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COMPILED, DIGESTED, AND ARRANGED,

BY JOHN WILKES, OF MILLAND HOUSE, IN THE COUNTY OF SUSSEX, ESQUIRE;

ASSISTED BY EMINENT SCHOLARS OF THE ENGLISH, SCOTCH, AND IRISH, UNIVERSITIES.

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1814.

Non audiendi sunt homines imperiti, qui humano ingenio majorem, vel inutilem, et rebus gerendis adverſam πολυμαθειαν criminantur. Eſt ſcilicet quædam Scientiarum cognatio et conciliatio; unde et Εγκυκλοπαιδειαν vocant Græci; ut in unâ perfectus dici nequeat, qui cæteras non attigerit.—Morhofi Polyhiſtor, l. i. c. i. s. i.

Thoſe inexperienced perſons, who make it a charge of accuſation againſt variety and extenſive learning, that it exceeds the compaſs of human ability, or is uſeleſs, or that it is an impediment to tranſacting buſineſs, deſerve no attention. For there is between the Sciences a degree of natural and cloſe connexion; from which the Greeks uſe the term "Encyclopædia;" ſo that no one can be perfect in any one Science, who has not attained to ſome knowledge of the reſt.

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DESCRIPTION OF THE FRONTISPIECE, ILLUSTRATING LAW.

LAW, DICTATED BY WISDOM, (UNDER THE FORM OF MINERVA, WITH HER ATTRIBUTES;) CONFIRMED BY EXPERIENCE, (EXEMPLIFIED BY AN OLD MAN HOLDING A ROLL, HIS HEAD COVERED WITH A VEIL,) PROMULGATED BY AUTHORITY, (IN A COMMANDING ATTITUDE, AND HOLDING THE MACE OF POWER,) RECEIVED BY OBEDIENCE (KNEELING) AND RESPECT, (STANDING AT A DISTANCE,) AND SANCTIONED AT THE ALTAR OF THE COUNTRY BY THE UNION OF JUSTICE (WITH HER WELL-KNOWN SYMBOLS) AND MERCY, (PRESENTING THE OLIVE OF PEACE AND THE POPPY OF OBLIVION, AND TREADING UPON THE INSTRUMENTS OF PUNISHMENT.)

No. 882.

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L.

L, A liquid conſonant, the eleventh letter of the alphabet, which preſerves always the ſame ſound in Engliſh. It is ſounded by intercepting the breath between the tip of the tongue and fore part of the palate, with the mouth open; and makes a ſweet ſound, with ſomething of an aſpiration; and therefore the Britons and Spaniards uſually doubled it, or added an *h* to it, in the beginning of words, as in *llan*, or *lhan*, (Welch,) a temple, ſounding nearly like *ſl*, &c. In the Saxon alſo it was aſpirated; as, hlaf, *loaf*; hlæfdiz, *lady*.

At the end of a monoſyllable it is doubled; as, *all*, *well*, *ſhall*, *ſtill*, *kill*, *full*; ſome of which monoſyllables, as *kill*, *full*, &c. were originally written *kille*, *fulle*; and when the *e* firſt became ſilent, and was afterwards omitted, the *ll* was retained, to give force, according to the analogy of our language, to the foregoing vowel. After a diphthong, *l* is written ſingle; as, *fail*, *feel*, *veal*, *cool*; and in words of more than one ſyllable; as, *channel*, *canal*, *tendril*. L is placed after moſt of the conſonants in the beginning of words and ſyllables; as, *black*, *glare*, *eagle*, &c. but before none. It is ſometimes placed before *e*, and ſounded feebly, ſo that it may be doubtful whether it ſtands before or after it; as, *table*, *ſhuttle*, *bible*, *battle*, or *battel*; like the letter *r*, in uſing which, from the doubtfulneſs of the ſound, we write indifferently *centre* or *center*, *ſceptre* or *ſcepter*. See R.

There are ſeveral people, for inſtance, the Chineſe in Aſia, the Illinois in America, &c. who cannot pronounce the *r*, but always change it into *l*. Thus when any of them have been baptized by the name of *Petrus*, *Franciſcus*, &c. they always pronounce it *Petlus*, *Flanciſcus*, &c.

The *ll* is a modern contrivance, and was never uſed among ancient Roman authors; they wrote *alium*, not *allium*; *macelum*, not *macellum*; *polucere*, not *pollucere*. The *ll* of the Greeks was ſometimes changed by the Romans into *li*; as, αλλος, *alius*; φυλλον, *folium*. L is alſo frequently uſed inſtead of *d*, as in *Ulyſſes*, from the Greek Οδυσσευς, in that Æolic dialect Υδυσσης. Thus alſo for *dautia*, we ſay *lautia*; for *dacrumæ*, *lacrymæ*, &c.

The figure of our L we borrowed from the Latins, they from the Greeks, and they again from the Hebrews, whoſe *lamed* is much like our L, excepting that the angle is ſomewhat more acute. L was alſo a numeral letter among the ancients, and is ſtill ſo in the Roman ciphering, ſignifying fifty. When a daſh was added at the top, it ſtood for fifty thouſand. L was uſed for fifty, being half a C, which ſignified a hundred, and was formerly written thus Ↄ, which, according to Paſquire, makes two LL, the one upright, the other inverted.

The French Louis-d'ors have a croſs on them, conſiſting of eight L's interwoven. The letter L is marked on the money coined at Bayonne. L, as an abbreviature, ſtands for Lucius; and LLS. for a ſeſterce. In Engliſh it denotes a pound ſterling.

LA, *ſ.* A note in muſic; the ſixth ſound in Guido's ſcale.

LA'A, a town of Auſtria: four miles ſouth of Vienna.

LA'AB, or La'va, a town of Auſtria, on the river Taya. In the year 1278, a battle was fought here between the emperor Rodolphus, and Ottocar king of Bohemia, in which the latter was ſlain; and, in the year 1645, it was taken by the Swedes: twelve miles eaſt-ſouth-eaſt of Znaym, and twenty-ſix north of Vienna. Lat. 48. 39. N. lon. 16. 16. E.

LAA'DAH, [Hebrew.] A man's name.

LAA'DAM, [Hebrew.] A man's name.

LAAD'STEE, a town of Norway: 112 miles north of Bergen.

LAA'GE, a town of Mecklenburg: fourteen miles ſouth-eaſt of Roſtock. Lat. 55. 58. N. lon. 12. 30. E.

LAA'LAND, or La'land, an iſland of Denmark, ſituated at the entrance into the Baltic from the Greater Belt; about fifty miles in length, and twelve in its mean breadth, and reckoned the moſt fertile ſpot in the Daniſh dominions. This iſland produces plenty of all ſorts of grain, particularly very fine wheat and excellent peaſe. It is alſo famous for a kind of red fruit called *manna*, which reſembles ſweet almonds in taſte, and grows on a long ſlender ſtem. Laaland is not without woods, which, however, are more frequent on the eaſt than on the weſt of the iſland. The inhabitants make little account of grazing, as they find that the cultivation of corn turns out to greater advantage. But, notwithſtanding all theſe conveniencies, as the country lies low, and the ſoil is damp, the air is very unhealthy. Of all the inhabitants of this iſland the clergy are beſt provided for, according to their rank. The nobility are numerous here, and many of them have very fine ſeats, and conſiderable eſtates. This iſland, like Falſter, has a particular governor; but in ſpiritual affairs both are under the juriſdiction of the biſhop of Funen. Naſkow is the capital. Lat. 54. 40. to 55. N. lon. 10. 59. to 11. 52. E.

LAALGUN'GE, a town of Hindooſtan, in Oude: twenty-five miles eaſt of Manickpour.

LAA'NE, a river of France, which runs into the Dyle near Louvain.

LA'AR. See Lar.

LA'AR's BANK', a ſhoal in the Eaſtern Indian Sea. Lat. 5. 45. S. lon. 118. 45. E.

LAARAT', an iſland in the Eaſtern Indian Sea, about fifty miles in circumference. Lat. 6. 48. S. lon. 132. 36. E.

LAAR'CHUS, the guardian of Battus of Cyrene. He uſurped the ſovereign power for ſome time, and endeavoured to marry the mother of Battus, the better to eſtabliſh his tyranny. The queen gave him a friendly invitation; but cauſed him to be aſſaſſinated, and reſtored the power to Battus. *Polyænas.*

LA'AS, *ſ.* [from *laqueus*, *à lax*, Lat. fraud.] A net, gin, or ſnare.

LA'AS, or LOSCH, a town of the duchy of Carniola, with a citadel: nine miles weſt of Gottſchee, and twenty-three eaſt-north-eaſt of Trieſte. Lat. 45. 58. N. lon. 14. 25. E.

LAAS'PHE, or LASPE, a town of Germany, in the county of Witgenſtein: twenty-two miles ſouth-weſt of Waldeck, and ſixty-four eaſt of Cologne. Lat. 50. 53. N. lon. 8. 30. E.

LAB, a town of Germany, in the biſhopric of Wurzburgh: ſix miles eaſt-ſouth-eaſt of Volkach.

LABAAR', a town of Hindooſtan, in ſubah of Agra: forty miles eaſt of Gwalior, and ſeventy-five ſouth-ſouth-eaſt of Agra.

LABACCAN', a northern province of Celebes, which, together with Bougero and Sageree, are the plains lying between Tello and Tanete, the proper granaries of Celebes.

LABAD'DE, a town and diſtrict of Africa, on the Gold Coaſt.

LABADI'E (John), a famous French enthuſiaſt, ſon of John-Charles Labadie, governor of Bourges and gentleman in ordinary of the bedchamber to the French king, was born in 1610. He entered young into the Jeſuits' college at Bourdeaux; which, by his own account, he afterwards quitted; but by other accounts was expelled for his peculiar notions, and for hypocriſy. He became a popular preacher; but, being repeatedly detected in working upon female devotees with ſpiritual inſtructions for carnal purpoſes, his loſs of character among the catholics drove him among the proteſtants. A reformed Jeſuit being thought a great acquiſition, he was precipitately accepted as a paſtor at Montauban, where he officiated for eight years; but, attempting the chaſtity of a young lady whom he could not convert to his purpoſe, and quarrelling with the catholic prieſt about the right of interring a dead body, he was at length baniſhed that place. The ſtory of his affair with the lady, as related by Mr. Bayle, may here be given as a ſpecimen of his miniſtry. Having directed this damſel to the ſpiritual life, which he made to conſiſt in internal recollection and mental prayer, he gave her out a certain point of meditation; and, having ſtrongly recommended it to her to apply herſelf entirely for ſome hours to ſuch an important object, he went up to her when he believed her to be at the height of her abſtraction, and put his hand into her boſom. She gave him a haſty repulſe, expreſſed a great deal of ſurpriſe at the proceeding, and was even preparing to rebuke him, when he, without being in the leaſt diſconcerted, and with a devout air, prevented her thus: "I ſee plainly, my child, that you are at a great diſtance from perfection; acknowledge your weakneſs with an humble ſpirit; aſk forgiveneſs of God for your having given ſo little attention to the myſteries upon which you ought to have meditated. Had you beſtowed all neceſſary attention upon theſe things, you would not have been ſenſible of what was doing about your breaſt; but you are ſo much attached to ſenſe, ſo little concentered with the Godhead, that you were not a moment in diſcovering that I had touched you. I wanted to try whether your fervency in prayer had raiſed you above the material world, and united you with the Sovereign Being, and living ſource of immortality and of a ſpiritual ſtate; and I ſee, to my great grief, that you have made very ſmall progreſs, and that you only creep on the ground. May this, my child, make you aſhamed, and for the future move you to perform the duties of mental prayer better than you have hitherto done." The young lady, who had as much good ſenſe as virtue, was no leſs provoked at theſe words than at the bold actions of her ghoſtly inſtructor; and could never afterwards bear the name of ſuch a holy father. Labadie, being driven out of Montauban, went to ſeek an aſylum at Orange; but, not finding himſelf ſo ſafe there as he imagined, he withdrew privately to Geneva, where he impoſed on the people by his devout preaching and carriage; and from thence was invited to Middleburg, where his ſpirituality made him and his followers be conſidered as ſo many ſaints, diſtinguiſhed by the name of *Labadiſts*. They increaſed ſo much, that he excited the attention of the other churches, whoſe authority he diſputed, till he was formally depoſed by the ſynod of Dort. Inſtead of obeying, he procured a tumultuous ſupport from a crowd of his devotees; and at length formed a little ſettlement between Utrecht and Amſterdam, where he erected a printing-preſs, which ſent forth many of his works. Here he was betrayed by ſome deſerters, who expoſed his private life, and informed the public of his familiarities with his female diſciples, under pretence of uniting them more particularly to God; and was finally obliged to retire to Altena in Holſtein, where he died in 1674. He was the author of a variety of publications, beſides his treatiſes on mental prayer, and ſelf-abſtraction, with ſuch quaint titles as, "The Herald of King Jeſus;" "True Exorciſm, or the only Means of driving the Devil from the Chriſtian World:" "The holy Decades;" "The Empire of the Holy Ghoſt, &c." which are not deſerving of being particulariſed.

After his death, his followers removed their wandering community to Wiewert, in the diſtrict of North-Holland, where it found a peaceful retreat, and ſoon fell into oblivion; ſo that few, if any, traces of it are now to be found. Some of the opinions of the Labadiſts were: 1. That God might, and did on certain occaſions, deceive men. 2. That the holy ſcriptures were not ſufficient to lead men to ſalvation, without certain illuminations and revelations from the Holy Ghoſt; that, in reading the ſcriptures, we ought to give leſs attention to the literal meaning of the words than to the inward ſuggeſtions of the ſpirit; and that the efficacy of the word depended upon him that preached it. 3. That the faithful ought to have all things in common. 4. That there is no ſubordination or diſtinction of rank in the true church of Chriſt. 5. That Chriſt was to reign a thouſand years upon earth. 6. That the contemplative life is a ſtate of grace and union with God, and the very height of perfection; that the Chriſtian, whoſe mind is contented and calm, ſees all things in God, enjoys the Deity, and is perfectly indifferent about every thing that paſſes in the world; and that the Chriſtian arrives at that happy ſtate by the exerciſe of a perfect ſelf-denial, by mortifying the fleſh and all ſenſual affections, and by mental prayer.

LA'BAN, [Heb. white.] Son of Bethuel, and grandſon of Nahor, brother to Rebekah, and father to Rachel and Leah. When Jacob came into Meſopotamia, A. M. 2245, ante A.D. 1759, he was well received by his uncle Laban. *Gen.* xxviii. &c. A month after his arrival, Laban ſaid to him, *Becauſe thou art my brother* [my brother's ſon], *ſhouldeſt thou therefore ſerve me for nought?* Gen. xxix. 15. Jacob propoſed to ſerve him ſeven years for his youngeſt daughter Rachel; and Laban conſented. Many are of opinion that Jacob ſerved him ſeven years before he married Rachel; and they are certainly borne out by the words of the text; but others aſſert the contrary. Jacob ſaid to Laban, *Give me my wife, for my days are fulfilled*; ver. 21. Laban, therefore, made a wedding-feaſt, but conveyed Leah into Jacob's chamber, ſo that Jacob perceived nothing of the fraud. Next morning he complained; but Laban replied, that it was unlawful to marry the younger daughter before the elder; but, if he would ſerve him ſeven years more, he would give him Rachel; to this Jacob conſented.

It does not appear that, in this marriage of two ſiſters, there was at that time, and in that country, what would be eſteemed ſuch a notorious and flagrant breach of propriety (if indeed there was any thing remarkable in it) as there would be among us. Our days are days of happier refinement than to tolerate ſuch connections; but this was long before Moſes; and that ſuch cuſtoms continued long after the time of Jacob is aſcertained by a hiſtory recorded of Omar, the ſecond caliph after Mahomet. While he was on his journey, there came, at one of his ſtages, a complaint before him of a man who had married two wives, that were ſiſters both by father and mother; a thing which the old Arabians, ſo long as they continued

in their idolatry, made no ſcruple of, as appears from that paſſage in the Alcoran, where it is forbidden for the time to come. Omar was very angry, and called him and his wives before him. After the fellow had confeſſed that they were both his wives, and ſo nearly related, Omar aſked him whether he was a Muſſulman? Yes, ſaid the fellow. And do you not know then, ſaid Omar, that it is unlawful for you to have them, when God ſaid, *Neither marry two ſiſters any more*? Alcoran, iv. 277. The man ſwore that he did not know it was unlawful; neither was it unlawful. Omar ſwore he lied, and he would make him part with one of them, or elſe ſtrike his head off. The fellow began to grumble, and ſaid he wiſhed he had never been of that religion, for he could have done very well without it; and had never been a whit better for it, ſince he had firſt profeſſed it. Upon which Omar ſaid, "O thou enemy to God, and of thyſelf, doſt thy revile Iſlam; which is the religion that God, and his angels, and apoſtles, and the beſt of the creation, have choſen?" And threatened him ſeverely if he did not make a quick diſpatch, and take which of them he loved beſt. The man was ſo fond of them both, that he could not tell which he had rather part with; upon which, ſome of Omar's attendants caſt lots for the two women; and, the lot falling upon one of them three times, the man took her, and was forced to diſmiſs the other. *Ockley's Hiſt. of the Saracens*, vol. i. p. 219. May not this ſtory throw ſome light on the precept of Moſes; Lev. xviii. 18. "And thou ſhalt not take a wife to her ſiſter, *to vex her.*" Does not this reſtriction look ſomewhat like Mahomet's in the Alcoran, as if ſuch practice had been common. Does Moſes forbid it only in the caſe when it would *vex* the other ſiſter; but leave it as before, if the firſt ſiſter did not remonſtrate againſt it? or, does he take for granted that the firſt wife muſt be vexed by the admiſſion of her ſiſter? In the ſtory of Omar's determination, it ſhould ſeem that both ſiſters were ſatisfied; for, had one been *vexed*, doubtleſs that had been the one to have quitted her huſband.

Our next remark will be upon the cuſtom, or law, of primogeniture in caſes of marriage. This was alſo confirmed afterwards by the Moſaic law, as is affirmed by the author of the Fragments to Calmet's Dictionary, (though he does not quote any text to that effect;) who adds, that by the ſame authority it was made criminal for a younger ſon to marry while his elder brother remained unmarried. *Fragment* cxxvi. Be this as it may, either the cuſtom was not univerſal, and generally known, or Jacob muſt have been acquainted with it; in the former caſe Laban was very culpable for not having explained to Jacob the law of that country in particular.

To return from this digreſſion. When Jacob had ſpent fourteen years in the ſervice of Laban, he was deſirous to return to Canaan. But Laban, wiſhing to continue him in his ſervice, ſaid, *Appoint me thy wages, and I will give it.* Gen. xxx. 28. Jacob demanded all the young which his ſtocks ſhould produce that were of a brown colour, ſpotted and ſpeckled, i. e. that ſeemed leaſt deſirable for their wool and their fleece. Laban agreed, and committed all that were ſpotted and of divers colours to the keeping of his own ſons; fearing, in all probability, leſt Jacob ſhould uſe art to produce cattle of divers colours, by a mixture of ſpotted ſheep and goats with thoſe which were not ſo. But Jacob accompliſhed an increaſe another way, as related in the remaining verſes of that chapter.

At length, after ſtaying twenty years with Laban, Jacob, perceiving that Laban did not regard him with the ſame kindneſs as formerly, reſolved to depart without taking leave: ch. xxxi. Laban ſet out in purſuit of him, and overtook him at Mount Gilead. God appeared overnight to Laban, and forbade him to ſay any thing harſh to Jacob; ſo that, when he ſaw Jacob, he only complained of his ſudden retreat, of his not giving him the comfort of embracing his daughters and grand-children, and of conducting them on their journey with cheerful muſic; but, on the ſubject of his ſtealing from him his gods, or teraphim, (ſee TERAPHIM,) he made great complaints. Jacob replied with ſome vehemence, and agreed, that whoever had committed this theft ſhould be put to death; not knowing that Rachel was that perſon. Laban ſearched all the tents of Jacob in vain, for Rachel concealed theſe images under her. Jacob in his turn remonſtrated with Laban reſpecting his conduct towards him; but at laſt they agreed to make a covenant together, and to ſet up a monument of it. They ſwore therefore reciprocal friendſhip and alliance; Laban called this pile of ſtones *Jagar Sahadutha*, and Jacob *Galeed*, both ſignifying the Heap of Witneſs; each according to his language, Laban uſing the Syriac, and Jacob the Hebrew. Having offered ſacrifice, they ate and drank together; and the next morning Laban took leave of his daughters and grand-children, and returned to Padam-aram; after which we hear no more of him. For the ſubſequent life of JACOB, ſee that article, vol. x. p. 664.

LA'BAN, a place beyond Jordan, in Moab. *Deut.* i. 1.

LA'BANT, *adj.* [from *labor*, Lat. to ſlide.] Sliding; falling down. *Scott.*

LABA'PI, a river of Chili, which runs into the Pacific Ocean in lat. 37. 20. S.

LABAR'CES, a town of Spain, in the province of Aſturia: twelve miles weſt of Santillana.

LABARIFE'RI, *ſ.* Among the Romans, ſtandard-bearers, who carried the labarum.

LAB'ARUM, *ſ.* The banner or ſtandard borne before the Roman emperors in the wars. The *labarum* conſiſted of a long lance, with a ſtaff at top croſſing it at right angles; from which hung a rich ſtreamer, of a purple colour, adorned with precious ſtones. Till the time of Conſtantine it had an eagle painted on it; but that emperor, in lieu thereof, added a croſs with a cipher expreſſing the name of Jeſus. The name *labarum* was not known before the time of Conſtantine; but the ſtandard itſelf, in the form we have deſcribed it, abating the ſymbols of Chriſtianity, was uſed by all the preceding emperors. Gibbon deſcribes it in the following terms: "The principal ſtandard which diſplayed the triumph of the croſs was ſtyled the *labarum*, an obſcure though celebrated name, which has been vainly derived from almoſt all the languages of the world. It is deſcribed as a long pike interſected by a tranſverſal beam. The ſilken veil, which hung down from the beam, was curiouſly enwrought with the images of the reigning monarch and his children. The ſummit of the pike ſupported a crown of gold, which incloſed the myſterious monogram, at once expreſſive of the figure of the croſs and the initial letters of the name of Chriſt. The ſafety of the labarum was entruſted to fifty guards, of approved valour and fidelity; their ſtation was marked by honours and emoluments; and ſome fortunate accidents ſoon introduced an opinion, that, as long as the guards of the labarum were engaged in the execution of their office, they were ſecure and invulnerable amidſt the darts of the enemy. In the ſecond civil war, Licinius felt and dreaded the power of this conſecrated banner, the ſight of which, in the diſtreſs of battle, animated the ſoldiers of Conſtantine with an invincible enthuſiaſm, and ſcattered terror and diſmay through the ranks of the adverſe legions. The Chriſtian emperors, who reſpected the example of Conſtantine, diſplayed in all their military expeditions the ſtandard of the croſs; but, when the degenerate ſucceſſors of Theodoſius had ceaſed to appear in perſon at the head of their armies, the labarum was depoſited as a venerable but uſeleſs relic in the palace of Conſtantinople. Its honours are ſtill preſerved on the medals of the Flavian family. Their grateful devotion has placed the monogram of Chriſt in the midſt of the enſigns of Rome. The ſolemn epithets of, ſafety of the republic, glory of the army, reſtoration of public happineſs, are equally applied to the religious and military trophies; and there is ſtill extant a medal of the emperor Conſtantius, where the ſtandard of the labarum is accompanied with theſe memorable words, *By this ſign thou ſhalt conquer.*"

LABAT' (John-Baptiſt), a celebrated traveller, of the order of St. Dominic, was born at Paris, taught philoſophy at Nancy, and in 1693 went to America in quality of a miſſionary. At his return to France in 1705, he was ſent by the chapter of his order at Bologna to give an account of his miſſion, and ſtaid ſeveral years in Italy. He died at Paris in 1738. His principal works are, 1. A New Voyage to the American Iſlands, 6 vols. 12mo. 2. Travels in Spain and Italy, 8 vols. 12mo. 3. A New Account of the weſtern Parts of Africa, 5 vols. 12mo. Father Labat was never in Africa, and therefore was not a witneſs of what he relates in that work. He alſo publiſhed the Chevalier des Marchais's Voyage to Guinea, in 4 vols. 12mo. and An Hiſtorical Account of the Weſtern Parts of Ethiopia, tranſlated from the Italian of Father Cavazzi, 5 vols. 12mo.

LABA'TA, a town of Spain, in the kingdom of Aragon: ten miles eaſt of Hueſca.

LABA'TIA, *ſ.* [ſo named by Swartz in memory of J. B. Labat.] In botany, a genus of the claſs tetrandria, order monogynia, natural order of guajacanæ, *Juſſ.* The generic characters are—Calyx: perianthium four-leaved, permanent; the two oppoſite leaflets erect; the two ſmaller ones ovate, obtuſe, concave. Corolla: one-petalled, ſubcampanulated; tube ſhorter than the calyx; border quadrifid; diviſions upright, obtuſe, ſmall; with two oppoſite ſmaller diviſions, ſituated in the partition of the corolla. Stamina: filaments four, length of the corolla, upright, awl-ſhaped, contiguous to the piſtil; antheræ ſharp-pointed, upright. Piſtillum: germ roundiſh, minute, ſuperior; ſtyle awl-ſhaped, length of the ſtamens; ſtigma ſimple, obtuſe. Pericarpium: capſule large, roundiſh, rough, four-celled. Seeds ſolitary, oblong, compreſſed.—*Eſſential Character.* Calyx four-leaved, inferior; corolla ſubcampanulate, four-cleft, with two minute ſegments in the diviſions of the corolla; capſule four-celled; ſeeds ſolitary.

Species. 1. Labatia ſeſſiliflora, or ſeſſile-flowered labatia: flowers ſeſſile. Native of Hiſpaniola.

2. Labatia Guianenſis, or Guiana labatia: flowers peduncled. This is a tree forty feet in height and more, and three feet in diameter, with a ruſſet-coloured wrinkled bark, and a whitiſh, hard, compact, wood. Branches ſtraight, long, ſubdivided. Leaves alternate, heaped, entire, ſmooth, firm, ovate-oblong, ending in a blunted point; the largeſt eight inches long and three wide. Flowers axillary or on the branches in pairs or threes, each on its pedicel; corolla greeniſh. It is called *Pourama pouteri* by the Caribs. Native of Guiana, in the foreſts by the river Sinemari, forty leagues from its mouth; flowering and fruiting in November.

LABATI'E NEU'VE, a town of France, in the department of the Higher Alps, and chief place of a canton, in the diſtrict of Gap. The town contains 200 and the canton 3130 inhabitants, on a territory of 125 kiliometres, in eight communes.

LAB'BE (Philip), author of many learned works, was born at Bourges in 1607. He entered into the ſociety of Jeſuits at the age of ſixteen; and taught Latin, rhetoric, and philoſophy, in the college of his native place. He was then called to the profeſſorſhip of moral theology, firſt at Bourges, and then at Paris, which metropolis was thenceforth his reſidence till his death in 1667. He was a man of a prodigious memory, various and extenſive reading, and indefatigable induſtry. The liſt of his works would occupy more room than we can afford, and indeed few of them are important enough to deſerve recording: they are for the moſt part compilations, made with no great judgment or accuracy, yet ſeveral were uſeful in their time: their ſubjects are hiſtory, antiquities, chronology, genealogy, geography, grammar, and bibliography: many of them relate to French hiſtory, and particularly that of his own order. The greateſt of his labours was a "General Collection of Councils," which appeared, with notes, in ſeventeen volumes folio, in 1672. Of theſe, nearly fifteen were prepared by father Labbe before his death; the remainder was ſupplied by father Copart, of the ſame ſociety. One of Labbe's grammatical works, entitled *Eruditæ pronuntiationis Catholici Indices, cum Diſſertationibus Proſodicis*, is ſtill uſed as a popular book of reference for the quantity of Latin words. *Moreri.*

LAB'BOCK BA'Y, a bay on the north-eaſt coaſt of the iſland of Borneo. Lat. 6. 2. N. lon. 117. 55. E.

LAB'DA, a daughter of Amphion one of the Bacchiadæ, born lame. She married Action, by whom ſhe had a ſon, whom ſhe called Cypſelus, becauſe ſhe ſaved his life in a coffer. See CYPSELUS, vol. v. p. 546.

LABDA'CIDES, a name given to Œdipus, as deſcended from Labdacus.

LAB'DACISM, *ſ.* [Greek.] The frequent repetition of the letter *l*; as, *Sol et luna luce lucebant.*

LAB'DACUS, a ſon of Polydorus by Nycteis, the daughter of Nycteus king of Thebes. His father and mother died during his childhood, and he was left to the care of Nycteus, who at his death left his kingdom in the hands of Lycus, with orders to reſtore it to Labdacus as ſoon as of age. He was father to Laius. It is unknown whether he ever ſat on the throne of Thebes.

LAB'DANUM, or LADANUM. See CISTUS CRETICUS, vol. iv.

LABDA'RA, a ſmall iſland in the gulf of Venice. Lat. 44. 14. N. lon. 15. 19. E.

LABDAS'SEBA, a tribe of ſavage Arabs inhabiting the deſert of Sahara in Africa. They are conſidered as the moſt powerful of all thoſe tribes except the Ouadelims, and very much reſemble them in every particular. See SAHARA and OUADELIMS.

LABEA'LIS, a lake in Dalmatia, now *Scutari*, of which the neighbouring inhabitants were called Labeates.

LABEFAC'TION, *ſ.* [from *labefy.*] The act of weakening; a decay, a downfal. *Scott.*

To LAB'EFY, *v. a.* [*labefacio*, Lat.] To weaken; to impair. *Dict.*

LA'BEL, *ſ.* [*labellum*, Lat.] A ſmall ſlip or ſcrip of writing:

When wak'd, I found
This *label* on my boſom; whoſe containing
Is ſo from ſenſe in hardneſs, that I can
Make no collections of it. *Shakeſpeare's Cymbeline.*

A ribbon hanging from one ſide of a crown or mitre. Any thing appendant to a larger writing.—On the *label* of lead, the heads of St. Peter and St. Paul are impreſſed from the papal ſeal. *Ayliffe's Parergon.*—In law, a narrow ſlip of paper or parchment affixed to a deed or writing, in order to hold the appending ſeal. So alſo any paper, annexed by way of addition or explication to any will or teſtament, is called a *label*, or codicil. *Harris.*

God join'd my heart to Romeo's; thou our hands;
And ere this hand, by thee to Romeo's ſeal'd,
Shall be the *label* to another deed,
Or my true heart with treacherous revolt
Turn to another, this ſhall ſlay them both. *Shakeſpeare.*

In heraldry, a kind of fillet with pendants, uſually placed at the top of an eſcutcheon to diſtinguiſh the coat of the ſecond brother. In mathematics, a long braſs ruler, with a ſmall ſight at one end and a centre-hole at the other, for taking altitudes.

LA'BEO (C. Antiſtius), an eminent Roman lawyer, ſon of a perſon of the ſame name, alſo a lawyer, and a conſpirator againſt Julius Cæſar, was a diſciple of Trebatius, and lived under Auguſtus. He was not only excellently ſkilled in the civil law, but was converſant in other ſtudies, particularly thoſe of grammar and dialectics, and the antiquities of language. He preſerved the free ſpirit of a republican under the rule of a maſter, and ſhowed on various occaſions that he had not forgotten the ancient liberty of his country. Suetonius, praiſing the lenity of Auguſtus, mentions that once, upon a nomination of ſenators, when each ſenator named another, Labeo choſe M. Lepidus,

M. Lepidus, the particular enemy of Auguſtus, and then an exile; and, when the emperor aſked him if there were no other more worthy, he replied, "that every man muſt judge for himſelf." His great rival in juriſprudence, Ateius Capito, a man of a more complying diſpoſition, blames this freedom as a kind of frenzy, and ſays that Labeo, "even when the deified Auguſtus was the acknowledged head of the commonwealth, conſidered nothing as good in law which was not ſanctioned by the ancient rules of juſtice." If Horace, by his *Labeone inſanior*, (more frantic than Labeo,) alluded to this perſon, and his paſſion for liberty, he may be ſuſpected of ridiculing a man of principle for unworthy purpoſes. Tacitus ſpeaks of both Capito and Labeo as "the two ornaments of peace in their age:" but celebrates the incorrupt freedom of the latter, which was the cauſe of his riſing no higher than the pretorſhip; while the obſequiouſneſs of the former was rewarded with the conſulate. Theſe two great lawyers were conſidered as at the head of two oppoſite ſects in the profeſſion; Capito, it is ſaid, adhering ſtrictly to the maxims he had received, while Labeo introduced many novelties from his reading and reflexion. As this appears contrary to their characters as before diſplayed, it is explained by ſuppoſing that Capito regarded the ſtrict letter of the law, while Labeo attended to its ſpirit. Our lawyer divided his time between buſineſs and ſtudy, ſpending ſix months at Rome in giving advice and attending to public duties, and ſix in a country retreat. He wrote a great number of books on different ſubjects, but chiefly relating to juriſprudence. Aulus Gellius ſeveral times refers to his commentaries on the twelve tables. The time of his death is uncertain; for it is ſcarcely probable that he is the perſon of the ſame name whom Pliny the elder mentions as lately dead at a very advanced age, and who made himſelf ridiculous by a paſſion for miniature-painting. *Gen. Biog.*

LAB'ENSTEIN. See LOBENSTEIN.

LA'BENT, *adj.* [*labens*, Lat.] Sliding; gliding; ſlipping.

LA'BER, a town of Bavaria, in the principality of Neuburg: eleven miles eaſt of Dietfurt, and nine weſt-north-weſt of Ratiſbon.

LA'BER, a river of Bavaria, which runs into the Danube five miles ſouth-weſt of Ratiſbon.

LA'BER, a river of Bavaria, which runs into the Altmuhl at Dietfurth.

LA'BER (Gros), a river of Bavaria, which runs into the Danube three miles north-north-eaſt of Straubing.

LA'BER (Klein), a river of Bavaria, which runs into the Danube four miles north-north-weſt of Straubing.

LABE'RIUS (Decimus), a writer of the dramatic pieces called by the Latins *mimes*, was a Roman knight by birth. He was ſixty years of age, when Julius Cæſar, in the plenitude of his power, incited him to appear on the ſtage in one of his own pieces. Macrobius, who has recorded the anecdote, has alſo preſerved the prologue ſpoken by Laberius on the occaſion, in which he intimates that the requeſt of ſuch a man as Cæſar was equivalent to a command. He ſhows a ſpirit in theſe verſes ſuperior to what might have been expected from a writer of licentious farces. The following lines are truly touching:

Ego bis tricenis annis actis ſine nota
Eques Romanus lare egreſſus meo
Domum revertar mimus: nimirum hoc die
Uno plus vixi, mihi quam vivendum foret.

Twice thirty years paſt o'er without a blot,
A Roman knight this morn I left my houſe,
A player to return. Alas! my friends,
I feel that I have liv'd a day too long.

He did not refrain, during the action, from ſome ſtrokes againſt the uſurper, and drew the eyes of all the aſſembly upon Cæſar by the ſentence, *Neceſſe eſt multos timeat quem multi timent:* "Many he dreads in turn, whom many dread." Cæſar, however, reſtored him to the rank of knight, which he had loſt by appearing on the ſtage; but, to his mortification, when he went to take his ſeat among the knights, no one offered to make room for him, and even his friend Cicero ſaid, "I would give you room, if I were not too much crowded;" meaning a ſarcaſm on the great number of new knights created by Cæſar. To which Laberius replied, "I wonder you ſhould be crowded, who uſually ſit upon two ſeats at once;" alluding to the orator's trimming conduct in the civil diſſenſions. Laberius ſurvived the dictator ten months, and died B. C. 44. The titles of ſeveral of his pieces are preſerved by Aulus Gellius, and a few fragments of him are given in Mattaire's Corpus Poetarum. Horace, in his Satires, has a line in diſparagement of the mimes of Laberius, but which may be underſtood rather as expreſſing contempt for that ſpecies of compoſition than for his performances in particular. *Voſſii Poet. Lat.*

LA'BES, *ſ.* [Latin.] A ſpot; a blemiſh; the fulneſs of the lips. *Phillips.*

LA'BES, a town of Hinder Pomerania: thirty miles north-eaſt of Stargard, and thirty ſouth of Colberg. Lat. 53. 39. N. lon. 15. 39. E.

LA'BEZ, a province of Algiers, lying to the ſouth of Boujeah. It was at one time a kingdom, and is now ſo called.

LA'BIA, *ſ. plu.* [Latin.] The lips; the edges of any wound or aperture.

LA'BIAL, *adj.* [*labialis*, Lat.] Uttered by the lips.—The Hebrews have aſſigned which letters are *labial*, which dental, and which guttural. *Bacon.*

LA'BIAL, *ſ.* One of the letters pronounced by a particular motion or preſſure of the lips.

LABIA'TÆ, *ſ.* in botany, a natural order of plants, ſo called, after Tournefort, from *labium*, a lip, in alluſion to the ſhape of the corolla, which reſembles the mouth and lips of an animal. This order, the 39th of Juſſieu's ſyſtem, and the ſixth of his eighth claſs, is equivalent to Linnæus's 42d natural order, *Verticillatæ*; or to the Didynamia Gymnoſpermia of his artificial ſyſtem; except that the latter neceſſarily excludes ſuch genera of *labiatæ* as have but two ſtamens, and which are therefore referred to his ſecond claſs, diandria. See BOTANY Index.

LA'BIATE, *adj.* Having lips. In botany, applied to an irregular corolla with two lips.

LA'BIATED, *adj.* Formed with lips.

LABIAU', a town of Pruſſia, in the province of Samland, with an ancient caſtle, on the Deim: twenty miles eaſt-north-eaſt of Konigſberg. Lat. 54. 10. N. lon. 21. 15. E.

LABI'CUM, a town of Italy, called alſo Lavicum, between Gabii and Tuſculum, which become a Roman colony about four centuries B. C. Now *Colonna.*

LA'BICZ, a town of Warſaw: thirty-two miles north of Gneſna.

LABIE'NUS, an officer of Cæſar in the wars of Gaul. He deſerted to Pompey, and was killed at the battle of Munda.—A Roman who followed the intereſt of Brutus and Caſſius, and became general of the Parthians againſt Rome. He was conquered by the officers of Auguſtus-Titus, an hiſtorian and orator at Rome in the age of Auguſtus. The ſenate ordered his papers to be burnt on account of their ſeditious contents; and Labienus, unable to ſurvive the loſs of his writings, deſtroyed himſelf.

LAB'ILE, *adj.* Slippery, apt to ſlide, unſtable. *Cole.*

LABIL'ITY, *ſ.* [*labilitas*, Lat.] Inſtability, aptneſs to ſlide. *Cole.*

LABI'NA, *ſ.* in old records, watery land.

LABI'NÆ, *ſ.* A term uſed by the authors who have written of Swiſſerland, and other mountainous countries, to expreſs thoſe vaſt maſſes of ſnow, which ſometimes fall from the hills, and bury houſes or even whole towns; and when hardened by the froſts, as is often the caſe, into ſolid ſubſtances, they overthrow woods, villages, and whatever ſtands in the way of their courſe, as they roll down the ſteep ſides of the precipices in their way. Some authors have alſo extended the word to a larger ſenſe, and made it ex-

preſs the falling of vaſt rocks, or parts of mountains, and their rolling down in the ſame manner into the flat country; this is a miſchief very frequent in the ſame places, after froſts, and often very fatal.

LABIODEN'TAL, *adj.* [*labium* and *dentalis.*] Formed or pronounced by the co-operation of the lips and teeth. —The dental conſonants are very eaſy; and firſt the *labiodentals*, *f*, *v*; alſo the linguadentals, *th*, *dh*. *Holder.*

LABIODEN'TAL, *ſ.* One of the letters pronounced by the co-operation of the lips and teeth.

LA'BIS, *ſ.* A kind of forceps, an inſtrument to lay hold of any thing. *Not much uſed. Scott.*

LA'BIUM VEN'ERIS. See DIPSACUS.

LAB'LAB. See DOLICHOS.

LA'BO, a town on the weſt coaſt of the iſland of Sumatra, whoſe chief trade is in pepper. Lat. 3. 20. N.

LABO'MAS, a town of the iſland of Cuba: ſeven miles ſouth-eaſt of Spiritu Santo.

LA'BON, a town on the weſt coaſt of Sumatra, celebrated for gold-duſt and camphor; but the inhabitants are ſhy of trading with ſtrangers: 150 miles ſouth-ſouth-eaſt of Acheen. Lat. 3. 10. N. lon. 96. 40. E.

LABOO'N, a town on the eaſt coaſt of the iſland of Borneo, ſituated on a peninſula which projects into the ſea. Lat. 5. 9. N. lon. 119. 5. E.

LA'BOR, *ſ.* See LABOUR.

LA'BOR, a town of New Navarre: 280 miles ſouth-eaſt of Caſa Grande.

LAB'ORANT, *ſ.* [*laborans*, Lat.] A chemiſt. *Not in uſe.*—I can ſhew you a ſort of fixt ſulphur, made by an induſtrious *laborant*. *Boyle.*

LABORA'TION, *ſ.* [from *labor*, Lat.] The act of laboring. *Scott.*

LAB'ORATORY, *ſ.* [*laboratoire*, Fr.] A chemiſt's workroom.—It would contribute to the hiſtory of colours, if chemiſts would in their *laboratory* take a heedful notice, and give us a faithful account, of the colours obſerved in the ſteam of bodies, either ſublimed or diſtilled. *Boyle.* —See the article CHEMISTRY, vol. iv. p. 191 & ſeq. the correſponding Engravings, eleven in number, including every inſtrument that can be wanted in a laboratory. See alſo the article FURNACE, vol. viii.

LAB'ORATORY, *adj.* Belonging to a place uſed for chemical operations; belonging to the place where the bombardiers prepare their works.

LABORIF'EROUS, *adj.* [from *labor*, Lat. labour, and *fero*, to bear.] Cauſing labour; enduring labour. *Scott.*

LABORIOS'ITY, *ſ.* [from *laborious.*] The ſtate of being laborious. *Cole.*

LABO'RIOUS, *adj.* [*laborieux*, Fr. *laborioſus*, Lat.] Diligent in work; aſſiduous.—That which makes the clergy glorious, is to be knowing in their profeſſion, unſpotted in their lives, active and *laborious* in their charges, bold and reſolute in oppoſing ſeducers, and daring to look vice in the face; and, laſtly, to be gentle, courteous, and compaſſionate, to all. *South.*

A ſpacious cave within its farmoſt part,
Was hew'd and faſhion'd by *laborious* art,
Through the hill's hollow ſides. *Dryden.*

Requiring labour; tireſome; not eaſy:

Do'ſt thou love watchings, abſtinence, and toil,
Laborious virtues all? learn them from Cato. *Addiſon.*

LABO'RIOUSLY, *adv.* With labour; with toil.—The folly of him, who pumps very *laboriouſly* in a ſhip, yet neglects to ſtop the leak. *Decay of Piety.*

I chuſe *laboriouſly* to bear
A weight of woes, and breathe the vital air. *Pope.*

LABO'RIOUSNESS, *ſ.* Toilſomeneſs; difficulty.—The parallel holds in the gainleſſneſs, as well as the *laborioufneſs*, of the work; thoſe wretched creatures, buried in earth and darkneſs, were never the richer for all the ore they digged; no more is the inſatiate miſer. *Decay of Piety.*—Diligence; aſſiduity.

LAB'OROUS, *adj.* [a poetical word for] Laborious.—For huſband's life is *laborous* and hard. *Spenſ. Hubberd.*

LABOSAR'DACH, or LABOROSOARCHOD, king of Babylon, ſon of Nerigliſſar, reigned nine months, according to Beroſus. He was ſlain by his own people, and ſucceeded by Nabonidas, ſays Beroſus; or Nabannidoch, according to Abydinus; or Labynitus, according to Herodotus. Many are of opinion, that this is the Belſhezzar of Daniel. The ſucceſſion of Nebuchadnezzar's ſons is extremely perplexed.

LA'BOUR, *ſ.* [*labeur*, Fr. *labor*, Lat.] The act of doing what requires a painful exertion of ſtrength, or wearieſome perſeverance; pains; toil; travail; work.—If I find her honeſt, I loſe not my *labour*; if ſhe be otherwiſe, it is *labour* well beſtowed. *Shakeſpeare.*—Work to be done. —Being a *labour* of ſo great difficulty, the exact performance thereof we may rather wiſh than look for. *Hooker.*

If you had been the wife of *Hercules*,
Six of his *labours* you'd have done, and ſav'd
Your huſband ſo much ſweat. *Shakeſpeare.*

Work done; performance.—Exerciſe; motion with ſome degree of violence.—Moderate *labour* of the body conduces to the preſervation of health, and curing many initial diſeaſes; but the toil of the mind deſtroys health, and generates maladies. *Harvey.*—Childbirth; travail. See the article PARTURITION.—Not one woman out of two hundred dies in *labour*. *Graunt.*

Not knowing 'twas my *labour*, I complain
Of ſudden ſhootings, and of grinding pain;
My throws come thicker, and my cries encreas'd,
Which with her hand the conſcious nurſe ſuppreſs'd. *Dryden.*

LABOU'R, before the revolution, a diſtrict of France, in Gaſcony, of which Bayonne was the capital.

To LA'BOUR, *v. n.* [*laboro*, Lat.] To toil; to act with painful effort.—Let more work be laid upon the men, that they may *labour* therein. *Exod.*

For your highneſs' good I ever *labour'd*
More than mine own. *Shakeſpeare.*

To do work; to take pains.—The matter of the ceremonies had wrought, for the moſt part, only upon light-headed weak men, whoſe ſatisfaction was not to be *laboured* for. *Clarendon.*—A *labouring* man that is given to drunkenneſs, ſhall not be rich. *Eccluſ.*—That in the night they may be a guard to us, and *labour* on the day. *Nehemiah.*—To move with difficulty:

The ſtone that *labours* up the hill,
Mocking the lab'rer's toil, returning ſtill,
Is love. *Glanville.*

To be diſeaſed with. *Not in uſe.*—I was called to another, who in childbed *laboured* of an ulcer in her left hip. *Wiſeman.*

They abound with horſe,
Of which one want our camp doth only *labour*. *B. Jonſon.*

To be in diſtreſs; to be preſſed.—This exerciſe will call down the favour of Heaven upon you, to remove thoſe afflictions you now *labour* under from you. *Wake's Preparation for Death.*

Trumpets and drums ſhall fright her from the throne,
As ſounding cymbals aid the *lab'ring* moon. *Dryden.*

To be in childbirth; to be in travail:

There lay a log unlighted on the earth,
When ſhe was *lab'ring* in the throws of birth;
For th' unborn chief the fatal ſiſters came,
And rais'd it up, and toſs'd it on the flame. *Dryden.*

Here, like ſome furious prophet, Pindar rode,
And ſeem'd to *labour* with th' inſpiring god. *Pope.*

To LA'BOUR, *v. a.* To work at; to move with difficulty; to form with labour; to proſecute with effort.—To uſe brevity, and avoid much *labouring* of the work,

is to be granted to him that will make an abridgment. 2 *Macc.*

Had you requir'd my helpful hand,
Th' artificer and art you might command,
To *labour* arms for Troy. *Dryden's Æneid.*

To beat; to belabour:

Take, ſhepherd, take a plant of ſtubborn oak,
And *labour* him with many a ſturdy ſtroke. *Dryden.*

LA'BOURER, *ſ.* [*labourer*, Fr.] One who is employed in coarſe and toilſome work.—The prince cannot ſay to the merchant, I have no need of thee; nor the merchant to the *labourer*, I have no need of thee. *Swift.*

Health to himſelf, and to his infants bread,
The *lab'rer* bears. *Pope.*

One who takes pains in any employment.—Sir, I am a true *labourer*; I earn that I eat; get that I wear; owe no man hate; envy no man's happineſs. *Shakeſpeare.*

The ſtone that labours up the hill,
Mocking the *lab'rer's* toil, returning ſtill,
Is love. *Glanville.*

Labourers, conſpiring together concerning their work or wages, ſhall forfeit 10l. for the firſt offence, 20l. for the ſecond, &c. and, if not paid, be ſet on the pillory. 2 & 3 *Edw.* VI. *c.* 15. See CONSPIRACY.—Juſtices of peace and ſtewards of leets, &c. have power to hear and determine complaints relating to non-payment of labourers' wages. 4 *Edw.* IV. 1. Labourers taking work by the great, and leaving the ſame unfiniſhed, unleſs for non-payment of wages, or where they are employed in the king's ſervice, &c. are to ſuffer one month's impriſonment, and forfeit 5l. The wages of labourers are to be yearly aſſeſſed for every county by the ſheriff, and juſtices of peace in the Eaſter ſeſſions, and in corporations by the head officers, under penalties. 5 *Eliz. c.* 4. And the ſheriff is to cauſe the rates and aſſeſſments of wages to be proclaimed. 1 *Jac.* I. *c.* 6. All perſons fit for labour ſhall be compelled to ſerve by the day in the time of hay or corn harveſt; and labourers in the harveſt-time may go to other counties, *having teſtimonials*. From the middle of March to the middle of September, labourers are to work from five o'clock in the morning till ſeven or eight at night, being allowed two hours for breakfaſt and dinner, and half an hour for ſleeping in the three hot months; and all the reſt of the year from twilight to twilight, except an hour and a half for breakfaſt and dinner, on pain of forfeiting 1d. for every hour abſent. If any labourer ſhall make an aſſault upon his maſter, he ſhall ſuffer and be puniſhed as a ſervant making ſuch aſſault. 5 *Eliz. c.* 4. And, by ſtat. 6 Geo. III. c. 25, artificers, labourers, *and other perſons*, abſenting themſelves from the ſervice of their employers, before the expiration of the term contracted for, ſhall be puniſhed by impriſonment for not leſs than one month, nor more than three.

LABOUREU'R (John), a writer of hiſtory and memoirs, was born in 1623 at Montmorenci, near Paris. At the age of nineteen he diſplayed his turn for hiſtorical reſearches by publiſhing an account of the tombs in the church of the Celeſtines at Paris, with memoirs of the perſons entombed, their genealogies, arms, &c. which, though an incorrect performance, was well received. In 1644, he was at court, in the ſtation of gentleman in waiting, when he was appointed to attend the marſhaleſs Guebriant into Poland, whither ſhe was conducting the ducheſs of Nevers, contracted to king Ladiſlaus IV. After his return, he publiſhed, in 1647, a curious narrative, of this female embaſſy. He then entered into the eccleſiaſtical profeſſion, and was made almoner to the king, and prior of Juvigné. In 1664, the king created him commander of the order of St. Michael. He died in 1675. His other works were, 2. A Hiſtory of the Marſhal de Guebriant, 1659. 3. A new edition of the Memoirs of Michael de Caſtelnau, with ſeveral genealogical hiſtories; 1656, 2 vols. folio; alſo at Bruſſels, in 3 vols, folio, 1731. This performance is reckoned to have thrown much light upon French hiſtory; and the additions by le Laboureur are ſaid to be very valuable, both for their accuracy and the free ſpirit in which they are written. 4. Hiſtory of Charles VI. tranſlated from the Latin of a manuſcript in the Library of the Preſident de Thou, 2 vols. folio, 1663. 5. A Treatiſe on the Origin of Coats of Arms, 1684, 4to. He left ſeveral manuſcripts, particularly, 6. A Hiſtory of the Peerage, in the king's library. *Moreri.*

LABOUREUR had a brother, (Louis,) bailiff of Montmorency, author of ſeveral pieces of poetry. And an uncle, (Claude,) provoſt of the abbey of l'Iſle Barbe, of which abbey he wrote a hiſtory; and publiſhed notes and corrections upon the breviary of Lyons, with ſome other things.

LA'BOURING, *ſ.* The act of toiling, or working hard.

LA'BOURSOME, *adj.* Made with great labour and diligence. *Not in uſe.*

He hath, my lord, by *labourſome* petition,
Wrung from me my ſlow leave. *Shakeſpeare's Hamlet.*

Among ſeamen it implies a violent rolling or pitching motion of a ſhip at ſea, by which the maſts, and even the hull, are in great danger. By pitching ſuddenly, the maſts are likely to be carried away; and by the heavy rolling motion the maſts ſtrain upon the ſhrouds, and conſequently upon the ſides, with an effort which increaſes as the ſine of their obliquity; and the continued agitation of the veſſel gradually looſens her joints, and makes her extremely leaky.

LA'BRA, *ſ.* [Spaniſh.] A lip. *Not uſed.*

Word of denial in thy *labras* here;
Word of denial: froth and ſcum, thou lieſt. *Shakeſpeare.*

LABRADE'US, a ſurname of Jupiter in Caria. The word is derived from *labrys*, which in the language of the country ſignifies a hatchet, which Jupiter's ſtatue held in its hand. *Plutarch.*

LABRADO'R, a country of North-America, in the government of Canada, bounded on the north-eaſt by Hudſon's Straits and the North Atlantic Ocean, on the ſouth-eaſt by the Straits of Belliſle, on the ſouth by Canada, and on the weſt by Hudſon's Bay. A late author, Mr. Cartwright, who, from a long reſidence of ſixteen years, had good opportunities of being well informed, ſays, the face of the whole country, at leaſt all we are at preſent acquainted with, is very hilly, and in moſt parts mountainous. The ſouth coaſt appears fertile from the ſea, but a cloſe inſpection diſcovers the ſoil to be poor, and the verdure to conſiſt only of coarſe plants, adapted to the nouriſhment of deer and goats, but not proper for horſes, kine, or ſheep. Corn might poſſibly be raiſed about the heads of the deepeſt bays, and in the interior parts of the country; but the few experiments which were made in gardens failed of ſucceſs; for the ears were ſinged by the froſt before the grain ripened. All the eaſt coaſt, as far as he went, exhibits a moſt barren appearance; the mountains riſe ſuddenly out of the ſea, compoſed of rocks, thinly covered in ſpots with black peat-earth, on which grow ſome ſtunted ſpruces, and a few other plants, but not ſufficient to give them the leaſt appearance of fertility; however, the ſea, rivers, and lakes, abound in fiſh, fowl, and amphibious creatures. No country is better furniſhed with large, convenient, and ſafe, harbours, or ſupplied with better water; for rivers, brooks, lakes, pools, and ponds, are every where to be met with in great abundance. All along the eaſt coaſt, and within the many capacious bays which indent it, are thouſands of iſlands of various ſizes, on which innumerable multitudes of eider-ducks, and other water-fowl, breed; the larger ones have generally deer, foxes, and hares, upon them. All kinds of fiſh which are found in the arctic ſeas abound on this coaſt; and the rivers are frequented by ſalmon and ſea-trout; pike, barbel, eels, river-trout, and ſome other kinds, are alſo found in them. A few miles from the ſea

the air becomes ſoft and warm, bare rocks no longer appear, the land is thickly clothed with timber, which reaches down almoſt to high-water mark, and is generally edged with graſs. Few ſtout trees are to be met with until you have advanced a conſiderable diſtance, and have ſhut the ſea out. Nature has clothed the ground with ſpruces and firs; intermixing a few larches, birch, and aſpens, ſparingly, along the edges of thoſe woods which grow adjoining to the ſhores of the bays, rivers, brooks, and ponds, where only they arrive at any degree of perfection. Labrador produces but ſeven ſorts of trees which are worthy of that appellation, viz. black, white, and red, ſpruce; larch, ſilver fir, birch, and aſpen; at leaſt, if there be any others, they muſt grow on the confines of Canada. The reſt are mere ſhrubs; they are the alder, oſier, dogberry, pears, juniper, currants, raſpberries, with a few others. The fruits conſiſt of various kinds of berries, viz. currants, raſpberries, partridge-berries, empetum nigrum, apples, pears, whortle-berries, cranberries, and a ſmall berry, the plant of which reſembles that of the ſtrawberry, each producing but a ſingle fruit, which is of a bright pink colour, granulated like a mulberry, and has a delicious flavour. The only vegetables found by him fit to eat, were wild celery, ſcurvy-graſs, the young leaves of the oſier, and of the ground whortle-berry; Indian ſallad, red docks, and an alpine plant which the rein-deer are very fond of. The ſoil is moſtly of a light kind, yet clay is common; no ores have yet been diſcovered, except that of iron, which ſeems to be in great plenty. White ſpar is very common, and ſeveral ſamples of that beautiful one, called Labrador ſpar, had been picked up by the Eſquimaux. The birds of the country are the white-tailed eagle, falcons, hawks, and owls of various kinds; raven, white grouſe, ptarmigan, ſpruce-game, whiſtling curlew, grey plover, various kinds of ſand-pipers, and other waders; geeſe, ducks of various ſorts, ſhags, gulls, divers of various ſorts, ſwallows, martins, ſome few ſpecies of ſmall birds, ſnipes, and doves; the two laſt are very ſcarce. The beaſts are bears both white and black, rein-deer, wolves, wolverines; foxes of various kinds, viz. black, ſilver, croſs, yellow, white, and blue; martins, lynxes, otters, mink, beavers, muſquaſh, racoons, hares, rabbits, and moles, and probably other kinds. He who wiſhes to ſtudy *the manners of bears* may here find ample ſatisfaction. At a cataract, ſurrounded with alders, ſpruces, firs, larches, birch, and aſpin, many ſalmon aſcend, and the bears aſſemble in numbers to catch their favourite prey. Some dive after the fiſh, and do not appear again till at the diſtance of ſeventy or eighty yards. Others ſeem to be *loungers*, who only come to ſee what is going forward, and to enjoy the *promenade* and the ſpectacle. Mr. Cartwright counted, upon one occaſion, thirty-two white bears, and three black ones.

The climate is remarkably healthy, the winters are very long and ſevere, but the cold is of a pleaſant kind; never cauſing a perſon to ſhiver, as it does in England; neither could he ever obſerve that the ſudden and great tranſitions which are ſo often experienced had any bad effect on the conſtitution, nor did he know of one endemical complaint. A few miles from the ſea, the weather in the ſummer-time is quite warm, and the air has a remarkable ſoftneſs in it; but the multitudes of moſquitos and ſand-flies are intolerable grievances. On the ſea-coaſt the air is much cooler; and it is very raw and cold indeed when the wind comes in from the ocean, occaſioned by the prodigious quantities of ice ſo immediately contiguous to the coaſt, whereby the water itſelf is always in a chilled ſtate. The buſineſs hitherto carried on by the Engliſh is the ſame with that on the iſland of Newfoundland. The exports are cod-fiſh, ſalmon, oil, whalebone, and furs; but the latter are much ſuperior to any of the ſame kind which are killed upon that iſland, and few parts of the world produce better. There are ſeveral Moravian ſettlements on the eaſt coaſt, the principal of which is Nain, formed about the year 1764.

The native inhabitants of Labrador conſiſt of two diſtinct nations of Indians, Mountaineers and Eſquimaux, who live in bitter enmity with each other. The *Mountaineers*, who inhabit the interior parts of the country towards the north, are tall, thin, and excellent walkers; their colour greatly reſembles that of our gypſies, probably occaſioned by their being conſtantly expoſed to the weather and ſmoky wigwams. Theſe people inhabit the interior parts of the country, which they traverſe by the aſſiſtance of canoes, covered with birch-rinds, in the ſummer; and of rackets, or ſnow-ſhoes, in the winter. They are wonderfully ſagacious at killing deer, otherwiſe they would ſtarve; and when they are in a part of the country, in the winter-time, where deer are ſcarce, they will follow a herd by the ſlot, day and night, until they tire them quite down; when they are ſure to kill them all, that is to ſay, if the night is light enough; for they reſt only four or five hours, then purſue again; which ſpace of time being too ſhort for the deer to obtain either food or reſt, they are commonly jaded out by the fourth day. The Indians paunch and leave them, go back to their families, return immediately with bag and baggage, and remain there until they have eaten them all; when, if they have not provided another ſupply elſewhere, they look out afreſh. But, when deer are plentiful, they are quickly provided with food without much trouble. As theſe people never ſtay long in a place, conſequently they never build houſes, but live the year round in miſerable wigwams, the coverings of which are deer-ſkins and birch-bark; the ſkins which they uſe for this purpoſe, as well as for clothes, are tainted to take off the hair, then waſhed in a lather of brains and water, and afterwards dried and well rubbed; but for winter uſe they alſo have jackets of beaver or deer-ſkins, with the hair on. As to the morals of theſe people, Mr. Cartwright ſays, he cannot ſpeak much in praiſe of them, for they are greatly addicted to drunkenneſs and theft. They profeſs the Romiſh religion; but know no more of it than merely to repeat a prayer or two, count their beads, and ſee a prieſt whenever they go to Quebec.

Of the *Eſquimaux*, however, Mr. Cartwright gives a much more favourable account. That gentleman's object, in viſiting the coaſt of Labrador, was the purſuit of various branches of buſineſs, and particularly the cultivation of a friendly intercourſe with the Eſquimaux Indians, "who have always been accounted the moſt ſavage race of people upon the whole continent of America." How juſtly they are now to be thus regarded, the reader will judge from the words of the author in his laſt volume, where, ſpeaking of theſe Indians, he obſerves: "I will content myſelf with ſaying they are the beſt-tempered people I ever met with, and moſt docile; nor is there a nation under the ſun with which I would ſooner truſt my perſon and property; although, till within theſe few years, they were never known to have any intercourſe with Europeans without committing theft or murder, and generally both."

Having eſtabliſhed a friendly intercourſe with the Eſquimaux Indians, Mr. C. relates many particulars of their ingenuity, diſpoſitions, and propenſities: "Very little more (he obſerves) than the mere neceſſaries of life (which, a little reflection will convince every one, are very few indeed) will ſatisfy an Indian; for he has no ſtimulus to induſtry. When he has killed food, he has generally procured clothing alſo; therefore he will work no longer. As ſeals are infinitely more valuable to an Eſquimau, and much more certain to be killed by him, than foxes, martens, or any other animals, on the ſkins of which luxury has fixed a better price; it is not ſurpriſing that he will ſtick cloſe to the chaſe of the one, to the great neglect of the other. Beſides, the catching of furs is ſo fatiguing and precarious, and the carcaſes ſo ſmall, that, were he to give up his time to that buſineſs, his family muſt periſh with hunger. Yet I have not a doubt, but commerce will, in progreſs of time, have the ſame effect on theſe people, that

that it ever has had on other nations; it will introduce luxury, which will increaſe their wants, and urge them to much more induſtry than they at preſent poſſeſs. They will then purchaſe traps, learn to build deathfalls, and contrive other devices to kill furs, at ſuch times as a ſucceſsful ſeal-chaſe ſhall give them leiſure to pay proper attention to that branch of trade."

Theſe people, Mr. Cartwright adds, are a detachment from the Greenlanders. That the Greenlanders and the Eſquimaux agree in every circumſtance of cuſtoms, and manners, and language, which are demonſtrations of an original identity of nation, was diſcovered near half a century ago. Crantz, in his Hiſtory of Greenland, (vol. i. p. 262.) informs us, that the Moravian brethren, who, with the conſent and furtherance of ſir Hugh Palliſer, then governor of Newfoundland, viſited the Eſquimaux on the Labrador coaſt, found that their language and that of the Greenlanders do not differ ſo much as high and low Dutch. Mr. Hearne, in 1771, traced this unhappy race farther back, towards that part of the globe from whence they had originally coaſted along in their ſkin-boats; having met with ſome of them at the mouth of the Copper-mine river, in the latitude of 72°, and near 500 leagues farther weſt than Pickerſgill's moſt weſterly ſtation in Davis's Strait. Their being the ſame tribe, who now actually inhabit the iſlands and coaſts on the weſt ſide of North America, oppoſite to Kamtſchatka, is a diſcovery, the completion of which was reſerved for captain Cook. The reader of his Third Voyage will find them at Norton Sound, and at Oonalaſhka, and Prince William's Sound; that is, near 1500 leagues diſtant from their ſtations in Greenland, and on the Labrador coaſt. And, leſt ſimilitude of manners ſhould be thought to deceive us, a table exhibiting proofs of affinity of language, drawn up by captain Cook and inſerted in the Appendix to the work juſt cited, will remove every doubt from the mind of the moſt ſcrupulous inquirer after truth.

The Eſquimaux are of a deep-tawny, or rather copper-coloured, complexion; they are inferior in ſize to the generality of Europeans, and there are but few of them who are of a good ſtature. They are flat-viſaged, and have ſhort noſes; their hair is black and very coarſe; their hands and feet are remarkably ſmall. The women load their heads with large ſtrings of beads, which they faſten to their hair above their ears; and they are fond of a hoop of bright braſs, which they wear as a coronet. Their dreſs is entirely of ſkins; and conſiſts of a ſort of hooded cloſe ſhirt, breeches, ſtockings, and boots. The dreſs of the different ſexes is the ſame, except that the women wear very large boots, and their upper garment is ornamented with a tail. In the boots they occaſionally place their children; but the youngeſt is always carried at their back, in the hood of their jacket. They have no ſort of bread, but live chiefly on the fleſh of ſeal, deer, fiſh, and birds. In the winter they live in houſes, or rather caverns, which are ſunk in the earth. In the ſummer they occupy tents, made circular with poles, and covered with ſkins. They have no ſort of beverage among them except water, and are not fond of ſpirituous liquors. They ſeem to have no ſort of religion, nor to have any object of adoration among them. They have no kind of government; and no man is ſuperior to another, but as he excels in ſtrength or in courage, and in having the greateſt number of wives and children. They have no marriage-ceremony; a wife is conſidered as property; and a huſband lends one of his wives to a friend. The women marry young. The men are extremely indolent, and women are mere drudges, doing every thing except procuring food. They ſew with the ſinews of a deer, and their needle-work is very neat. They have few diſeaſes, and are conſequently without phyſicians; but they imagine, that tying to their neck or wriſts the particular part of ſome fiſh or animal, according to the complaint, will effect a cure. Theſe Indians cannot reckon numerically beyond ſix; and their compound numbers reach no farther than twenty-one; every thing beyond this is a multitude. Their dread of the Mountaineers makes them live always upon the ſea-ſhores. Their canoes are extremely long in proportion to their breadth, being upwards of twenty feet by two, and contain only one perſon; they are covered with ſkins, and extremely light, ſo that they are eaſily overſet. They navigate their ſhallops without a compaſs, in the thickeſt fogs, and are very good-coaſters. Their dogs, of which they have a great number, ſerve as a guard, and as food; their ſkins ſupply them with clothing; and in winter they draw their ſledges. They cannot bark, but make a moſt hideous howl; they are large, and have a head like a fox; whereas the dogs of the Mountaineers are very ſmall. The weapons of theſe Indians are the dart, and the bow and arrow; but they are not very expert in the uſe of either. Their population cannot be accurately aſcertained; Mr. Curtis made ſome attempt for this purpoſe, by counting the number belonging to each tribe, eſtimated by the number of boats, and by that of the men, women, and children, belonging to each boat; eſtimating them in this way, he reckons their number to be 1623.

For the amuſement of our readers, we ſhall extract from Mr. Cartwright's Journal an account of the behaviour of thoſe Eſquimaux Indians who accompanied him on his return to England, at the concluſion of his firſt voyage.

"*Dec.* 11–13, 1772.—At three o'clock this afternoon we came to an anchor in the Downs, and took a pilot on-board. We ſailed from thence the next morning, and in twenty-four hours came to an anchor in Graveſend Road; I landed with the two men, and ſet off for London in a poſt-chaiſe, where we arrived at three in the afternoon.

"*Dec.* 14.—I went down the river this morning, met the veſſel in the Pool, and brought the women on-ſhore. They were greatly aſtoniſhed at the number of ſhipping which they ſaw in the river; for they did not ſuppoſe that there were ſo many in the whole world; but I was exceedingly diſappointed to obſerve them paſs through London Bridge without taking much notice of it. I ſoon diſcovered that they took it for a natural rock which extended acroſs the river. They laughed at me when I told them it was the work of men; nor could I make them believe it, till we came to Blackfriars' Bridge, which I cauſed them to examine with more attention; ſhowing them the joints, and pointing out the marks of the chiſels upon the ſtones. They no ſooner comprehended by what means ſuch a ſtructure could be erected, than they expreſſed their wonder with aſtoniſhing ſignificancy of countenance. On landing at Weſtminſter Bridge, we were immediately ſurrounded by a great concourſe of people; attracted not only by the uncommon appearance of the Indians, who were in their ſeal-ſkin dreſſes, but alſo by a beautiful eagle, and an Eſquimau dog, which had much the reſemblance of a wolf, and a remarkable wildneſs of look. I put them all into coaches with as much expedition as poſſible, and drove off to the lodgings which I had prepared in Leiceſter-ſtreet.

"In a few days time, I had ſo many applications for admittance to ſee the new viſitors, that my time was wholly taken up in gratifying the curioſity of my friends and their acquaintance; and the numbers who came made my lodgings very inconvenient to the landlord as well as to myſelf. I therefore reſolved to look out for a houſe. I ſoon hired a ſmall one, ready furniſhed, for ten guineas a-month, in Little Caſtle-ſtreet, Oxford Market, and removed thither. Being willing, as far as lay in my power, to comply with the inceſſant applications of my friends for a ſight of the Indians, and finding it impoſſible either to have any reſt, or time to tranſact buſineſs, I appropriated two days a-week to that purpoſe, viz. Tueſdays and Fridays. On thoſe days, not only my houſe was filled, even to an inconvenience, but the ſtreet was ſo much crowded with carriages and people, that my reſidence was a great nuiſance to the neighbourhood. As their ſkin-dreſſes had a dirty appearance and an offenſive ſmell, I provided a quantity of broad-cloth, flannel, and beads,

together with whatever elſe was neceſſary; and the women, now having leiſure to work, and being excellent tailors, ſoon clothed them all anew; preſerving their own faſhion in the cut of their garments.

"I once took the men to the opera when their majeſties were there; and we chanced to ſit near Mr. Colman, the manager of Covent Garden Theatre, who politely invited all the Indians and myſelf to a play at his houſe. He fixed on Cymbeline, and they were greatly delighted with the repreſentation. But their pride was moſt highly gratified, at being received with a thundering applauſe by the audience, on entering the box. The men ſoon obſerved to their wives, that they were placed in the king's box, and received in the ſame manner as their majeſties were at the opera; which added conſiderably to the pleaſure which they felt from the *tout enſemble*. Never did I obſerve ſo young a child pay ſuch unremitting attention to the whole repreſentation, as little Ickeuna; no ſooner did the ſwords begin to claſh, in the fighting-ſcene between Poſthumus and Iachimo, but ſhe ſet up a moſt feeling ſcream.

"About a fortnight after our arrival in town, having provided great-coats, boots, and hats, for the men, in order that they might paſs through the ſtreets unobſerved, I took Attuiock with me, and walked beyond the Tower. We there took boat, rowed up the river, and landed at Weſtminſter Bridge; from whence we walked to Hyde-Park Corner, and then home again. I was in great expectation, that he would begin to relate the wonders which he had ſeen, the inſtant he entered the room; but I found myſelf greatly diſappointed. He immediately ſat down by the fire-ſide, placed both his hands on his knees, leaned his head forward, fixed his eyes on the ground in a ſtupid ſtare; and continued in that poſture for a conſiderable time. At length, toſſing up his head, and fixing his eyes on the ceiling, he broke out in the following ſoliloquy: *Oh! I am tired; here are too many houſes; too much ſmoke; too many people; Labrador is very good; ſeals are plentiful there; I wiſh I was back again.* By which I could plainly perceive, that the multiplicity and variety of objects had confounded his ideas; which were too much confined to comprehend, at firſt, any thing but the inconveniences that he had met with. And, indeed, the longer they continued in England, the more was I convinced of the truth of that opinion; for their admiration increaſed in proportion as their ideas expanded; till at length they began more clearly to comprehend the uſe, beauty, and mechaniſm, of what they ſaw.

"Although they had often paſſed St. Paul's without betraying any great aſtoniſhment, or at leaſt not ſo much as all Europeans do at the firſt ſight of one of thoſe ſtupendous iſlands of ice which are daily to be ſeen near the eaſt coaſt of their own country, yet, when I took them to the top of it and convinced them that it was built by the hands of men, (a circumſtance which had not entered their heads before, for they had ſuppoſed it a natural production,) they were quite loſt in amazement. The people below, they compared to mice; and inſiſted that it muſt be at leaſt as high as Cape Charles, which is a mountain of conſiderable altitude. Upon my aſking them how they ſhould deſcribe it to their countrymen on their return, they replied, with a look of the utmoſt expreſſion, that *they ſhould neither mention it, nor many other things which they had ſeen, leſt they ſhould be called liars, from the ſeeming impoſſibility of ſuch aſtoniſhing facts.*

"Walking along Piccadilly one day with the two men, I took them into a ſhop to ſhow them a collection of animals. We had no ſooner entered than I obſerved their attention riveted on a ſmall monkey; and I could perceive horror moſt ſtrongly depicted in their countenances. At length the old man turned to me, and faltered out, "Is that an Eſquimau?" I muſt confeſs, that both the colour and contour of the countenance had conſiderable reſemblance to the people of their nation; but how they could conceive it poſſible for an Eſquimau to be reduced to that diminutive ſize, I am wholly at a loſs to account for; unleſs they had fixed their attention on the countenance only, and had not adverted to any other particulars. On pointing out ſeveral other monkeys of different kinds, they were greatly diverted at the miſtake which they had made; but were not well pleaſed to obſerve, that monkeys reſembled their race much more than ours. The parrots, and other talkative birds, next attracted their notice. And it was a great treat to me, both then and at all other times, to obſerve their different emotions, much more forcibly expreſſed in their countenances than is poſſible to be done by thoſe whoſe feelings are not equally genuine. Civilized nations imperceptibly contract an artificial expreſſion of countenance, to help out their languid feelings; for knowledge, by a communication with the world and books, enlightens our ideas ſo much, that they are not ſo liable to be taken by ſurpriſe as the uninformed mind of the ſavage, who never had the leaſt hint given him that certain things are in exiſtence; conſequently, they break upon them as unexpectedly, and forcibly, as the ſun would do upon a man who was born deaf and blind, in caſe he ſhould ſuddenly be brought to ſight on a clear day.

"Being on a dining-viſit with that excellent ſurgeon and anatomiſt, the ingenious John Hunter; in the afternoon Attuiock walked out of the room by himſelf, but preſently returned with ſuch evident marks of terror, that we were all greatly alarmed, fearing ſome accident had happened to him, or that he had met with an inſult from one of the ſervants. He ſeized hold of my hand, and eagerly preſſed me to go along with him. I aſked the cauſe of his emotion, but could get nothing more from him than 'Come along, come along with me;' and he haſtily led me into a room in the yard, in which ſtood a glaſs caſe containing many human bones. 'Look there,' ſays he, with more horror and conſternation in his countenance, than I ever beheld in that of man before; 'are thoſe the bones of Eſquimaux whom Mr. Hunter has killed and eaten? Are we to be killed? Will he eat us, and put our bones there?' As the whole company followed us, the other Indians had alſo taken the alarm before the old prieſt had finiſhed his interrogatories; nor did any of them ſeem more at eaſe, by the reſt of us breaking out into a ſudden and hearty laugh, till I explained to them that thoſe were the bones of our own people, who had been executed for certain crimes committed by them, and were preſerved there, that Mr. Hunter might better know how to ſet thoſe of the living, in caſe any of them ſhould chance to be broken; which often happened in ſo populous a country. They were then perfectly ſatisfied, and approved of the practice; but Attuiock's nerves had received too great a ſhock to enable him to reſume his uſual tranquillity, till he found himſelf ſafe in my houſe again.

"Paſſing through Hyde Park in our way to Holland Houſe, and obſerving his majeſty looking at the regiment of Old Buffs, which were then going to Plymouth, we got out of the coach, and went up to the front; where I explained to them the uſe of that body of men, and of the evolutions which they were performing. After his majeſty had viewed the regiment collectively, the recruits were drawn out at a few paces diſtant from the left flank, that he might examine them ſeparately. So great a crowd had gathered round us, as incommoded our view of the troops, and attracted the notice of the king, who then ſent general Harvey to order me, with the Indians, into the vacant ſpace between the regiment and the recruits. Here his majeſty rode ſlowly paſt them, and condeſcended to ſalute them by taking off his hat, accompanied with a gracious ſmile; honours which they were highly pleaſed with, and often mentioned afterwards with great exultation. Nor were they in the leaſt diſpleaſed that his majeſty did not ſpeak to them; ſince I had previouſly told them not to expect it; and they obſerved that he ſpoke to none but the commanding officer, and one or two of thoſe who were in attendance."

"The face of the country did not paſs unobſerved by them; and their expreſſion was, *The land is all made*; for they ſuppoſed that we had cut down the woods, and levelled the hills. In the former ſuppoſition they were certainly right; and I do not wonder at the latter, ſince they would naturally ſuppoſe that all the world was like the ſmall part of it which they had formerly ſeen; and which is almoſt an entire collection of hills covered with thick woods. As they had never before ſeen any cultivated land (except a few ſmall gardens, which they obſerved were dug with a ſpade), they formed an idea of our immenſe numbers, by being able to till ſo much land and conſume the produce of it in a year; excluſive of the animal food with which they ſaw our tables and markets abounded. How the inhabitants of London were ſupplied with food, I could never make them fully comprehend, any more than I could the number of people by which the metropolis was inhabited. Their arithmetic goes no higher than the number twenty-one; therefore, the beſt I could do, was to tell them, that a certain number of large whales would ſerve them for one meal only. Nothing ſurpriſed them more, than to meet with a man who aſſured them he could not ſhoot, had never killed an animal, nor ſeen the ſea, in his life.

"After my return to town, by his majeſty's permiſſion I took them to court; where their dreſſes and behaviour made them greatly taken notice of. They were alſo at the houſes of ſeveral of the nobility and people of faſhion; and I omitted nothing, which came within the compaſs of my pocket, to make their ſtay in England agreeable, or to impreſs them with ideas of our riches and ſtrength. The latter I thought highly neceſſary, as they had often, when in Labrador, ſpoken of our numbers with great contempt; and told me they were ſo numerous, that they could cut off all the Engliſh with great eaſe, if they thought proper to collect themſelves together; an opinion which could not fail to produce in me very unpleaſant reflections. But they had not been long in London before they confeſſed to me, that the Eſquimaux were but as one, compared to the number of the Engliſh."

Having purchaſed a brig of eighty tons, Mr. C. began, in the ſpring of the year 1773, to prepare for a ſecond voyage, in order to reſtore theſe Eſquimaux to their country and friends. But the pleaſing proſpects which he had indulged were of a ſhort duration. On the evening of the 13th of May, Caubvick, a female Indian, complained of great ſickneſs at her ſtomach, which daily grew worſe. At Lymington, her diſorder was declared to be the ſmall-pox; and, as it was in vain to expect the reſt ſhould eſcape the infection, preparative medicines were accordingly given to them. On the 22d, Caubvick appeared to be out of danger. At the ſame time, Ickcongoque, another Indian, began to ſicken. On the 29th, ſo dreadful a ſtench pervaded the whole veſſel, that there ſeemed reaſon to apprehend that they would all be ſoon attacked with a peſtilential fever. The Indians were all ill, and two of the ſhip's crew were already indiſpoſed. Mr. C. therefore ordered the maſter to carry the veſſel into Plymouth, removed the Indians on-ſhore, and procured for them every medical aſſiſtance which Plymouth afforded; yet, melancholy to relate! Caubvick alone recovered. On the 16th of July, Mr. C. ſailed for Labrador. The hair of the Indian woman being much matted with the ſmall-pox, it was by no means eaſy to prevail on her to part with that which ſhe regarded as a principal ornament; nor, when cut off, would any intreaties, or repreſentations of the danger to which ſhe would expoſe her countrymen, induce her to throw it overboard. She carried it home; and, in the farther peruſal of the Journal, we obſerve a conjecture, founded on the knowledge of ſome facts, that the hair of this Indian was the means of communicating to her countrymen this fatal diſorder. On the 31ſt of Auguſt they reached the coaſt of Labrador. The report of their arrival brought the three ſouthernmoſt tribes of Eſquimaux, amounting to about five hundred, to receive their long-expected friends, and to hear the wonderous ſtories which they might have to relate. We ſhall give an account of the affecting ſcene of their diſappointment in the words of the author: "I placed myſelf upon a rock near the water-ſide, and Caubvick ſat down a few paces behind me. We waited for the landing of the Indians with feelings very different from their's; who were hurrying along with tumultuous joy at the thoughts of immediately meeting their relations and friends again. As the ſhore would not permit them to land out of their boats, they brought them to their anchors at a diſtance off, and the men came in their *kyacks*, each bringing two other perſons, lying flat on their faces; one behind and the other before, on the top of the ſkin covering. On drawing near the ſhore, and perceiving only Caubvick and myſelf, their joy abated, and their countenances aſſumed a different aſpect. Being landed, they fixed their eyes on Caubvick and me, in profound gloomy ſilence. At length, with great perturbation and in faltering accents, they enquired, ſeparately, what was become of the reſt; and were no ſooner given to underſtand, by a ſilent ſorrowful ſhake of my head, that they were no more, than they inſtantly ſet up ſuch a yell, as I had never before heard. Many of them, but particularly the women, ſnatched up ſtones, and beat themſelves on the head and face till they became ſhocking ſpectacles; one pretty young girl (a ſiſter to the two men deceaſed) gave herſelf ſo ſevere a blow upon the cheek-bone, that ſhe bruiſed and cut the fleſh ſhockingly, and almoſt beat an eye out. In ſhort, the violent frantic expreſſions of grief were ſuch as far exceeded my imagination; and I could not help participating with them ſo far as to ſhed tears moſt plentifully. They no ſooner obſerved my emotion, than, miſtaking it for the apprehenſions which I was under for fear of their reſentment, they inſtantly ſeemed to forget their own feelings, to relieve thoſe of mine. They preſſed round me, claſped my hands, and ſaid and did all in their power to convince me that they did not entertain any ſuſpicion of my conduct towards their departed friends. As ſoon as the firſt violent tranſports of grief began to ſubſide, I related the melancholy tale, and explained to them, as well as I could, the diſorder by which they were carried off; and pointed to Caubvick, who bore very ſtrong as well as recent marks of it. They often looked very attentively at her, but, during the whole time, they never ſpoke one word to her, nor ſhe to them. As ſoon as I had brought the afflicting ſtory to a concluſion, they aſſured me of their belief of every particular, and renewed their declarations of friendſhip. Their ſtay afterwards was but ſhort; they preſently reimbarked, weighed their anchors, and ran acroſs the harbour to Raft Tickle, where they landed and encamped; the reſt of the afternoon and the whole of the night was ſpent in horrid yellings, which were conſiderably augmented by the variety of echoes, produced from the multiplicity of hills ſurrounding the harbour, till the whole rung again with ſounds that almoſt petrified the blood of the brig's crew and my new ſervants." Mr. Cartwright returned to England at the latter end of the year 1773. He made afterwards four other voyages of commercial ſpeculation to the ſame coaſts, and was always well received by the natives. He publiſhed his entertaining Journal in 1793, in 3 vols. 4to. The coaſt of Labrador extends from lat. 50. 30. to 62. 30. N. lon. 55. 30. to 78. 30. W.

LABRADO'R, a large lake which, by its numerous branches, forms a water-communication through great part of the iſland of Cape Breton. In ſome maps it is called St. Peter's Lake.

LABRADO'R STONE. See *Feldſpatum*, under the article MINERALOGY.

LABRADO'R TEA, in botany. See LEDUM.

LABRIT', a town of France, in the department of the Landes, and chief place of a canton, in the diſtrict of Mont-de-Marſan. The place contains 584, and the canton 4401, inhabitants, on a territory of 497½ kiliometres, in nine communes.

LABRO'SE,

LABRO'SE, *adj.* [from *labra*, Span.] Having full lips; having a brink. *Bailey.*

LABROSUL'CIUM, *ſ.* [Latin.] A canker in the lips. *Phillips.*

LA'BRUM, *ſ.* [Latin.] A bathing-tub; the edge of a ditch or river; a lip. *Phillips.*

LA'BRUM VEN'ERIS. See DIPSACUS.

LA'BRUS, *ſ.* [from λαβρος, Gr. voracious; or from *labrum*, Lat. a lip, on account of the thickneſs of the lips.] In ichthyology, a genus of thoracic fiſhes, the characters of which are—Lips very thick, the lip-bones concealed, the upper lip double and extenſile; a ſlender ſkin beyond each ray of the dorſal fin; teeth ſharp; gill-coverts ſcaly.

Theſe fiſhes in general have the upper jaw moveable, ſo that it can be protruded or drawn back; it conſiſts of two bones which join in the middle; each bone is provided with an apophyſis, or proceſs, at the place of junction; above this half-jaw appear, according to the ſize of the mouth, two other thin bones, whoſe narrow ends join in the middle, and their broad ends advance to the corners of the mouth; they have no other tegument but the ſkin, and no immediate connection with the other bones. Artedius calls them *external jaws*; but, as they do not perform the functions of lips, and are very rarely furniſhed with teeth, and furthermore as they touch neither the upper nor under jaw, this name cannot be proper for them. Neither can they be denominated *lips*, as Linnæus would have it, for that name can be applied to fleſhy ſubſtances only, not bony. Dr. Walbaum, in his new edition of Artedius, calls them *whiſkers*; but this gives the idea of ſomething hairy. The only thing they can be compared to is the *os hyoides* in the human frame. Bloch calls them *lip-bones*, and him we have followed. Now, the fiſhes of this tribe having theſe bones ſhort and narrow, and concealed by broad thick lips, bones thus covered are taken by Bloch to form the generic character; ſome other fiſh indeed have this peculiarity, but they are ſufficiently diſtinguiſhed by other marks. The fiſhes of this genus have a lengthened body, a blunt ſnout, the head ſometimes partly covered with ſcales, ſometimes quite bare; the ſcales are thin and oval, like thoſe of ſerpents; the lateral line is much curved in the back part in ſome ſpecies, in others it breaks off, and in ſome it is quite ſtraight. The fins are rounded in moſt of the ſpecies, though ſome have them pointed. They have ſeven fins, of which the dorſal is very long, and the membrane is continued beyond the end of each ray; this is the Linnæan generic character. They have beautiful colours; and, the ſpecies being very numerous, ſome are found in all parts of the world. They are predaceous, ſeeking the ſhallows and rocky bottoms of the ſeas contiguous to the boldeſt ſhores; and thence their fleſh is firm and wholeſome. The Greek writers were acquainted with ſix ſpecies; Bloch reckons up no leſs than 112, which he divides into thoſe with ſwallow-tails, creſcent-tails, and rounded tails; which laſt, being very numerous, he again ſubdivides into thoſe which have ſcales on the head, and thoſe which have not. Cepede has divided the Labri into no leſs than ſeven genera; Labrus, Hiatula, Oſphronemus, Cheilinus, Lutjanus, Trichopodus, and Cheilodipterus; to which may be added Gomphoſus and Monodactylus, by which he has deſignated ſome ſpecies very nearly reſembling the Labri. All theſe we ſhall, in conformity with our uſual plan, reſtore to their places according to the Gmelinian ſyſtem, inſerting the recently-diſcovered kinds in their proper places.

I. *Tail divided; forked or creſcent-ſhaped.*

1. Labrus Braſilienſis, the Braſilian wraſſe. Specific character, ſtripes on the dorſal and anal fin. There are 11 rays in the pectoral fin, $\frac{1}{6}$ in the ventral, $\frac{3}{25}$ in the anal, 18 in the tail, and $\frac{9}{23}$ in the dorſal. The upper figures in the fraction-like form denote the number of *ſpinous* rays in each fin.

The head is without ſcales, ſloping, and ornamented with vermicular lines or ſtripes of blue upon a gold ground, which are continued all down the back. The mouth is ſmall, the jaws of equal length, with two canine teeth in the upper, and four in the lower, and a row of little ſharp teeth along the ſides. The noſtrils are double, and near the eyes; the pupil is black, irides dark red, and light blue. The lateral line is arched parallel with the back, and nearer to it than to the belly; the anus is nearer the head than the tail. The ſcales are large and ſmooth. The ſoft rays of the fins are ramified, except of the dorſal and anal, which are only dichotomous. Gold is the prevailing colour in this fiſh, on which the blue lines and ſpots have a fine effect. The dorſal and anal fins are yellow, with each three blue ſtripes; the other fins are entirely blue. This beautiful fiſh is found in the waters of Braſil; its length is not more than ten inches according to Marcgrave; but prince Maurice ſays it grows to the ſize of the carp. It lives on prey, bites at a hook, and is excellent food. Cepede places this and the third ſpecies in his third diviſion, ſuppoſing the tail to be trilobated.

2. Labrus lunaris, the lunated wraſſe: body purple, and eight ſpines in the dorſal fin. There are 5 rays in the membrane of the gills, 17 in the pectoral fin, 6 in the ventral, 13 in the anal, 14 in the tail, 21 in the dorſal. The head is ſmall, compreſſed, without ſcales, furniſhed with a great number of pituitous pores; there is one row of ſmall ſharp teeth, of which the back ones are the longeſt; the tongue and palate are ſmooth, but there are bones in the gullet armed with flat teeth. The eyes are ſmall, pupil blue, iris ſilvery, and a nictating membrane; the noſtrils are cloſe to the eyes. The poſterior operculum terminates in a blunt point, and conſiſts of two ſmall laminæ; under the anterior one is found the *ſingle gill*; concerning which peculiarity, ſee the article ICHTHYOLOGY, vol. x. p. 736. The body is oblong, and covered with ſmooth ſcales. The anus is nearer the head than the tail; the lateral line makes an abrupt bend at the end of the dorſal fin; it appears ſplit in three upon every ſcale. The ſoft rays of the fins are moſtly four-branched, and the ſpiny ones jagged. The head and dorſal fin are dark blue; the lower parts are lighter; the pectoral fins are yellow at the baſe, and afterwards dark blue, the dorſal fin is edged with white above and below. Inhabits South America and India.

3. Labrus viridis vittatus, the green ſtriped wraſſe: the beautiful green colour which pervades this fiſh, and eight ſpines in the dorſal fin, form the ſpecific character. The pectoral fin has 12 rays, the ventral 6, the anal 13, the tail 14, the dorſal 28. The head is ſmall, compreſſed, void of ſcales, and ornamented with green ſtripes. Mouth as in the preceding. The noſtrils are double, and near the eyes. The eyes have a black pupil, and golden iris. The body is narrow, compreſſed, and covered with large ſmooth ſcales, edged with yellow and green. The lateral line goes ſtraight with the back, and is curved towards the end. The back is carinated, the belly thin, the anus in the middle of the body. The dorſal and anal fins are yellow, with a green edging at top and bottom: the others are yellow in the middle, and green at the extremities. This ſpecies is from Japan; it grows a foot long. We have given it the name of *viridis vittatus*, to diſtinguiſh it from Linnæus's *Labrus viridis*, which has a rounded tail, and inhabits the Mediterranean. The preſent ſpecies is from Bloch.

4. Labrus bifaciatus, the two-banded wraſſe: two brown tranſverſe ſtripes on the body. The membrane of the gills has five rays, the pectoral fin 12, the ventral 6, the anal 14, the tail 13, the dorſal 21. The head is void of ſcales, containing a number of minute apertures which ſeparate a viſcous liquor. The teeth are cloſe together, and the front ones are the largeſt. The eyes are ſmall; the pupil is red, the iris green. The palate and tongue ſmooth, but there are pearl-ſhaped teeth in the gullet. The body is long; the ſcales broad, thin, and ſmooth. The lateral line

line is very near the back, then drops almoſt perpendicularly into the middle of the tail. The head is reddiſh; the body grey, with two broad ſtripes of brown at the front part; tail forked, the baſe and outer forks grey, the middle bluiſh. The breaſt is white; the pectoral and ventral fins are yellow; the anal and dorſal reddiſh, bordered with light blue. This ſpecies is from the Eaſt Indies.

5. Labrus trichopterus, the brittle-finned wraſſe: ventral fin with briſtly rays. The membrane of the gills has 4 rays, the pectoral fin 10, the ventral 3, the anal 44, the tail 16, and the dorſal 14. Pallas gives the ventral fin but one ray, and makes that the ſpecific character. The head and mouth are ſmall; the lips ſtrong, and the jaws of equal length armed with ſmall teeth; the noſtrils are double, the front pair furniſhed with a membrane to cloſe them. The eyes have a golden iris ſurrounding a black pupil. The body is broad and thin; the back is rounded in the front part, but carinated back, as is the belly, which is very ſhort, ſo that the anus is near the head. On the ſides is a blackiſh oblong ſpot, and another on the tail. The lateral line makes a ſtrong inflection at the end of the pectoral fin. The ſcales are very ſmall, hard, and ſerrated. The dorſal fin is very ſhort, and the anal remarkably long; the long ray of the ventral is made up of joints like the antennæ of beetles; this ray is long as the whole body, and probably ſerves the fiſh as a line to angle for young fry, who may miſtake it for a worm. The back is brown; the reſt of the body pale blue varied with yellow. The tail-fin is creſcent ſhaped, (Cepede ſays forked,) covered with yellow ſpots, as the anal is in part; the pectorals are bluiſh. This ſpecies is from Japan.

6. Labrus monodactylus, the one-fingered labrus: the ventral fin conſiſting of one ſmall ſpiny ray, hardly viſible; dorſal and anal falcated, tail creſcent-ſhaped. The membrane of the gills has ſeven rays, the dorſal fin 33, the pectorals 17, ventrals 1, anal $\frac{3}{30}$. This is from Commerſon, and made a diſtinct genus (Monodactylus) by Cepede. The dorſal and anal fins are nearly equal in extent, almoſt reaching to the tail fin. The anus is juſt oppoſite the pectoral fins, which are pointed. The lateral line runs near the back, and follows its curvature. The gill-covert is in two pieces, the hinder one irregularly fringed. The eyes are large; the mouth ſmall; the upper jaw in a ſemicircular form, furniſhed with ſhort ſharp teeth cloſe ſet; it is extenſile alſo, and covers the lower. The tongue is broad, rounded in front, narrow at the rims, almoſt entirely rough; the noſtrils are double. The body and tail are much compreſſed, covered with ſmall round ſmooth ſcales; ſcales ſmaller ſtill appear on the baſe of the dorſal and anal fins. Prevailing colour ſilver, with brown tints on the back, as well as on the anterior part of the anal, dorſal, and pectoral, fins, though theſe are ſometimes fleſh-colour. Length, ten inches.

7. Labrus melagaſter, the black-bellied wraſſe: ſcales on the front operculum. The membrane of the gills has five rays, the pectoral fin 12, the ventral 6, the anal 10, the tail 19, and the dorſal 25. The head is ſhort, declining, and compreſſed; the mouth is very ſmall, and the teeth ſo minute as to be hardly perceptible; jaws nearly equal. The noſtrils are ſingle, and near the eyes. The eyes are large, high in the head, with a black pupil and golden iris. The poſterior operculum is compoſed of two equal laminæ; the under ſurface of the anterior one exhibits the ſingle gill. The gills have a very wide aperture, and the membrane is covered in part. The trunk is broad and thin; the ſcales are broad, ſmooth, and round, black on the belly, which is very uncommon; on the other parts chocolate-colour, edged with brown and black; they form a furrow on the back and at the anus, and cover part of the tail-fin alſo. The lateral line is interrupted. The fins are black, ending ſharp; the pectorals and ventrals are peculiarly long. This ſpecies is from Surinam.

8. Labrus melapterus, the ſoft-finned wraſſe: all the rays of the fins ſoft except the firſt of the ventral. The pectoral fin has 12 rays, the ventral $\frac{1}{5}$, the anal 12, the tail 16, the dorſal 20. The body is narrow and compreſſed, and there are no ſcales on the head; the aperture of the mouth is ſmall; the jaws of equal length, with a ſingle row of ſmall ſharp teeth, of which thoſe in front of the upper jaw are larger than the reſt. The noſtrils are ſingle. The eye conſiſts of a black pupil and yellow iris. The front operculum is made up of ſeveral ſmall laminæ; the hinder one terminates in a blunt point. The ſcales are broad and ſmooth; the anus is in the middle of the body. The fiſh is white, towards the back inclining to blue; the fins are yellow ſhaded with blue; there are five dark-coloured ſpots on the body. Native of Japan.

9. Labrus rufus, the rufous wraſſe: tail-fin lunate, body entirely tawny. There are 23 rays in the dorſal fin, 17 in the pectorals, 6 in the ventrals, 12 in the anal, 16 in the tail. This ſpecies inhabits North America; grows to a foot or more in length. The lower jaw is longer than the upper; the front teeth of the upper jaw are longer than the reſt.

10. Labrus Zeylanicus, the Ceylon wraſſe: tail lunate, body green above, pale purple beneath. This ſpecies inhabits Ceylon; one foot and a half long; fleſh good. Head blue; gill-coverts green with purple lines; pectoral fins with a purple ſpot in the middle, and edged with fine blue; ventral blue; dorſal and anal bluiſh purple, edged with green; tail yellow in the middle, each ſide ſtreaked with red, blue at the baſe.

11. Labrus ſemi-ruber, the red-and-yellow wraſſe: 12 ſpiny and 11 articulated rays in the dorſal fin, the ſixth articulated ray much longer than the reſt; four teeth larger than the reſt in the upper jaw; the anterior part of the body red, the poſterior yellow. There are 5 rays in the membrane of the gills, 16 in the pectorals and anal, 6 in the ventrals, 14 in the tail. This was firſt obſerved by Commerſon in June 1767, in the fiſh-market at St. Salvador, the capital of Braſil. It has ſcales on the baſe of the dorſal and anal fins.

12. Labrus tetracanthus, the four-ſpined wraſſe: 4 ſpines and 21 jointed rays in the dorſal fin; the upper lip broad, thick, and wrinkled; three rows of black dots on the dorſal fin, one row on the anal; tail ſemilunar; 18 rays in the anal fin, which, as well as the ſoft rays of the dorſal, end in filaments. Its country is not known; the account was taken from a ſpecimen preſerved in ſpirits belonging to a collection brought from Holland to Paris during the late war. Beſides the four rows of ſmall black ſpots on each ſide mentioned above, ſimilar ones appear on the tail-fin.

13. Labrus ſemi-diſcus, the ſemicircular wraſſe: 21 rays in the dorſal fin, that and the anal fringed; 19 tranſverſe ſtripes on each ſide; a light ſemicircular ſpot at the end of the tail-fin, which is creſcent-ſhaped. Fourteen rays in the anal fin, 13 in the caudal. This ſpecies and the two following, taken from Commerſon's manuſcripts, inhabit the great Indian Gulf, and the ſeas which run into it. Jaws nearly equal in this and the following.

14. Labrus doliatus, the encircled wraſſe: 9 ſpiny and 13 articulated rays in the dorſal fin; tail ſemilunar; 20 tranſverſe ſtripes on each ſide encircling the animal; opercula not ſcaly in this and the preceding. There are 14 rays in the anal fin, 11 in the caudal.

15. Labrus hirſutus, the prickly wraſſe: 11 hard and 12 ſoft rays in the dorſal fin, 6 large teeth in the upper jaw; the lateral line prickly; 12 longitudinal ſtripes on each ſide, 4 more on the neck; back dotted. The anal and tail fins have 13 rays each. A thick tranſverſe ſtripe acroſs the tail.

16. Labrus ſcarus, the doubtful wraſſe: tranſverſe appendages at the ſides of the tail. This is Gmelin's firſt ſpecies, and has its name from being ſomewhat ſimilar to the Scarus genus, which immediately precedes the Labrus in that ſyſtem. Cepede has placed this and the following in a ſeparate genus, Cheilinus, from χειλος, Gr. a lip, to denote a certain ſimilarity with the Labrus, which ſignifies the ſame. We have therefore called it the *doubtful wraſſe*. It inhabits the coaſts of Greece, and was greatly

eſteemed and ſought after by the earlieſt civilized people of Europe; it is found alſo in the Mediterranean, Sicily, and all the Grecian iſles. Its colour is whitiſh, or livid mixed with red; grows eight or ten inches long. The ſcales are large, and very tranſparent; teeth blunt, fit for grinding the plants and weeds it tears from the rocks; and this food it prefers to all other; a remarkable circumſtance, which made ancient writers compare it to the ruminating animals among quadrupeds; and ſome have gone ſo far as to ſay that it really chews the cud, and hence, according to Ariſtotle, the Greeks called it μηρυναν, the ruminating fiſh. They go in ſhoals. The Greek poet Oppian has ſung their mutual affection, ſaying, that, when one is caught by a hook, one of his companions cuts the line for him to eſcape; he adds, that if one of them is encloſed in a net, and endeavours to eſcape tail foremoſt, ſeveral of them will aſſiſt him by taking hold of his tail in their mouths; and particularly, that, when a female is caught, the males will expoſe themſelves to the greateſt dangers to effect her liberation. In the earlieſt times of our vulgar era, this fiſh was known in the Archipelago and ſea then called the Carpathian, as far as the firſt promontory of the Troad; from this place, in the time of Tiberius Claudius, a Roman admiral, called Optatus Elipertius, brought ſeveral of them alive, and put them in the ſea along the ſhores of Oſtia and Campania. In five years, by adhering to the ſimple precaution of always throwing them back into the water when caught among other fiſh, they became very plentiful along the Italian coaſts, where before they had never been ſeen. This fact is not unintereſting, inaſmuch as it may ſerve as a hint for the breeding, preſerving, and multiplying, of ſcarce ſpecies of fiſh. Philoponus, the commentator of Ariſtotle towards the end of the ſixth or beginning of the ſeventh century, remarked, that this fiſh produced a certain ſound or noiſe, when, its head being above the ſurface, it ſpouted the water briſkly out of its mouth. The Trigla and ſome other fiſh have been obſerved to make a ruſtling noiſe in certain ſituations, and doubtleſs from the ſame cauſe, the action of the air. In the days of Roman luxury, this fiſh was in great requeſt. Martial tells us, that it was reckoned a delicacy at the moſt ſumptuous tables; that the liver was moſt eſteemed; but that they ate the inteſtines without cleaning them; at which we need not ſo much wonder (ſince this animal feeds only on vegetables) as at modern gluttons who eat without cleaning ſome ſorts of birds, called *game*, which are known to feed upon animal ſubſtances liable to real corruption. In the time of Rondeletius, this fiſh, and its inteſtines alſo, were ſtill much reliſhed; he writes that it may be conſidered as the firſt among rock-fiſh; that the fleſh is light, friable, eaſy of digeſtion, and pleaſant to the taſte; and that the bowels, which ſhould by no means be thrown away, ſmell like violets. But the price paid for it at that time was much below what was given at ancient Rome in the time of Pliny; it made a part of a diſh in which the rareſt delicacies were combined, ſerved up to the emperor Vitellius in a veſſel, which from its ſize was called Minerva's ſhield; here the inteſtines of the ſcarus were mingled with the brains of pheaſants and peacocks, the tongues of flamingos, and the roes of the muræna. This fiſh will feed alſo upon land-plants, or vegetables; it is often caught with a bait of a bean or pea leaf, &c.

17. Labrus Cretenſis, the Grecian wraſſe: the dorſal fin without ſpiny rays, body greeniſh, teeth 4. There are four rays in the membrane of the gills, 16 in the pectoral fin, 6 in the ventral, 11 in the anal, 18 in the tail, and 20 in the dorſal. The head is large, ſloping, and covered with ſcales; the lips are thick, the jaws ſerrated; near the corner of the mouth there are three recurved ſpines, by means of which the fiſh when hooked becomes more ſafely ſecured. The noſtrils are round, ſmall, ſingle, and near the eyes. The gills have a very wide aperture, and the membrane is partly concealed. The ſcales are very large, and imbricated or furrowed. The lateral line originates from the upper part of the operculum, keeps near the back, and marks every ſcale it paſſes over with from three to ſix ſtreaks of dark brown. The anus is in the middle of the body. The back and head are dark green, the ſides lighter, the belly yellow. The fins are yellow, but green at the extremities. The pupil of the eye is black; the irides are double, white and green. The fins have ſtrong rays, but not ſpiny, and are ramified; the ventral fins are farther from the head than the pectorals. The idea that this fiſh is found in the waters of Greece has no other foundation than the name of Cretenſis given it by Aldrovandus; it is placed among the fiſhes of India by Renard, Bloch, &c.

18. Labrus anthias, the gruntling wraſſe: the ſecond ſpine of the dorſal fin is long; body reddiſh. There are five rays in the membrane of the gills, 40 in the pectoral fin, $\frac{1}{6}$ in the ventral, $\frac{3}{9}$ in the anal, 13 in the tail, $\frac{10}{25}$ in the dorſal. The head is ſhort, compreſſed, and covered with ſcales. The mouth opens upwards; the under jaw is ſomewhat longer than the upper, each armed with a row of ſharp teeth, bent back, and ſtanding apart, the intervals filled with ſhort teeth very cloſe like pins. The tongue is ſmooth; but the throat is exaſperated by two bones rough like a file. The noſtrils are ſingle, and near the eyes; the pupil of the eye is black, the iris gold-colour. The bones of the lips are broad, and furniſhed with ſmall ſcales: the front operculum is ſerrated, and the branchial membrance is partly looſe. The body is narrow; the lateral line runs near the back, but is interrupted at the end of the dorſal fin; and the anus is nearer the tail than the head. The fins are in general long, eſpecially thoſe of the anus and tail, and all end in a point, but the tail is bifurcated; the ſoft rays are ramified. The long ſpine in the dorſal fin has ſome faint reſemblance to a razor, and has gained this fiſh the name, among others, of the *barber*. A pale red tint ſhades the hard ſilvery ſcales. From ſome peculiarities in conformation, Gmelin ſuppoſes this may belong to the Perca genus; but Bloch has placed it at the head of a genus of his own formation, Anthias, the gruntling. Cepede derives anthias from ανθος, a flower, on account of its beauty; with this the names given it by the ancients agree. It was called alſo the *ſacred fiſh*; and it was ſaid that no noxious animal would be found in the ſame waters; therefore bathers and divers might ſafely deſcend to the bottom of the ſea wherever this privileged animal reſorted. This fiſh haunts the Mediterranean; as the Greek writers have given deſcriptions of it in detail, it muſt be common in the waters of Greece. According to Ariſtotle and Pliny, it is of the gregarious kind. Oppian ſays it keeps in the ſea between rocks, and only comes out to ſeek for its food, which conſiſts of young fiſh, particularly ſhell-fiſh; this writer alſo gives a long account of the manner of catching them; wolf's fleſh is a good bait; from his deſcription of the fiſhery, and the compariſon which Elian makes of it with the tunny, it muſt attain to a conſiderable ſize. It is ſaid to be very voracious. From its not being able to bite the line in two, Oppian was led to conclude it had no teeth; but the want of ſtrength in the teeth was the only reaſon; they are like a ſmall file.

19. Labrus hepatus, the hepatus: lower jaw the longeſt, tranſverſe black lines on each ſide the body. The dorſal fin has $\frac{19}{14}$ rays, pectorals 13, ventrals 6, anal 9. The ſnout is pointed, teeth ſmall; a triangular ſpace in the palate is rough with ſmall aſperities. There is a black ſpot on the dorſal fin behind the ſpinous rays. It inhabits the Mediterranean, and ſome rivers which run into the Adriatic.

20. Labrus griſeus, the grey wraſſe: tail ſemilunar, but very little hollowed out; body pale grey. Inhabits North America; Cateſby has figured it without pectoral fins.

21. Labrus catenula, the beaded wraſſe: lower jaw longeſt, eight rows of little round ſpots like beads on each ſide the body; two ſtripes acroſs the hind head; the back raiſed; $\frac{11}{24}$ rays in the dorſal fin; ſix large teeth in the

upper jaw. This and the following were firſt made known by Commerſon, and are deſcribed from his MSS. for he left to others the care of publiſhing his valuable diſcoveries. They are found in the great Indian Gulf, and the ſeas communicating therewith.

22. Labrus longiroſtris, the long-noſed wraſſe: ſnout very long; operculum double, not ſcaly. There are $\frac{9}{19}$ rays in the dorſal fin, $\frac{3}{10}$ in the anal. There are four or five longitudinal ſtripes, and three or four rows of very ſmall ſpots, diſtant from each other, on each ſide the body; in this reſpect reſembling the preceding.

23. Labrus Thunberg, Thunberg's wraſſe: the rays of the dorſal fin reaching beyond the membrane; the lower jaw rather the longeſt; the bending of the back and belly leſſens at the end of the dorſal and anal fins. There are 6 rays in the membrance of the gills; the dorſal fin has 12 ſpines and 11 flexible rays, pectoral fins 15, ventrals 6, anal 11, tail 19. Four teeth in each jaw larger than the reſt; ſcales brown edged with white. Found at Japan by Thunberg, who called it a Sciæna, on account of the dorſal rays reaching beyond the membrane; but, not having ſcales on the head, it cannot belong to that genus. It is a doubtful ſpecies. Cepede has placed it here.

24. Labrus gallus, the poiſonous wraſſe: tail-fin forked, but truncate in the middle; violet lines at the baſe of the dorſal and anal; lower lip with a doubling on each ſide. The membrane of the gills has 5 rays, the dorſal $\frac{8}{25}$, pectorals 14, ventrals 6, anal 3 ſpines, 14 or 15 rays in all, the caudal 15 rays. Eyes remote, iris green, the edge of the pupil red; teeth in one row, the middle ones larger and remote, the reſt contiguous; lateral line a little branched, bent downwards near the end of the dorſal fin; pectoral fins oval, blue, the middle violet; ventral blue, the ſecond ray ending in a long thread; dorſal and anal blue at the outer edge; tail yellow in the middle, violet towards the ſides, and edged with blue. Inhabits Arabia, and is accounted poiſonous; body duſky-green with violet lines all over the body; belly with two blue ſtripes, and a green one in the middle; ſcales lax, ſtriate, membranaceous at the edge, and marked with a tranſverſe purple band. Forſkal firſt obſerved this fiſh, and placed it, and the three following, in the Scarus genus; Cepede has it in a genus of his own creating, Oſphronemus, of which the character is, the firſt ray of the ventral fin ſpinous, the ſecond a long filament.

25. Labrus purpureus, the purple wraſſe: caudal fin truncate in the middle; dorſal and anal with a longitudinal purple reflected ſtripe at the baſe. The dorſal fin has $\frac{8}{25}$ rays, pectorals 15, ventrals 6, anal 14, tail 12. Crown convex, naked, brown, with a purple triangle each ſide before the eyes; eyes ſmall, remote, iris purple; lips obtuſe, equal, the upper protractile; teeth ſtrong, in one row, the two middle ones larger, remote; before the tranſverſe noſtrils a round foramen with a cirrhus; gill-coverts naked, with a ſquare purple ſpot at the hinder edge of the poſterior; pectoral and dorſal fins green, the tip of the former with a large lunar black ſpot; anal and ventrals blue; tail green, with purple ſpots; lateral line branched. Inhabits Arabia; one foot and a half long; body lance-truncate, duſky-green with three purple ſtripes each ſide, beneath blue; ſcales broad rhombic, ſtriate, looſely imbricate; fleſh good.

26. Labrus pſittacus, the green-and-purple wraſſe: tail truncate in the middle; edge of the fins, abdominal ſtripe, and marks on the head, blue. The membrane of the gills has 5 rays, dorſal fin 20, pectorals 13, ventrals 6, anal 10, tail 12; no ſpinous rays in the fins of this and the following. Inhabits Arabia; body greeniſh, with yellowiſh lines; ſcales ſtriate. Eyes ſmall, remote; jaws of two bones, the lower with one tooth each ſide, upper three; gill-covert with looſe ſcales; lateral line ſlightly branched, double, the firſt near the back, the other in the middle; fins purple.

27. Labrus niger, the black wraſſe: tail truncate in the middle; a duſky-green longitudinal ſtripe down the chin. Five rays in the membrane of the gills, 20 in the dorſal fin, 14 in each pectoral, 6 in each ventral, 12 in the anal, and 13 in the tail. Inhabits Arabia. Body dark brown; head with greeniſh-brown lines; jaws, which are bifid, blotches on the head, and outer edge of the fins, blue-green; lips edged with red, then greeniſh brown; teeth in the upper jaw two, canine, white, and many ſmaller within. Fins violet-brown; pectorals obſcure, ferruginous, brown at the baſe; tail greeniſh, the angles lanceolate. Lateral line double, ramentaceous; opercula ſcaly, as in the Sciæna.

28. Labrus chanus, the ruffed wraſſe: head with three bluiſh rivulets on each ſide, a ſquare blue ſpot under each eye. Ten ſpinous, 25 in all, rays in the dorſal fin, 15 in each pectoral, 6 in each ventral, $\frac{3}{10}$ in the anal, and 17 in the caudal. Found by Forſkal at Conſtantinople. Above brown; beneath white. Lower jaw longer than the upper; between the eyes are two furrows, diverging behind; anterior gill-coverts ſerrate behind, poſterior three-toothed. Pectoral, ventral, and anal, fins yellow; dorſal and caudal ſpotted with red.

29. Labrus operculatus, the brown-patch wraſſe: 10 brown bands round the body; a brown ſpot or patch on each operculum. The dorſal fin has $\frac{13}{20}$ rays, each pectoral 16, ventrals 6, the anal $\frac{9}{28}$, caudal 16. Inhabits Aſia, eſpecially the great Indian Gulf. It has ſeveral little black ſpots on the back part of the head.

30. Labrus auritus, the eared wraſſe: the gill-coverts lengthened out into the ſhape of fins, by means of a long obtuſe black membrane. The rays are, $\frac{10}{21}$ in the dorſal fin; 15 in the pectorals, 6 in the ventrals, $\frac{3}{13}$ in the anal, 17 in the caudal. This and the following are found both in the freſh and ſalt waters of North America. Iris yellow; tail bilobated. Deſcribed by Dr. Garden.

31. Labrus falcatus, the ſickle-finned labrus: dorſal and anal fins falcate; the five firſt rays unarmed. The dorſal fin has $\frac{7}{27}$ rays, the pectorals have 17 each, the ventrals five, the anal $\frac{3}{20}$, and the caudal 20. Teeth ſharp; colour ſilvery; ventral fins ſmall.

32. Labrus oyena, the oyena: body ſilvery like the preceding; from two to five of the firſt rays of the dorſal fin nearly unarmed. The dorſal fin has $\frac{9}{19}$ rays, the pectorals 15, the ventrals $\frac{1}{70}$, the anal $\frac{3}{13}$, the tail 16. Inhabits the ſandy ſhores of Arabia; above ſix inches long. Body oblong; belly ſtraight; ſometimes painted with red interrupted ſtripes. Lips equal, the upper protractile; teeth numerous, very ſhort; lateral line nearer the back, and nearly parallel; tail two-lobed, the lobes lanceolate; fins glaucous.

33. Labrus gomphoſus, the nail-ſnouted labrus: ſnout lengthened out like a nail or pin; colour entirely blue. There are ſix rays in the membrane of the gills, $\frac{8}{14}$ in the dorſal fin, 14 in the pectorals, ſix in each ventral, (the ſecond ray lengthened into a filament,) $\frac{2}{12}$ in the anal, and 14 in the tail, which is deeply lunated. Commerſon has deſcribed this fiſh in his manuſcripts under the name of Elops, which, being already appropriated to a genus of *abdominal* fiſhes, Cepede has changed to Gomphoſis, each of them (γομος and ηλος) expreſſing the ſhape of the ſnout. It is of the ſize of a tench; its whole ſurface is blue without any ſpot, ſomewhat darker on the pectoral fins, but very light on the reſt. The eye has different ſhades of blue; the pupil is encloſed in a white circle, round which runs the iris, which is of a bright emerald or aqua marina. The back is ſomewhat arched; the belly more ſo. The muzzle is about a ſeventh part of the total length; it is ſomewhat like a hog's ſnout at the end; the upper jaw is moveable, and ſometimes rather the longeſt; but ſtill the orifice of the mouth, which is ſmall, forms a kind of tube. Each jaw conſiſts of one bone, furniſhed with a ſingle row of teeth very ſmall and cloſe together; the two front teeth of the upper jaw are longer than the reſt; the palate, &c. are ſmooth, and the inſide of the mouth is of a bluiſh colour. The eyes are

very

very ſmall, and near the noſtrils; the noſtrils are double. The head and opercula are free from ſcales; each operculum is in two pieces, the hinder piece is pointed towards the tail, and is partly bordered with a membrane. The ſpines of the dorſal fin are ſhorter than the articulated rays. The lateral line runs near the back as far as the end of the dorſal fin, where it bends and goes into the middle of the tail-fin; the line is made up of a number of little ſtrokes obſcurely repreſenting Chineſe characters. The ſcales are broad, and marked with lines as if channelled.

There is a variety found by Commerſon at Otaheite, which Cepede makes a ſeparate ſpecies; it differs in having a bright and agreeable mixture of yellow and red with the blue.

34. Labrus jaculatrix, the archer: the dorſal fin far from the neck; ventral fins united by a membrane; the lower jaw the longeſt; five tranſverſe ſtripes on the body. There are $\frac{4}{15}$ rays in the dorſal fin, 12 in the pectorals, 6 in the ventrals, $\frac{3}{8}$ in the anal, 17 in the tail. Found in Aſia, chiefly in the Indian Gulf; colour gold-yellow. This is deſcribed in the 57th volume of the Phil. Tranſ.

35. Labrus furca, the forked wraſſe: $\frac{9}{19}$ rays in the dorſal fin, the laſt ray of the dorſal and anal fins very long; tail deeply forked; lower jaw the longeſt, teeth minute; $\frac{2}{12}$ rays in the anal fin. This and the 15 following ſpecies are added to this diviſion by Cepede, chiefly from Commerſon's manuſcripts. This and the nine following are found in the great Indian Gulf, in the ocean between New Holland and the continent of America, and on the ſouth-eaſt coaſt of Africa and at Madagaſcar. The ſpecific character deſcribes this fiſh ſo completely, that nothing need be added.

36. Labrus ſex-faſciatus, the ſix-banded wraſſe: $\frac{13}{23}$ rays in the dorſal fin; ſnout long, mouth ſmall, lower jaw longeſt; ſix tranſverſe ſtripes; tail forked. There are 12 rays in each pectoral fin, 10 in the anal.

37. Labrus macrogaſter, the big-bellied wraſſe: $\frac{13}{28}$ rays in the dorſal fin; the belly very large; head and opercula ſcaly like the back; tail creſcent-ſhaped; ſix tranſverſe ſtripes, as in the preceding. Ten rays in each pectoral fin, 14 in the anal, 11 in the tail. Teeth very ſhort; lateral line interrupted.

38. Labrus filamentoſus, the filamentous wraſſe: 15 ſpines each ending in a filament, and 9 articulated rays, in the dorſal fin; 15 rays in the tail-fin; the aperture of the mouth a vertical ſemicircle; four or five tranſverſe ſtripes on the back. Teeth very ſhort and even.

39. Labrus anguloſus, the angular wraſſe: 12 ſpines and 9 articulated rays in the dorſal fin, the articulated rays much longer than the ſpinous; lips broad and thick; lines and dots on the firſt piece of the operculum like net-work, the ſecond piece furrowed and cornered; five or ſix longitudinal rows of little points on each ſide. There are 6 or 7 diſtinct rays in each pectoral fin, 3 ſpines and 6 articulated rays in the anal, 14 rays in the caudal. The teeth are very ſmall; a dark ſpot and 5 or 6 white points on each ſide the dorſal fin.

40. Labrus octo-vittatus, the eight-ſtriped wraſſe: $\frac{11}{23}$ rays in the dorſal fin, $\frac{3}{10}$ in the anal; tail ſemilunar; teeth much longer in the upper jaw; the hinder piece of the gill-covert angular; four oblique ſtripes on each ſide. The dorſal fin is edged with black or brown.

41. Labrus punctulatus, the punctulated wraſſe: dorſal fin very long, with 13 ſpines; dorſal, anal, and ventral, fins, ſharp; caudal ſemilunar, with 12 or 13 rays; lower jaw the longeſt, mouth very large; five or ſix large teeth in the lower jaw, and two in the upper; little round ſpots all over the body.

42. Labrus Commerſonii, Commerſon's wraſſe: $\frac{9}{25}$ rays in the dorſal fin; teeth nearly equal in both jaws; $\frac{1}{18}$ rays in the anal fin; back and much of the ſides beſpread with little round equal ſpots, as in the preceding.

43. Labrus lævis, the ſmooth wraſſe: $\frac{15}{28}$ rays in the dorſal fin; the lower jaw longer than the upper; teeth large, recurved, equal; lateral line almoſt ſtraight; tail a little creſcent-ſhaped; ſcales hardly viſible; five large ſpots or bands.

44. Labrus macropterus, the large-finned wraſſe: 20 rays in the dorſal fin, 21 in the anal; moſt of theſe rays long and thready; tail-fin ſemicircular; a black ſpot on the hinder angle of the opercula, which, and the head, are ſcaly like the back.

45. Labrus 15-aculeatus, the 15-ſpined wraſſe: $\frac{15}{24}$ rays in the dorſal fin, 3 in the anal; 12 in the tail; the upper jaw longeſt; teeth ſmall and equal; gill-covert angular; ſix tranſverſe ſtripes on the back and neck. This and the following probably inhabit the great Indian Gulf, and about the South-Sea iſlands. The lateral line is interrupted.

46. Labrus macrocephalus, the great-headed wraſſe: $\frac{14}{20}$ rays in the dorſal fin; $\frac{3}{12}$ in the anal; the head large, nape and ſpace between the eyes much raiſed; the lower jaw the longeſt; teeth hooked, equal, ſtanding apart; tail-fin in two rounded lobes, and with a light border; pectorals trapezium-ſhaped.

47. Labrus Plumierii, Plumier's wraſſe: $\frac{10}{21}$ rays in the dorſal fin, $\frac{1}{10}$ in the anal, blue ſtripes on the head; body ſilvery ſpotted with blue and gold; fins gold-colour; a tranſverſe crooked ſtripe on the caudal; 6 or 7 rays in the membrane of the gills. Inhabits America; lateral line gold-colour. On the whole, this is a beautiful ſpecies. Deſcribed from Plumier's manuſcripts.

48. Labrus Gouanii, Gouan's wraſſe: $\frac{8}{19}$ rays in the dorſal fin; $\frac{3}{16}$ the anal; gill-covert in three pieces, not ſcaly like the back, terminating in a broad rounded prolongation; lateral line very faint; a pointed appendage between the ventrals; tail ſemilunar. Its country is unknown, this and the following being part of a Dutch collection *given* (ſays Cepede) to France. The teeth are hooked, largeſt in front.

49. Labrus enacanthus, the nine-ſpined wraſſe: $\frac{9}{19}$ rays in the dorſal fin; lateral line interrupted; ſix tranſverſe ſtripes on the body, and two on the caudal fin, which is ſemilunar; two or three large, ſtrong, hooked, teeth at the extremity of each jaw; ſcales large.

50. Labrus rubo-lineatus, the red-lined wraſſe $\frac{12}{23}$ rays in the dorſal fin, $\frac{3}{15}$ in the anal; four long teeth in each jaw, ſtanding apart; the upper jaw rather longeſt; eleven or twelve thin longitudinal red ſtripes on each ſide; an ocellated ſpot at the origin of the dorſal, and another at the baſe of the tail-fin, which is a little creſcent-ſhaped. Inhabits the quickſands and coral rocks about the iſles of Madagaſcar and Reunion; deſcribed by Commerſon in his Latin MS. The lateral line is ramified or ſprigged. Colour brown; fins fleſh-colour.

51. Labrus pavo, the peacock wraſſe: body varied with blue, green, red, and hoary. There are 5 rays in the membrane of the gills, 31 in the dorſal fin, 14 in the pectorals, 9 in the ventrals, 14 in the anal, 16 in the tail. This ſpecies is placed by Cepede at the head of the ſecond diviſion with the tail-fin entire, but without deſcribing that fin, whether ſtraight, rounded, or lanceolated; we have therefore left it where Gmelin has placed it, among thoſe with forked tails. It inhabits the Mediterranean Sea, near Syria; and is a moſt beautiful ſpecies. It exhibits almoſt all the colours of the rainbow. The upper ſurface is green mingled with yellow, interſperſed with red and blue ſpots of the brighteſt hue; ſpots of a ſimilar colour, but ſmaller, ſparkle upon the opercula, and upon the anal and tail fins, which laſt is violet, or rather the colour of indigo; the front of the dorſal is blue and purple; on each ſide of the body are two beautiful brown ſpots; the ventral fins are of a bright red. The body and tail are long and compreſſed; there is one row of teeth in the jaws; the pectoral fins are rounded; the rays of the dorſal and anal fins are longer as they approach the tail. Length a foot or more.

II. *Tail*

II. *Tail entire, i. e. either ſtraight, rounded, or ſpear-ſhaped.*

52. Labrus hiatula, the gaping wraſſe: no anal fin; 6 or 7 black bands on the body. Cepede has made this a diſtinct genus, (Hiatula,) on account of its wanting the anal fin. It was firſt obſerved at Carolina by Dr. Garden. The lips are retractile, wrinkled within; and the ſpinous rays of the dorſal fin, towards the tail, are furniſhed with a long filament, as in moſt of the genus; the ſimple rays equal. The teeth in the jaws are crooked and ſharp, thoſe in the palate orbicular. The dorſal is black in the poſterior part; gill-coverts punctured at the edge. There are ſix or ſeven tranſverſe black ſtripes or bands on the body; the tail rectilinear.

53. Labrus marginalis, the marginated wraſſe: body browniſh; edge or margin of the dorſal and pectoral fins tawny. Country not known.

54. Labrus ferrugineus, the ferruginous wraſſe: body ferruginous without ſpots. Inhabits India.

55. Labrus ocellatus, the eye-tailed wraſſe: dorſal fin filamentous; an eye-ſhaped ſpot at the middle of the baſe of the caudal. Country not known.

56. Labrus melops, the melops: dorſal fin filamentous like the preceding, and with the anal variegated; a brown emilunar ſpot behind each eye. Inhabits the ſouthern European ſeas.

57. Labrus Niloticus, the Egyptian wraſſe: dorſal, anal, and caudal, fins clouded. Inhabits Egypt, chiefly the Nile. Brown, in his late Travels in Africa, Egypt, and Syria, deſcribes it, "like the white trout, but ſometimes weighing 50lbs." If he means the ſhape of the tail to be like that fiſh, this ſpecies ſhould belong to the firſt diviſion.

58. Labrus luſcus, the blinking wraſſe: all the fins yellow; upper eyelid black. Prevailing colour yellow; country unknown.

59. Labrus cinereus, the cinereous wraſſe: body grey with darker ſpots, a black ſpot at the baſe of the tail. This is Gmelin's 64th ſpecies, *labrus griſeus*; but, as there is already a *griſeus*, the 5th ſpecies, (our 20th,) we have followed Cepede in altering the ſpecific name to *cinereus*. It inhabits the Mediterranean; is three inches long; oval compreſſed. Cheeks with a few blue lines; iris green; mouth ſmall; teeth ſmall, the fore-ones larger; fins reddiſh, with duſky-yellow ſpots; tail yelloviſh towards the baſe.

60. Labrus Cornubius, the gold-finny: a large black ſpot near the tail; firſt rays of the dorſal fin tinged with black. It inhabits the Corniſh coaſts, and is about a palm long; ſimilar to the tench; ſnout like a hog; tail ſtraight.

61. Labrus mixtus, the yellow-and-blue labrus: body variegated with yellow and blue; front teeth largeſt. The upper ſurface is blue with brown and yellow ſhades; under part yellow. Inhabits the Mediterranean, coaſts of Dalmatia; reſembles L. pavo.

62. Labrus fulvus, the yelloviſh wraſſe: body tawny, tail convex. Inhabits North America. The aperture of the mouth is large, with three or four large teeth at the extremity of the upper jaw, and ſome ſmall ones in the palate; the lower jaw the longeſt, and furniſhed with a row of ſmall teeth; there is a ſtrong ſpine in the tail-fin; ſcales ſmall.

63. Labrus merula, the blackbird wraſſe: body blackiſh blue. The ventral fins, as in moſt of the ſpecies, have 1 ſpinous and 5 articulated rays; the dorſal has 10 ſpines, each with a filament, and 15 articulated rays; tail-fin ſtraight. The colour of this ſpecies has gained it the name of blackbird ever ſince the days of Ariſtotle. It was common, and very natural, to diſtinguiſh animals little known by ſome peculiarity in colour or form ſimilar to one more familiar; but ſome naturaliſts went farther; they pretended, that of this ſpecies there were individuals entirely white, as occaſionally may be found among the blackbirds; and this change from black to white was ſaid to be regular, periodical, annual, and common to all the ſpecies; whereas among birds we know it to be very rare, and ſubject to no rule. Ariſtotle ſays, that this fiſh and the Turdus merula appear in all their beauty of gloſſy black in the ſpring, having paſſed the winter in the rocky bottoms of the ſea-ſhore, but that for the reſt of the year they are white. It is poſſible, that in certain countries, the want of food, or its peculiar qualities, the nature and temperature of the water, and ſome other cauſes, might combine to tarniſh the gloſs of the ſcales, and give them a grey or dirty-white appearance. The iris of the eye is of a beautiful red, as in many birds of black plumage. Inhabits the ſeas of Europe. Scales large; teeth large and bent back; jaws equal.

64. Labrus rone, the rone: $\frac{15}{2}$ rays in the dorſal fin, that fin filamentous and very long; $\frac{3}{8}$ in the anal; caudal rectilinear, with 14 rays; the upper ſurface dark red with green ſtreaks; under ſurface red mingled with yellow. Inhabits the ſeas of Norway.

65. Labrus fuliginoſus, the clouded wraſſe: $\frac{9}{20}$ rays in the dorſal fin, $\frac{2}{11}$ in the anal; lower jaw the longeſt; the two firſt teeth in each jaw longer than the reſt; the head variegated with green, red, yellow; four or five tranſverſe ſtripes on the body. The dorſal fin is dark purple with ſome dots of a lighter blue; the pectorals reddiſh with a black ſpot at the baſe; the ventrals varied with black, blue, purple, and greeniſh; the anal, black inclining to blue; the caudal, green mixed with brown; and there is a ſmall black ſpot at the extremity of each lateral line. This and the two following haunt the rocks about the iſles of Madagaſcar, Mauritius, and Bourbon.

66. Labrus tænianotus, the ribband wraſſe: $\frac{7}{20}$ rays in the dorſal fin, $\frac{2}{13}$ in the anal; two front teeth in each jaw longer than the reſt; rugoſities diſpoſed in rays about the eyes; two broad longitudinal green ſtripes upon each ſide; ſcales on part of the caudal fin, which is ſtraight; coloured marks, like Chineſe letters, along the lateral line. Cepede has named this *fuſcus*, from the colour of the back and head which are brown; the dorſal, anal, and tail, fins, are bordered with green; the ventrals greeniſh; the pectorals yellow at their origin, brown at their extremity.

67. Labrus centiquadrus, the chequered wraſſe: 9 filamentous ſpines and 13 articulated rays in the dorſal fin, $\frac{2}{14}$ in the anal; the four firſt teeth in the upper jaw and two in front of the lower longer than the reſt; head reddiſh; the whole ſurface of the body and tail marked in ſquares alternately white and purple black. Red lines and dots appear upon the dorſal and anal fins, and a black ſpot upon each pectoral; the caudal is yelloviſh.

68. Labrus marmoratus, the marbled wraſſe: 10 ſpines and 13 articulated (longer) rays in the dorſal fin, $\frac{2}{18}$ in the anal; teeth equal, ſtanding apart, tail ſtraight; the ſurface beſpread with little dark ſpots and larger whitiſh ones, ſo as to appear mottled or marbled. This and the following were obſerved by Commerſon in the Great Equatoreal Ocean.

69. Labrus macrourus, the great-tailed wraſſe: 26 rays in the dorſal fin, 19 in the anal; ſnout narrow and protruded; teeth large, ſtrong, and triangular; 10 ramified rays in the caudal fin, which is ſtraight, and very large compared with the other fins; longitudinal ſtripes or lines on the back; a ſpot at the origin of the dorſal fin; moſt of the tail, anal, and extremity of the dorſal fin, of a dark colour; 14 rays in each pectoral fin.

70. Labrus iulis, the rainbow-fiſh: two ſpines in the anal fin, a ſerpentine tawny ſtripe along each ſide; ſides bluiſh. The membrane of the gills has 6 rays, the pectoral fins 14, the ventrals $\frac{1}{6}$, the anal 14, the tail 15, and the dorſal $\frac{9}{21}$. The jaws are of equal length, with four ſharp bent teeth in front, and two rows of conical teeth along the ſides ſtanding apart; Willughby ſpeaks of one row only; but, in ſo ſmall a fiſh, he might eaſily overlook the inner row, which are very minute. The palate and tongue are ſmooth, but there are ſome pearl-ſhaped teeth in the throat. The noſtrils are double, and near the eyes. The pupil is black; the iris orange-coloured. The gill-coverts are ſmooth; the ſingle gill lies under the front one; the aperture is wide, and the membrane moſtly concealed. The trunk is narrow and thin; the back and belly

belly are round; the anus is nearer to the head than to the tail-fin. The lateral line is close to the back, and has a considerable curve near the end; it appears serrated all the way. The scales are firmly fixed in the skin; they are small, thin, and serrated; hence the fish is rough to the touch when the hand is passed upwards. The soft rays of the fins are in general double, but even the spiny rays are not stiff. The female is black on the back, the male green. The stripe mentioned as part of the specific character begins at the hind-head, and runs irregularly quite to the tail-fin; a dark violet stripe runs just below it; the rest of the sides, and the belly, are white, with faint stripes of violet. The dorsal fin is bright orange at the upper and fore part, and pale violet at the base, which last is mostly the colour of the other fins. Colours so various and bright have gained this fish the name of *maid, damsel, young-fish, rainbow*, &c. Belon declares it to be the most beautiful inhabitant of the sea; but, since so many beautiful species have been found in the East Indies, Linnæus is content with placing it in the first rank for beauty in the seas of Europe. Cetti, on the other hand, disputes even this preference; he says, that, except the violet and yellow stripes, there is nothing but ordinary white, and some red and yellow badly shaded on the fins; and these observations he made on the fish while yet alive, and just taken out of the water. But Salvian, Rondeletius, Willughby, and more recently Brunniche and Cepede, join with Belon in praising the beauty of its colours; and there is no doubt but this fish, like many others we have spoken of, may be very different in appearance from the influence of age, food, season, climate, &c. It is probable also that Cetti might have seen females only, whose colours are not so bright as those of the males. There is a variety, which is red on the upper surface, white beneath, tail-fin green, opercula blue.

This species is found in several parts of the Mediterranean. It must have been plentiful in the Grecian Seas, since Aristotle places it among fish which go in shoals; but Salvian says they are always seen singly in the environs of Rome. Rondeletius found them in plenty at Antibes, in France, and in the gulf of Genoa; he avers that they bit his feet while he was bathing, which Bloch does not credit. Hasselquist met with it in the Nile, Cavolini in Sardinia, Forskal at Malta, and Brunniche at Marseilles. Rondeletius describes it only as the length of a finger, but Bloch possessed a specimen which was near eight inches long. Elian and Oppian reckon this fish so venomous as to make any fish it only touches very hurtful to man; however, it is daily eaten without prejudice, and Galen reckons it wholesome and easy of digestion. Its food is shell and other fish; it deposits its spawn in stony places in spring. It is caught with a net, but more easily with a line, as it bites freely.

71. Labrus paroticus, the blue-eared wrasse: lateral line curved, fins rufous, gill-coverts sky-blue. The dorsal fin has $\frac{9}{21}$ rays, the pectoral fins 12, ventrals 6, anal and tail 14 each. Inhabits India. The front teeth the largest; the back is grey, the belly whitish.

72. Labrus suillus, the swinish wrasse: dorsal fin filamentous, with $\frac{9}{17}$ rays; a black spot above the tail. The pectoral fins have 13 rays, ventrals $\frac{1}{6}$, anal $\frac{3}{10}$, and caudal 14. Inhabits the European Seas, or Northern Atlantic Ocean. The prevailing colour in this species is violet; the lower jaw and pectoral fins sometimes bright yellow.

73. Labrus guaza, the guaza: body brown; tail rounded, the rays extending beyond the membrane. Inhabits the main ocean.

74. Labrus osphronemus, the goramy: 6 rays in each ventral fin, the first spinous, the second filamentous reaching to the tip of the tail-fin; hind part of the back much raised; lateral line straight; tail rounded. The membrane of the gills has 6 rays, $\frac{13}{25}$ in the dorsal, $\frac{10}{30}$ in the anal, 14 soft rays in each pectoral, and 16 in the caudal. Osphronemus is the generic name given to this fish by Commerson. It is large, and extremely good food; it grows to the length of six feet, and, being high in proportion, it furnishes a considerable quantity of good and wholesome aliment. Commerson observed it at the Mauritius in February 1770. It had been brought from China, where it is indigenous, and from Batavia, where it inhabits also. It is not common at Bengal, but might be easily bred there. It was first bred in ponds; and thence spread into the rivers, where it multiplied considerably, and preserved all its good qualities, so as to be one of the best fresh-water fish about Mauritius. It would be well worth the trouble and expence of bringing some alive, and fit for breeding, into England or France. The body is compressed, but very broad or high; the under part of the belly and tail, and the hinder part of the back, carinated; the height of the fish diminishes suddenly at a small distance from the tail-fin. Broad scales cover the body, tail, opercula, and head; while smaller ones extend over a considerable portion of the dorsal and anal fins. On the top of the head there are two slight furrows inclining towards the muzzle; the upper jaw is moveable, the lower the longest; each is furnished with a double row of teeth, the outer row short, and bent inwards, the inner row smaller and closer. There is a hard fleshy substance in the palate; the tongue is whitish, drawn back as it were into the gullet, and fixed there; the nostrils double; the operculum in two pieces, the first piece excavated at bottom, the second has a point towards the pectorals, and is bordered by a membrane. Within the mouth, and above the gills, there is an ethmoid bone, (called by Commerson *labyrinthiform*,) lying in a particular cavity; the use of which, he says, deserves to be inquired into. The dorsal fin begins rather backward, and increases in height as it approaches the tail, where it takes a rounded form. The anus is very forward towards the throat, as is always the case where the anal fin is very extensive; in this species, it is longer even than the dorsal, which is very rare. The general colour of this fish is brown, with some reddish tints which are lighter on the fins than on the back; scales on the sides and belly silvery, edged with brown. It must be observed, that *goramy* is a name sometimes given to the following species.

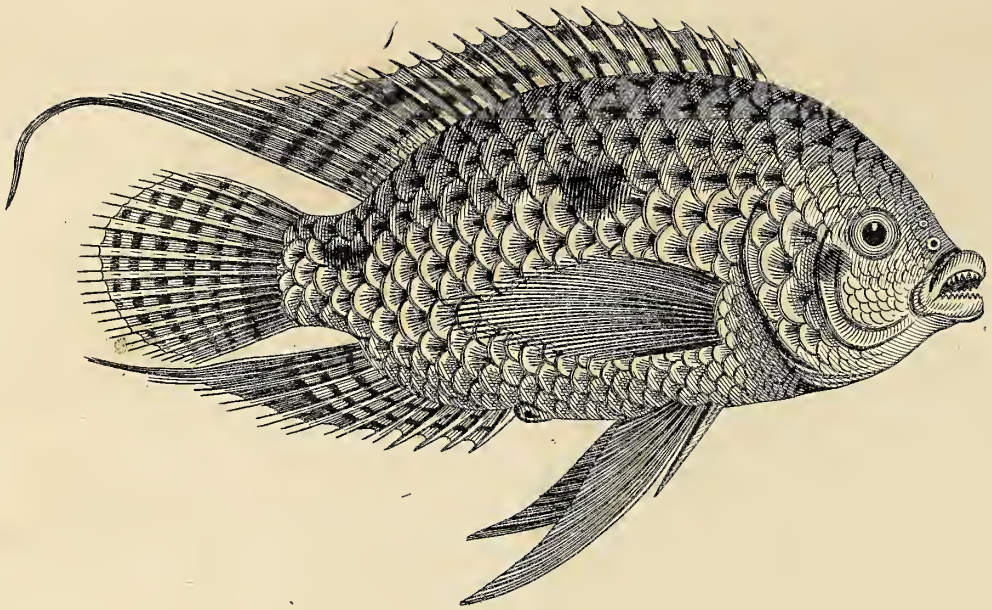
75. Labrus trichopodus, the chinned labrus: mouth in the upper part of the head; the lower jaw formed like a chin; ventral fins long and bristly, each consisting properly but of one long filamentous ray; the dorsal and anal fins have each 18 rays. This species resembles the L. trichopterus in the form of the ventral fin, which is as long as the whole fish; it is from Commerson's MSS. and Cepede has placed it first in his genus Trichopodus, or bristly feet. The conformation of the head is very remarkable; the lower jaw is protruded, rounded, raised, and bent, so as to resemble the human chin; the position and dimensions of the mouth, the shape of the lips, the place and size of the eyes, the double opercula like cheeks, the convexity of the forehead—all bring to mind a gross resemblance of a man's face; there are no scales on the head and face; the broad laminæ which occupy their place look like a skin. The body and tail are compressed, but high in the middle of the total length. The dorsal and anal fins are low, and nearly alike; the pectorals short, broad, and round; caudal straight.

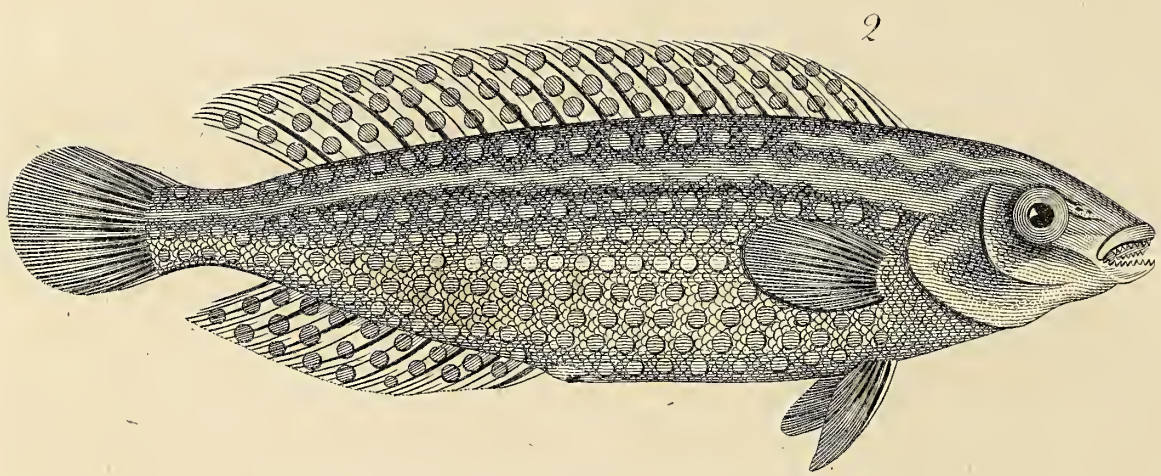
76. Labrus bimaculatus, the bimaculated wrasse: dorsal fin filamentous; a brown spot on the middle of the body and at the base of the tail. The two first rays of the ventral fins are filamentous; the anal lanceolated, the extremity of the dorsal falcated. The body is of a pale colour; inhabits the Mediterranean and British seas.

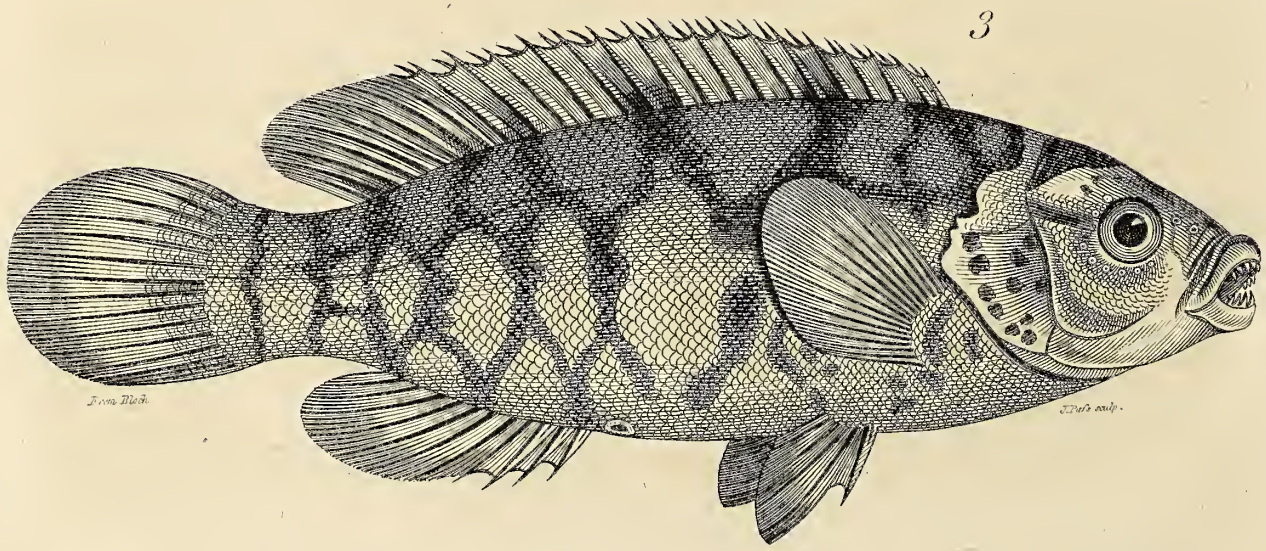
77. Labrus punctatus, the punctated wrasse: dorsal fin filamentous, body with longitudinal lines spotted with brown. The membrane of the gills has 5 rays, the pectoral fins 15; the ventrals $\frac{1}{6}$, the anal $\frac{3}{10}$, the tail 16, and the dorsal $\frac{24}{34}$. The head is small, and sloping; the nostrils are midway between the eyes and mouth; the eyes have a nictating membrane, a black pupil, and yellow iris. The scales on the posterior operculum are as large

as

LABRUS.







1. The Punctated Wrasse.—2. The Dropped Wrasse.—3. The Wainscoted Wrasse.

London. Published as the Act directs, July 25, 1812. by Allard & Jones.

as thoſe on the body, which happens but ſeldom; and there is no fiſh with a rounded tail-fin whoſe other fins are ſo ſharp at the points as in this. The body is thin and broad, covered with large, round, ſmooth, ſcales, extending over part of the dorſal and anal fins, though in thoſe places they are not ſo large. The anus is in the middle of the body. The back and belly are round: back brown; belly and ſides lighter, marked with nine longitudinal yellow ſtripes with brown ſpots; there are black ſtripes upon the dorſal, anal, and tail, fins; the pectorals and ventrals are dark grey. The ſoft rays of all the fins are long and bifurcated; the ſeventh of the pectoral is the longeſt, the ſecond of the ventral, the laſt but one in the dorſal and anal; theſe rays are ſo long, that they look like hairs. There is a round black ſpot on the head, ſides, and tail. Bloch gives 12 rays to the anal fin, of which he ſays 4 are ſpinous, which he makes the ſpecific character. This ſpecies inhabits the rivers of Surinam; and probably does not exceed four or five inches in length. It is repreſented on the annexed Plate I. fig. 1.

78. Labrus oſſifagus, the bone-eater: dorſal fin with 30 rays. This is the Linnæan ſpecific character; yet Gmelin gives 17 ſpinous and 14 articulated rays, in all 31, to the dorſal fin; Cepede alters the ſpecific character to correſpond with this number; Turton alters the number of rays to correſpond with the ſpecific character. There are 15 rays in the pectorals, $\frac{3}{15}$ in the anal ($\frac{3}{13}$ Cepede), $\frac{1}{6}$ in the ventrals, and 13 in the tail. It inhabits the Atlantic and Mediterranean ſeas; a very obſcure ſpecies. It is not known whence it gained the appellation of *oſſifagus*, or *oſſiphagus* as Cepede more properly writes it; Turton makes it *oſſifragus*, or bone-breaker, the name of a kind of eagle.

79. Labrus rupeſtris, the rock-wraſſe: 17 ſpines in the dorſal fin, which is filamentous; a brown ſpot at the upper edge of the tail. The membrane of the gills has 5 rays, the pectoral fins 13, the ventrals $\frac{1}{6}$, the anal $\frac{2}{11}$, the tail 17, the dorſal $\frac{17}{26}$. The head is marked on both ſides with blue ſtripes, which go round the eye, and along to the muzzle. The jaws are of equal length, and furniſhed with a row of little ſharp teeth, of which the four in front of the upper jaw are longer than the reſt; the tongue is thick, moveable, and ſmooth; the palate is ſmooth alſo; but there are two bones oppoſite each other in the gullet furniſhed with ſhort round teeth proper for triturating the aliment. The lips are fleſhy; the noſtrils are double, one pair round, the others oval. The pupil of the eye is black, iris gold-colour. The front operculum is minutely ſerrated, double, and covered with ſmaller ſcales than the other; the ſingle gill is found on its interior ſurface. The aperture of the gills is wide; the membrane covered. The ſcales are ſmooth; the anus is much nearer the tail than the head. The belly is white; the back greeniſh yellow. On the body there are tranſverſe brown ſtripes, and longitudinal red ones. The fins are cinereous, but there is a black patch at the origin of the dorſal near the head. Bloch places this in his genus Lutjanus, of which the ſerrature of the opercula is the generic character; but he ſeems to confound it with the Labrus Cornubius, as he adds ſeveral of the ſynonyma which in Gmelin accompany that genus. This ſpecies is found in the North Sea, and ſometimes, though rarely, in the Baltic; many are caught about the rocky ſhores of Denmark and Norway, eſpecially at Chriſtianſund. They differ in ſize according to the places where they are caught, but probably do not exceed ſix inches. The fleſh is white, and eaſy of digeſtion, except (ſays Pontopiddan) thoſe caught near Weyle in Norway, which are too fat. They are cooked divers ways, like the river-perch.

80. Labrus onitis, the graſſy wraſſe: dorſal fin filamentous; belly ſpotted with cinereous and brown. General colour brown; tail-fin rounded, and yellow. Inhabits the ocean.

81. Labrus viridis, the parrot-wraſſe: body green, with a blue line on each ſide. Inhabits the Mediterranean; under ſurface yellow, ſometimes with blue ſpots on the belly. Cepede calls this *L. pſittacus*, the parrot, to diſtinguiſh it from Bloch's *L. viridis* in the firſt diviſion, which we have named *viridis vittatus*.

82. Labrus turdus, the thruſh labrus: body oblong, green, ſpotted; iris golden. Inhabits the Atlantic and Mediterranean ſeas; ſcarcely a foot long. The body is ſometimes green, the pectoral fins pale yellow, the ventral blue; ſometimes deeper green, ſhining beneath the lateral line, with golden ſpots on the chin, and white ones in the middle; and ſometimes above yellow, with white ſpots; beneath ſilvery, with red veins.

83. Labrus exoletus, the five-ſpined wraſſe: dorſal fin filamentous; a blue line on the body; five ſpines in the anal fin: rays in the dorſal fin $\frac{12}{25}$, in the pectorals and tail 13, ventrals $\frac{1}{6}$, anal $\frac{5}{13}$. This ſpecies inhabits the Atlantic Ocean; it is found alſo in Norway, and ſometimes in Greenland.

84. Labrus Chinenſis, the Chineſe wraſſe: dorſal fin filamentous, body livid, crown blunt. In the dorſal fin $\frac{12}{24}$ rays, pectorals 13, ventrals $\frac{1}{6}$, anal $\frac{5}{12}$, caudal 12. Inhabits Aſia, on the coaſts to China. In this and the preceding, Turton marks 23 rays to the anal fin; probably errors of the preſs.

85. Labrus Japonicus, the Japaneſe wraſſe: entirely of a fine full yellow colour. The dorſal fin has $\frac{10}{24}$ rays, the pectorals 16, ventrals $\frac{1}{6}$, anal $\frac{3}{8}$, tail 18. Six inches long; inhabits Japan; obſerved by Houttuyn. The dorſal fin is filamentous; opercula ſcaly like the body; teeth ſmall and ſharp.

86. Labrus boops, the ox-eyed wraſſe: lower jaw the longeſt, two dorſal fins. The firſt dorſal fin has $\frac{5}{10}$ rays, the ſecond 12, pectorals 14, ventrals $\frac{1}{6}$, anal 11, tail 22. Large ſharp teeth in the lower jaw, which is the longeſt. The eyes are very large, and by their width approach each other, occupying almoſt entirely the upper part of the head. The opercula are covered with ſcales ſimilar to thoſe on the back. Inhabits Japan. In Cepede we find this ſpecies, and ſeveral of the Sciænæ, in a ſeparate genus, between the Labrus and Sciæna, expreſſing by its name, Cheilodipterus, that it has the extenſible lips of the Labrus, and two dorſal fins like the Sciæna.

87. Labrus chromis, the pale wraſſe: dorſal fins nearly united; ſecond ray of the anal very large, thick, and compreſſed. The firſt dorſal fin has 10 rays, the ſecond $\frac{1}{22}$, pectorals 18, ventrals 6, anal $\frac{2}{7}$, tail 19. Inhabits Carolina; where it is called the *drum*, from the noiſe it is imagined to make. Obſerved by Dr. Garden; ſize of the river-perch. Body dull ſilvery, with brown bands. Gill-coverts one-toothed, not ſerrate; firſt ray of the anal fin very ſhort and ſtiff.

In ſome reſpects this reſembles the Cheilodipterus cyanopterus, or blue-fin, of Cepede, deſcribed from Plumier's MSS. Cepede's account is as follows: Nine rays in the firſt dorſal fin; dorſals and caudal blue; tail ſtraight; upper jaw longer than the lower, which is furniſhed with a barble. Inhabits South America between the tropics. Gill-covert in three pieces; the third piece toothed ſo as to preſent two prolongations towards the tail; the upper rounded, the lower ſharp. The lateral line exactly divides the colours of the upper and lower parts; for above that line there are tints of gold, red, and green, in narrow unequal tranſverſe ſtripes, undulating and inclining towards the tail; under the line, the bands are ſtill more irregular and ſinuous, the colours only green and brown; the pectoral, ventral, and anal, fins, are gold-colour; dorſal and tail blue.

88. Labrus cheilodipterus, the two-finned labrus: ten ſpines in the firſt dorſal fin, ſecond filamentous; tail rounded; lower jaw the longeſt; ſeveral rows of jagged teeth. There are 6 rays in the membrane of the gills, $\frac{7}{10}$ in the ſecond dorſal, 17 in each pectoral, $\frac{1}{6}$ in each ventral, $\frac{3}{8}$ in the anal, 20 in the caudal. This is deſcribed by Cepede from a female ſpecimen ſent him from Cayenne by

citizen Leblond. It inhabits South America, or that part of America which lies between the tropics. The operculum is in two pieces.

89. Labrus linearis, the ſtraight wraſſe: body oblong; all the rays of the dorſal fin ſpinous except the laſt. The dorſal fin has $\frac{20}{1}$ rays, pectorals 12, ventrals 6, anal 15, tail 12. The dorſal fin is very long; the head compreſſed; general colour white or whitiſh; front teeth largeſt. Inhabits South America and India.

90. Labrus lunulatus, the lunulated wraſſe: body greeniſh brown with darker bands; ſcales with each a ferruginous band; breaſt ſpeckled with red. There are 5 rays in the membrane of the gills, $\frac{6}{26}$ in the dorſal fin, 12 in the pectorals, $\frac{1}{6}$ in the ventrals, $\frac{3}{12}$ in the anal, 13 in the tail. Inhabits Arabia; a foot long; ſcales broad, entire, grooved. Head ſomewhat compreſſed; iris greeniſh-brown. Gill-coverts with a red ſpot towards the baſe, the hinder part generally marked with a tawny lunule, ſurrounded with black on the membrane; gill-membrane greeniſh, with two tawny ſpots. Lateral line interrupted. Pectoral fins rounded, yellow, the reſt green, the ſpaces between the rays red or ſpotted with red; tail rounded.

91. Labrus variegatus, the ſtriped wraſſe: body red, with four lateral parallel olive ſtripes, and as many blue ones. Five rays in the membrane of the gills, $\frac{17}{30}$ in the dorſal fin, 15 in the pectorals, $\frac{1}{6}$ in the ventrals, and $\frac{3}{15}$ in the anal. Inhabits the Britiſh coaſts; ten inches long; body oblong. Lips large, double; gill-coverts cinereous ſtriped with fine yellow. At the beginning of the dorſal fin a broad bed of rich blue, middle part white, the reſt red; at the baſe of the pectoral fins a dark olive ſpot; ventral and anal fins tipt with fine blue; tail rounded, upper half blue, lower yellow.

92. Labrus venoſus, the veiny wraſſe: green, with red anaſtomozing veins; a black ſpot on the operculum and dorſal fin. Inhabits the Mediterranean; body oval, compreſſed, three inches long. Sides of the head with a few red longitudinal lines; filaments and band on the dorſal fin red.

93. Labrus guttatus, the ſpotted wraſſe: body reddiſh variegated with black; a ſpot on the middle of the baſe of the tail-fin. This alſo inhabits the Mediterranean; and is three inches long. Body oblong, compreſſed, with very minute white ſpecks in rows and black ſpots. Iris green; under each eye two oblique black lines. Fins pale rufous; anal ſpeckled with white, and, with the ventrals, ſometimes green.

94. Labrus coquus, the cook: body purple and dark blue, beneath yellow: tail rounded. A ſmall ſpecies, which inhabits the coaſt of Cornwall.

95. Labrus cinædus, the ſordid wraſſe: body pale yellow, back purple, dorſal fin reaching from head to tail. This ſpecies inhabits the Mediterranean; where it was known in the time of Athenæus, and even of Ariſtotle, being named *alpheſtas*, and *cinædas*, becauſe they were generally ſeen two together, one ſwimming cloſe to the tail of the other. This fiſh, like moſt of thoſe which haunt rocky places, called *ſaxatiles*, is ſoft, tender, eaſy of digeſtion, and extremely good for weak ſtomachs. Throat narrow; teeth notched or lobated.

96. Labrus albo-vittatus, the white-ſtriped wraſſe: $\frac{9}{29}$ rays in the dorſal fin, $\frac{2}{13}$ in the anal; one row of ſmall ſharp teeth in each jaw; lips very thick; body oblong; colour yellowiſh, two very long white ſtripes, and a ſhorter above them, along each ſide; tail-fin rounded.

97. Labrus cæruleus, the blue wraſſe: $\frac{17}{29}$ rays in the dorſal fin, $\frac{2}{14}$ in the anal; general colour blue, with yellow ſpots and bluiſh ſtripes; a large blue ſpot in front of the dorſal fin; ventrals, anal, and caudal, edged with blue; teeth longeſt in front. This is ſaid by Cepede to inhabit the Britiſh ſeas, as well as Norway and Denmark.

98. Labrus lineatus, the lineated wraſſe: $\frac{17}{30}$ rays in the dorſal fin, $\frac{3}{15}$ in the anal; ſnout long, front teeth much longer than the reſt; hind head raiſed and convex; body long, tail rounded; back reddiſh, ſides blue, breaſt yellow; belly pale blue; four longitudinal green ſtripes on each ſide. The ventral, anal, and tail, fins, are tipped with red; the latter yellow at the baſe; a blue ſpot on the front part of the dorſal fin. This is a Britiſh ſpecies.

99. Labrus maculatus, the maculated wraſſe: the fins ſpotted; 20 ſpines in the dorſal fin. The membrane of the gills contains 5 rays, the pectoral fins 14, the ventrals $\frac{1}{6}$, the anal $\frac{3}{12}$, the tail 17, and the dorſal $\frac{20}{32}$. The head terminates in a blunt ſnout; there is one row of ſharp teeth in each jaw, the lowermoſt are the largeſt; the palate and tongue are ſmooth, but the gullet is rough with ſmall teeth. The noſtrils are double, and near the eyes, and under the anterior operculum lies the ſingle gill. The pupil of the eye is black, iris gold-colour. The gills have a wide aperture, and the membrane is in part concealed; on the front operculum are the apertures to the pituitary canals. The body is pretty broad, and thick in proportion. The anus is nearer the tail than the head. The ſcales are broad, thin, and ſmooth, covering part of the tail-fin, which is rounded. The back is dark yellow, the belly lighter; alternate ſtripes of blue and brown on the breaſt; the colours of the male are the brighteſt. The fins are yellow inclining to violet, and ornamented with brown ſpots; the laſt rays of the dorſal and anal fins much longer than the reſt. This ſpecies inhabits the North Sea, where it ſeeks the ſhallows, not exceeding two fathoms deep, near the ſhores; it is found alſo in the bay called Chriſtianſbucht, near Haaven. In the North Sea it attains the length of fifteen inches; it is fat, fleſhy, and well-taſted. In Denmark it is called *ſea-carp*.

100. Labrus inermis, the unarmed wraſſe: no ſpines in the fins; body very long; lateral line ſtraight, or nearly ſo; a longitudinal line with black ſpots upon each ſide. The general colour is green; the back brown; whitiſh ſpots on the ſides. Inhabits the Arabian Sea; diſcovered by Forſkal.

101. Labrus ariſtatus, the rough wraſſe: 32 rays in the dorſal fin, 25 in the anal; body compreſſed, oval; ſcales ſhort, each raiſed up by two bones; teeth ſtanding apart, two in front of the lower jaw protruded. Diſcovered at China by Sparrman.

102. Labrus bivittatus, the two-ſtriped wraſſe; two brown ſtripes along the body; the upper one running over the eye. The membrane of the gills has 5 rays, the pectoral fins 14, the ventrals $\frac{1}{6}$, the anal $\frac{3}{14}$, the tail 13, the dorſal $\frac{9}{27}$. The head is ſomewhat broad at the top, compreſſed at the ſides; in other reſpects, the head, mouth, &c. reſemble the other ſpecies. The eyes have a nictating membrane; pupil green, iris yellow. The body is narrow, and covered with large ſcales. The fins end in a point, except the tail, which is rounded. The back and belly are red; the ſides yellow, which on the fins is ſhaded with violet; the tail-fin is violet with yellow ſpots Country unknown.

103. Labrus macrolepidotus, the great-ſcaled wraſſe: $\frac{9}{22}$ rays in the dorſal fin, 16 in the anal. The membrane of the gills has 5 rays, the pectoral fins 12, the ventrals 6, the anal 16, the tail 19. The head is ſhort, compreſſed, and ſmooth; jaws of equal length, with a row of ſharp teeth in each, of which the foremoſt are the largeſt; the palate and tongue are ſmooth, but there are teeth in the gullet. The noſtrils are oval, and midway between the mouth and noſe. The eyes are vertical, and have a black pupil in a yellow iris; underneath are two ſemicircular rows of pores, or pituitary canals. The gills have a wide aperture, and the membrane is looſe; the opercula are compoſed of ſeveral little plates, and the ſingle gill lies under the anterior one. The body is thin; the back and belly are carinated. The lateral line runs near the back, and is interrupted at the end of the dorſal fin; the belly is ſhort, and the anus nearer the head than the tail; the tail-fin is rounded. The ſcales are thin, ſmooth, round, and ſtretch over part of the tail-fin. The dorſal fin is ſhallow, but extends almoſt the whole length of the body. The body is of a yellowiſh brown colour, the ſides lighter than the back and belly; the head is yellow, and there are ſpots of violet on the opercula; the fins are pale yellow.

low inclining to violet, and there are ſome dark-blue ſpots at the beginning of the dorſal. This ſpecies is ſuppoſed to be from the Eaſt Indies.

104. Labrus cyanocephalus, the blue-head: head blue, lateral line interrupted. There are 5 rays in the membrane of the gills, 12 in the pectoral fin, $\frac{1}{6}$ in the ventral, 14 in the anal, $\frac{2}{12}$ in the tail, and $\frac{9}{20}$ in the dorſal. The ſtructure of the head reſembles the other ſpecies: the noſtrils are ſingle, but divided within; they are oval, and placed nearly midway between the eyes and mouth. The eyes are ſmall, the pupil black, iris yellowiſh. The gills have a large aperture; the membrane is looſe, and the hinder operculum ends in a point. The lateral line interrupted. The back is dark blue, ſides ſilvery; fins grey, inclining to green; tail-fin rounded. The ſcales are large, round, and thin. Country unknown; the original from which this account is taken is in the cabinet of Mr. Linke at Leipſic.

105. Labrus guttulatus, the dropped wraſſe: round, ſilver drops or ſpots on the body, and all the rays of the fins ſoft. The pectoral fins have each 13 rays, the ventrals 6, the anal 9, the tail 16, the dorſal 19. The head and mouth are like the preceding ſpecies; the noſtrils are double, and near the eyes; the pupil is black, iris ſilvery. The ſcales are hard, and covered with a membrane. The ſides are blue, the back brown, the belly whitiſh; the ſpots on the ſides and on the anal fin are ſilvery, thoſe on the dorſal yellow; the head is blue decorated with ſilvery ſtripes, one of which, of a vermicular form, runs from the top of the eye to the fin of the tail. The whole of this beautiful fiſh appears as if ſtudded with ſilver and precious ſtones; the ſpots are round, like new-fallen drops of rain. The tail-fin is rounded, and ramified. Its country is unknown; the original is in the cabinet of Mr. Linke at Leipſic; length about five inches. See Plate I. fig. 2.

106. Labrus teſſellatus, the wainſcoted wraſſe: few ſcales about the eyes and opercula. There are 4 rays in the membrane of the gills, 16 in each pectoral fin, $\frac{1}{6}$ in each ventral, $\frac{3}{12}$ in the anal, 16 in the tail, and $\frac{17}{28}$ in the dorſal. The mouth is ſmall, with one row of ſmall ſharp teeth; jaws equal. The ſcales are very ſmall and ſoft; near the eyes, towards the upper part of the operculum, there is only one patch of ſcales, which ſingularity has furniſhed the ſpecific character. The eyes have a nictating membrane; the pupil is black, in a ſilvery iris; in front of theſe are the double noſtrils, and from four to ſix pores, which probably are apertures to the pituitary canals. On the opercula and breaſt are ſome ſmall brown ſpots on a ſilvery ground; but there are larger ſpots, running one into another, like old wainſcoting, on the body. The back is violet-colour; the ſides ſilvery; the ventral fins are black, the reſt blue and yellow; the fins are all rounded, and all the ſoft rays are ramified. This ſpecies is from Norway; and is ſhown at fig. 3.

107. Labrus 5-maculatus, the five-ſpotted wraſſe: the head covered with ſcales, and 15 ſpines in the dorſal-fin. The membrane of the gills has 5 rays, the pectoral fins 15, ventrals $\frac{1}{6}$, anal $\frac{3}{12}$, tail 16, dorſal 25. The head and mouth are as in the other ſpecies, except the greater quantity of ſcales (like the Sciæna) as mentioned above. The pupil of the eye is black, the iris yellow; the noſtrils are ſolitary and oval; under the eye is a curved line of pituitary pores. The membrane of the gills is for the moſt part concealed. There is a black ſpot on the ſnout, one on the poſterior operculum, another on the anal fin, and two on the dorſal, whence the name. The fins are ſhort, with dichotomous rays. The colour of this fiſh is yellow mixed with violet; on the head the violet colour prevails; the fins are yellow, ſhaded with violet at the ends. This ſpecies is from Norway.

108. Labrus microlepidotus, the ſmall-ſcaled wraſſe: no ſpots, the opercula ſcaly. There are 12 rays in the pectoral fins, $\frac{1}{6}$ in the ventrals, $\frac{3}{13}$ in the anal, 18 in the tail, and $\frac{17}{30}$ in the dorſal. The head is narrow, and without ſcales as far as the opercula; the noſtrils are ſingle, and near the eyes; theſe have a black pupil, and a narrow yellow iris incloſed in a broader one of the colour of ſilver. The jaws are of equal length, with a row of ſharp teeth not cloſe together. The aperture of the gills is wide, and the membrane covered. The anus is nearly in the middle of the body. The ſcales are very ſmall. The head and back are dirty yellow, the ſides and belly ſilvery; the fins are white ſhaded with brown; the dorſal fin is moſtly brown; the ſoft rays are four-branched; tail rounded. The country of this ſpecies is unknown.

109. Labrus tinca, the common wraſſe, or old wife. Size and habit of a carp, or rather of a tench. The ſcales large; noſe prominent; lips large, doubled, fleſhy, reflex, and retractile; eyes red; teeth diſpoſed in two rows, the firſt being conic, the ſecond very minute, and as if deſigned for ſupporters to the reſt; in the throat three tuberculated bones, two above, and one below; theſe ſerve to comminute the teſtaceous food on which the animal chiefly lives. General colour pale red, more or leſs tinged either with orange or brown; but ſometimes elegantly varied with blue, red, and yellow, ſpots: fins red, ſpotted and ſtreaked with blue; pectorals large and rounded. Native of the European ſeas; and uſually found in deep waters about rocky coaſts. This is ſhown at fig. 4. Plate II.

110. Labrus ballan, the ballan wraſſe: body yellow, ſpotted with orange; above the noſe a deep furrow, fartheſt gill-covert with a depreſſion radiated from the centre. This is found during ſummer in great ſhoals at Scarborough, coming from the coaſt of Norway; it is about the ſize of L. tinca, of which probably it is only a variety. The author of "Britiſh Fiſhes" conſiders this, the preceding, and the following, to be one individual ſpecies. See the article *Labrus tinca* in Dr. Rees's New Cyclopædia.

111. Labrus vetula, the ſea old wife: ventral, anal, and tail fins, edged with black. The membrane of the gills has 6 rays, the pectoral fins 14, ventrals $\frac{1}{6}$, anal $\frac{3}{14}$, tail 16, dorſal $\frac{16}{29}$. The head is wedge-ſhaped, and the ſcales begin at the eyes; near theſe are the noſtrils, which are double. The jaws are of equal length, with a row of ſharp teeth; the palate and tongue are ſmooth, but there are three bones armed with pearl-ſhaped teeth in the throat. The eyes are near the top of the head; the pupil is black, the iris blue, and they are furniſhed with the nictating membrane. The gills have a wide aperture, and the membrane is more than half concealed; the opercula are ſcaly, and the ſingle gill exiſts in this ſpecies. The body and half the tail-fin are covered with ſmall ſcales; tail rounded. The anus is in the middle of the body. The head is reddiſh; the body yellow, with dark ſpots of the ſame colour with the back. The fins are moſtly bluiſh, with a number of ſpots on the anal, tail, and dorſal. This ſpecies is found in Norway, on the coaſt of Brittany, and in Normandy. It grows to the length of ten or twelve inches; it is fleſhy and well-taſted; and much eſteemed by the Bas Bretons, who ſalt and preſerve it. Whence it gained the name of *old wife* it is not eaſy to gueſs. See fig. 5.

112. Labrus Johnius, the kamt. This and the following are made a new genus by Bloch; and named by him after Mr. John of Tranquebar, who tranſmitted the two ſpecies contained in it, and a vaſt number of other fiſhes. The generic characters are, The head covered with ſcales, the opercula not ſerrated, and the dorſal fins joined together. Theſe fiſhes have a long body; the firſt dorſal fin is raiſed, and conſiſts of hard prickly rays; the other is narrow, with ſoft rays. The Tamuls, or Malabars, give this genus the name of *kattalei*, and they diſtinguiſh as many as eighteen ſpecies, of which Bloch deſcribes only two. The ſpecific character therefore will be, the dorſal fin preſenting two different parts, and the protruſion of the upper jaw. The membrane of the gills has 5 rays, the pectoral fins 16, the ventrals $\frac{1}{6}$, the anal $\frac{2}{9}$, the tail 18, the dorſal $\frac{14}{40}$. The head is round, compreſſed, and entirely covered with ſcales ſimilar to thoſe on the back;

the mouth is ſmall, the ſnout hanging over a little; there are ſeveral rows of ſharp teeth, and the palate is rough alſo. The noſtrils are double, and near the eyes; the eyes are vertical, the pupil black in an orange iris. The firſt piece of the operculum is narrow, the ſecond broad; the gills have a large aperture, and the membrane is for the moſt part concealed. The back is rounded; the lateral line is broad, nearly ſtraight; and of a faint yellow colour. The ſoft rays of the anal and tail are ſix-branched, of the reſt they are divided into four. The back and ſides are blue, the belly yellow, the dorſal and tail fins blue, the others a beautiful red; tail rounded. This ſpecies is eighteen inches long; it is caught at all ſeaſons about Tranquebar, in the ſea, for in rivers it is never ſeen; it is fat and good eating, eſpecially in December. The fiſhermen ſay it has no fixed time for ſpawning. The Malabar name is *carutta*, which Bloch and Cepede have choſen for the ſpecific.

113. Labrus aneus, the aney: the ſpecific character is the protruſion of the lower jaw, and the dorſal fin divided as before. The membrane of the gills has 5 rays, the pectoral fins 14, ventrals 6, anal 9, tail 18, dorſal $\frac{9}{33}$. The mouth is large; the teeth are ſmall, narrow, and ſharp. The lateral line is narrow, curved near its origin, and runs in a parallel direction with the back. The head, eyes, and ſhape of the dorſal fin, reſemble the preceding. The back and front part of the dorſal fin are blackiſh; the ſides white; the pectoral and ventral fins are brown red; the poſterior part of the dorſal, and the anal and tail fins, are red at the baſe, and bluiſh in other parts. This ſpecies is alſo from the coaſt of Coromandel; it is not ſo good food as the preceding, which in other reſpects it reſembles. The Indian name is *anei kattalei*, which we have preſerved.

114. Labrus cingulum, the belted wraſſe: $\frac{9}{22}$ rays in the dorſal fin, 16 in the anal; two teeth in front of each jaw larger than the reſt; ſnout pointed; front part of the body livid, hind part brown, a whitiſh belt or band round the middle; ſmall lenticular dark purple ſpots on the head, dorſal, anal, and tail, fins; tail rounded. This and the following ſeven are deſcribed by Cepede from Commerſon's manuſcripts. They all inhabit the Great Equatoreal Ocean, and ſeas which communicate with it; the preſent ſpecies has been more particularly obſerved at the Mauritius, or Iſle of France. The rim of the dorſal and anal fin is often whitiſh; and there is commonly on the hind part of the operculum a black ſpot with a white point in the middle, like the pupil of an eye encircled by its iris.

115. Labrus digramma, the two-lined wraſſe: $\frac{11}{19}$ rays in the dorſal fin, $\frac{1}{11}$ in the anal; the lower jaw rather longeſt, two front teeth longer than the reſt; two lateral lines, the upper one terminating beyond the dorſal fin, and uniting with the oppoſite line; the lower one begins nearly under the middle of the dorſal fin, and runs into the tail-fin, which is rounded.

116. Labrus hololepidotus, the ſcaly wraſſe: $\frac{11}{38}$ rays in the dorſal fin, $\frac{2}{12}$ in the anal; teeth in the lower jaw nearly equal; ſcales all over the head and opercula ſimilar to thoſe on the back; opercula pointed; tail rounded.

117. Labrus tæniourus, the tail-banded wraſſe; 20 rays in the dorſal fin, $\frac{3}{14}$ in the anal; teeth large, ſtanding apart; ſcales large, with a dark border; lateral line hardly viſible; a broad ſtripe or band acroſs the tail-fin, which is rounded.

118. Labrus hortulanus, the garden labrus: $\frac{5}{20}$ rays in the dorſal fin, which is low; $\frac{2}{13}$ in the anal; ſnout protruded; teeth in the upper jaw nearly horizontal; two lateral lines uniting about the middle of the dorſal fin; tail rounded, with 16 rays; ſpots on the head and opercula, and on the ſide of each ray of the dorſal and anal fins; the ſurface of the body and tail divided by ſloping lines into lozenge-ſhaped partitions, with a ſpot in the middle of each, ſomewhat like plots or beds in a garden.

119. Labrus ſparoides, the broad wraſſe: $\frac{10}{22}$ rays in the dorſal fin, $\frac{10}{26}$ in the anal; the height or breadth of the body nearly equal to the length of the body and tail; a dent over the eyes; lower jaw longeſt; head and gill-coverts ſcaly like the back; tail-fin rounded, containing 17 rays; the ſides irregularly ſpotted. From Boſc's manuſcripts.

120. Labrus leopardus, the leopard wraſſe: $\frac{9}{23}$ rays in the dorſal fin, $\frac{2}{12}$ in the anal; the ſpines of the dorſal higher than the membrane; mouth large, two teeth in front of each jaw larger than the reſt; operculum in two pieces; pectoral and tail fins rounded; ſcales hardly viſible; a black line from the eye to the back of the operculum, a very dark ſtripe acroſs the tail; ſpots made up of other ſmaller ſpots on the head, body, tail, dorſal, and anal fins, like a leopard's ſkin.

121. Labrus malapteronotus, the ſoft-backed wraſſe: 21 rays, all ſoft, in the dorſal fin, whence the name. Lower jaw a little protruded; front teeth bent forwards; a dark ſpot on the hind part of the operculum; lateral line bent; tail rounded; three whitiſh ſpots upon each ſide of the body.

122. Labrus Diana, the Diana wraſſe: $\frac{12}{22}$ rays in the dorſal fin, $\frac{2}{15}$ in the anal; the dorſal fin in three diſtinct parts, the caudal rounded, and conſiſting of 12 rays. Four large teeth in front of the upper jaw, two in front of the lower; one large tooth bent forward, at each corner of the mouth; each ſcale marked with a ſmall dark-coloured creſcent, whence the name. Obſerved by Commerſon in the Great Equatoreal Ocean.

123. Labrus macrodontus, the great-toothed labrus: $\frac{13}{21}$ rays in the dorſal fin, $\frac{3}{12}$ in the anal; laſt rays longeſt; tail rounded, with 14 rays; ſcales large; hind head raiſed; four ſtrong hooked teeth at the extremity of each; a large one bent forward at each corner of the mouth. Country unknown; this being part of a Dutch collection brought to Paris during the revolutionary war.

124. Labrus Neuſtria, the Neuſtrian wraſſe, or great old wife: $\frac{20}{31}$ rays in the dorſal fin, $\frac{3}{10}$ in the anal, and 7 in the membrane of the gills; tail rounded, with 15 rays; teeth equal, ſtrong, ſtanding apart; back marbled with yellow, brown, and green; ſides with yellow, brown, and white. The dorſal fin is coloured like the ſides of the fiſh; the reſt of the fins in a manner ſimilar to the back. Inhabits the ſhores of the ancient Neuſtria. This and the next are from the manuſcripts of citizen Noel of Rouen, who, however, would place them among the Chetodons.

125. Labrus calops, the fine-eyed wraſſe: $\frac{12}{20}$ rays in the dorſal fin, $\frac{2}{13}$ in the anal; eyes black, very large and bright, hence the name; lateral line ſtraight, ſcales ſtrong and broad; a large brown ſpot juſt beyond each pectoral fin. There is a row of double ſharp teeth in each jaw. The back is of a browniſh colour; the whole fiſh, except the head, is covered with large ſcales of ſingular brightneſs. Fleſh white and firm, like young cod; air-bladder very large.

126. Labrus cruentatus, the bloody wraſſe: $\frac{9}{24}$ rays in the dorſal fin; teeth ſhort, even, diſtinct; lower jaw the longeſt; eye very large; lateral line very near the back; tail-fin tapering to the end, and rounded; general colour ſilvery, with very large irregular blood-coloured ſpots; the fins are golden. A beautiful ſpecies. This and the following were obſerved in America by Plumier.

127. Labrus pſittaculus, the paroquet wraſſe: 18 rays in the dorſal fin, which is very low, yellow, and nearly equal throughout; 12 in the anal and tail; mouth ſmall, jaws nearly equal; body oblong, tail rounded. General colour green, with three red ſtripes along each ſide, and one on the dorſal fin; a black ſtripe on each eye; a red ſtripe edged with blue from the eye to the origin of the dorſal fin, and on the hinder rim of each piece of the operculum; the anal fin is yellow with a red border; the caudal is yellow alſo, with four or five ſtripes, which are crooked, concentric, unequal in ſize, alternately red and blue.

128. Labrus perdica, the partridge wraſſe: tail even, back ſtraight, crown ſmooth; body with indented yellow ſtripes on each ſide. This ſpecies inhabits the ſea round Conſtantinople. Head above brown, beneath reddiſh-white;

white; hinder gill-coverts unarmed, ending in a rounded angle, and blue at the tip; lateral line above ſaw-toothed. Dorſal and anal fins reddiſh; pectorals with a blue ſpot at the baſe.

129. Labrus comber, the comber: back, fins, and tail, red; belly yellow; tail rounded; (Cepede ſays ſpear-ſhaped.) This inhabits the coaſt of Cornwall; has a ſlender ſmall body. A parallel ſmooth even ſilvery ſtripe reaches from the gills to the tail on each ſide, below the lateral line. The operculum is lengthened out, and rounded at its extremity.

130. Labrus melapterus, the black-finned wraſſe: fins black; eight ſpines in the dorſal fin. The branchial membrane has five rays, the pectoral fins 12, the ventrals 6, the anal 13, the tail 15, the dorſal 29. The head is ſloping; the mouth ſmall; each jaw armed with two canine teeth and a row of grinders; the canine teeth of the lower jaw are bent outwards; the palate is ſmooth; the noſtrils ſingle, round, and near the eyes. The eyes are ſmall, with a black pupil and orange iris, and bordered with pituitary canals in a radiated form. The aperture of the gills is large, and the membrane almoſt entirely concealed. The ſcales are large and ſmooth, with a light-brown radiated ſpot upon each; the anus is in the middle of the body. The head and back are of a red brown; the belly, tail, opercula, and round the eyes, green; the ſides yellowiſh; the fins black, except the pectoral which is brown. This ſpecies is from Japan, where it is called *ikan cacatoea*.

131. Labrus trimaculatus, the red wraſſe: body red, with two large ſpots at the lower part of the dorſal fin, and a third between that fin and the tail. There are five rays in the membrane of the gills, $\frac{17}{30}$ in the dorſal fin, 15 in the pectorals, 6 in the ventrals, 12 in the anal. The head is narrow, and without ſcales as far as the eyes, near which appear the double noſtrils. The aperture of the mouth is ſmall; the jaws nearly equal in length, with a row of ſharp teeth, of which the front ones are the longeſt; the tongue is moveable, and ſmooth, as is the palate, but the throat is exaſperated with round grinding teeth. The pupil of the eye is black, iris yellow. The front operculum is covered with very ſmall ſcales, and conceals the ſingle gill; the aperture is wide, and the membrane for the moſt part concealed. The trunk is narrow; the ſcales ſmall, extending over part of the tail-fin. The belly is round; the back ſharp; the anus is nearer the tail than the head. The fins are rounded; "the ventrals (ſays Bloch) lie farther back than the pectorals;" they do indeed begin rather farther back, but not ſo decidedly as to require that this fiſh ſhould be removed into the abdominal order. The whole fiſh is of a bright red colour, which is lighter on the ſides; the dorſal, anal, and tail, fins, are ſometimes edged with blue, as expreſſed in the Plate III. fig. 6.

This ſpecies is from Norway, being found at Chriſtianſund near Haaven, where it is called *ſudernaal*. It attains a foot in length, living on ſhell-fiſh, and is delicate food. "It is ſtrange," adds Bloch, "that Gmelin ſhould not have introduced this fiſh into his laſt edition of Linnæus." That accurate obſerver for once was guilty of an overſight; this is the 57th ſpecies of Gmelin's edition. We find this fiſh alſo on our own coaſts; it is known in the iſle of Angleſea and on the coaſt of Cornwall.

132. Labrus chloropterus, the green wraſſe: colour green, two canine teeth in each jaw, and two ſpines in the anal fin. There are 6 rays in the membrane of the gills, 13 in the pectoral fins, $\frac{1}{6}$ in the ventrals, 12 in the anal, 16 in the tail, and $\frac{9}{20}$ in the dorſal. The head is narrowed in front, and ornamented with blue ſtripes. There are two rows of round teeth; the outer row conical, and the front teeth are the largeſt; the inner row flat like pearls; at each corner of the mouth is a projecting tooth bent upwards. The noſtrils are double, and near the eyes; the pupil is black, the irides yellow and orange. The gills have a wide aperture, and the membrane is partly concealed. The body is thin; the ſcales broad, ſlippery, edged with yellow, and extend over part of the tail-fin. The anus is nearer the head than the tail; the fins end ſharp, except the tail, which is round like the reſt of this diviſion. This fiſh is moſtly of a green colour; darker on the back, lighter on the ſides and belly; the fins are green alſo, but ſome darker than others. This ſpecies is from Japan. It is ſhown at fig. 7.

133. Labrus faſciatus, the four-banded wraſſe: broad ſtripes or bands on the body, and eight ſpines in the dorſal fin. Each pectoral fin has 12 rays, the ventrals 6, anal 13, tail 14, dorſal 12. The head is compreſſed; the ſcales begin on the front operculum, but there are none on the hinder one, which is double, and of a green colour. The teeth are ſhort and round, except two canine teeth in the front of each jaw. This ſpecies has very large lips, and ſeems to hold a middle place between the Sparus and the Labrus. The noſtrils are double, and near the eyes, which have a black pupil in a red iris. The body is covered with large ſmooth ſcales, and banded with four broad brown ſtripes. The lateral line breaks off at the end of the dorſal fin. The back goes off ſharp, the belly rounded, and the anus is nearer the tail than the head. The body is olive-colour; the dorſal and anal fins blackiſh, the others brown. This ſpecies is from Japan; it is about a foot long.

134. Labrus decacanthus, the ſtriated wraſſe: dorſal fin filamentous; brown and white lines on the body. Inhabits America.

135. Labrus livens, the livid wraſſe: dorſal fin filamentous; body livid brown; tail rounded. Inhabits the Mediterranean; about a foot long.

136. Labrus ſcina, the ſcina: body greeniſh, with white and yellow waves; between the eyes an impreſſed hollow, and before the hollow a groove. Diſcovered by Forſkal at Conſtantinople; body above white, with yellow rivulets; belly ſtraight. Iris green; middle teeth very large; anterior gill-coverts ſlightly ſerrate behind, poſterior unarmed; lateral line interrupted. Pectoral fins yellowiſh, without ſpots; the reſt obſcure, yellow ſpotted with blue.

137. Labrus lapina, the lapina wraſſe: pectoral fins yellow, ventrals blue, the reſt violet ſpotted with blue. Obſerved by Forſkal at Conſtantinople. Body oblong-oval, above brown, beneath whitiſh, the ſides greeniſh-yellow with three lines each ſide, each compoſed of a double row of red ſpots. Head ſpotted with red on the ſides; under the eye an irregular blue line; before the noſtrils an oblique gibboſity; iris blue. Anterior gill-coverts ſerrate behind, poſterior notched.

138. Labrus ramentoſus, the branched wraſſe: colour greeniſh brown; the filaments of the firſt dorſal ſpines twice as long as the rays. Five rays in the membrane of the gills, $\frac{9}{21}$ in the dorſal fin, 13 in the pectorals, $\frac{1}{6}$ in the ventrals $\frac{3}{13}$ in the anal, 12 in the tail. Found near the ſea-ſhores in Arabia. Body lanceolate, ſpotted with violet on the fins, crown, and under the eyes; ſometimes fine green. Scales large, entire, rounded, diſpoſed in nine rows from the belly to the back. Iris above and beneath brown; the ſides yellow. Lips equal, the upper protractile; beſides the row of ſmall teeth, in the middle of each jaw there are four teeth four times as long as the reſt.

139. Labrus ocellatus, the ocellated labrus: greeniſh, with a ſcarlet ocellate ſpot behind each eye. In the dorſal fin $\frac{14}{24}$ rays, 11 in the pectoral fins, $\frac{1}{6}$ in the ventrals, $\frac{3}{14}$ in the anal, 15 in the tail. Inhabits the Syrian ſhores. Body ſuboval; back yellowiſh-brown; head marked with irregular blue lines. Gill-coverts with an oblong oblique blue ſpot, ſurrounded with a ſcarlet circle, from which, both above and below, proceeds a ſcarlet line; the anterior truncate behind and ſlightly ſawed, the poſterior unarmed; tail linear.

140. Labrus gibbus, the gibbous wraſſe: varied with blue and orange; tail rounded; above each eye a ſemilunar ſpot. Inhabits the Britiſh coaſts; eight inches long; ſcales large. Head ſloping; neareſt gill-coverts finely

finely ſerrate; back very much arched. Dorſal and anal fins ſea-green ſpotted with black; pectorals yellow, tranſverſely ſtriped with red at the baſe; ventrals and caudal pea-green.

141. Labrus olivaceus, the olive-coloured wraſſe: body olive-green; the gill-coverts tipped with blue; and a black ſpot on the tail. Five rays in the membrane of the gills, in the dorſal fin $\frac{15}{25}$, pectorals 13, ventrals $\frac{1}{6}$, anal $\frac{3}{14}$, caudal 12. Inhabits the Mediterranean; two inches long. Body oblong compreſſed, beneath inclining to ſilvery. Head pointed, ſomewhat ſilvery; iris green; fore teeth ſharp, intermediate ones remote. Anterior gill-covert deeply ſerrate, the poſterior one blue at the tip, ſurrounded with a ſcarlet ring. Fins the colour of the body; tail pale rufous.

142. Labrus fuſcus, the brown wraſſe: body brown, with blue lines and ſpots. Five rays in the membrane of the gills, $\frac{16}{25}$ in the dorſal fin, 12 in the pectorals, $\frac{1}{6}$ in the ventrals, $\frac{3}{14}$ in the anal, 13 in the tail. This alſo (and the following) was obſerved by Brunniche in the Mediterranean; it is about three inches long; body compreſſed, oblong, beneath whitiſh. Head pointed, and marked with blue rivulets; iris white, within cheſnut; mouth ſmall; anterior gill-covert ſerrate; lateral line a little arched, the hind part crooked. Dorſal and caudal fins brown ſpotted with blue; pectorals rufous tipt with blue; ventrals without ſpots; anal reddiſh dotted with blue.

143. Labrus unimaculatus, the one-ſpotted wraſſe: body finely ſtriped with olive; a black ſpot on the hinder part of the dorſal fin. Five rays in the membrane of the gills, $\frac{14}{25}$ in the dorſal fin, $\frac{1}{6}$ in the ventral $\frac{3}{12}$ in the anal, and 13 in the tail. Length of the preceding; body oval, compreſſed, with about ten pale-blue longitudinal parallel ſtraight lines. Iris reddiſh-white, with an inner circle of red; teeth in one row, the fore ones larger; anterior gill-coverts ſerrate; pectoral fins bluiſh.

There is a variety of this, found in the Adriatic ſea, which is reticulated with duſky and greeniſh-ſilvery colours.

144. Labrus Adriaticus, the Adriatic wraſſe: four broad bands acroſs the body; $\frac{19}{22}$ rays in the dorſal fin, black ocellate ſpots on its hind part. Inhabits the Adriatic, body pale, three inches long. Head with oblique tawny lines; iris yelloviſh; teeth very ſmall; anterior gill covert ſerrate. Ventral and anal fins black; the latter tipt with yellow.

145. Labrus varius, the variegated wraſſe: beautifully variegated with purple, green, blue, and black. Inhabits the Mediterranean, about Marſeilles; delicate and wholeſome food.

III. *Tail-fin in three parts, or lobes.* This third diviſion is from Cepede, and conſiſts entirely of new ſpecies deſcribed by him from Commerſon's valuable manuſcripts.

146. Labrus trilobatus, the trilobated wraſſe: 29 rays in the dorſal fin, 17 in the anal, 13 in the pectorals, and tail. The dorſal fin is long and low; teeth large, ſtrong, nearly equal; head and opercula not ſcaly like the back; lateral line ramified and ſinuous; obſcure ſpots on the body. This and the four following inhabit the great equatorial ocean.

147. Labrus bilunulatus, the double creſcent: $\frac{13}{40}$ rays in the dorſal fin, which is in two parts: head not ſcaly like the back; four large teeth in each jaw, lower jaw the longeſt; a ſmall ſpot on moſt of the ſcales; a large one on each ſide at the extremity of the dorſal fin.

148. Labrus Hebraïcus, the Hebrew wraſſe: 21 rays in the dorſal fin, 13 in the anal, 10 in the pectorals, 16 in the tail; marks like Hebrew or oriental characters on the head and opercula, which are not ſcaly; a little ſpot on moſt of the ſcales; a tranſverſe ſtripe near the operculum.

149. Labrus latovittatus, the broad-ſtriped wraſſe: 42 rays in the dorſal fin, 41 in the anal, (both theſe very long,) 11 in the tail. Body and head long; teeth numerous, minute, equal; a ſtripe along the baſe of the dorſal fin; a broad one ſtraight from the pectoral to the caudal fin. The lateral line, in this and the following, is firſt bent, afterwards ſtraight.

150. Labrus annulatus, the annulated wraſſe: 21 rays in the dorſal fin, 15 in the anal, 7 in the pectorals, 13 in the tail; teeth ſmall and equal; ſcales hardly viſible; nineteen narrow, regular, uniform, ſtripes or bands, quite round the body. There is a large ſemilunar ſpot on the baſe of the caudal fin, occupying almoſt its own ſurface; a ſtripe or two along the anal fin, and an oblique one paſſing over each eye.

151. Labrus tricuſpidatus, the triple-tailed wraſſe: tail trilobated; two lateral lines. There are $\frac{3}{19}$ rays in the dorſal fin, 12 in the pectorals, 6 in the ventrals, $\frac{3}{12}$ in the anal, 12 in the tail. This ſpecies is about the ſize of a common carp. The general colour is bluiſh brown, varied on the head, neck, and opercula, with lines and ſpots of red, white, and yellow. The pectorals are yellow, eſpecially at their origin; the ventrals marked with red. The head and body are high and thick; moſtly covered with large, round, ſmooth, ſcales. The two front teeth in each jaw longer than the reſt. Operculum bilaminated. The tail-fin is very broad; and furniſhed on its ſide at its origin with three or four appendages, almoſt membranous; broad pointed ſcales, very looſe, being attached only by a very ſmall portion of their circumference. The dorſal and anal fins are pointed towards the tail. The two lateral lines are very remarkable, and ſtraight: the upper one runs from the operculum to near the end of the dorſal fin; the ſecond from a correſponding point in the middle of the anal to the appendages of the caudal; each compoſed of little lines or ſtrokes, like Chineſe characters. Commerſon diſcovered this ſpecies in 1769 in the ſea about the iſlands of Madagaſcar and Mauritius. *Gmelin's Linn.* 1283. *Bloch*, viii. 95. *Cepede*, iii. 424. *Shaw*, iv. 481.

LABRU'SCA. See VITIS.

LABUR'NUM. See CYTISUS.

LABUS'SIA, a river of Ruſſia, in the government of Tobolſk, which runs into the Vich in lat. 61. 50. N. lon. 79. 14. E.

LA'BY, a town of Sweden, in the province of Upland: twelve miles north of Upſal.

LA'BY, a town of Africa, in the country of Sierra Leone: ſixty miles north of Teemboo. Lat. 10. 48. N.

LAB'YRINTH, *ſ.* [*labyrinthus*, Lat.] A maze; a place formed with inextricable windings.—The earl of Eſſex had not proceeded with his accuſtomed warineſs and ſkill; but run into *labyrinths*, from whence he could not diſentangle himſelf. *Clarendon.*

Suffolk, ſtay;
Thou may'ſt not wander in that *labyrinth*;
There minotaurs and ugly treaſons lurk. *Shakeſpeare.*

Mention is made of four celebrated labyrinths among the ancients, ranked by Pliny in the number of the wonders of the world; viz. the Cretan, Egyptian, Lemnian, and Italian.

1. That of Egypt, according to Pliny, was the oldeſt of all the known labyrinths, and was ſubſiſting in his time after having ſtood 3600 years. He ſays, it was built by king Peteſucus, or Tithoes; but Herodotus makes it the work of ſeveral kings; it ſtood on the banks of the lake Mœris, and conſiſted of 12 large contiguous palaces, containing 3000 chambers, 1500 of which were under ground. See the article ARCHITECTURE, vol. ii. p. 65. Strabo, Diodorus Siculus, Pliny, and Mela, ſpeak of this monument with the ſame admiration as Herodotus; but not one of them tells us that it was conſtructed to bewilder thoſe who attempted to go over it; though it is manifeſt that, without a guide, they would be in danger of loſing their way. It was this danger, no doubt, which introduced a new term into the Greek language. The word *labyrinth*, taken in the literal ſenſe, ſignifies a circumſcribed ſpace, interſected by a number of paſſages, ſome of which croſs each other in every direction like thoſe in quarries and

and mines, and others make larger or ſmaller circuits round the place from which they depart, like the ſpiral lines we ſee on certain ſhells. In the figurative ſenſe, it was applied to obſcure and captious queſtions, to indirect and ambiguous anſwers, and to thoſe diſcuſſions which, after long digreſſions, bring us back to the point from which we ſet out. See the article EGYPT, vol. vi. p. 361.

2. The Cretan labyrinth is the moſt famed in hiſtory or fable; having been rendered particularly remarkable by the ſtory of the Minotaur, and of Theſeus who found his way through all its windings by means of Ariadne's clue. In the Encyclopædia Britannica is a plan of it, copied after a draught given by Meurſius, taken from an ancient ſtone. But what was the real nature of this labyrinth, merits a more particular inquiry. Diodorus Siculus relates as a conjecture, and Pliny as a certain fact, that Dædalus conſtructed this labyrinth on the model of that of Egypt, though on a ſmaller ſcale. They add, that it was formed by the command of Minos, who kept the Minotaur ſhut up in it; and that in their time it no longer exiſted, having been either deſtroyed by time, or purpoſely demoliſhed. Diodorus Siculus and Pliny, therefore, conſidered this labyrinth as a large edifice; while other writers repreſent it ſimply as a cavern hollowed in the rock, and full of winding paſſages. The two former authors, and the writers laſt mentioned, have tranſmitted to us two different traditions; it remains for us to chooſe that which is moſt probable.

"If the labyrinth of Crete (ſays the abbé Barthelemi) had been conſtructed by Dædalus under Minos, whence is it that we find no mention of it, either in Homer, who more than once ſpeaks of that prince and of Crete; or in Herodotus, who deſcribes that of Egypt, after having ſaid that the monuments of the Egyptians are much ſuperior to thoſe of the Greeks; or in the more ancient geographers; or in any of the writers of the ages when Greece flouriſhed? This work was attributed to Dædalus, whoſe name is alone ſufficient to diſcredit a tradition. In fact, his name, like that of Hercules, had become the reſource of ignorance, whenever it turned its eyes on the early ages. All great labours, all works which required more ſtrength than ingenuity, were attributed to Hercules; and all thoſe which had a relation to the arts, and required a certain degree of intelligence in the execution, were aſcribed to Dædalus.

"The opinion of Diodorus and Pliny ſuppoſes, that in their time no traces of the labyrinth exiſted in Crete, and that even the date of its deſtruction had been forgotten. Yet it is ſaid to have been viſited by the diſciples of Apollonius of Tyana, who was cotemporary with thoſe two authors. The Cretans, therefore, then believed that they poſſeſſed the labyrinth.

"I would requeſt the reader (continues the abbé) to attend to the following paſſage in Strabo. At Napulia, near the ancient Argos, (ſays that judicious writer,) are ſtill to be ſeen vaſt caverns, in which are conſtructed labyrinths that are believed to be the work of the Cyclops; the meaning of which is, that the labours of men had opened in the rock paſſages which croſſed and returned upon themſelves, as is done in quarries. Such, if I am not miſtaken, is the idea we ought to form of the labyrinth of Crete.

"Were there ſeveral lahyrinths in that iſland? Ancient authors ſpeak only of one, which the greater part place at Cnoſſus; and ſome, though the number is but ſmall, at Gortyna. Belon and Tournefort have given us the deſcription of a cavern ſituated at the foot of Mount Ida, on the ſouth ſide of the mountain, at a ſmall diſtance from Gortyna. This was only a quarry according to the former, and the ancient labyrinth according to the latter; whoſe opinion I have followed, and abridged his account. Thoſe who have added critical notes to his work, beſides this labyrinth, admit a ſecond at Cnoſſus, and adduce as the principal ſupport of this opinion the coins of that city, which repreſent the plan of it, according as the artiſts conceived it. For on ſome of theſe it appears of a ſquare form, on others round; on ſome it is only ſketched out; on others it has, in the middle of it, the head of the Minotaur. In the Memoirs of the Academy of Belles Lettres, I have given an engraving of one which appears to me to be of about the 15th century before Chriſt, and on which we ſee on one ſide the figure of the Minotaur, and on the other a rude plan of the labyrinth. It is therefore certain that at that time the Cnoſſians believed they were in poſſeſſion of that celebrated cavern; and it alſo appears that the Gortynians did not pretend to conteſt their claim, ſince they have never given the figure of it on their money.

"The place where I ſuppoſe the labyrinth of Crete to have been ſituated, according to Tournefort, is but one league diſtant from Gortyna; and, according to Strabo, it was diſtant from Gnoſſus ſix or ſeven leagues. All we can conclude from this is, that the territory of the latter city extended to very near the former.

"What was the uſe of the caverns to which the name of labyrinth was given? I imagine that they were firſt excavated in part by nature; that in ſome places ſtones were extracted from them for building cities; and that, in more ancient time, they ſerved for a habitation or aſylum to the inhabitants of a diſtrict expoſed to frequent incurſions. In the journey of Anacharſis through Phocis, I have ſpoken of two great caverns of Parnaſſus, in which the neighbouring people took refuge; in the one at the time of the deluge of Deucalion, and in the other at the invaſion of Xerxes. I here add, that, according to Diodorus Siculus, the moſt ancient Cretans dwelt in the caves of Mount Ida. The people, when inquiries were made on the ſpot, ſaid that their labyrinth was originally only a priſon. It may have been put to this uſe; but it is difficult to believe that, to prevent the eſcape of a few wretches, ſuch immenſe labours would have been undertaken." *Travels of Anacharſis.*

3. The labyrinth of Lemnos was ſupported by columns of wonderful beauty; there were ſome remains of it at the time when Pliny wrote.

4. That of Italy was built by Porſenna, king of Etruria, for his tomb.

LAB'YRINTH, a cluſter of ſmall iſlands in the Pacific Ocean, diſcovered, in 1722, by Capt. Roggewein, ſeventy-five miles weſt from the Pernicious Iſlands.

LAB'YRINTH, a chain of ſhoals, rocks, and ſmall iſlands, on the eaſt coaſt of New Holland, extending from Cape Tribulation to Cape York.

LAC, or LACCA, *ſ.* A ſubſtance well known in Europe, under the different appellations of ſtick-lac, ſhell-lac, ſeed-lac, &c. It is the product of an inſect, the Coccus ficus, which depoſits its eggs on the branches of various trees enumerated under that article, vol. iv. p. 723. but we have noted it more particularly on the CROTON lacciferum, which ſee, vol. v. p. 396.

Lac is not entitled to arrangement either with oils, reſins, or gums. It is not ſoluble either in water or in fat oils. Some eſſential oils appear to extract a dilute tincture. The action of the acids upon lac, either when concentrated or diluted, does not ſeem to be conſiderable; but this requires more particular examination; eſpecially as far as relates to the nitrous acid. Ardent ſpirit acts but feebly on this ſubſtance. By ſtanding upon it in the cold, it forms a clear tincture, apparently by diſſolving only a part of its principles; but, when digeſted in a moderate heat, the whole of the lac unites with the ſpirit, and forms a turbid mixture, or imperfect ſolution, of a gummy appearance, which does not afterwards become clear. In this way, however, with judicious management, it appears practicable to form a very hard opake varniſh, reſembling that of China or Japan.

Of lac there are four kinds known in commerce: viz. 1. Stick-lac, which is the lac in its natural ſtate, from which all the others are formed. This is obtained in pretty conſiderable lumps, with much of the woody parts of the branches on which it is formed adhering to it. 2. Seed-

lac, which is the former broken into ſmall pieces, garbled, and appearing in a granulated form. 3. Lump-lac, which is ſeed-lac liquefied by fire, and formed into cakes. 4. Shell-lac is the purified lac, or the cells liquefied, ſtrained, and formed into their tranſparent laminæ. Lac is brought into this ſtate, or purified, by the following proceſs. It is broken into ſmall pieces, and picked from the branches and ſticks, and then put into a ſort of canvas bag of about four feet long, and about ſix inches in circumference. Two of theſe bags are in conſtant uſe, and each of them held by two men. The bag is placed over a fire, and frequently turned till the lac is liquid enough to paſs through its pores, when it is taken off the fire, and ſqueezed by two men in different directions, dragging it along the convex part of a plantain-tree prepared for the purpoſe; while this is doing, the other bag is heating, to be treated in the ſame manner. The mucilaginous and ſmooth ſurface of the plantain-tree ſeems peculiarly well adapted for preventing the adheſion of the heated lac, and giving it the form which enhances its value ſo much. The degree of preſſure on the plantain-tree regulates the thickneſs of the ſhell, and the quality of the bag determines its fineneſs and tranſparency, upon which its value depends.

The lac is applied to various purpoſes by the natives in India. A great quantity of the ſhell-lac is conſumed in making ornamental rings, painted and gilded in a variety of taſtes, to decorate the arms of the ladies; and it is formed into beads, ſpiral and linked chains for necklaces, and other female ornaments. It is alſo uſed for *ſealing-wax*. For this purpoſe, take a ſtick, and heat one end of it upon a charcoal fire; put upon it a few leaves of the ſhell-lac ſoftened above the fire; keep alternately heating and adding more ſhell-lac, until you obtain a maſs of three or four pounds of liquefied ſhell-lac upon the end of your ſtick. Knead this upon a wetted board, with three ounces of levigated cinnabar, and form it into cylindrical pieces; and to give them a poliſh, rub them while hot with a cotton cloth.

For *japanning*, take a lump of ſhell-lac, prepared in the manner of ſealing-wax, with whatever colour you pleaſe, fix it upon the end of a ſtick, heat the poliſhed wood over a charcoal fire, and rub it over with the half-melted lac, and poliſh by rubbing it even with a piece of folded plantain-leaf held in the hand; heating the lacquer, and adding more lac as occaſion requires. Their figures are formed by lac, charged with various colours, in the ſame manner. In ornamenting their images and religious houſes, &c. they make uſe of very thin beaten lead, which they cover with various varniſhes, made of the lac charged with colours. The preparation of them is kept a ſecret. The leaf of lead is laid upon a ſmooth iron heated by fire below, while they ſpread the varniſh upon it. See JAPANNING.

For *grindſtones*, take of river-ſand three parts, of ſeed-lac waſhed one part, mix them over the fire in a pot, and form the maſs into the ſhape of a grindſtone, having a ſquare hole in the centre; fix it on an axis with liquefied lac, heat the ſtone moderately, and by turning the axis it may be eaſily formed into an exact orbicular ſhape. Poliſhing grindſtones are made only of ſuch ſand as will paſs eaſily through fine muſlin, in the proportion of two parts of ſand to one of lac. The ſand is compoſed of ſmall angular cryſtalline particles, tinged red with iron, two parts to one of black magnetic ſand. The ſtone-cutters, inſtead of ſand, uſe the powder of a very hard granate, called *corunde*. Theſe grindſtones cut very faſt; when they want to increaſe their power, they throw ſand upon them, or let them occaſionally touch the edge of a vitrified brick. The ſame compoſition is formed upon ſticks; for cutting ſtones, ſhells, &c. by the hand.

For *painting*, take one gallon of the red liquid from the firſt working for ſhell-lac, ſtrain it through a cloth, and let it boil for a ſhort time, then add half an ounce of foſſil alkali; boil an hour more, and add three ounces of powdered load (bark of a tree); boil a ſhort time, let it ſtand all night, and ſtrain next day. Evaporate three quarts of milk, without cream, to two quarts, upon a ſlow fire; curdle it with ſome milk, and let it ſtand for a day or two; then mix it with the red liquid above-mentioned; ſtrain them through a cloth, add to the mixture 1½oz. of alum, and the juice of eight or ten lemons; mix the whole, and throw it into a cloth-bag ſtrainer. The blood of the inſect forms a coagulum with the caſeous part of the milk, and remains in the bag, while a limpid acid water drains from it. The coagulum is dried in the ſhade, and is uſed as a red colour in painting and colouring.

For *dyeing*, take one gallon of the red liquid prepared as before without milk, to which add three ounces of alum. Boil three or four ounces of tamarinds in a gallon of water, and ſtrain the liquor. Mix equal parts of the red liquid and tamarind-water over a briſk fire. In this mixture dip and wring the ſilk alternately, until it has received a proper quantity of the dye. To increaſe the colour, increaſe the proportion of the red liquid, and let the ſilk boil a few minutes in the mixture. To make the ſilk hold the colour, they boil a handful of the bark called *load* in water; ſtrain the decoction, and add cold water to it; dip the dried ſilk into this liquor ſeveral times, and then dry it. Cotton cloths are dyed in this manner; but the dye is not ſo laſting as in ſilk. The lac-colour is preſerved by the natives upon flakes of cotton dipped repeatedly into a ſtrong ſolution of the lac-inſect in water, and then dried. The Hindoos, as Mr. Charles Wilkins informed Mr. Hatchett, diſſolve ſhell-lac in water, by the mere addition of a little borax; and the ſolution, being then mixed with ivory-black, or lamp-black, is employed by them as an ink, which, when dry, is not eaſily acted upon by damp or water. Mr. Hatchett found this fact to be exactly as it was ſtated by Mr. Wilkins.

Beſides the above-mentioned, there is another ſort, which is white or yelloviſh, brought from Madagaſcar, very much reſembling the *pe-la* of the Chineſe which has been lately examined by Dr. Pearſon. See LACCIC ACID.

The colour given by lac is leſs beautiful, but more durable, than that given by cochineal. To render the colouring matter of the lac diffuſible in water, ſo as to be applied to the ſtuffs to be dyed, Mr. Hellot directs the following proceſs: Let ſome powdered gum-lac be digeſted for two hours in a decoction of comfrey-root, by which a fine crimſon colour is given to the water, and the gum is rendered pale or ſtraw-coloured. To this tincture, poured off clear, let a ſolution of alum be added; and, when the colouring matter has ſubſided, let it be ſeparated from the clear liquor, and dried. It will weigh about one-fifth of the quantity of lac employed. This dried ſecula is to be diſſolved or diffuſed in warm water, and ſome ſolution of tin is to be added to it, by which it acquires a vivid ſcarlet colour. This liquor is to be added to a ſolution of tartar in boiling water; and thus the dye is prepared.

The method of obtaining the fine red-lac uſed by painters from this ſubſtance, is by the following ſimple proceſs: Boil the ſtick-lac in water, filtre the decoction, and evaporate the clear liquor to a dryneſs over a gentle fire. The occaſion of this eaſy ſeparation is, that the beautiful red colour, here ſeparated, adheres only ſlightly to the outſides of the ſticks broken off the trees along with the gum-lac, and readily communicates itſelf to boiling water. Some of this ſticking-matter alſo adhering to the gum itſelf, it is proper to boil the whole together; for the gum does not at all prejudice the colour, nor diſſolve in boiling water; ſo that after this operation the gum is as fit for making ſealing-wax as before, and for all other uſes which do not require its colour.

A tincture of gum-lac may thus be prepared: Take two ounces of gum-lac, reduce it to a fine powder, and make it into a ſtiff paſte with oil of tartar *per deliquium*; ſet this in an open glaſs to dry by a gentle heat, then remove it to the open air, that it may relent and grow ſoft; then dry it again, and repeat this two or three times, at the end of

of which the hard body of this reſin will be found reſolved into a purple colour. This may yet again be dried, and when dried muſt be reduced to powder, which powder will afford a fine ſtrong tincture to ſpirit of wine, being boiled in it in a tall glaſs in a ſand-heat for two or three hours. And by this proceſs ſtrong tinctures may be made from myrrh, amber, gum, juniper, &c. which will yield no tincture of ſtrength to ſpirit of wine alone, if treated in the uſual way. A ſpirituous tincture of ſtick-lac was formerly ſometimes given as a mild reſtringent and corroborant in female weakneſſes, and in rheumatic and ſcorbutic diſorders. But the principal medicinal uſe of this concrete was as a topical corroborant and antiſeptic, in laxities and ſcorbutic bleedings, and ulcerations of the gums. Some employed for this purpoſe a tincture of the lac in alum-water; others a tincture made of vinous ſpirits, impregnated with the pungent antiſcorbutics. The college of Edinburgh directed an ounce of the powdered lac, with half an ounce of powdered myrrh, to be digeſted in a ſand-heat, for ſix days, in a pint and a half of ſpirit of ſcurvy-graſs.

The gum-lac has been lately uſed as an electric, inſtead of glaſs, for electrical machines.

Lac (artificial), Laque, or Lake, is alſo a name given to a coloured ſubſtance, drawn from ſeveral flowers; as the yellow from the flower of the juniper, the red from the poppy, and the blue from the iris or violet. The tinctures of theſe flowers are extracted by digeſting them ſeveral times in aqua vitæ, or by boiling them over a ſtove-fire in a lixivium of pot-aſhes and alum. The principal lakes are, Carmine, Florence-lake, and lake from Madder.

For the preparation of *Carmine*, four ounces of finely-pulverized cochineal are to be poured into four or ſix quarts of rain or diſtilled water, that has been previouſly boiled in a pewter kettle, and boiled with it for the ſpace of ſix minutes longer; (ſome adviſe to add, during the boiling, two drams of pulverized cryſtals of tartar.) Eight ſcruples of Roman alum in powder are then to be added, and the whole kept upon the fire one minute longer. As ſoon as the groſs powder has ſubſided to the bottom, and the decoction is become clear, this latter is to be carefully decanted into large cylindrical glaſſes covered over, and kept undiſturbed, till a fine powder is obſerved to have ſettled at the bottom. The ſuperincumbent liquor is then to be poured off from this powder, and the powder gradually dried. From the decanted liquor, which is ſtill much coloured, the reſt of the colouring-matter may be ſeparated by means of the ſolution of tin, when it yields a carmine little inferior to the other.

For the preparation of *Florentine-lake*, the ſediment of cochineal that remained in the kettle may be boiled with the requiſite quantity of water, and the red liquor likewiſe that remained after the preparation of the carmine mixed with it, and the whole precipitated with the ſolution of tin. The red precipitate muſt be frequently edulcorated with water. Excluſively of this, two ounces of freſh cochineal, and one of cryſtals of tartar, are to be boiled with a ſufficient quantity of water, poured off clear, and precipitated with a ſolution of tin, and the precipitate waſhed. At the ſame time two pounds of alum are alſo to be diſſolved in water, precipitated with a lixivium of pot-aſh, and the white earth repeatedly waſhed with boiling water. Finally, both precipitates are to be mixed together in their liquid ſtate, put upon a filter, and dried. For the preparation of a *cheaper* ſort, inſtead of cochineal, one pound of Braſil-wood may be employed in the preceding manner.

Madder-lake, which was mentioned long ago by Neri, and has been ſince diſcovered afreſh by Margraff, is made by diſſolving two ounces of Roman alum in ſix pounds of boiling water, and to this adding two ounces of fine madder, with which the water is ſuffered to boil once or twice more, and then to ſtand for ſome time in digeſtion. The decoction being afterwards filtered, a ſolution of alkali is to be mixed with it till no farther precipitation enſues. See farther under the article Pigment.

LA'CA, a town of Africa, in the country of the Foulies: ten miles north-weſt of Goumel.

LACA'BEN, a town of Aſiatic Turkey, in the province of Aladulia: thirty miles ſouth-ſouth-weſt of Malatia.

LACANI'TIS, in ancient geography, a country of Aſia, in Cilicia, according to Ptolemy, who places in it one city, viz. Irenopolis.

LACARACOON'DA, a town of Bengal: ten miles ſouth of Nagore. Lat. 23. 48. N. lon. 87. 27. E.

LACA'RIA, a ſmall town of Italy, in the eaſtern part of Lucania, ſouth of Heraclea, and near the gulf of Tarentum; founded by a colony of Phocæans, and celebrated for its good wine.

LA'CAS, a town of the iſland of Cuba: fifteen miles weſt of Villa del Principe.

LAC'CA HER'BA. See Impatiens.

LACCADI'VE I'SLANDS, a group of ſmall iſlands in the Indian Sea; the neareſt about 120 miles from the coaſt of Malabar. Theſe iſlands are ſuppoſed to be what Ptolemy called *Inſulæ Numero* XIX. The Nineteen Iſlands; but in fact they are thirty-two; all of them ſmall, and covered with trees; they are rocky on their ſides, moſtly as if laid on a bottom of ſand, attended with reefs, and the channels between them very deep; they are commonly viſited by Engliſh ſhips, in their way from India to the Perſian Gulf, or Red Sea. The principal traffic of theſe iſlands is in the produce of the cocoa-palm, ſuch as the oil, cables, and cordage; and in fiſh, which is dried and ſent to the continent of India, from whence they get rice, &c. in return. They alſo trade to Maſcat in large boats; and bring back, in return for their commodities, dates and coffee. Ambergris is often found floating off theſe iſlands. Lat. 10. 0. to 12. 40. N. lon. 71. 15. to 73. 30. E.

LAC'CIC, *adj.* Partaking of the nature of lac; prepared from lac.

Laccic Acid, a ſubſtance that was firſt introduced to the notice of chemiſts by Dr. Pearſon. It is obtained from a peculiar compound called *white-lac*, which Dr. Anderſon of Madras diſcovered to be the product of ſome inſects of the Coccus tribe. Small quantities of it were ſent to Europe about the year 1789; and, at the requeſt of ſir Joſeph Banks, an examination of it was undertaken by Dr. Pearſon, and the reſult of his inquiries appeared in the Philoſophical Tranſactions for 1794. The lac, in its natural ſtate, is of a grey colour; and occurs in pieces of from three to fifteen grains in weight. Many of its properties preſent conſiderable reſemblance to thoſe of bees' wax; and Dr. Pearſon is of opinion, that theſe ſubſtances are very nearly allied to each other, differing only in the proportion of their conſtituents. A curious circumſtance, connected with this point, is, that, the inſect which ſecretes the lac alſo produces honey; but the phenomena attending the appearance of the latter product have not been examined with the attention which they merit. To procure the laccic acid, it is merely neceſſary to expoſe the lac, as afforded by the *coccus*, to a heat juſt ſufficient to liquefy it. A reddiſh watery fluid will ſeparate, having the ſmell of newly-baked hot bread; and it is this ſubſtance which conſtitutes the acid under inquiry. The following are ſome of its properties. At the temperature of 60°, it has a ſpecific gravity of 1·025. Paper ſtained with litmus and turnſol is reddened by it. It poſſeſſes a ſaline taſte, and is ſomewhat bitter; but is not in the ſmalleſt degree ſour. By expoſure to the air it becomes muddy, and depoſits a ſmall quantity of ſediment. Dr. Pearſon diſtilled 250 grains of it, and afterwards evaporated the product until it grew turbid. On ſtanding ſome hours, acicular cryſtals were produced, having a biteriſh taſte, which amounted to about $\frac{1}{100}$th of the weight of the fluid employed. The acid diſſolves carbonat of ſoda with effervescence; and by evaporation yields cryſtals which are deliqueſcent. It produces a purpliſh tint on being mixed with lime-water, but no ſediment appears. Tincture of galls cauſes a green precipitate; and with acetat of lead a reddiſh powder is depoſited. This

forms

forms nearly the whole of the information that has been conveyed to us with reſpect to it; and as yet, therefore, nothing either very ſtriking, or very important, has been communicated by the diſcovery. It is to be lamented that Dr. Pearſon had ſo ſmall a quantity of matter to operate upon in his experiments, as it becomes difficult, from the want of a more complete examination, to aſcertain whether the ſubſtance is entirely new to us; or whether it is only the modified appearance of ſome compound with which we had been before acquainted.

LAC'COS, *ſ.* [Greek.] Among the ancients, a ditch or trench uſed inſtead of an altar, when ſacrifices were to be offered to the ſubterranean or infernal gods.

LACE, *ſ.* [*lacet*, Fr. *laqueus*, Lat.] A ſtring; a cord:

There the fond fly entangled, ſtruggled long,
Himſelf to free thereout; but all in vain:
For, ſtriving more, the more in *laces* ſtrong
Himſelf he tied, and wrapt his winges twain
In limy ſnares, the ſubtil loops among. *Spenſer.*

A ſnare; a gin.—The king had ſnared been in love's ſtrong *lace*. *Fairfax.*—A plaited ſtring, with which women faſten their clothes:

Doll ne'er was call'd to cut her *lace*,
Or throw cold water in her face. *Swift.*

Ornaments of fine threads curiouſly woven.—Our Engliſh dames are much given to the wearing of coſtly *laces*; and, if they be brought from Italy, they are in great eſteem. *Bacon.*—Textures of thread, with gold or ſilver:

He wears a ſtuff, whoſe thread is coarſe and round,
But trimm'd with curious *lace*. *Herbert.*

Sugar. *A cant word now out of uſe:*

If haply he the ſect purſues,
That read and comment upon news;
He takes up their myſterious face,
He drinks his coffee without *lace*. *Prior.*

To LACE, *v. a.* To faſten with a ſtring run through eyelet holes.—I cauſed a fomentation to be made, and put on a *laced* ſock, by which the weak parts were ſtrengthened. *Wiſeman.*

Theſe glitt'ring ſpoils, now made the victor's gain,
He to his body ſuits; but ſuits in vain:
Meſſapus' helm he finds among the reſt,
And *laces* on, and wears the waving creſt. *Dryden.*

To adorn with gold or ſilver textures ſewed on.—It is but a night-gown in reſpect of yours; cloth of gold and coats, and *lac'd* with ſilver. *Shakeſpeare.*—To embelliſh with variegations:

Then clap four ſlices of pilaſter on't,
That, *lac'd* with bits of ruſtic, makes a front. *Pope.*

To beat; [whether from the form which L'Eſtrange uſes, or by corruption of *laſh.*]—Go you, and find me out a man that has no curioſity at all, or I'll *lace* your coat for ye. *L'Eſtrange.*

LACED MUTTON. An old word for a whore.—Ay, ſir, I, a loſt mutton, gave your letter to her, a *lac'd mutton*, and ſhe gave me nothing for my labour. *Shakeſpeare.*

LACE-BAR'K. See DAPHNE lagetto, vol. v.

LA'CE-MAKER, *ſ.* One who is employed in making lace.

LA'CE-MAKING, *ſ.* Lace, for ornamenting clothes, is formed of thread, cotton, or ſilk, woven into a net, the meſhes of which are varied in their figure, according to the deſign of the pattern, as octagons, hexagons, &c. &c. The lace is alſo ornamented by a thread, much thicker than the thread forming the net, which is woven in among the meſhes, in the figure of flowers, and other fantaſtic curves; upon the beauty and elegance of which, the value of the lace depends. This thick thread is called the *gimp*.

Lace is made upon a pillow or cuſhion, upon which a piece of ſtiff parchment is ſtretched, having a number of holes pricked through it, to form a pattern of the intended lace. Through theſe holes, pins are ſtuck into the pillow; and the threads, wound upon ſmall bobbins, are woven around the pins, and twiſted round each other in various ways, to form the required pattern. This proceſs is extremely tedious, particularly for the wide laces with complicated petterns; and, though it is extremely expenſive to the conſumer, the people (chiefly in Bedford and Buckinghamſhire) who manufacture it can only obtain ſufficient to ſupport a wretched exiſtence, by the moſt inceſſant exertion.

Of late years, the manufacturers of Nottingham have directed their ingenuity to imitate this ſpecies of lace by machinery, in which they have ſucceeded moſt perfectly; but ſtill it is only an imitation, the knot or loop of the meſhes being eſſentially different. In the pillow-lace, the net or meſhes may be deſcribed by ſuppoſing a number of ropes, each formed of two or more threads twiſted round each other; theſe are extended parallel; but, at every two or three ſpiral turns of theſe ropes, the ſtrands or threads compoſing one rope are twiſted around with thoſe of its neighbour, and then return to be twiſted with its own; and this reciprocally of the whole number forms a netting; the figure of the meſhes depending upon the number of turns which are made, before the twiſt is changed from one rope to the next. To form a lace of this deſcription, it is eſſential that the ends of each thread be detached, and capable of being twiſted over the adjacent threads. This is eaſily done by the hand upon the pillow, by twiſting the bobbins round each other; but has many difficulties which prevent its performance by machinery. The Nottingham lace is only a modification of the ſtitch or loop of which ſtockings are made; all the meſhes being formed by a continuance of one thread, which is, by the machine, formed into loops a whole courſe (that is, the length of the intended piece of lace) at once, by preſſing it down alternately over and under between a number of parallel needles; a ſecond courſe is then made of ſimilar loops on the ſame needles, and the loops of the firſt are drawn through thoſe of the ſecond, in ſuch a manner as to form meſhes by retaining the firſt loops; the ſecond are then retained by a third courſe, and this by a fourth, and ſo on. The machine is very nearly like a common ſtocking-frame, but provided with an additional apparatus, which can be readily applied. It conſiſts of a frame, containing a number of needles which we will call *points*; theſe are introduced between the fixed needles of the ſtocking-frame, and a certain number (one half, for inſtance) of the loops in the thread are taken off the fixed needles upon theſe points, which are moved endways, the ſpace of two, three, or more, fixed needles, and put down upon them again. Another ſet of loops is now taken upon the points, and moved in the oppoſite direction; by this means, croſſing the loops over each other, and forming meſhes, the figure of which will depend upon the number of needles it is thus carried over. But, as this admits of no great variety of patterns, another machine has been invented, which is much more extended in its application. Like the former, it has the parts of the ſtocking-frame, but differently made. The thread is, in this, rolled upon a cylinder, in the ſame manner as a weaver's beam; as many threads being wound round it as there are needles in the frame. Theſe threads paſs through eyes in the ends of ſmall points, called guides, which are oppoſite the needles; and theſe guides are fixed on two bars, each of which has half the guides faſtened in it, that is, one guide is faſt in one bar, and the next in the other, and ſo on alternately of the whole. Each of the guides preſents a thread to its needle, and are all at once moved by the hand to twiſt the threads two or three times round the needles which are oppoſite them; the loop is now made in a manner ſimilar to the other frame. The next time, the alternate guides are ſhifted endways, ſo as to apply themſelves to other needles than thoſe they were oppoſite before. This croſſes the thread, ſo as to make a net; but

the quantity which is ſhifted endways is altered every time, by means of the machinery, ſo as to move a certain number of needles; which number is altered every time, to produce the pattern. All the parts of this machine, except the guides, are moved by means of treadles, inſtead of uſing the hands, as in the common ſtocking-frame. The net produced by theſe frames is woven in bands of the width of the intended lace, having a wider meſh than the others, through which the diviſion is to be made to ſeparate the lace into narrow ſtripes. Before cutting up in this manner, the lace is ſpread in a frame, and a common needle with a thick thread is worked in the meſhes, to imitate the gimp, according to the pattern for which the lace is intended. The lace-trade of Nottingham has been carried to a very great extent, but is at preſent in a ſtate of ſtagnation, being chiefly dependent on foreign trade, as it has never been in ſuch great repute with the Britiſh ladies.

Lace is alſo made of gold and ſilver thread, much in the ſame manner as the bone or blond lace above deſcribed. The importation of gold and ſilver lace is prohibited. Great quantities of the fineſt blond-laces have been imported from Flanders. By 3 Geo. III. c. 21. and 5 Geo. III. c. 48. if any perſon ſhall import any ribbands, laces, or girdles, not made in Great Britain, whether the ſame ſhall be wrought of ſilk alone, or mixed with other materials, the ſame ſhall be forfeited, and may be ſeized by any officer of the cuſtoms, in whatever importers', venders', or retailers', hands they may be found; and the importer, and every perſon aſſiſting therein, and the venders and retailers in whoſe cuſtody they ſhall be found, or who ſhall ſell or expoſe the ſame to ſale, or conceal with intent to prevent the forfeiture, ſhall forfeit reſpectively 200l. with coſts; half to the king, and half to the officer who ſhall inform and proſecute.

Method of Cleaning Gold Lace and Embroidery when tarniſhed.—For this purpoſe alkaline liquors are by no means to be uſed; for, while they clean the gold, they corrode the ſilk, and change or diſcharge its colour. Soap alſo alters the ſhade, and even the ſpecies, of certain colours. But ſpirit of wine may be uſed without any danger of its injuring either the colour or quality of the ſubject; and in many caſes proves as effectual, for reſtoring the luſtre of the gold, as the corroſive detergents. A rich brocade, flowered with a variety of colours, after being diſagreeably tarniſhed, had the luſtre of the gold perfectly reſtored by waſhing it with a ſoft bruſh dipt in warm ſpirit of wine; and ſome of the colours of the ſilk, which were likewiſe ſoiled, became at the ſame time remarkably bright and lively. Spirit of wine ſeems to be the only material adapted to this intention, and probably the boaſted ſecret of certain artiſts is no other than this ſpirit diſguiſed. Among liquids, Dr. Lewis ſays, he does not know of any other that is of ſufficient activity to diſcharge the foul matter, without being hurtful to the ſilk; as to powders, however fine, and however cautiouſly uſed, they ſcratch and wear the gold, which here is only ſuperficial and of extreme tenuity. But, though ſpirit of wine is the moſt innocent material that can be employed for this purpoſe, it is not in all caſes proper. The golden covering may be in ſome parts worn off; or the baſe metal, with which it had been iniquitouſly alloyed, may be corroded by the air, ſo as to leave the particles of the gold diſunited; while the ſilver underneath, tarniſhed to a yellow hue, may continue a tolerable colour to the whole; in which caſes it is apparent, that the removal of the tarniſh would be prejudicial to the colour, and make the lace or embroidery leſs like gold than it was before.

Method of ſeparating the Gold and Silver from Lace without burning it.—Cut the lace in pieces, and (having ſeparated the thread from it by which it was ſewed to the garment) tie it up in a linen cloth, and boil it in ſoap-ley, diluted with water, till you perceive it is diminiſhed in bulk; which will take up but a little time, unleſs the quantity of lace be very conſiderable. Then take out the cloth, and waſh it ſeveral times in cold water; ſqueezing it pretty hard with your foot, or beating it with a mallet, to clear it of the ſoap-ley; then untie the cloth, and you will have the metallic part of the lace pure, and no-where altered in colour or diminiſhed in weight.

This method is abundantly more convenient and leſs troubleſome than the common way of burning; and, as a ſmall quantity of the ley will be ſufficient, the expence will be trifling, eſpecially as the ſame ley may be uſed ſeveral times, if cleared of the ſilky calcination. It may be done in either an iron or copper veſſel. The ley may be had at the ſoap-boilers, or it may be made of pearl-aſh and quicklime boiled together in a ſufficient quantity of water. The reaſon of this ſudden change in the lace will be evident to thoſe who are acquainted with chemiſtry; for ſilk, on which all our laces are wove, is an animal ſubſtance, and all animal ſubſtances are ſoluble in alkalies, eſpecially when rendered more cauſtic by the addition of quicklime; but the linen you tie it in, being a vegetable, will remain unaltered.

LACEDÆ'MON, in fabulous hiſtory, a ſon of Jupiter and Taygeta the daughter of Atlas, who married *Sparta* the daughter of Europa, by whom he had Amyclas and Eurydice the wife of Acriſius. He was the firſt who introduced the worſhip of the Graces in Laconia, and who firſt built them a temple. From Lacedæmon and his wife, the capital of Laconia was called *Lacedæmon* and *Sparta*.

LACEDÆ'MON, a noble city of Peloponneſus, called alſo *Sparta*; the names differing in this, that the latter is the proper and ancient name of the city, the former of the country, which afterwards came to be applied to the city. Homer alſo makes this diſtinction; and calls the country *holy*, becauſe encompaſſed with mountains. It has alſo been ſeverally known by the name of *Lelegia*, from the Leleges the firſt inhabitants of the country, or from Lelex the firſt of their kings; and *Oebalia*, from *Oebalus* the ſixth king from Eurotas. It was alſo called *Hecatompolis*, from 100 cities which the whole province once contained. The preſent city is called *Miſtra*, ſituated in lat. 36. 55. N. lon. 23. 0. E. See SPARTA; and, for the hiſtory of Lacedæmon, or Laconia, ſee the article GREECE, vol. viii.

LACEDÆMO'NIAN, *adj.* Born at Lacedæmon; belonging to Lacedæmon.

LACEDÆMO'NIAN, *ſ.* A native of Lacedæmon.

LACEDÆMO'NIUS, a ſon of Cimon by Clitoria. He received this name for his father's regard for the Lacedæmonians. *Plutarch.*

LACEDOG'NA. See CEDOGNA, vol. iv.

LA'CEMAN, *ſ.* One who deals in lace.—I met with a nonjuror, engaged with a *laceman*, whether the late French king was moſt like Auguſtus Cæſar, or Nero. *Addiſon's Spectator.*

LA'CERABLE, *adj.* [from *lacerate.*] Such as may be torn.—Since the lungs are obliged to a perpetual commerce with the air, they muſt neceſſarily lie open to great damages, becauſe of their thin and *lacerable* compoſure. *Harvey.*

To LA'CERATE, *v. n.* [*lacero*, Lat.] To tear; to rend; to ſeparate by violence.—And my ſons *lacerate* and rip up, viper-like, the womb that brought them forth. *Howel.*—The heat breaks through the water, ſo as to *lacerate* and lift up great bubbles too heavy for the air to buoy up, and cauſeth boiling. *Derham.*

LACERA'TION, *ſ.* The act of tearing or rending; the breach made by tearing.—The effects are, extenſion of the great veſſels, compreſſion of the leſſer, and *lacerations* upon ſmall cauſes. *Arbuthnot.*

LA'CERATIVE, *adj.* Tearing; having the power to tear.—Some depend upon the intemperament of the part ulcerated, others upon the continual afflux of *lacerative* humours. *Harvey on Conſumptions.*

LACER'NA, *ſ.* A coarſe thick garment worn by the Romans over their gowns, like a cloak, to keep off the rain and cold. It was firſt uſed in the camp, but afterwards admitted into the city. The emperors wore the lacerna of a purple dye. The lacerna was at firſt very ſhort, but

was lengthened after it became fashionable, which was not till the civil wars and the triumvirate; before this time it was confined to the soldiers. Senators were forbidden wearing it in the city by Valentinian and Theodosius. Martial makes mention of lacernæ worth 10,000 sesterces. Some confound this garment with the penula; but it seems rather to have resembled the *chlamys* and *birrus*.

LACER'TA, *s.* [from *lacero*, to tear, on account of the voracity of the larger species; or from *lacertosus*, brawny, sinewy, strong.] In zoology, a genus of the class amphibia, order reptilia; including the crocodiles, lizards, water-newts, chameleon, salamander, &c. Generic characters: Body four-footed, elongated, tailed; naked, i. e. without any secondary integument.

This is the most numerous genus in the tribe of oviparous quadrupeds. The animals of this genus are easily distinguished from all other oviparous quadrupeds, as they have no bucklers, like the tortoises; and are all furnished with tails, which are entirely wanting in frogs and toads. Their bodies are covered either with scales of more or less strength, or with tubercles of greater or less projection. Their length varies, in the different species, from two or three inches, to twenty-six or even thirty feet. Their tails differ both in general form, and in proportion to the size of the body; being flat in some species, and rounded in others; in some species three times as long as the body, in others very short; in all the species the tail is extended horizontally backwards, and is almost as thick at the base as the hinder part of the body from which it arises. In general the hind legs are longer than the fore, though Linnæus makes *pedibus equalibus* part of the generic character. Some species have five toes on each foot, while others have only four or three on the fore feet, or only on the hind feet. In most of the species, the five toes of the hind feet are of unequal lengths; the third and fourth being longer than the rest, and the outer toe is separated from the others, so as to form a kind of thumb, while, in all the viviparous quadrupeds, the toe which serves this purpose is the inmost. The phalanges, or moveable pieces, of the toes, in this genus, are not confined to three for the fingers and two for the thumbs, as in viviparous quadrupeds, but sometimes extend to four, as in some species of birds, which gives greater facility for grasping the branches of trees in climbing.

The different species of this genus differ from each other in habits, as much as in external form. Some live almost entirely in the water, or on the sequestered banks of great rivers and marshes. Some, instead of avoiding the habitations of mankind, seem to prefer these to all other places. Some live in the woods, and run with great swiftness along even the highest and most slender branches of trees.

Most of the lizard tribe have only two or four vertebræ of the neck; but the crocodile, which, from its power and size, stands at the head of all these animals, has seven, like all viviparous quadrupeds. Thus that species may be considered as connecting the lizards with the superior orders of viviparous quadrupeds, while, by its habits and structure, it connects them with the tortoises. The salamander, on the contrary, seems to unite the genus with a lower order of oviparous quadrupeds, and thus assists to form and support the wondrous chain of animated nature.

As this genus includes so great a number of species, it was thought necessary to reduce them into some methodical arrangement, uniting together such as resemble each other in size, external form, and general habits. For this purpose, the genus is here arranged into eleven divisions. But such divisions neither are, nor can be, perfectly precise; since species may occur which may with almost equal propriety be referred to either of the neighbouring sections; but in general they will be found useful in the investigation of the species.

I. *Tail two-edged, and divided into segments; tongue very short; five toes on the fore feet, four on the hind feet.*

1. Lacerta crocodilus, the common or Nilotic crocodile. Specific character, head mailed, neck carinated, and two lateral crested processes on the upper part of the tail.

The crocodile, in its general form, is extremely similar to the other lizards, but has a number of distinctive characters peculiar to itself. The head is long, flattened, and much wrinkled; the muzzle being thick, and somewhat rounded. On the upper part of the muzzle, there is a round, blackish, soft, spongy, substance, in which the nostrils are placed; which are of a crescent figure, having the points turned backwards. The mouth is enormously large, opening even behind the ears, the jaws being sometimes several feet in length: the lower jaw is perfectly straight on both sides; but the upper jaw is waved in its direction, and is much enlarged at its posterior extremity, so as to overlap the under jaw on each side; it becomes narrower at the sides, and is in its turn overlapped by the under jaw, almost to the muzzle, where it again enlarges, and overlaps the under jaw. From this circumstance, the teeth that are situated at these overlapping places, have the appearance of tusks or canine teeth; such as the ten teeth in the front part of the upper jaw. On the other hand, the two foremost teeth of the lower jaw, when the mouth is shut, not only penetrate into the upper jaw, but even proceed quite through it, and appear on the outside like two small horns. This circumstance is very evident in all the individuals of any considerable size; and is even perceptible in a young specimen from Senegal, only four feet four inches long, preserved in the royal cabinet at Paris. Notwithstanding the distinctness of this remarkable character, Cepede says it has not been hitherto noticed by any naturalist, except by the Jesuit mathematicians who were sent into the east by Louis XIV. and who sent home the description of a crocodile from Siam. There are sometimes as far as thirty-six teeth in the upper jaw, and thirty in the lower; but the number is subject to variety. The teeth are of different lengths, very strong, somewhat hollowed, striated on their lateral surfaces, of a conical form, and sharp-pointed; they are firmly fixed in the jaws, by means of strong roots, forming a single row on each side of each jaw, and are somewhat bent or hooked backwards, especially those nearest the muzzle. They are so situated in the two jaws, relatively to each other, that they pass between each other when the mouth is shut; and, in this situation, the points of several of the lower teeth are received into the hollows in the upper gums, and of several of the upper teeth into similar hollows in the gums of the lower jaw. The gentlemen of the academy, who dissected a very young crocodile in 1681, having drawn out several of its teeth, found others of a very small size in the bottoms of the sockets; hence it appears, that the first set of teeth must fall out, and be replaced by a new set, in the same manner with the incisive teeth of mankind, and of many viviparous quadrupeds.

Notwithstanding that several authors have insisted, that the upper jaw in crocodiles is moveable, it only needs a single glance at the skeleton to be convinced that, as in all quadrupeds, the upper jaw is entirely fixed, and the motion is confined to the under jaw. In most viviparous quadrupeds, besides the direct vertical motion of opening and shutting the mouth, the lower jaw has a lateral motion from side to side, for the purpose of grinding or chewing the food. This motion is denied to the crocodile; which is only very imperfectly able to masticate its food, because the teeth are so placed as not to meet, or oppose each other; but they are excellently calculated for keeping a fast hold of their prey, and for tearing it to pieces; after which it is mostly swallowed without chewing, and without being mixed with saliva: it is, however, very readily digested, in consequence of the crocodile having a larger proportion of bile and gastric juice than any other animal. In these respects, the crocodile has considerable resemblance to the class of fishes; and the teeth, in several species of sharks, resemble those of the crocodile, both in figure and arrangement.

The ancients, and even ſome modern authors, have ſuppoſed that the crocodile had no tongue; but its tongue is in reality very large, even larger in proportion than that of an ox; it is, however, ſo firmly attached to the two ſides of the lower jaw, by means of a membrane, that it cannot be thruſt out of the mouth. On our firſt Plate, fig. 2 is intended to exhibit this peculiar conformation. The crocodile however has no lips; ſo that, even when walking or ſwimming with the utmoſt tranquillity, the teeth are bare, and the aſpect ſeems animated with rage. Another circumſtance, that contributes to increaſe the terrific nature of its countenance, is the fiery appearance of the eyes; which, being placed obliquely and very near each other, have a malignant aſpect: theſe are furniſhed with two hard, moveable, and very-much wrinkled, eyelids; over which is an indented rim, reſembling an eyebrow drawn together into a menacing frown. This general aſpect of malignity and hideouſneſs has certainly contributed greatly to produce a reputation for inſatiable cruelty, which ſome voyagers have attributed to this animal. The eyes, as in thoſe of birds, are defended by a membrana nictitans, which adds conſiderably to their power. The ears are placed very near to, and ſomewhat higher than, the eyes, and are covered by a ſkin, which is cracked and elevated in ſuch a manner as to reſemble ſhut eyelids; from which circumſtance, ſome naturaliſts have been induced to believe that the crocodile had no external ears, eſpecially as theſe paſſages are not very obvious in many other ſpecies of lizards. The upper portion of this ſkin, which covers the paſſage, is moveable, and, when lifted up, the tympanum, or drum of the ear, can be diſtinctly ſeen. Some voyagers ſeem to have been deceived by this reſemblance of the ſkin covering the ears to eyelids, and have reported that crocodiles had been killed which had four eyes. Notwithſtanding the ſlight projection of theſe ears, we are informed by Herodotus, that the ancient inhabitants of Memphis hung pendants to the ears of the ſacred crocodiles which were kept at that city. The brain is extremely ſmall. The tail is very long, and is as thick at the root as the body, of which it ſeems only to be a prolongation. In its figure, it is flattened laterally, having ſome reſemblance to an oar, and, by its means, the crocodile manages itſelf when ſwimming in the water with great eaſe, and is enabled to ſwim with great ſwiftneſs. Beſides this inſtrument, the toes of the hind feet are united by webs, ſo that they can be employed as fins to aſſiſt in ſwimming. Of theſe toes, which are four in number on each hind foot, and five on each fore foot, only the three innermoſt on each foot are in general provided with claws, which are uſually an inch or two in length; but the ſkeleton deſcribed by Grew had claws on all the toes.

Crocodiles are naturally defended by almoſt impenetrable armour. Their whole body is covered with ſtrong hard ſcales, except the top of the head, where the ſkin is fixed directly over the bones of the ſkull. The ſcales on the flanks, on the legs and feet, and on the greater part of the neck, are round, of various ſizes, and very irregularly placed: thoſe on the back, and on the upper ſide of the tail, are ſquare, and are diſtributed in regular tranſverſe rows or belts. Hence, in our attempts to kill or wound this animal, we muſt not direct the ſtroke from behind forwards, as in thoſe animals in which the ſcales are imbricated over each other: it is neceſſary to inflict the wounds between the rows of ſcales, where nothing but ſkin occurs. The ſquare ſcales are exceedingly firm and hard, and are at the ſame time ſufficiently flexible to prevent them from being brittle. Labat ſays, that they are proof againſt a muſket-ball, unleſs it is diſcharged very near, or the piece be very ſtrongly charged; and that the negroes make caps, or rather helmets, of their ſkin, which are ſufficiently ſtrong to defend them againſt the ſtroke of a hatchet. The hardneſs of theſe ſcales is probably in proportion to the age of each individual, and perhaps varies in the different ſexes. M. de la Borde ſays, that they are impenetrable to muſket-balls, except under the ſhoulders; and, according to M. de la Coudreniere, they may likewiſe be wounded in the belly and near the eyes. Each of theſe ſcales has a kind of creſt, or ſerrated ridge, on its middle, which adds to its ſtrength, and in general enables them to reſiſt the force of a muſket-ball. On the middle of the neck, there are two tranſverſe rows of theſe tuberculated ſcales, in the form of cocks' combs, one of which conſiſts of four and the other of two pieces. Each ſide of the upper ſurface of the tail is furniſhed with a longitudinal row of theſe creſted tubercles, which extends the whole length in a ſerrated ridge of ſharp points, that unite together in a ſingle row near the tip of the tail. The ſcales which cover the belly, the under ſide of the head, neck, tail, and feet, and the inner ſide of the legs, are placed in tranſverſe rows: theſe ſcales are ſquared and ſomewhat flexible, like thoſe on the back, but are much weaker, and have no protuberances. The cetaceous and other voracious fiſhes attack the crocodile in theſe weaker parts of the body: in this manner, as we are told by Pliny, the dolphin often kills the crocodile: and in the furious combats that take place between the crocodile and the ſaw-fiſh, the latter, finding it impoſſible to penetrate through the ſtrong tuberculated armour on the upper part of the body, dives below his enemy, and wounds him in the belly.

The colour of the Nilotic crocodile is a greeniſh yellow, more or leſs variegated with pale green in blotches and tranſverſe bars, having a general reſemblance to braſs ſlightly ruſted. The under parts of the body, tail, and feet, and the inner ſides of the legs, are yellowiſh white. It has been alleged, that the name of this animal, in Greek and Latin, from which the French and Engliſh names are directly copied, is derived from κροκος, or *crocus*, ſaffron, owing to the reſemblance of its colour to that ſubſtance. Some authors, on the other hand, derive it from κροκος, ſaffron, and δειλος, afraid, pretending that it was afraid of that drug. Ariſtotle ſeems to have conſidered the crocodile as being black: thoſe indeed of the river Senegal are often very dark brown, verging towards black; but that ancient naturaliſt could not know any thing of the productions of that part of Africa. The length of the crocodile varies according to its different ages, and according to the temperatures of the countries which it inhabits. It ſeldom exceeds twenty-five or twenty-ſix feet, even in the moſt favourable climates; and, in other countries, as on the coaſt of Guiana, which ſeem leſs favourable to its growth, it hardly ever grows beyond thirteen or fourteen feet long. The ſpecimen in the royal cabinet at Paris, from which Cepede's account is drawn up, meaſured almoſt fourteen feet long, and more than four feet in circumference at the thickeſt part of the body; from which we may conclude, that the largeſt individuals are between eight and nine feet round.

The ſexual union takes place in the beginning of ſpring, the female lying on her back, as in all the lizard tribe. It was long thought, that the female crocodile laid all her eggs at one time; but M. de la Borde informs us, that ſhe lays twice, and ſometimes three times, with an interval of a few days, producing from twenty to twenty-four eggs each time. Hence each female may lay ſeventy-two eggs in one ſeaſon; which agrees ſo far with the aſſertion of Linnæus, that the number of eggs from one female in a year ſometimes amounts to a hundred. Theſe eggs are laid on the banks of the rivers, in a hole in the ſand. In Cayenne and Surinam, according to the information of M. de la Borde, the female prepares a ſmall hillock of ſand, with a hollow in the middle, which ſhe lines with leaves and other vegetable matter; then depoſits her eggs, and covers them over with leaves. The vegetable ſubſtances ferment, which produces ſome heat, that, in addition to that of the atmoſphere, hatches the eggs. In Cayenne the crocodiles and tortoiſes lay their eggs at the ſame ſeaſon, in the month of April; but the laying-ſeaſon of the former continues rather longer than the latter. It is very remarkable,

remarkable, that the egg of ſo large an animal, and from which a creature is produced that is to become of ſuch enormous magnitude, ſhould ſcarcely exceed the egg of a pintado or Guinea-fowl in ſize. An egg of a crocodile of fourteen feet long, killed in Upper Egypt in the act of laying, is preſerved in the imperial cabinet at Paris: it is whitiſh, and of an oval figure, and is covered by a chalky ſhell, ſimilar to that of a hen's egg, but not ſo hard; but the ſkin or film, immediately within the ſhell, is thicker and ſtronger; the long diameter is two inches five lines, and the ſhort diameter one inch eleven lines. The fœtus-crocodiles are rolled up within the egg, and ſeldom exceed ſix or ſeven inches long when they break the ſhell, which they ſometimes do with the head, and at other times with the ſerrated tubercles on the back. When they firſt come forth, they drag about with them the remains of the yolk, attached to the umbilical chord, and ſurrounded by its proper membrane, together with a kind of after-burthen, in which they had been enveloped when within the ſhell. All theſe circumſtances are very diſtinctly obſervable in the ſpecimen preſerved in the imperial cabinet, which was caught immediately on breaking through the ſhell. The inſertion of the umbilical chord remains very perceptible for ſome time, but diſappears as the animal grows older; the rows of ſcales, which were ſeparated to allow its paſſage, growing together gradually, and concealing it.

From the information of travellers, we are certain that the crocodiles do not ſit upon their eggs; indeed, independent of that teſtimony, we ſhould have ſo concluded from an attentive review of the conformation and natural habits of the animal, notwithſtanding that Pliny has reported that the male ſits on the eggs alternately with the female. M. de la Borde, however, writes, that, in Surinam, the female always keeps within a ſmall diſtance of the place where ſhe has depoſited her eggs, and even defends them with fury againſt any perſon or animal that attempts to approach them. Immediately on getting out of the eggs, they run for the water, where they are both in greater ſecurity from danger, and better ſituated to procure proper food. Even there, however, they are by no means exempted from dangers, even of the moſt unnatural kind; they are not only preyed on by voracious fiſhes, but the old crocodiles, when preſſed by famine, often do, from urgent neceſſity, what other animals of a more ſanguinary diſpoſition ſeem to perpetrate merely to ſatisfy the cruelty of their diſpoſitions; they devour the helpleſs young of their own kind.

The gradual evolution and growth of the crocodile are thus poetically deſcribed by Dr. Darwin:

So from his ſhell, on Delta's ſhowerleſs iſle,
Burſts into birth the monſter of the Nile;
Firſt, in tranſlucent lymph, with cobweb threads
The brain's fine floating tiſſue ſwells and ſpreads:
Nerve after nerve the gliſtening ſpine deſcends;
The red heart dances, the aorta bends:
Through each new gland the purple current glides,
New veins meand'ring drink the refluent tides.
Edge over edge expands each hardening ſcale,
And ſheaths his ſlimy ſkin in ſilver mail.
Erewhile, emerging from the brooding ſand,
With tiger-paw he prints the brineleſs ſtrand:
High on the flood with ſpeckled boſom ſwims,
Helm'd with broad tail, and oar'd with giant limbs:
Rolls his fierce eye-balls, claſps his iron claws,
And champs with gnaſhing teeth his maſſy jaws.
Old Nilus ſighs thro' all his crane-crown'd ſhores,
And ſwarthy Memphis trembles and adores.

The crocodile prefers the banks of ſuch large rivers as, in conſequence of frequent or periodical overflowing, are covered with mud, in which they find abundance of teſtaceous fiſh, worms, and frogs, for food. On the ſlimy banks of theſe marſhy and wooded waters, the large crocodile, covered over with mud, and appearing like the trunk of a fallen tree, often remains motionleſs for a long while, watching with aſtoniſhing patience for an opportunity to ſeize his prey. His ſtillneſs, colour, and form, impoſe on fiſhes, ſea-fowl, tortoiſes, and other animals, ſo that they approach without ſuſpicion. He likewiſe ſeizes on ſheep, goats, hogs, and even on cattle and horſes. While ſwimming along the great rivers, he ſeldom raiſes more than juſt the top of his head above water, ſo as to ſee around, ſeeking to ſurpriſe any of the larger animals that may come cloſe to either ſhore. When he ſees any one approach to drink, he dives and ſwims under water, till he gets near enough to catch it by the legs, then drags it into the water till it is drowned, and devours it at his leiſure. When preſſed with hunger, the crocodile even devours mankind. Haſſelquiſt relates, that, in Upper Egypt, it very often devours the women who come to draw water from the Nile, and the children who play about on the banks. Some authors pretend that it attacks negroes in preference to white men; but this probably proceeds from the much greater number of negroes than whites in the countries where the obſervation has been made, and from the occupation of the negroes expoſing them more to the danger of being attacked.

As the largeſt crocodiles have both occaſion for a greater quantity of food, and are more eaſily ſeen and avoided by ſmall animals, they muſt be expected to ſuffer the effects of hunger more frequently, and with greater violence, than ſmaller individuals, and are conſequently much more dangerous, eſpecially in the water. In this element he enjoys the whole of his ſtrength with much greater advantage than on the land. In ſpite of his great ſize, and apparent unwieldineſs, he moves about in the water with great ſwiftneſs and agility, often emitting a kind of half-ſuppreſſed murmuring noiſe. Though the great length of his body prevents him from turning ſuddenly, he ſwims forward with aſtoniſhing velocity, when about to ſeize his prey: this he generally throws down with a ſtroke of his rugged tail, then ſeizes it in his talons, and pulls it to pieces, or cuts it in two with his ſtrong ſharp teeth, and ſwallows it down his enormous throat. When on the land, his motions are vaſtly more embarraſſed, and he is conſequently then leſs dangerous; but, though he advances much ſlower than in the water, he runs tolerably faſt when the ground is ſmooth, and his road is ſtraight forward. Wherefore, on theſe occaſions, the beſt method of eſcape is by continually turning in a ſmall circle. Thoſe which inhabit the lakes are ſometimes left dry, in conſequence of the water evaporating; and, not being able to reach any other water, they are forced to ſubſiſt by catching birds or land-animals, or even to live a long while without food; and are then extremely dangerous.

On comparing the various relations of voyagers and travellers, it appears that the voracity and boldneſs of this animal augments, diminiſhes, or is even altogether extinguiſhed, according to climate, ſize, age, and ſituation, and eſpecially in proportion to the ſcarcity or abundance of accuſtomed food. Hunger may ſometimes compel them even to feed on each other, and then the weaker muſt neceſſarily be deſtroyed by the ſtronger. But we cannot ſuppoſe, with ſome authors, either that the female conducts her young to the water when they are hatched, or that ſhe and the male devour all thoſe that cannot run ſwiftly. We have ſeen, that the heat of the ſun and the atmoſphere ſuffice for hatching the eggs; that the young, when they come forth, find the way directly to the water by themſelves; and, as the crocodiles are never cruel except to ſatisfy the cravings of hunger, they certainly do not merit the accuſation of ſo barbarous a repaſt. But can we as eaſily reſcue man from the charge of barbarity? Brown relates, that he has frequently ſeen crocodiles kept ſeveral months without any food; they had been put into ponds, after having their jaws tied together with wire!

According to the authority of voyagers, the crocodiles that inhabit near the line never become torpid; but thoſe which inhabit near the tropics, or in higher latitudes, retire

tire into deep caverns near the ſhore at the approach of the cold ſeaſon, and remain torpid during the winter. Pliny ſays, that the crocodile ſpends four months of winter in caves, and without food; and, as the crocodiles of the Nile were beſt known to the ancients, we may thence conclude, that they ſuffer an annual torpor during the cold ſeaſon. But, though the crocodile, like all other oviparous quadrupeds, hybernates in higher latitudes, where any degree of winter-cold is experienced, its ſcaly covering is not injured either by the cold or abſtinence, as in moſt of the other animals of this claſs: hence it does not change its ſkin, like moſt of the lizards.

In all thoſe countries where mankind is not ſufficiently numerous to force them to live diſperſed, crocodiles are found in numerous aſſemblages. This habit of living together is an additional proof, that the character of cruelty and ferocity has been falſely attributed to this animal; for ferocious animals are always ſolitary and unſocial. That they are not naturally either fierce or cruel, is evident from their being tamed in ſome countries. In Bouton, one of the Molucca iſlands, they are ſometimes kept and fattened, in a certain degree of domeſticity. In ſome countries, they are kept for the ſake of oſtentation. Thus the king of Saba, on the ſlave-coaſt of Africa, has always two ponds filled with crocodiles. In the Rio San-Domingo, likewiſe on the weſtern coaſt of Africa, M. Brue was aſtoniſhed to find the crocodiles, uſually conſidered as ſuch terrible animals, perfectly harmleſs, inſomuch that the children played with them, mounted on their backs, and even beat them, without danger, or any appearance of reſentment. M. de la Borde had ſeen crocodiles in Cayenne kept in ponds, where they lived for a long time without doing any harm even to the tortoiſes which were kept in the ſame ponds, and fed along with them on the refuſe of the kitchens. The ancients were well acquainted with the means of taming crocodiles; for Ariſtotle informs us, that nothing more is neceſſary for this purpoſe than to ſupply them abundantly with food, the want of which is the only cauſe of their being dangerous; whereas animals naturally ferocious are to be tamed only by ſtarving.

Heat is ſo neceſſary to crocodiles, that they not only ſeem to live with great difficulty in temperate countries, but are even ſmaller in proportion as the climates they inhabit are farther removed from the equator. They are met with, however, both in the Old and New Worlds, ſeveral degrees to the north or ſouth of the tropics. The rivers of Corea are much infeſted with crocodiles.

Notwithſtanding the formidable appearance of the crocodile, the negroes, in the neighbourhood of the river Senegal, venture to attack it, particularly when aſleep, endeavouring to ſurpriſe it in places where the water is not deep enough to allow it to ſwim. They approach it boldly, having the left arm defended by a covering of thick leather, and attack it with ſpears, or a kind of dart called *zagaye*, aiming their thruſts chiefly at the throat and the eyes. They even ſometimes force open its mouth, and, preventing it from ſhutting, by means of the zagaye placed firmly between the jaws, hold down its head in the water till it is drowned or ſuffocated. M. Adanſon gives the following account of an engagement between a negro and a crocodile ſeven feet long, which the negro diſcovered ſleeping among ſome buſhes at the foot of a tree, near the banks of a river. He ſtole gently up to the animal, and gave it a deep wound with a knife, in the ſide of the neck. The crocodile, though mortally wounded, ſtruck the negro ſo violently on the legs with its tail, as to knock him down; but, without quitting his hold, he roſe inſtantly, and, wrapping a rope round the muzzle of the crocodile, while one of his companions held it faſt by the tail, and M. Adanſon mounted on its back to hold it down, he drew out the knife from the wound, and cut off its head. In Egypt, the peaſants often dig a deep trench, in the uſual track by which the crocodile goes from the water up into the country, which they cover lightly with branches of trees and earth; then, making a great noiſe to frighten the crocodile, it haſtens to the water, and, falling into the pit, is there either killed or ſecured with ropes or nets. Sometimes they fix one end of a ſtrong rope to the trunk of a large tree, having a large hook at the other end, to which a living lamb is tied: this is left on the bank of the river, and, by its cries to get looſe, attracts a crocodile to the ſpot; which, willing to avail itſelf of the ſuppoſed repaſt, at the ſame time gets the hook fixed in its jaws. The more the crocodile ſtruggles to get free, the more firmly the hook penetrates; the people on the ſhore give line in proportion as the crocodile dives, and, following all its motions in the water, wait till it is completely exhauſted, and then drag it to land.

Mankind is not the only enemy of the crocodile, though perhaps the moſt deſtructive, for fewer crocodiles are always found in proportion to the population of their reſidence: they are likewiſe preyed on by tigers and by the hippopotamus; which latter animal is ſo much the more dangerous, that it is able to purſue the crocodile to the very bottom of the ſea or of the rivers. Beſides this, great numbers of crocodiles are deſtroyed before they get out of the eggs, by animals that are too weak to look them in the face after they have acquired any ſize. The ichneumon, monkeys, ſagoins, ſapajous, and ſeveral ſpecies of water-fowl, ſeek for and devour crocodiles' eggs with great avidity; and even break vaſt numbers, as if merely in ſport.

The eggs and the fleſh of crocodiles, particularly that of the tail and the belly, are uſed as food by the negroes of Africa, and by ſeveral nations in India and America. This fleſh is juicy and very white, and is conſidered by theſe people as very delicious; but ſuch Europeans as have ventured to eat of it have been moſtly diſguſted by the ſtrong muſky flavour with which it is impregnated. M. Adanſon, however, ſays, that he ate part of a young crocodile which he ſaw killed in Senegal, and thought it tolerably good. It is very probable that the taſte of crocodiles' fleſh will differ, according to the age and nouriſhment of the individual from which it is taken.

A kind of bezoar is ſometimes found in the alimentary canal of the crocodile, and in ſeveral other ſpecies of lizards. Several of theſe were in the collection of Seba, who had received them from Amboyna and Ceylon: the largeſt were about the ſize of ducks' eggs, but longer; and their ſurfaces were covered over with projections, about the ſize of ſmall pepper-corns. Like all other bezoars, theſe were compoſed of various layers, one over the other: their colour was duſky cinereous, more or leſs mixed or marbled with white.

The ancient Romans, though they might have learnt ſomewhat of the hiſtory and appearance of the crocodile, from the reports of travellers, or from the writings of the Greek naturaliſts, never ſaw any till fifty-eight years before the Chriſtian era, when Scaurus the edile preſented five to the people in the public ſhows. Auguſtus afterwards produced great numbers of living crocodiles in his ſhows, cauſing men to fight with them in the arena; and Heliogabalus fed numbers for that purpoſe. As the crocodiles were brought from a diſtance, and muſt have been conſidered by the Romans as a very formidable animal, we are not to wonder that very extraordinary medicinal virtues were attributed to them by the ancients: ſcarcely any part of their bodies but was ſuppoſed a remedy againſt diſeaſe: the teeth, the ſcales, the fleſh, and the inteſtines, were all prized as ſo many infallible drugs. The gall, the fat, and the eyes, of the crocodile, are ſtill held in much eſteem by the modern Egyptians and Arabs. They were held in ſtill higher veneration by the ancient natives of Egypt. From inſpiring terror by their ravages, the depraved reaſon of a miſguided people converted them into gods; building altars and appointing prieſts for the ſuperintendence of this ſtrangely-perverted worſhip. The city of Arſinoë was peculiarly conſecrated to theſe monſtrous gods; and, when they died, their bodies were ſacredly depoſited in the great pyramids, among the tombs

of the Egyptian monarchs. But, ſuch has been the change of ſentiments, and the progreſs of reaſon, that, in the ſame country where theſe animals were worſhipped two and three thouſand years ago, a reward is now given for their deſtruction.

The following obſervations reſpecting this animal are given in the Moniteur by citizen Frank, one of the phyſicians of the army of the eaſt, during the late expedition into Egypt. "In Europe, when Egypt and the Nile happen to become the ſubject of converſation, the danger of being devoured by crocodiles is frequently mentioned. It does not ſeem to be generally known that this amphibious animal is never ſeen in that part of the Nile which flows through Lower Egypt, and that it is even neceſſary to aſcend the Thebaid a conſiderable way before any of them can be ſeen. I never ſaw a crocodile until I had paſſed beyond Girzeh. In hot weather, and when the Nile is low, the crocodile riſes from the bottom in order to baſk upon the dry ſand-banks, which are then pretty numerous. It was in the months of April and May that I travelled in the Said. The crocodile very rarely repoſes himſelf upon the ſides of the river, except in ſpots which are difficult of acceſs and little frequented. In general he does not go more than ten paces from the water; the ſlighteſt noiſe wakes him; and upon no occaſion was I able to get within muſket-ſhot of one. Beſides, as the ſcales of this animal are extremely hard, it is almoſt impoſſible to kill him, unleſs the ball happen to pierce exactly under the humerus. At Dendera, I met with a kiachef who took a ſingular pleaſure in hunting the crocodile. I ſaw him kill ſeven in ſucceſſion, which were placed on a terrace before his houſe, and the noiſe made by each would at ſome diſtance be taken for the report of a cannon. When the natives happen to ſhoot, or catch one by means of a ſnare, they expreſs as much ſatisfaction as we do in Europe at killing a wolf. Among the numerous crocodiles which I obſerved in aſcending and deſcending the Nile, I ſaw none above from eight to ten feet in length. Proſper Alpinus ſpeaks of a crocodile thirty yards long; but it ſhould be remarked that this author never was in Egypt, and he was moſt probably deceived by a falſe account. The celebrated Norden ſays that he ſaw ſome of fifty feet; but, in my opinion he was likewiſe deceived; for I met with no perſon in the country who had ever ſeen them of that length.

"As to the danger of being devoured by this animal, it is infinitely leſs than is generally imagined. He ſeems in general afraid of man, for he avoids inhabited places. Hence he is more frequently ſeen the nearer one approaches the cataracts. The careleſſneſs with which the inhabitants and their children amuſe themſelves in the Nile, and walk along the banks, proved to me that they had no fear of the crocodile. If, however, a favourable occaſion offers, this cunning animal falls, by ſurpriſe, upon a ſheep, goat, aſs, or ſometimes a child, with which he inſtantly plunges to the bottom of the river. At one ſpot only, where the women were accuſtomed to fill their water-pitchers, I ſaw a ſemicircular fence of ruſhes, intended to prevent the crocodile from doing miſchief. It was erected in conſequence of one of them having torn the breaſt of a woman, as ſhe was ſtooping to fill her pitcher.

"I have another and a very ſingular obſervation to make with reſpect to the crocodile. It is, that when he repoſes out of the water, he is almoſt always ſurrounded by a variety of large birds, among which I have conſtantly diſtinguiſhed the pelican. What a ſtrange connection between animals ſo different in their nature! It is a known fact that the white heron has a ſingular ſympathy for buffaloes and oxen. Does a like ſympathy ſubſiſt between theſe birds and the crocodile, and particularly between the pelican and that animal?"

Denon's remarks may be added in confirmation of the above, that the crocodile is not ſo very formidable as is generally ſuppoſed: "In my wanderings on the banks of the Nile, I have ſeen a great number of all ſizes, from three to twenty-ſix or twenty-eight feet in length; many officers worthy of credit aſſured me that they met with one no leſs than forty feet long. They are by no means ſo ferocious as is pretended; their favourite reſorts are the low iſlands of the river, where they are ſeen baſking in the ſun (the moſt intenſe heat of which appears highly grateful to them) by numbers at a time, aſleep and motionleſs as ſo many logs of wood, ſurrounded by birds, who appear totally unmindful of them. What is the food of theſe large animals? Many ſtories are related of them, but we have not yet had an opportunity of verifying a ſingle one. Daring even to imprudence, our ſoldiers ſet them at defiance; even I myſelf bathed daily in the Nile; for the tranquil nights that I thus obtained rendered me regardleſs of dangers which we had not as yet verified by a ſingle fact. If the crocodiles had devoured a few of the carcaſſes which the war left at their diſpoſal, ſuch a food, it might be imagined, would only excite their appetite, and engage them to purſue when alive ſo favourite a prey; and yet we were never once attacked by them, nor did we ever meet with a ſingle crocodile at a diſtance from the water. Hence it appears probable that they find in the Nile itſelf a ſufficient quantity of eaſily-procurable food, which they digeſt ſlowly, being, like the lizard and ſerpent, cold-blooded and of an inactive ſtomach. Beſides, having in the Egyptian part of the Nile no enemies but each other and man, they would be truly formidable, if, covered as they are with an almoſt impenetrable defenſive armour, they were alert and ſkilful in making uſe of thoſe which nature has given them for attack."

The crocodile of the Nile is repreſented on Plate I. fig. 1. Fig. 2 is the head of a young crocodile from Seba, with the mouth open, to ſhow the interior: *aa*, the upper jaw; *b*, the throat; *cc*, one half of the tongue as fixed to the under jaw, in its natural ſtate; *dd*, the other half, with the membrane turned back at *e*; *fff*, the lower jaw; *g*, the palate.

From the deſcription we have given, we think it will be eaſy to prove that the crocodile is the *leviathan* of the ſcripture. Job ſpeaks of the leviathan in the manner following: *Canſt thou draw out leviathan with an hook? or his tongue with a cord which thou letteſt down?* Job xli. i. "Is the crocodile one of thoſe fiſh which is to be caught by a hook, and faſtened by the tongue, or ſtrung through the mouth and gills, to be led up and down as one pleaſes?" He aſks this as of a thing impoſſible, which no one could attempt without great temerity. Herodotus, lib. ii. cap. 70. relates a way of taking the crocodile with a hook; but this probably was not invented in the time of Job. They threw a hook baited with hog's fleſh into the Nile. The fiſhermen ſtood on the ſhore, where they made a pig cry: the crocodile immediately came forward, and ſwallowed the fleſh with the hook. The fiſhermen drew it on-ſhore, threw mud into its eyes, (which are very ſmall in proportion to the reſt of the body,) and killed it. We have already noticed a mode of catching the crocodile by means of a live ſheep writhing in torture. *Canſt thou put a hook into his noſe, or bore his jaw through with a thorn?* as they did beaſts of ſervice, ſuch as camels and buffaloes which were guided in this manner, and directed at pleaſure. "Is the crocodile one of thoſe gentle and tractable animals?" *Lay thine hand upon him; remember the battle; do no more*; or according to the Hebrew, "Lay thine hand upon him, and never think of the battle." *Behold, the hope of him is in vain; ſhall not one be caſt down even at the ſight of him?* Heliodorus, a very ancient author, tells of one Artimedorus, who, lighting by chance on a crocodile that was ſleeping on the ſands, was ſo ſcared, that he inſtantly loſt both his underſtanding and memory. Job continues, *None is ſo fierce that dare ſtir him up.* It would be very great raſhneſs to attempt it; nevertheleſs the inhabitants of Tentyrus deſtroyed crocodiles wherever they could find them. *Who can diſcover the face of his garment? or who can come to him with his double bridle?* The crocodile ſleeps in the day-time on the ſand,

1 2

From Taylor's Cabinet.

J.Pass sc.

The Leviathan and Behemoth of the Scriptures.

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with his mouth open; but, notwithſtanding his being aſleep, who will dare to harneſs him? *Who can open the doors of his face? his teeth are terrible round about.* The head of this animal is oblong, and the mouth extremely large; the teeth ſhut one within another like the teeth of a ſaw. There have been ſome ſeen in India ſo large that a tall man might ſtand upright between their jaws. *By his neeſing a light doth ſhine, and his eyes are like the eyelids of the morning. Out of his mouth go burning lamps, and ſparks of fire leap out. Out of his noſtrils goeth ſmoke, as out of a ſeething-pot or cauldron. His breath kindleth coals, and a flame goeth out of his mouth.* This poetical deſcription admirably expreſſes the vivacity of the crocodile's eyes, when he ſprings out of the water, the rapidity wherewith he purſues his prey, and the rapacity with which he devours it. *In his neck remaineth ſtrength.* His ſtrength is principally in his neck and head. Going ſtraight forward, he ravages every thing, and kills all before him, when preſſed by hunger. *Flakes of his fleſh are joined together; they are firm in themſelves; they cannot be moved.* His body is all nerve and muſcle; it is as it were impenetrable and invulnerable. *His heart is as firm as a ſtone; yea, as hard as a piece of the nether mill-ſtone.* Theſe expreſſions deſcribe, in a lively manner, the ſtrength, courage, and intrepidity, of the crocodile. *The ſword of him that layeth at him cannot hold; the ſpear, the dart, nor the habergeon.* Travellers agree that the crocodile's ſkin is proof againſt ſwords, darts, arrows, and fire-arms; if any would pierce him, he muſt ſtrike him under the belly. *He eſteemeth iron as ſtraw, and braſs as rotten wood. The arrow cannot make him flee; ſling-ſtones are turned with him into ſtubble. He maketh the deep to boil like a pot; he maketh the ſea like a pot of ointment.* In the oriental ſtyle, great rivers and lakes are called ſeas. There are crocodiles not only in the Nile, but in lakes. Thoſe of the lake Mœris were adored in Egypt. They carefully prepared proviſion for them; they put rich pendants in their ears, and bracelets on their legs. When the crocodile ſtirs himſelf with impetuoſity, or caſts up water through his mouth, he makes the lake or river he is in to boil like a cauldron. The crocodile ſmells like muſk; not only while he is alive, but his fleſh after his death retains this ſcent. *He beholdeth all high things, he is a king over all the children of pride.* Some explain this by ſaying, that the crocodile is the king of fiſh; but it may be better underſtood of the Egyptians, who are often called in ſcripture *children of pride*, or proud. The crocodile was their king, their god. In Hebrew the word *king* often means the god of any nation; every one knows that the Egyptians worſhipped the crocodile, and that the crocodile was the emblem or figure of Egypt.

The author of the book of Job has evidently taken great pains to draw highly-finiſhed poetical pictures of two remarkable animals, behemoth and leviathan; whom he reſerves to the laſt in his deſcription of nature, and with which he cloſes the climax of that diſcourſe which he puts into the mouth of the Almighty. He even interrupts that diſcourſe, and ſeparates, as it were, theſe ſurpriſing creatures from thoſe which he had deſcribed before; and he deſcants on them in ſuch a manner as ſhows the poetic animation with which he wrote. And theſe creatures evidently appear to be meant as *companions*; to be reſerved as fellows and aſſociates. Under this idea, it is natural to inquire what were the creatures moſt likely to be companionized and aſſociated, in early ages, and in the countries bordering on Egypt? We hope it will now be admitted, that by the leviathan is meant the crocodile; accepting this as decided, the queſtion is, What is behemoth, his fellow? If any Egyptian poems, or other writings, had come down to us, we might have a chance of meeting in them with ſomething to aſſiſt our reſearches: but of theſe we are totally deſtitute. The editor of the new edition of Calmet's Dictionary has, however, by means of ſome Egyptian repreſentations, pretty clearly decided this queſtion; and has confirmed our opinion, (ſee vol. ix. p. 193.) that the hippopotamus is the animal in queſtion. Upon inſpecting the great work publiſhed under the authority of the king of Naples, containing prints from the antiquities found at Herculaneum, that gentleman diſcovered, among other Egyptian ſubjects, ſome repreſentations wherein theſe two animals are grouped together. Thoſe which he ſelected we have taken the liberty to copy into the annexed Plate II. Fig. 1. repreſents, at the bottom, a large crocodile, with his mouth open as if yelling; on his back is a pygmy, holding, in each hand, croſſed reeds; a little higher is a duck floating on the water; and above, are two hippopotami, *among reeds*, (Job. xl. 21.) each with his mouth open, as if bellowing; the lower one, ſeems alſo to be moving its tail; (ver. 17.) The reſt of the water is adorned with flowers, &c. Fig. 2 is an extract from that famous piece of antiquity commonly called the Preneſtine Pavement: it is muſaic, (or coloured ſtones,) and was formerly part of the pavement of the Temple of Fortune at Preneſtum. The portion here copied is that which ſhows the aſſociation of the crocodile and the hippopotamus; having at the bottom two crocodiles ſprawling about in the mud of a kind of iſland; and above three hippopotami, of which one is juſt lifting up his head above the water, to ſtare at thoſe who are engaged in hunting them; a ſecond has two ſhafts ſtuck into his ſhoulders, of which he ſeems to complain; the third has received a ſhaft in his hip, of which he ſeems to take no notice, but to feed on in full ſecurity. The veſſel, and the perſons in it, alſo deſerve inſpection.

We might quote, as another inſtance of this aſſociation of the hippopotamus and the crocodile, the famous ſtatue of the Nile, with the ſixteen children about him, (alluding to his waters riſing to ſixteen cubits;) the baſe of which ſtatue is ornamented with a number of theſe animals all around it (ſixteen or ſeventeen), in various attitudes, with reeds, &c. and pygmies in boats, &c. Theſe inſtances are clear and decided; there are others not ſo clear; as in the famous Iſiac table; the hippopotamus is among the reeds; but the crocodile is not ſo cloſely connected with him as in the foregoing inſtances. After theſe authorities, we may venture to conclude, that it was not only not uncommon, but that it really was the cuſtomary manner of thinking, and conſequently of ſpeaking, in ancient times, and eſpecially in the countries where they were native, to couple the hippopotamus with the crocodile, as the two moſt wonderful of creatures. I may add, that, being well known in Egypt, and being, in ſome degree, objects of Egyptian pride, they could not eſcape the notice of any curious naturaliſt, or writer of natural hiſtory; ſo that, to ſuppoſe they were omitted in this part of the book of Job, would be to ſuppoſe a blemiſh in it: and, if they are inſerted, no other deſcription can be that of the crocodile and hippopotamus.

The pygmy on the back of the crocodile, at fig. 1, is a cuſtomary mode of depicting the inhabitants of Ethiopia, and thoſe around the head of the Nile, i. e. Upper Egypt and farther ſouth. The pygmies are well known to the readers of claſſic authors; but we recollect no alluſion to them in ſcripture, unleſs in Iſaiah xviii. 1, 2. *Woe to the land which is beyond the rivers of Ethiopia; that ſendeth ambaſſadors to the ſea, even in veſſels of bulruſhes upon the waters.* See the article PYGMY.

It ſhould be remembered that theſe ſubjects from Herculaneum were the common ornaments of common houſes. Fig. 1 formed part of the wall of a ſhop, ſituated near the gate of the city of Pompeii. The merit of the figures, therefore, as inſtances of art, is by no means conſiderable; but their commonneſs, as ſeems to be a fair inference from their being found in ſuch ſituations, deſerves notice in ſupport of the generally-underſtood aſſociation of theſe animals in Egypt.

It remains to mention two other varieties of the common crocodile. β. The *African Crocodile*, has the ſnout much ſhorter than the head, and the neck ſmooth, that is, free from the ridged or carinated ſcales which appear on the neck of the common crocodile.

The

The *Black Crocodile* is another African variety, described by Adanſon in his Hiſtory of Senegal. Cepede makes it a diſtinct ſpecies. The moſt ſtriking difference between this and the former is, that the jaws are longer than in the common crocodile, whereas in the other African variety they are ſhorter. This variety is almoſt black, while the ſpecies is of a greeniſh or brown colour. Adanſon firſt diſcovered this in the great river Senegal in Africa. The black crocodile is more deſtructive than that of the Nile. "The difference of colour in this crocodile," ſays Cepede, "cannot certainly be referred merely to the influence of climate; for Adanſon ſaw vaſt numbers of the common green crocodile in the ſame rivers, which are preciſely ſimilar to thoſe of Egypt. But theſe black crocodiles have not been ſeen in any other part of the world, except in the river Senegal; and M. Adanſon is the only naturaliſt who has hitherto deſcribed them." Hence perhaps it might be fair to conclude that M. Cepede was juſtified in marking this as a diſtinct ſpecies.

2. Lacerta Gangetica, the gavial, or Gangetic crocodile: muzzle very long, rounded, and almoſt cylindrical; the tail armed with two ſerrated ridges, which unite backwards into one. In colour ſimilar to the preceding, and, like that, grows to a very conſiderable ſize. By comparing the dimenſions of a part of the jaws of one of theſe crocodiles with the ſame part of a complete ſpecimen near twelve feet long, both of which are preſerved in the imperial cabinet, there is reaſon to conclude, that the individual, to which the fragment belonged, had meaſured thirty feet ten inches in length. It is probably this ſpecies which Tavernier mentions having ſeen on the banks of the Ganges, from Toutipour to Acerat. In deſcending the river, the firſt day he ſaw a great number of theſe animals lying on the ſand. He fired among them, and wounded one in the jaw, but it eſcaped into the river. Next day, he ſaw a great number in a ſimilar ſituation, and fired at two of them, with three balls each time, and killed them both.

It would appear that the gavial was not altogether unknown to the ancients; for Ælian mentions, that in his time crocodiles were found on the banks of the Ganges, which had a kind of horn at the extremity of the muzzle. Edwards, however, is the firſt modern naturaliſt who has mentioned this ſpecies; for it was not deſcribed by Linnæus; but has been inſerted in the Syſtema Naturæ, ſince his death, by Gmelin. Edwards tells us, that three of theſe creatures were ſent from Bengal about the year 1747, to the late Dr. Mead, phyſician in ordinary to the king. Two of them the doctor preſerved in his collection, and preſented the third to the late curious Mrs. Kennon; and, ſince the deceaſe of theſe worthy perſons, they became the property of Mr. James Lemon of London, who obliged our author with one of them to produce to the Royal Society. The narrowneſs of the beak is the moſt extraordinary circumſtance in this crocodile, which appears like the bill of the bird called gooſeander. It has ſmall ſharp teeth. Another peculiarity was a paunch or open purſe in the middle of the under ſide of the belly, which ſeemed to be naturally formed round the hips, and hollow within, to receive its young in time of danger, as it appears in the opoſſum and kanguroo. Dr. Parſons gave it as his opinion, that the opening in the belly was really natural, it having no appearance of being cut or torn open; but later writers ſuppoſe it to have been nothing more than the paſſage by which the umbilical veſſels of the animal were attached during its confinement in the egg.

The teeth are nearly double the number of thoſe of the common crocodile, and are of equal ſize throughout the whole length of the jaws. The general ſtructure of the feet is ſimilar to that of the common crocodile, except that the third and fourth toes only, and this on the fore as well as hind feet, are connected together by a web. "The eyes," ſays Edwards, "are very prominent, and ſeem to be ſo conſtructed that they may be carried above the water, while the reſt of the animal is wholly under water, in order to watch its prey on the ſurface, or on the banks and ſhores of rivers." In the Britiſh Muſeum is a ſpecimen of this animal meaſuring about eighteen feet.

3. Lacerta alligator, the alligator, or American crocodile: head flat, imbricated, naked or uncarinated neck, and tail furniſhed above with two riſing lateral lines.

So great is the general reſemblance between this animal and the crocodile, that many naturaliſts have been ſtrongly inclined to conſider it as a mere variety, rather than a diſtinct ſpecies. Among others, Cepede is of this opinion, and declares, that on examining ſeveral ſpecimens of American crocodiles, and collating them with thoſe of the Nile, he could not but conſider them as abſolutely of the ſame ſpecies; and that the ſlight differences obſervable between them may be well ſuppoſed to be owing merely to the effect of climate. Both animals, he obſerves, agree in the number of teeth; and the general manners and habits of both are found to be ſimilar in the old and new continent. The more accurate diſcrimination, however, of Blumenbach and ſome others ſeems in reality to prove, that the alligator or American crocodile is ſpecifically diſtinct from the Nilotic, though the difference is not ſuch as immediately to ſtrike a general obſerver. The leading diſtinction ſeems to be, that the head of the alligator is rather ſmooth on the upper part than marked with thoſe very ſtrong rugoſities and hard carinated ſcales which appear on that of the crocodile; and that the ſnout is conſiderably flatter and wider, as well as more rounded at the extremity. The alligator arrives at a ſize not much inferior to that of the crocodile; ſpecimens having been often ſeen of eighteen or twenty feet in length.

"Though the largeſt and greateſt numbers of alligators," ſays Cateſby, "inhabit the torrid zone, the continent abounds with them ten degrees more north, particularly as far as the river Neus in North Carolina, in the latitude of about 33, (beyond which I have never heard of any,) which latitude nearly anſwers to the northernmoſt parts of Africa, where they are likewiſe found. They frequent not only ſalt-rivers near the ſea, but ſtreams of freſh water in the upper parts of the country, and in lakes of ſalt and freſh water, on the banks of which they lie lurking among reeds, to ſurpriſe cattle and other animals. In Jamaica, and many parts of the continent, they are found about twenty feet in length; they cannot be more terrible in their aſpect than they are formidable and miſchievous in their natures, ſparing neither man nor beaſt they can ſurpriſe, pulling them down under water, that, being dead, they may with greater facility, and without ſtruggle or reſiſtance, devour them. As quadrupeds do not ſo often come in their way, they ſubſiſt chiefly on fiſh. Carnivorous animals get their food with more difficulty and leſs certainty than others, and are often neceſſitated to faſt a long time. Reptiles particularly, by ſwallowing what they eat whole, digeſt ſlowly, and can live long without food. Wolves are ſaid to gorge themſelves with mud, to ſupply the want of better food; for the like cauſe many alligators ſwallow ſtones and other ſubſtances, to diſtend and prevent the contraction of their inteſtines when empty, and not to help digeſtion, which they ſeem in no need of. For in the greater number of many I have opened, nothing has appeared but clumps of wood and pieces of pine-tree coal, ſome of which weighed eight pounds, and were reduced and worn ſo ſmooth from their firſt angular roughneſs, that they ſeemed to have remained in them many months. In South Carolina they are very numerous, but the northern ſituation of that country occaſions their being of a ſmaller ſize than thoſe nearer the line; and they rarely attack men or cattle, yet are great devourers of hogs. In Carolina they lie torpid from about October to March, in caverns and hollows in the banks of rivers; and, at their coming out in the ſpring, make a hideous bellowing noiſe. The hind part of their belly

belly and tail are eaten by the Indians. The fleſh is delicately white, but has ſo perfumed a taſte and ſmell, that I never could reliſh it."

According to the obſervations of Monſ. de la Borde, as related by Cepede, it appears that the alligators in South America depoſit their eggs, like the turtles, at two or three different periods, at the diſtance of ſome days from each other; laying from twenty to about four-and-twenty eggs each time. Monſ. de la Borde adds, that thoſe of Cayenne and Surinam are obſerved to raiſe a little hillock towards the banks of the river they frequent, and, hollowing it out in the middle, to amaſs together a heap of leaves and other vegetable refuſe, in which they depoſit their eggs; and, covering them with their leaves, a fermentation enſues, by the heat of which, joined to that of the atmoſphere, the eggs are hatched. The time at which the alligators about Cayenne begin to lay their eggs, is the ſame with that in which the turtles alſo depoſit theirs, viz. the month of April. Both the alligator and the crocodile are ſuppoſed to be very long-lived animals, and their growth is extremely ſlow.

We have, in the Monthly Magazine for Nov. laſt, (1811,) an account of an alligator, in which the exploded idea of the motion of the upper jaw is revived. But, as the obſervations were made on the living ſubject, and ſigned with the name of the obſerver, (G. Cumberland, Briſtol,) we ſhall inſert the account. "As the public in general ſeem to be of opinion that there is a diſtinction between the animals called crocodiles and the alligators, which ſeems very doubtful; I took an opportunity, lately, of very carefully both examining and drawing one of the latter, lately brought by the ſhip Elizabeth, to this port, from the Black River, in the iſland of Jamaica; having been caught when very young. This alligator is not above two feet long, and, as far as I can obſerve, exactly reſembles thoſe animals which have been frequently exhibited in London (both dried and living) as crocodiles of the Nile. Inhabiting ſwamps and rivers, it is an animal difficult to catch, as at the leaſt noiſe, being amphibious, it drops under water like a frog or water-newt; and, being generally in company with the parents, whoſe ſize renders them formidable enemies to man or beaſt, and who ſeem to prefer negro fleſh to white, few perſons are willing to undertake the buſineſs of enſnaring them. This female, in warm weather, prefers being out of water for a long time; and one of its habits has ſhown me why *it moves the upper and not the under jaw*; for, when out of water, it repoſes the head on the table, lifting up the upper mandible, and thus it remains till the mouth has flies in it, on which it inſtantly drops the jaw, like a trap-door, over the impriſoned ſufferers; and thus, no doubt, it repoſes it at the bottom of rivers to take in eels or other fiſhes. Its temper ſeems gentle when not irritated, and, young as it is, it already knows its feeder; but, when provoked by a cat or dog, it has already ſeized them. The manner in which its teeth are ſet ſeems particularly calculated for taking and holding eels, as there are two waves in each jaw that enable it to preſs the prey out of a right line; the ſharpneſs of its teeth, which are like fangs, and longeſt at each extremity of theſe waving indentures, alſo greatly aid its hold. In cloſing, there is reaſon to think they croſs each other, but this I could not exactly aſcertain. In the foſſil ones I found that always the caſe, and obſervable in that of Mr. P. Hawker, of Stroud, which, like this, is a ſharp-noſed alligator. The rows of teeth, above and below, conſiſt almoſt generally of thirty-ſix in each jaw, and are white as ivory, curved a little, long, and pointed. At the extremity of the noſe on the upper ſide is a circular membrane, darker than the reſt of the ſkin, and having two valves in the form of two ſmall creſcents, both of which it opens for air at the ſame time, though but rarely; above the eyes, which have nictating membranes, are two ſtrong plates of bone. Next comes the hinge of the upper-jaw, with four ſtuds or ſcales, and behind them two plates, like ſhields; then the neck; after which four plates make the commencement of a proceſs that extends to the point of the tail. The whole of what may be properly termed the tail (commencing below the anus, which is a ring of ſcales) conſiſts of thirty-ſix joints, eighteen double-finned and eighteen ſingle-finned above; and this rule held good with two dried animals, called crocodiles, now in Mr. Bullock's Muſeum in Piccadilly. The arms before have five fingers terminated with ſharp claws; and the diviſion is of three inwards and two outwards, the thumb and little finger being of the ſame magnitude; the hind legs are webbed ſtrongly, and the claws ſtrongeſt. In other reſpects the body reſembles the coats of a turtle, but the arms are ſcaled and well defended. Like the turtle, its belly is pale ſtraw-colour, inclining to green, quite flat, the ſcales poliſhed and ſquared, and each ſcale has a mark as if it had been pinned like a tile. The hinder legs in conſtruction are much like thoſe of a frog, and he goes very faſt by their aid. In general, when out of water, it ſits with the head elevated a great deal; in the water, with it ſupine. It eats the guts of chickens, or any offal; its ſmell is rather fiſhy, but not diſagreeably ſo."

II. *Body covered with carinated ſcales.*

4. Lacerta caudiverbera, the ſcollop-tailed lizard: tail flat, and cleft into ſcollops like little wings; feet palmate. This ſpecies inhabits the warmer regions of South America, being found particularly in Peru and Chili; it ſometimes grows to the length of ſeveral feet. The back and ſides are covered by ſquare plates and oval ſcales. The tail is indented or notched at the edges, and the animal has the power of ſhaking it like a whip, and ſtriking with it in a ſimilar manner: hence the name *caudiverbera*, or whip-tail, which has been applied to this, and alſo to ſome others which can move their tail in the ſame manner. In the flattened form of the tail it has ſome reſemblance to the crocodile; from which, however it is eaſily diſtinguiſhed, particularly by having five toes on each foot, while the crocodiles have only four on the hind feet. From this latter circumſtance, Cepede conſiders the animal repreſented by Seba, i. 106. as this ſpecies; though quoted by Linnæus as ſynonymous with the crocodile, and by Gmelin as a ſynonyme of the alligator. On the other hand, the animal repreſented by Seba muſt not be confounded with the *dracæna*, as the former has webbed feet, while thoſe of the latter have no membranes interpoſed between the toes. Beſides theſe conſiderations, Seba informs us, that the large lizard which he has repreſented came from America, in which it agrees with what Linnæus ſays of the whip-tail. It may be proper to remark, in this place, that the animal repreſented by Seba, vol. ii. t. 103. f. 2. which is quoted as a variety of the whip-tail in the Syſtema Naturæ, is in reality the *dracæna*; for, though the engraver has given it webs between the toes of the hind feet, the text expreſsly ſays that it has none.

Its total length is about ſixteen inches, of which the tail meaſures ſomething more than half. The head is large and flattiſh, the mouth wide, the tongue broad, the teeth ſmall and numerous, the neck ſhort, the throat protuberant, the body thick, and the limbs rather ſhort than long; the tail tapers gradually to the tip, but is edged throughout its whole length with a broad and deeply-ſcolloped fin or membrane, (hence the name which we have adopted from Dr. Shaw,) which gradually widens as it approaches the tip, where it is conſiderably broader than on the ſides: Dr. Turton has therefore called it the *flat-tailed* lizard. The whole animal is covered, except on the head, with a ſkin of a yellow colour; the back being marked by numerous diſtant red tubercles or granules, each ſurrounded by a circle of ſmall white ſcales; the thighs and middle part of the tail are alſo ſpotted with ſimilar red tubercles, but not ſurrounded by white ſcales like thoſe on the back; the webs of the hind feet and the ſcolloped or finny part of the tail are of a bright red; all the toes are furniſhed with claws. It is an extremely-rare animal,

and its full hiſtory does not appear to be clearly underſtood. See Plate III. fig. 1.

β. There is an Egyptian variety mentioned by Laurenti, No. 54.

L. Schneideriano, Schneider's flat-tailed gecko, is probably another variety, though conſidered by him and Dr. Shaw as a diſtinct ſpecies before unnoticed. Size not mentioned; colour cinereous with a brown band on each ſide the head, running acroſs the eyes over the ſhoulders; along each ſide of the body a kind of ſuture or wrinkling of the ſkin: tail broad, convex above, flat below, and edged with a row of longer and ſharper ſcales than on the other parts. The lamellæ of the feet lunulated and divided.

5. Lacerta dracæna, the dracæna lizard: tail long, and denticulated along the upper part; body ſmooth. This may be conſidered as one of the largeſt of the lizard tribe; it is a native of ſeveral parts of South America, as well as of ſome of the Indian iſlands, and is ſaid to be more eſteemed in ſome countries as an article of food than chicken. The head is ſmall, and of an elegant form, the ſnout tapering in ſuch a manner as to bear a reſemblance to that of an Italian greyhound; the teeth are ſmall and numerous, and the tongue forked; the opening of the ears large, and ſurrounded by a well-defined ſcaly border. The proportions of the neck and limbs are elegant, though ſtrong; and the body is moderately thick: the tail is of a great length, though in a fine ſpecimen, preſerved in the Leverian Muſeum, it was not quite ſo long in proportion as repreſented by Seba. The colour is brown, with a ſlight caſt of cheſnut, paleſt on the abdomen and inſides of the limbs; the outſides of which are marked by numerous ſmall pale or yellowiſh ſpots. The whole animal is ſmooth, or deſtitute of prominences on the ſkin, which is covered with ſmall, ovate, and in ſome parts ſlightly-ſubquadrate, ſcales, largeſt on the outſides of the limbs, the back, and the abdomen; along the upper edge of the tail runs a continued ſeries of ſhort triangular denticulations. The feet are moderately ſtrong, and the toes are armed with ſharp crooked claws. This ſpecies, like the preceding, has the power of agitating its long tail, and brandiſhing it like a whip; from which the name of *caudiverbera* has been applied to it as well as to the other. This ſpecies has likewiſe been named the *cordylus*; but that term belongs to a very different lizard, to be afterwards deſcribed. Dr. Shaw obſerves, that Cepede's account rather applies to the *bicarinata*, or at leaſt that he has confounded the two ſpecies.

6. Lacerta bimaculata, the two-ſpotted lizard: tail twice the length of the body, carinated and ſerrated on the upper edge; toes lobate. This ſpecies was firſt deſcribed by Dr. Sparrman, in the Memoirs of the Stockholm Academy for 1784, from ſeveral ſpecimens ſent to the muſeum of baron de Geer, from North America, by Dr. Acrelius. In ſome of theſe ſpecimens, the upper parts of the body were ſpotted with black; but in every one there were two large black ſpots on the ſhoulders, from which circumſtance the trivial name, here retained, was adopted by Sparrman. The head is compreſſed, or flattened at the ſides. The tail is flattened laterally, and is twice the length of the body. All the toes are edged with membranes, or lobed at their ſides, except the outer toe of each foot. The ground-colour of this ſpecies is variable, but is moſt commonly blackiſh or greeniſh blue. Each foot has five toes. This ſpecies is found in Penſylvania and St. Euſtatius; and frequents the woods, living much in the hollows of trees: it is likewiſe found in drains, and other ſubterraneous places. Its voice is a kind of whiſtle, which it emits frequently. It is eaſily taken by means of a bunch of ſtraw, which is brought towards it, the perſon who carries the ſtraw imitating its whiſtle, when the animal leaps in, and is ſecured.

7. Lacerta monitor, the monitory lizard: body black, with tranſverſe rows of white ocellated ſpots; tail very long, compreſſed, and carinated. The monitor, or monitory lizard, is one of the moſt beautiful of the whole tribe, and is alſo one of the largeſt; ſometimes meaſuring not leſs than four or five feet from the noſe to the tip of the tail. Its ſhape is ſlender and elegant, the head being ſmall, the ſnout gradually tapering, the limbs moderately ſlender, the tail laterally compreſſed, and inſenſibly decreaſing towards the tip, which is very ſlender and ſharp. Though the colours of this lizard are ſimple, yet ſuch is their diſpoſition, that it is impoſſible to ſurvey their general effect without admiration. In this reſpect, however, the animal varies, perhaps, more than moſt others of its tribe; hence the many varieties quoted, which chiefly conſiſt in the diſtribution of the colours. However, it is moſt commonly black, with the abdomen white, the latter colour extending to ſome diſtance up the ſides, in the form of ſeveral pointed bands; beſides which the whole body is generally ornamented by ſeveral tranſverſe bands conſiſting of white annular ſpots, while the head is marked with various ſtreaks of the ſame colour, the limbs with very numerous round ſpots, and the tail with broad diſtant tranſverſe bands. In others, the ſpots forming the lateral bands are ſimple inſtead of annular; and in others again, the annuli, or white rings, are themſelves compoſed of ſmall white ſpots, which are likewiſe often ſcattered here and there over the black ground-colour. The ground-colour in ſome, inſtead of being black, is of a deep ferruginous brown. All, however, agree ſo far in the general diſpoſition of the variegations, that it is not eaſy to miſtake the ſpecies for any other. This elegant animal is a native of South America, where it frequents woody and watery places, and, if credit may be given to the reports of ſome authors, is of a diſpoſition as gentle as its appearance is beautiful. It has even gained the title of *monitor*, *ſalvaguarda*, &c. from its pretended attachment to the human race; and it has been ſaid that it warns mankind of the approach of the alligator by a loud and ſhrill whiſtle. But theſe names have been alſo applied by ſome authors to different ſpecies, as the *teguixin*, &c.

Six diſtinct varieties of this ſpecies are enumerated in the Syſtema Naturæ on the authority of Laurenti and Seba; the variation is chiefly in the colour; we ſhall therefore only mention one, which Seba has more particularly deſcribed.

ε. The *Tejuguacu*. The French call this *lizard de mer*, ſea-lizard; and Seba *defenſor littoris maris*, the ſafeguard of the ſea-ſhore, becauſe it feeds upon dead fiſh which it finds either upon the ſhores of the ſea or the banks of rivers; but it never commits itſelf to the deep, for it cannot ſwim, not having the neceſſary organs. The ſurface of the upper part of the body, which is of a bluiſh caſt, is ornamented with ſmall ſquamæ of the thinneſt texture. The head, which is adorned in a ſimilar manner, is thin and long. The mouth converges to a point, and, as well as the head, is variegated with bright white ſpots like ſmall pearls in a ſtring, and the intermediate ſpaces are likewiſe marked with other ſpots. This variegation on the top of the head reſembles a crown. The eyes and ears are deeply fixed in the head, over the ears is a pellucid ſquama like that of a fiſh: the tongue, like a ſerpent's, is bifid. All the remaining part of the body, the legs and feet, are ornamented like a peacock's tail. The upper part of the tail, which is furniſhed with a ſharp edge or ridge, has ſingular ſpots, which form large belts, and in theſe likewiſe the bright ſpecks are apparent; the reſt of the tail, to the end, is covered with ſmall ſquamæ forming rings. Bright thin ſquamæ of a ſky-blue cover the vortex. Near the arms are perceptible two tubercles, rugged, with pointed heads, not unlike teſticles.

8. Lacerta varia, the variegated lizard: tail long, carinate; body blackiſh, tranſverſely variegated with yellow ſpots and marks. Introduced into the Syſtema Naturæ by Dr. Turton; but ſo nearly does it reſemble the L. monitor, that it may be doubted whether it ſhould not be conſidered as a variety, rather than a truly-diſtinct ſpecies. It differs, however, in colour, and in ſome degree in the diſpoſition of its variegations, which are generally pale yellow

yellow inſtead of white, and in ſome ſpecimens even of a bright gold-colour. The markings on the body alſo, inſtead of the general ocellated pattern of the preceding, conſiſt rather of rounded or ſlightly-ſubangular ſpots and variegations; the limbs, as in the preceding, are marked either with numerous bands or ſpots, and the tail is banded: the claws are very large and ſtrong. Native of New Holland; and about fifteen inches long.

9. Lacerta bicarinata, the bicarinated lizard: tail compreſſed, with a double ridge on its upper ſurface; and four rows of carinated ſcales on the back. This ſpecies, which Cepede appears to have confounded with the *dracæna*, as mentioned in that article, is in general of much ſmaller ſize, the ſpecimen figured in the work above-mentioned meaſuring but two feet five inches from the tip of the ſnout to the end of the tail. In its habit it bears ſome reſemblance to a crocodile in miniature, having hard tuberculated and carinated ſcales on the upper parts of the body, and two rows of ſcales more prominent than the reſt running from the upper part of the back to the tail, at which part they become confluent, and are continued, in the form of a ſerrated creſt, to the tip: the head is ſmall; the mouth wide; the ſnout ſharpiſh; the teeth pretty numerous; thoſe in front of the mouth ſmall, thoſe ſituated backwards larger, and more obtuſe; the tongue forked. The colour of this animal, according to Cepede, is a reddiſh brown more or leſs tinged with greeniſh in ſome parts. It is a native of South America, where, like the guana, and ſome other lizards, it is occaſionally uſed as food: the eggs alſo are ſaid to be much eſteemed for the ſame purpoſe. It frequents woody and marſhy regions. Monſ. de la Borde, a correſpondent of Cepede, kept one alive for ſome time: it often continued in the water for hours together, hiding itſelf when diſturbed or affrighted; but delighted in coming out occaſionally, and baſking in the ſun.

The *Ignarucu* is a large lizard found in Braſil, eſpecially about the river St. Francis, much reſembling the crocodile, and is ſaid to climb trees with great facility. It ſeems to be a variety either of this ſpecies or of the *dracæna*; but it is of a darker colour, and its claws are weaker.

10. Lacerta cordylus, the cordylus: tail ſhort, ſurrounded with rings of ſharp-pointed and denticulated ſcales; body ſmooth. The Linnæan character, "body ſmooth," muſt be underſtood as applying to the back and belly, when compared with the legs and ſides, and eſpecially with the tail, for on the inſides of the thighs there are ſimilar rows of tubercles with thoſe on moſt of the lizards. The ſpecies which forms the ſubject of this article is found in Aſia and Africa, and appears likewiſe to inhabit the ſouth of Europe, as Ray mentions having met with it near Montpellier. The name of *cordylus*, which is excluſively appropriated to this ſpecies by Linnæus, has likewiſe been applied by ſome writers to ſeveral others, and particularly to the *dracæna*, already deſcribed. The following deſcription is given by Cepede from ſeveral individuals preſerved in the imperial cabinet at Paris. The head is ſomewhat triangular, enlarged at the back part, and very much flattened; being covered on the top and ſides by large ſcales. The jaws are covered by two other rows of large ſcales, and armed with ſmall ſtrong ſharp teeth of an equal ſize. The noſtrils are ſmall; the openings of the ears are narrow, being ſituated at the two extremities of the baſe of the triangle of which the muzzle forms the apex. The body is much flattened; the belly being covered with tolerably-large and almoſt-ſquare ſcales, arranged in half-rings, or tranſverſe bands. The ſcales on the back are larger than thoſe on the belly, and are likewiſe almoſt ſquare; thoſe on the ſides are all ridged, giving the flanks a prickly or ſpinous appearance. The tail is almoſt equal in length to the body; and the ſcales, which cover it in overlapping circles, have each a prominent ridge, terminating in a kind of lengthened prickle, which is provided with a very ſmall ſpine at each ſide. Theſe ſcales, being of conſiderable length, and riſing up at their ends, form very diſtinct waved rings, ſomewhat diſtant from each, giving the tail the appearance of being compoſed of ſeveral joints, or portions. In a female, the tail of which was entire, were counted nineteen of theſe circles. The ſcales which cover the legs reſemble thoſe on the tail, being rigid longitudinally, and ending in ſharp points. The feet have five toes each, all of which are armed with claws. The colour of the ſcales is blue, more or leſs mixed with cheſnut in blotches or ſtripes. Total length, ten inches.

Cepede mentions a variety, with the ſcales much ſmaller.

III. *Back and tail, or the whole body, covered with denticulated or ſharp-pointed ſcales.*

11. Lacerta pelluma, the pelluma lizard: tail verticillate, longiſh, with rhomboidal ſcales. This is one of the middle-ſized lizards; the total length being nearly two feet, and the length of the body and tail nearly equal. It is a native of Chili, where it is ſaid to inhabit hollows under ground. It is covered on the upper parts with very minute ſcales; and is beautifully variegated with green, yellow, blue, and black: the under parts are of a gloſſy yellowiſh green: the tail long, and verticillated by rows of rhomboid ſcales. The ſkin of this lizard is ſaid to be uſed by the Chilians for purſes.

12. Lacerta ſtellio, the ſtarry lizard: tail encircled with various rings of ſcales, head and body beſet with ſpines. The tail of this lizard is uſually rather ſhort, or of what is called a middle length; being taper in its form, and diminiſhing from the root to the tip. This animal is extremely diſagreeable in its appearance; reſembling the toad a good deal, eſpecially in the general form of the head; in which circumſtance it reſembles the *orbicularis*, inſomuch that ſome authors have given the ſame name to both. Its colours, however, make up in a great meaſure for the diſguſting appearance of its form, being a very beautiful variegation of white, black, and grey, and ſometimes green, which are diſpoſed like the colours of marble. It inhabits all parts of Africa, from Egypt to the Cape of Good Hope: it is likewiſe found in the eaſt, in the iſlands of the Archipelago, in Judea, and in Syria; in which two laſt-mentioned countries, according to Belon, it grows to a conſiderable ſize, being as large as a weaſel. Cetti, in his Natural Hiſtory of Sardinia, informs us that it is common in that iſland, where it inhabits the houſes, being called *tarentole* by the Sardinians and in ſeveral parts of Italy; which name is likewiſe given to a variety of the green lizard, and even to ſome others. The ſtarry lizard, however, is chiefly abundant in Egypt; being found in great numbers about the pyramids and the ancient tombs, where they live among the crevices of the ſtones, feeding on flies and other winged inſects.

The pyramids, thoſe almoſt indeſtructible monuments of human power and vanity in times far beyond the reach of hiſtory, ſeem deſtined to preſent very extraordinary objects of various kinds. Both in ancient and modern times, the excrements of this lizard have been gathered among the pyramids with great care. By the ancients, who ſuppoſed this ſubſtance to be the excrement of the crocodile, it was called *crocodilia*; and the ſame name, according to Belon, is retained by the modern Greeks. Perhaps theſe excrements would not have been in ſo much requeſt, had they been known not to proceed either from the largeſt or the ſmalleſt of the lizard tribe; for the extremes of things, whether in greatneſs or minuteneſs, are apt to impoſe on the ignorance of thoſe who are unable to conſider the great chain of nature. The moderns, however, being better informed on this ſubject, have referred that ſubſtance to the ſtarry lizard, which poſſeſſes no remarkable properties; but, the true or falſe value of its excrement having been already eſtabliſhed, it ſtill continues in uſe, eſpecially among the Turks, who conſume large quantities of it as a coſmetic. It may be here obſerved, that the lizard which we may ſuppoſe to have been emphatically termed *ſtellio* by the ancients, from its being marked with ſpots reſembling ſtars, ſeems at preſent unknown. It is, however, obſervable, that in one of Seba's

plates a ſpecies occurs which is actually marked with well-defined or regular ſtar-ſhaped ſpots.

13. Lacerta Mauritanica, the Mooriſh lizard: tail ſhort, ſurrounded at the root with rings of pointed ſcales, the outer end being ſmooth; upper part of the body prickly; toes lamellate underneath, and deſtitute of claws. Cepede and Shaw agree that this ſpecies much reſembles the *gecko*; and therefore place it in the 6th diviſion, among the geckos; but Schneider inſiſts that Cepede never ſaw the animal, and that his *geckctto* is a different ſpecies called *dubia*, which therefore we ſhall deſcribe in its place. The preſent ſpecies inhabits Mauritania and India. Beneath the thighs is a ſhort row of papillæ. The tail is flattiſh beneath, and covered with broad tranſverſe ſcales; the principal or moſt ſtrongly marked verticilli are the ſix upper ones.

There are two varieties. β, With the tail entirely ſurrounded with prickly rings. γ, With the body prickly all over.

14. Lacerta azurea, the azure lizard: tail verticillate, ſhort, with mucronate ſcales. The colour of this ſpecies, in its natural or recent ſtate, ſeems to be an elegant pale blue, faſciated on the body and tail with ſeveral tranſverſe and ſomewhat-alternate bands either of black or very deep blue; but this is moſt conſpicuous in the ſmaller ſpecimens or varieties. It alſo appears to be ſometimes met with of a plain colour, or with only a pair of faſciæ on the upper parts of the body. The head is rather obtuſe; the body moderately thick, and covered, as well as the limbs, with very ſmall ſmooth ſcales; the tail, on the contrary, which is of moderate length, is very diſtinctly and ſtrongly verticillated by rows of large carinated ſcales, the extremities of which project conſiderably, ſo as to form ſo many ſpiny points. It inhabits Africa; and is conſidered by Linnæus as connecting this diviſion with the next.

Of the variety β we have no account. γ. This likewiſe inhabits Braſil, and is called *tecunhana*. Many coloured ſtripes ornament the upper part of the body from the head to the tail; the middle one of which, running along the back, is white, marked with brown dots; the reſt are of a pale blue with bright black ſpots, and marked out with ſmall yellow lines. The abdomen is variegated with blue and black. The head is of a pale blue with black ſpots; but the thighs, feet, and toes, are marked with bright white ones; the reſt of the animal is of a pale blue. The tail is encircled by dark blue belts.

L. acanthura, the ſpine-tailed lizard, the *quetzpaleo* of Seba,) is a variety of the *azurea*, if not the ſpecies itſelf. A ſpecimen of this animal, which Dr. Shaw gives as a diſtinct ſpecies, is preſerved in the Britiſh Muſeum. Its length is about a foot and half, but it probably grows to a conſiderably larger ſize. The head is covered with ſomewhat ſmall ſub-hexagonal ſcales, and is very diſtinctly marked off, as it were, from the body; beneath the throat is a very conſpicuous tranſverſe plait; and the whole ſkin alſo, about the neck, throat, and beginning of the ſides, is, as Seba deſcribes it, remarkably lax; and it is probable that in the living animal the ſkin beneath the throat may have a kind of pouched appearance, though entirely without any middle carina on that part. The other parts of the body, both above and below, are covered with very ſmall ſcales; of which, however, thoſe of the under parts are rather larger than thoſe of the upper. From the beginning of the neck to the origin of the tail runs a ſeries of ſhort denticulations, forming a ſerrated creſt of very ſlight elevation; the tail is very long, and ſtrongly marked into numerous verticilli, or rings, compoſed of very long and very-ſtrongly carinated ſcales; each terminating in a lengthened point, and thus cauſing a ſpiny appearance throughout the whole length of that part. The feet are all pentadactylous, and the toes rather long: eſpecially thoſe of the hind feet; the claws ſtrong and ſharp. The colour of this ſpecies on the upper parts is glaucous, variegated with a few ſmall and ſomewhat indiſtinct clouds and marbling of a whitiſh caſt; the tail and under parts are of a pale or yellowiſh white colour.

15. Lacerta angulata, the angulated lizard: the tail long and hexagonal; the ſcales carinate and mucronate. Linnæus, quoting Rolander, firſt publiſhed a deſcription of this ſpecies, which inhabits America. The head is remarkable, having the appearance of being cut abruptly at its hinder part, where the ſkin forms ſeveral tranſverſe ridges. All the ſcales covering the body are pointed, and have elevated ridges, except thoſe on the belly. The animal can erect theſe ſcales at its pleaſure, and is then all over briſtled with ſmall ſharp ſpines. The under part of the throat is covered by two large round ſcales. The general colour of this ſpecies is reddiſh brown, and its ſize is ſmall. Inhabits America.

16. Lacerta orbicularis, the orbicular lizard: tail round, three ſpines on the top of the head, belly almoſt hemiſpherical. The body is ſo bulky, eſpecially at the ſides and belly, as to be almoſt as broad as it is long; which has induced Linnæus, following other natural hiſtorians, to give it the name of *orbicularis*. The belly is deſtitute of tranſverſe bands, or ſemi-circular rows of ſcales. The tail does not exceed the length of the body. The toes are covered with ſcales both on their upper and under ſurfaces. The ground-colour is whitiſh grey, more or leſs ſpotted with brown or yellowiſh. The orbicular lizard is by no means an agreeable object: the thickneſs and general proportions of its body giving it very much the appearance of a toad, furniſhed with a tail and beſet with prickles; but the gentleneſs of its manners ſoon effaces its deformity, the effect of which is conſiderably diminiſhed by the beauty of its colours. Its prickles ſeem only intended for defence, as it never attempts to do the ſmalleſt injury. It becomes readily tame; allows itſelf to be handled, without ever offering to bite, and even ſeems fond of being careſſed, appearing pleaſed at being turned over and over. Some parts of its body are extremely ſenſible, particularly about the noſe and eyes, where, we are aſſured by ſome writers, it bleeds on the ſlighteſt touch. Ray informs us, that this innocent animal, dried and powdered, is uſed as a remedy in ſome diſeaſes. Inhabits the warm parts of America. See Plate III. fig. 2.

The variety β has a ſhorter tail, and wants the three long ſpines on the head; and to this variety ſeems properly applied the name *tapayaxin*, which Cepede gives to the ſpecies. It inhabits New Spain, but is very rare and uncommon. The whole body, head, feet, and tail, are rough with bright ſhining prickles like the points of needles; it is alſo covered with very-cloſely united ſquamæ of various colours, as white, dark brown, reddiſh, grey, cinereous, and fleſh-colour. Its toes are armed with very ſharp black and crooked nails, and beautifully covered with ſquamæ to the very ends, and variegated like marble. The head is ſhort, hard, and triangular, blunted from the forehead, very much like that of the cameleon; from the root of the noſtrils above the eyes, which are very long and bright, is extended along the forehead ſomething prominent reſembling a ſhield, reaching thence to the neck, and uniting with the back.

17. Lacerta baſiliſcus, the baſiliſk: tail long; a radiated dorſal and caudal fin, and pointed occipital creſt. The baſiliſk of the ancients, ſuppoſed to be the moſt malignant of all poiſonous animals, and of which the very aſpect was ſaid to be fatal, is a fabulous exiſtence, to be found only in the repreſentations of painters and poets. Without citing other deſcriptions, it may be ſufficient to quote that of Lucan, who, with true poetic licence, repreſents the baſiliſk exerting his terrific glance in the burning deſerts of Africa, and obliging the reſt of the poiſonous tribe to preſerve an humble diſtance:

Sibilaque effundens cunctas terrentia peſtes,
Ante venena nocens, late ſibi ſubmovet omne
Vulgus, et in vacua regnat baſiliſcus arena.

Then fiercely hiſſing through the poiſon'd air
The baſiliſk exerts his deathful glare;
At diſtance bids each vulgar peſt remain,
And reigns ſole monarch of his ſultry plain.

But

But the animal known in modern natural hiſtory by this name is a ſpecies of lizard, of a very ſingular ſhape, and which is particularly diſtinguiſhed by a long and broad wing-like proceſs or expanſion, continued along the whole length of the back, and to a very conſiderable diſtance on the upper part of the tail, and furniſhed at certain diſtances with internal radii analogous to thoſe in the fins of fiſhes, and ſtill more ſo to thoſe in the wings of the Draco volans, or flying dragon. This proceſs is of different elevation in different parts, ſo as to appear ſtrongly ſinuated and indented, and is capable of being either dilated or contracted at the pleaſure of the animal. The occiput, or hind part of the head, is elevated into a very conſpicuous pointed hood, or hollow creſt; and from this creſt, ſays Cepede, the name *baſilic*, which ſignifies "little king," is derived. Notwithſtanding its formidable appearance, the baſiliſk is a perfectly-harmleſs animal, and, like many other of the lizard tribe, reſides principally among trees, where it feeds on inſects, &c. It has long ago been admirably figured in the work of Seba, and, as it is an extremely rare ſpecies, has ſometimes been conſidered (from the ſtrangeneſs of its form) as a fictitious repreſentation. There is, however, in the Britiſh Muſeum, a very fine ſpecimen, well preſerved in ſpirits, and which fully confirms the excellency of Seba's figure; from which, in all probability, Linnæus himſelf (who never ſaw the animal) took his deſcription. The colour is a pale cinereous brown, with ſome darker variegations towards the upper part of the body. Its length is about a foot and a half. The young or ſmall ſpecimens have but a ſlight appearance either of the dorſal or caudal proceſs, or of the pointed occipital creſt. It is principally found in South America, and ſometimes conſiderably exceeds the length before mentioned, meaſuring three feet, or even more, from the noſe to the extremity of the tail. It is ſaid to be an animal of great agility, and is capable of ſwimming occaſionally with perfect eaſe, as well as of ſpringing from tree to tree by the help of its dorſal creſt, which it expands in order to ſupport its flight. See fig. 3.

18. Lacerta principalis, the ſmooth-creſted lizard: tail ſubcarinated, plain-edged gular creſt, and ſmooth back. Rather a ſmall ſpecies, ſcarcely exceeding the length of eight or nine inches from the noſe to the extremity of the tail. Its general form is rather ſlender; the head ſmall; the ſnout taper, the back ſmooth, or deſtitute of ſerratures, a ſharpened carina only running along the upper part of the tail; the throat is furniſhed with a gular creſt, which is of a ſmooth or rounded outline; the ſcales on the whole animal are very ſmall; the tail long; and the toes, as in ſome other lizards, ſomewhat dilated on each ſide towards their extremities. The colour of the animal is blue. It is a native of South America.

The *Roquet*, deſcribed by Cepede, appears to be a variety of the above. It was ſent from Martinico to the Paris cabinet, under the appellation of *anolis*, or garden-lizard. It is by no means the *anolis* of Rochefort and Ray; but reſembles very much the animal deſcribed by Dutertre and Rochefort under the name of *roquet*. The roquet reſembles the L. agilis in ſeveral circumſtances of its figure and ſtructure; but differs materially from that ſpecies, by wanting the tranſverſe bands of ſcales on the belly. It is never of any conſiderable ſize; that in the Paris cabinet meaſured two inches and a half long, excluſive of the tail, which is twice the length of the body. The roquet deſcribed by Ray was conſiderably ſhorter, the body and head being only one inch, and the tail an inch and a half, long. The general colour is like that of a withered leaf, ſpotted with yellow and blackiſh. The eyes are very bright; the noſtrils tolerably large. Like the L. agilis, it frequents gardens, and is very active; its fore-legs being long, which, raiſing its body from the ground, contributes to its agility. The claws are long and hooked, which enable it to climb with facility. In running, it always carries the head a good deal elevated, which attitude increaſes the agreeableneſs of its appearance and motions. It runs about with amazing ſwiftneſs, in ſudden and interrupted jerks, that are compared, in their rapidity, to the flight of a bird. It ſeems to prefer moiſt ſituations, and is frequently found among ſtones, ſeeming to be fond of leaping about from one to another. Both in running and when at reſt, it always keeps the tail reflected over its back; and, notwithſtanding the rapidity of its motions, and the apparent petulance of its manners, it is in reality very harmleſs, and even docile, affecting the company of mankind, like the ſcaly and green lizards. When fatigued by its rapid movements, and over-heated, it ſtops for a time with its mouth open, puſhing out a large divided tongue, and panting like a dog that has taken violent exerciſe. It is probably from this habit, joined to the uſual turned-up form of the tail, that it has received the trivial name of *roquet*, which is given in France to a particular ſmall kind of dog. It deſtroys great numbers of inſects; and, as it eaſily and frequently goes into ſmall holes in the ground, in thoſe places which it frequents, ſome have alleged that it feeds on the eggs of other lizards and ſmall tortoiſes, which, being only covered by ſoft membranes, give hardly any reſiſtance to its teeth.

19. Lacerta platura, the broad-tailed lizard: body rough; colour grey-brown, paler beneath; with depreſſed lanceolate tail, almoſt ſpiny on the margin. This remarkable ſpecies is a native of New Holland, and is ſtrikingly diſtinguiſhed by the peculiar form of its tail, which is flat or depreſſed, and gradually widens from the baſe to a greater diameter than the body of the animal, and again gradually tapers to a ſharp attenuated extremity; it is muricated, as is every other part of the upper ſurface of the animal, by ſmall tubercles, which on the edges of the tail are lengthened into ſharpened points; the head is large, ſomewhat flattened, broad at the back part, and tapers at the ſnout; the neck is nearly of the diameter of the body, which ſomewhat exceeds the tail in length; the limbs are of moderate length and rather ſlender than ſtrong; the feet all pentadactyle, with ſlender toes, armed with curved claws. The colour of the whole animal on the upper parts is a duſky browniſh grey; beneath paler, and ſmooth. The general length of this ſpecies ſeems to be from four to ſix inches, or rather more. See Plate IV. fig. 4.

IV. *Back ciliate, toothed, or creſted; head covered with calloſities.*

20. Lacerta iguana, the common or American guana. Specific character, long round tail, ſerrated back, and denticulated gular creſt. Though the lizard tribe affords numerous examples of ſtrange and peculiar form, yet few ſpecies are perhaps more eminent in this reſpect than the guana, which grows to a very conſiderable ſize, and is often ſeen of the length of four, five, and even ſix, feet. It is a native of many parts of America and the Weſt-Indian Iſlands, and is alſo ſaid to occur in ſome parts of the Eaſt Indies. Its general colour is green, but with much variation in the tinge of different individuals; it is generally ſhaded with brown in parts of the body, and ſometimes this is even the predominating colour. It has been deſcribed and figured by ſeveral authors; but the moſt expreſſive repreſentations are thoſe given by Seba, who has no leſs than five. The guana is eaſily diſtinguiſhed from all other lizards, by the large pouch which hangs from the under ſide of its neck, and by the ſerrated or indented creſt, which reaches from the head to the extremity of the tail, and which likewiſe adorns the fore-part of the throat. The ſpecimen in the Paris cabinet, which was ſent by M. Sonini from Cayenne, and from which the deſcription in Cepede's work was formed, was four feet long. The head is compreſſed at the ſides, and flattened at the top. The teeth are ſharp, and reſemble in form thoſe of the green lizards that inhabit the South of France. The muzzle, between the eyes, and the circuit of both jaws, are covered with ſmooth, ſhining, and highly-coloured, ſcales; three of theſe, larger than the reſt, are placed on each ſide of the head, beneath the external ear; and one of theſe three, larger than either of the others,

others, is of an oval figure, and of remarkable poliſh and brilliancy. The eyes and the openings of the ears are very large. Above the noſtrils, the top of the head, and each ſide of the neck, are ſtudded with tubercles, like the figure of cut diamonds. A kind of creſt, compoſed of large projecting ſcales, ſomewhat like ſpear-points in their form, extends from the extremity of the lower jaw, under the throat, and ornaments the fore-part of the dilatable pouch on the neck. The body, tail, and legs, are covered with ſmall ſcales, which form a projecting ridge on the back: this ridge or creſt on the back, which extends from the top of the head to the extremity of the tail, is compoſed of very long ſharp ſcales, ſtanding perpendicularly upwards; the higheſt of theſe are on the middle of the back; and they diminiſh gradually in length towards the end of the tail, where they are hardly perceptible. The tail is round, inſtead of being compreſſed at the ſides, as in the crocodiles and moſt of the lizards; and it tapers very much towards the tip. Each foot, both behind and before, has five divided toes, armed with ſtrong hooked claws. On each fore foot, the firſt or innermoſt toe has only one joint, or phalanx, the ſecond has two, the third three, the fourth four, and the fifth or outermoſt two. On each hind foot, the innermoſt toe has one phalanx, the ſecond two, the third three, the fourth four, and the fifth, which is ſeparated from the reſt like a thumb, has three. On each ſide, under the thighs, there is a row of fifteen hollow tubercles, which are all perforated at their ſummits, as if intended as outlets or excretory ducts to ſome ſecretion; their real uſe, however, has not been hitherto aſcertained, but it is an intereſting object of inquiry. In general, the ground-colour of this ſpecies is green, mixed with yellow, or with different ſhades of blue; on the belly, the legs, and the tail, theſe colours are often variegated in ſtreaks. But the colours vary from various circumſtances of age, ſex, and climate; which explains the apparent contradictions that are found in the deſcriptions of the guana, as given by various voyagers and naturaliſts.

The diſpoſition of this ſpecies, which feeds entirely on vegetables and inſects, is extremely gentle and harmleſs. We muſt not, however, be ſurpriſed at the terrifying appearance which has been attributed to it by ſome travellers; eſpecially when, agitated by fear or wrath, its eyes ſeem on fire, it hiſſes like a ſerpent, it ſwells out its pouch under the throat, laſhes about its long tail, erects the ſcales on its back, and holds its head, briſtled all over with tubercles, in a menacing poſture. The female is uſually ſmaller than the male; her colours and proportions are more elegant and agreeable; her appearance is more gentle and pleaſing; and her ſcales have frequently a very fine and brilliant green colour. All theſe beauties have not, apparently, been beſtowed in vain; but ſeem to have produced the moſt violent attachment on the part of the male: on the beginning of the fine weather, at the end of winter, the male ſeeks for the female with great ardour; and, forgetting his uſual gentleneſs or ſtupidity, he defends his mate even with fury, attacking every object, that ſeems inclined to hurt her, with great boldneſs; and, at this time, though his bite is by no means poiſonous, he faſtens ſo firmly, that it is neceſſary either to kill him, or to beat him violently on the noſe to make him quit his hold. The female uſually quits the woods or mountains about two months after the end of winter, on purpoſe to depoſit her eggs in the ſand of the ſea-ſhore. Theſe eggs are ſaid to be always unequal in number, from thirteen to twenty-five. They are longer, but not thicker, than pigeons' eggs. The outer covering is white and flexible, more like thoſe of the ſea-tortoiſe than the eggs of crocodiles. The inſide is whitiſh, and has no glairy matter, like the white in birds' eggs. Moſt travellers ſay, that theſe eggs give an excellent reliſh to ſauces, and that their taſte is preferable to that of poultry-eggs.

The guana, according to moſt authors, ſwims with difficulty, though it is moſtly found on the ſhores of the ſea, and the banks of rivers. Cateſby ſays, that, when in the water, it uſes its tail almoſt alone for ſwimming, keeping all its feet drawn cloſe up to its belly. But it runs with aſtoniſhing nimbleneſs along even the higheſt branches of trees, around which it twiſts its body and tail, concealing the head in the various foldings of the body. In Surinam, the guana, with various other lizards and ſeveral kinds of ſerpents, frequent the branches of a ſweet-ſmelling ſpecies of jaſmine. When they have regaled themſelves with food, they retire to reſt on the branches which overhang the water; and at this time, notwithſtanding their uſual agility, they become quite ſtupid, and are eaſily caught. The natural gentleneſs of their diſpoſitions, increaſed perhaps by that languor to which moſt lizards and ſerpents are ſubject after ſwallowing a conſiderable quantity of food, occaſions the tranquillity and inattention, remarked by moſt voyagers, with which theſe animals, though naturally timid and active, permit the approach of danger. The guana is difficultly killed, by blows, or even by wounds from fire-arms; but it dies very ſpeedily, after puſhing any ſharp inſtrument, even a ſtraw, up its noſtrils; this occaſions the flow of a few drops of blood, after which the animal expires. The ſtupidity or apathy, with reſpect to danger, which has been attributed to the guana, and which is almoſt always the companion of innocence, is ſo great, that the animal is very eaſily caught alive. In ſeveral countries of America, it is hunted with dogs that are trained to the chaſe; but it is likewiſe eaſily taken in traps, or by the following artifice: the perſon who means to catch a guana, takes a long ſtick, having a ſmall ſtrong chord at its extremity, formed into a running nooſe; when he diſcovers a guana extended on the branch of a tree, baſking in the beams of the ſun, he advances ſlowly, whiſtling in a particular manner; the animal ſeems pleaſed with the ſound, and extends its head as if to liſten; coming gradually nearer, and continuing to whiſtle, he begins by tickling the ſides and throat of the guana, which not only admits this liberty, but turns itſelf up gently to receive it, ſeeming delighted with the treacherous careſſes: thus, ſeducing it, as it were, by tickling and by the ſound of his whiſtle, to its ruin, he induces it gradually to lift its head from among the branches, and dexterouſly ſlips the nooſe over its neck; then, giving it a ſudden jerk, cauſes it to fall on the ground, and, ſeizing it by the root of the tail, places one of his feet on its body to hold it faſt. Notwithſtanding the apparent natural ſtupidity and gentleneſs of the guana, it no ſooner finds its confidence thus groſsly abuſed, but it endeavours to aſſume a violence that does not ſeem congenial to its nature: it becomes extremely agitated; its throat ſwells out with rage, its eyes ſeem all on fire, and it opens its large mouth: but all its efforts are now in vain; the hunter, preſſing it to the ground with his whole ſtrength, holds it faſt, till he has tied its mouth and legs, ſo that it is no longer capable either of flight or defence. The guana may be kept alive without food for ſeveral days. When firſt taken, it ſeems exceſſively averſe from the reſtraint; it is then apparently deſirous of biting, but ſoon becomes tame, and even familiar, and may be kept in gardens, or even in houſes, with great ſafety. In this ſtate of domeſticity, it generally reſts during the day, and goes about at night; at which ſeaſon, owing to its eyes being conſtructed like thoſe of cats, it is more readily able to ſeize inſects, on which it chiefly feeds. When walking about, it is frequently ſeen to dart out its tongue, probably to catch ſmall flies. Brown relates, that he kept a full-grown guana in his houſe for more than two months. At firſt, it appeared fierce and miſchievous, but became gentle in a few days. It lay quiet on a bed for the moſt part during the day, but ran about at night, and was never obſerved to eat any thing, but ſeemed to lap up ſmall particles floating in the air with its tongue, which were certainly minute inſects, darting out its tongue to catch theſe, while walking about, exactly like the chameleon. The fleſh of the guana, according to Brown, is much eſteemed, and

and is even preferable, when fricaſſeed or otherwiſe properly dreſſed, to that of poultry; though it is ſaid to be hurtful to thoſe whoſe blood is in bad order; and M. de la Borde alleges that it is of difficult digeſtion. The fleſh of the females is reckoned more delicate and fatter than that of the males. They are even made an article of trade in the Bahama iſlands, being carried alive to Carolina, and other parts of America, where the fleſh is ſalted up for uſe. M. de la Borde informs us, that in ſome iſlands, where the guana is ſcarce, it is reſerved for the tables of the rich. Hence we ought not to be ſurpriſed at the avidity with which this gentle and harmleſs animal is ſought after, which never deſtroys any thing but uſeleſs leaves and flowers, or noxious inſects; which requires only the hole of a rock or ſome dry branches for its habitation; and which has been placed by nature as one of the greateſt ornaments of the foreſts. Mankind is more eager to deſtroy thoſe animals which are objects of luxury, and which may miniſter to his appetites, than to extirpate ſuch as are hurtful.

Concretions are ſometimes found within the body of the guana, ſimilar to thoſe which are met with in the bodies of the tortoiſe, the crocodile, &c. and reſembling the ſubſtances called bezoars, that are found in the bodies of viviparous quadrupeds, particularly ſuch as have been called occidental bezoars. M. Dombey brought one of theſe, from South America, to the imperial cabinet at Paris. Its ſhape reſembles the half of an egg, ſomewhat hollowed at one end: it is formed of ſeveral poliſhed layers, compoſed of ſmall needle-like cryſtallizations: one end is convex, and the other concave; but it muſt not be ſuppoſed a portion of a bezoar which had formerly been larger, for its layers are regularly continued round the edges of the concave part, as well as on that which is convex: in all probability, the nucleus, around which it has cryſtallized, was nearly of the ſame form. The ſurface of the concave part is not poliſhed like the reſt of its body, probably owing to being kept away from friction by its figure. The larger diameter of this bezoar is fifteen lines, or twelfth parts of an inch, and the ſmaller diameter fourteen. In the collection of Seba, there were ſeveral of theſe bezoars from the guana, about the ſize of pigeons' eggs, and of a cinereous yellow colour, with darker ſpots. They are called *beguan* by the Indians, who conſider them as more valuable than moſt other bezoars.

The guana is very common in Surinam, in the woods of Guiana, in Cayenne, and in Mexico; but is ſcarce in the Weſt-India iſlands, in conſequence of being much ſought after, on account of the excellence of its fleſh. It is likewiſe found in many parts of the Old World, both in Africa and Aſia. Dampier ſays that ſeveral guanas were ſeen near Seal Bay in New Holland, which ſtopped and hiſſed when any one came near them, but did not attempt to run away. It is every where confined to the torrid zone, being never found in any of the cold or even temperate regions. Its colours vary, according to its age and ſex, and in the ſeveral countries which it inhabits: but it is always very remarkable, and readily diſtinguiſhable from the other ſpecies of lizards, by its habits, by the peculiarity of its form, and by the beautiful enamel which adorns its ſcales. See fig. 5.

β. The *chameleon guana* is mentioned as a variety, but no account is ſubjoined by *Gmelin*.

The *horned lizard*, according to Cepede, its firſt deſcriber, reſembles the guana in many reſpects. It is nearly of the ſame ſize, and has the ſame proportions in the form and dimenſions of its body, legs, and tail. The head is flattened and ſomewhat hollowed at the top, and has ſimilar large pointed projecting tubercles at the ſides; but in one ſpecimen theſe large tubercles were wanting. The teeth are divided into ſeveral ſmall points, at their edges, ſimilar to thoſe of large individuals of the guana ſpecies. This lizard varies from the guana in wanting the large creſted pouch under the throat; but the diſtinguiſhing characteriſtic is formed by a kind of conical horn, covered by a ſingle large ſcale, placed almoſt between the eyes, and having before it, between it and the muzzle, four large projecting tubercles. This lizard, which was communicated to the Paris cabinet by Bonnaterre, is found in great numbers in St. Domingo.

21. Lacerta calotes, the Aſiatic guana: tail long and rounded; a ſerrated creſt from the hind part of the neck along the back, conſiſting of pointed ſcales or ſpines ſtanding apart; ſimilar ſcales or ſpines round the lower and back part of the head; theſe erect ſcales are not on the tail, nor on the throat, as in the common guana. The head is flat, and very broad at its back part, like that of the chameleon. Allowing for theſe differences, this ſpecies is ſtill conſiderably allied to the common guana in general appearance; but is of much ſmaller ſize, rarely exceeding the length of a foot and half from the tip of the noſe to the extremity of the tail. It is alſo deſtitute of the very large gular pouch, ſo conſpicuous in that animal; inſtead of which it has merely a ſlight inflation or enlargement on that part. In colour it occaſionally varies, like moſt of this tribe; but is commonly of an elegant bright blue, variegated by ſeveral broad and ſomewhat-irregular white or whitiſh tranſverſe bands on each ſide of the body and tail. The ſcales are larger in proportion than thoſe of the common guana, ſharp-pointed, and marked by a pretty ſtrong carina: the limbs are rather ſlender than ſtout, and the toes more remarkably ſo: the tail exceeds the body very conſiderably in length, and terminates acutely. This ſpecies has been well repreſented in the work of Seba, who has figured ſeveral varieties, differing in ſize and colour. It is a native of the warmer regions both of Aſia and Africa, and is found in many of the Indian iſlands, and particularly in Ceylon, in which it is common. According to Cepede, it is alſo found in Spain; and is ſaid by that author to wander about the tops of houſes in queſt of ſpiders; and he obſerves, that it is even reported to prey on rats, and to fight with ſmall ſerpents in the manner of the common green lizard and ſome others.

There are three varieties; of which the firſt, β, may perhaps be Seba's "Brown lizard with black ſpots from Galicia, a province of Spain." This lizard, of a brown colour with numerous black ſpots, came from Corunna; it has a kind of comb, or ſaw, on the back. The head is beautifully covered with ſquamæ, which bending backwards form ſmall angular excreſcences. On each ſide of the neck are three excreſcences reſembling thorns. The ears are fringed. In the middle of the forehead is a large ſcale like a white roſe. Above the eyes, which are large and ſurrounded by a belt or circle formed of ſcales, are two elevated tubercles: large bright ſquamæ cover the noſe alſo. The jaws diſplay numerous ſharp teeth, and a ſmall ſwelling like the guana. The belly is of a pale cinereous grey, as is the tail, which is long and pointed.

γ. A ſmall variety, of a livid hue above, green beneath.

δ. The *tuberculated guana*, with broad blunt ſpines over the neck or hind-head.

22. Lacerta ſupercilioſa, the ſupercilious lizard: tail ridged on its upper ſurface; back and eyebrows fringed with projecting ſcales. This lizard, in its general appearance, is ſomewhat allied to the guana, and more eſpecially to the horned guana of Cepede; having, like that animal, the appearance of a pair of ſharp-pointed horn-like proceſſes above and beyond each eye, between which are alſo ſituated a certain number of aculeated ſcales; while from the back of the head to the tip of the tail runs a ſeries of ſhort, or ſlightly-elevated, ſerratures: the ſcales about the edges of the mouth and on the tip of the noſe are, as uſual in moſt lizards, larger than on the reſt of the animal: the tongue is large and rounded: the body is covered with ſmall ſubacuminated ſcales, thoſe on the tail being ſomewhat larger: the limbs are rather ſlender, and the tail of moderate length. Seba figures two ſpecimens of this lizard; one of which has ſeveral rounded ſcales, of different ſizes, interſperſed here and there on the ſides of

the body; and which are not viſible on the other. This is an Aſiatic ſpecies, and is alſo found in the Indian iſlands. The colour of one of Seba's ſpecimens, both of which, he informs us, came from Amboyna, was pale yellow, tinged with bluiſh variegations: the other with brown and whitiſh ones. It meaſures from twelve to about ſixteen inches from the noſe to the tip of the tail.

23. Lacerta ſcutata, the ſcutated lizard: tail ſomewhat compreſſed, and of a middling length; ridge of the back ſerrated, and two ſharp-pointed ſcales on the hind-head. Allied in ſhape, ſize, and general appearance, to the former, but has a ſomewhat-larger head in proportion. It is principally diſtinguiſhed by a row of ſcales more elevated than the reſt, which paſs over each eye; a ſort of ridge or prominent edge being continued from thoſe parts, as in the chameleon, towards the back of the head, where they unite, and are continued in form of a ſhort denticulated creſt down the middle of the back to the tail, which is much longer than the body. The body is covered with moderately-ſmall acuminated ſcales; the limbs and tail with ſomewhat larger ones. The colour of this lizard is brown; more or leſs deep in different individuals, and clouded or mottled with a few variegations of a ſtill deeper caſt. Inhabits Ceylon and Amboyna.

Seba mentions a variety, the head of which is much ſhorter than the preceding, the neck thick and round, and the ears ſmall: it reſembles the ſalamander in its head and ſhort and thick tongue. This is alſo from Amboyna. Its ſcales are thin and ſmall, reddiſh ſhaded with white.

24. Lacerta Amboinenſis, the Amboyna lizard: tail long, laterally compreſſed; with a radiated ridge on its upper ſurface; the dorſal future dentated. This ſpecies appears to have been firſt deſcribed by Valentyn, in his account of the Eaſt Indies, and particularly of the iſland of Amboyna, where it is principally found; but a much more accurate deſcription, accompanied by an exquiſite figure, was publiſhed in the year 1768 by Dr. Albert Schloſſer. It ſeems in ſome degree to form a connecting link between the guana and the baſiliſk. It grows to the length of three feet, and is at once remarkable for the ſingularity of its appearance and the beauty of its colours. The head is rather large than ſmall, ſomewhat tuberculated above, and covered with ſmall roundiſh ſcales: the upper jaw obtuſe and ſomewhat inclining to a ſquare termination; the lower is rounded: the ſcales ſurrounding the lips are larger than on other parts of the head: the eyes are moderately large; the foramina of the ears conſpicuous; the mouth wide; the teeth ſharp and numerous; the tongue large, fleſhy, and ſlightly emarginated at the tip: the ſkin about the neck, throat, and breaſt, is looſe or wrinkled. The body is covered with very ſmall oblong or ſomewhat-ſquare ſcales, interſperſed with much larger rounded or oval ones, ſcattered here and there over the ſides and about the ſhoulders and thighs. The tail is very long, of a rounded form, and furniſhed above with a very broad riſing creſt or upright proceſs, ſcolloped, or ſinuated on the edge by ſlight ſubdiviſions, and internally ſtrengthened by ſeveral bony radii reſembling thoſe in the fins of fiſhes: the ſcales on this part of the tail are larger than on the other parts: from the back of the head to the extremity of the tail runs a continued ſeries of denticulated ſerratures, gradually diminiſhing in ſize as they approach the tip of the tail: the legs are moderately long, ſtout, and ſcaled in a ſimilar manner with the body: the feet are large and ſtrong, and are each furniſhed with five toes, edged on their ſides with a denticulated or pectinated ſkin, and terminated by ſtrong curved claws. The head and neck of this animal are green, variegated by tranſverſe whitiſh undulations: the back and tail brown, with a ſlight bluiſh or purpliſh caſt; the ſides and abdomen pale-brown or greyiſh, ſpotted by the round white ſcales before mentioned.

This lizard, according to Valentyn, reſides in the neighbourhood of rivers and other freſh waters. It is frequently obſerved on the banks of riſing grounds, as well as on the lower kind of ſhrubs which grow near the water; but does not aſcend the taller trees. When diſturbed by the approach of men, dogs, &c. it plunges into the water, and hides itſelf beneath the rocks or ſtones under the banks, whence, however, it may be eaſily taken; and, when caught, does not attempt to bite, or defend itſelf, but ſeems, as it were, ſtupefied: it may alſo be caught by a nooſe or ſnare. It lays its eggs in the ſand; eſpecially near the ſmall iſlets of the rivers it frequents: theſe eggs, while in the belly of the animal, are of a yellow colour, and are diſpoſed into two long groupes or cluſters; but when laid are white, and of an oblong ſhape. The male and female differ conſiderably in ſize and diſtribution of colours; the female being of a more obſcure tinge than the male, and having but little appearance of the creſt or proceſs on the tail. This animal is more eſteemed as food than even the common guana; and its fleſh is ſaid to be very white, ſweet, and of a penetrating odour. Valentyn, who had attended to the anatomy of the animal, informs us, that it has a ſmall triangular heart; an oblong liver, with a round gall-bladder; ſmall reddiſh lungs, ſlightly tinged with lead-colour; a narrow whitiſh ſtomach, coated, or, as it were, enveloped in fat, and large inteſtines, in which were diſcovered the berries and ſeeds of certain aquatic ſhrubs, together with ſome ſmall ſemi-tranſparent pebbles, and a kind of worms not unlike millepedes. Of this curious lizard a very fine ſpecimen occurs in the muſeum of the late Mr. John Hunter.

β. The *Javan lizard* is of a larger ſize, as much as three feet eight inches in length; with the tip of the tail ſquare in the male, round in the female; and the gular pouch much compreſſed. The tail alſo is longer, being nearly three times the length of the body.

25. Lacerta agama, the agama: tail long and round; hind-head and neck creſted with prickly ſcales, of which thoſe on the hind-head are reverſed. This ſpecies is in ſome reſpects allied to the *calotes*, but differs in wanting the very conſpicuous dorſal ſerratures, inſtead of which it has only a ſmall denticulated carina on that part. The head is larger in proportion, and is covered on the back part with elongated or ſharp-pointed ſcales, ſome of which are more or leſs reverſed at their extremities: the body is coated with ſmall ſcales, with ſeveral larger ones of a rounded form ſcattered here and there on the ſides: the tail is long, and verticillated with ſtages of ſharp-pointed ſcales. The whole animal is of a leſs ſlender and elegant aſpect than the calotes, and is commonly of a brown or lead-coloured caſt, clouded here and there with deeper and lighter variegations. It is a native of South America and ſome of the Weſt-India iſlands, and ſometimes grows to a very conſiderable ſize. The male is ſaid to differ from the female in having the dorſal creſt compoſed of longer ſpines, extending almoſt to the lower part of the back, whereas in the female they ſcarcely reach farther than the ſhoulders.

β. Head like the chameleon, with uniform ſcales as far as the neck, but a looſe and full ſkin hanging down in folds encircles the neck. On the ſide of the neck, behind the ears, are ſharp ſtar-formed prickles; and on the top of it are pointed prickles alſo. On the upper part of the body it is of a cinereous yellow, and covered all over with prickly ſcales. The venter is of a pale aſh-colour: on the thighs and feet the ſcales are larger, but ſimilarly pointed; the tail is not belted as in the preceding, but the upper part is covered with white ſcales.

L. muricata, the brown Auſtralaſian lizard, can hardly be conſidered as ſpecifically diſtinct, though deſcribed as ſuch in White's Journal of a Voyage to New South Wales. It meaſures more than a foot in length; its general colour is a browniſh grey, the upper part marked with tranſverſe duſky bars, moſt conſpicuous on the legs and tail, which latter is very long. The ſcales on every part are of a ſharp form, and furniſhed with a prominent line on the upper ſurface: towards the back part of the head they almoſt run into a kind of weak ſpines. The feet are furniſhed

niſhed with moderately ſtrong and ſharp claws. The chief difference, excluſive of colour, ſeems to be the want of the reverſed ſcales on the back part of the head.

Cepede is of opinion that the cinereous green lizard, repreſented by Sloane, vol. ii. plate 273. fig. 2. the fifth ſpecies of lizard, which Brown (p. 463.) ſays is very common in Jamaica, and the blue lizard of Edwards, pl. 245. are all to be conſidered as varieties of this ſpecies.

That deſcribed by Sloane is of a cinereous green colour, having a ſhort creſt on the back. It is found in great numbers in the woods of Jamaica, and differs little from the guana, but is ſmaller, of a fuller green colour, and the creſt on its back is ſhorter. Its eggs are ſmaller than thoſe of pigeons.

The lizard, which Brown enumerates as his fifth ſpecies, is green, and its tail has a creſt or ridge of erect ſcales. It is very common in Jamaica; and is uſually of a beautiful green, but the colour changes according to the ſituation of the animal, like ſeveral other ſpecies of this genus; this changeableneſs is even more remarkable than in moſt other lizards, and it more readily acquires the hues of ſuch ſubſtances as it is affected by. The body is covered by ſlight ſcales; thoſe which are on the upper ſurface of the tail being erected, and forming a ſmall creſt, ſomewhat like that of the guana. Its diſpoſitions are very gentle, and it ſeldom exceeds nine or ten inches long.

The blue lizard of Edwards is very ſingular in the ſtructure of its toes: theſe are edged on each ſide by a kind of membranes, that are very unlike thoſe on the feet of certain aquatic birds, having more reſemblance to the feet of ſome kinds of flies that act in ſome degree by ſucking; they ſeem intended to enable the animal to walk on the ſmooth ſurfaces of the large leaves of trees and other plants. There is a ſmall elevated ridge along the whole back, as far as the tail, where it becomes ſerrated. The whole upper part of the body is bluiſh, tranſverſely variegated with lighter and darker ſhades. The under parts of the body are of a very pale fleſh-colour. The ſpecimen deſcribed by Edwards was ſent from the iſland of Nevis in the Weſt Indies, preſerved in ſpirit of wine; and had probably changed its natural green colour to blue, in conſequence of the action of the ſpirit, as ſuch a change is very often produced in green lizards by the ſame means.

26. Lacerta umbra, the clouded lizard: tail long and round, nape ſomewhat creſted, hind-head callous and protuberant, back ſtreaked. The head is much rounded, the hind-head being augmented by a callous protuberance of ſome ſize, entirely deſtitute of ſcales. The under part of the throat has a deep fold of ſkin. The colour of the body is diſpoſed in clouds, and the ſcales are ridged and ſharp-pointed, giving the back a ſtreaked appearance. The tail is longer than the body. Inhabits the warm ſouthern parts of America; but is little known.

27. Lacerta marmorata, the marbled lizard: tail long and round; throat ſlightly creſted; back ſmooth. The head is covered by large ſcales; the under part of the throat is furniſhed with a range of ſmall ſcales, extending, like a kind of creſt, towards the breaſt, and notched or indented on its edge; this appendage being more remarkable on the male than the female. The belly has no tranſverſe bands. The under ſide of the thighs have each a longitudinal row of eight or ten tubercles, which are not ſo obvious on the female. The upper ſurfaces of the claws are black. Its moſt remarkable character is the length of its tail, which exceeds that of any other lizard in proportion to its body: in one ſpecimen ſent from India to Paris by M. Sonnerat, the tail is four times the length of the body and head, having the ſcales ſo diſpoſed as to give it the appearance of nine longitudinal ridges. The colour of this ſpecies is greeniſh on the head, greyiſh on the upper parts of the body, tranſverſely ſtreaked with white and black; this becomes reddiſh on the thighs and ſides of the belly, where it is marbled with white and brown. This ſpecies inhabits America and the Weſt-India iſlands, and, according to Linnæus, India. The tail is marked by three or four ſlightly-riſing or carinated longitudinal lines.

The African lizard, named *Warral* by Shaw, and *Guaral* by Leon, belongs apparently to this ſpecies. According to Shaw, the warral is ſometimes thirty inches long, probably including the tail; and its colour is bright red, with blackiſh ſpots. This red colour is not very different from the redneſs on the marbled lizard, the colour of which at leaſt comes nearer that of the lizard mentioned by Shaw than any other African ſpecies. Shaw mentions, that the warral ſtrikes its tail againſt the ground whenever it ſtops, which circumſtance accords very well with the ſtructure of the marbled ſpecies, which has a very long ſlender tail, which may be eaſily agitated. The Arabs, according to Shaw, believe that a woman certainly becomes barren, if ſtruck by the tail of this lizard.

28. Labrus criſtata, the creſted lizard: tail lanced, ſhort, pinnate; back creſted; body porous, naked. The body is reddiſh-brown, with lead-colour ſpots; creſt reaching from the head to the tail, unequally dentate, ſubpellucid, in the middle of the back half an inch high: head very thick, obtuſe: ſnout broad; feet cleft, the fore-feet four, hind feet five, toed; tail with a bordered membrane each ſide.

V. *Body naked, feet unarmed; fore-feet four-toed.*

29. Lacerta Americana, the American lizard: tail lanceolate, middle-ſized; back fringed; belly ſpotted with yellow. This is an aquatic ſpecies, deſcribed by Seba. When a warm ſhower falls, it comes upon land as it were to refreſh itſelf. It delights in change of food. The tail is broad, extended obliquely from the body, which the animal makes uſe of as an oar. The venter is ſomewhat puffy and round; the upper part of the body is of a deep brown, ſpotted with black on the ſcales, which are thin; the under part is pale yellow, ſpotted with red. Inhabits America; length four or five inches. The tranſlator of Cepede ſuppoſes this may be a variety of the following.

30. Lacerta paluſtris, the aſk, or great water-newt: colour blackiſh, ſpeckled with white on the ſides; belly orange, irregularly ſpotted with black. This ſpecies, when full grown, meaſures from about five and a half to ſix inches in length, and ſometimes rather more. Its colour on the upper parts is an extremely dark or blackiſh brown, the ſides being marked with numerous ſmall ſcattered whitiſh ſpecks or granulations: the under parts are of a bright orange-colour, variegated with numerous large irregular ſpots or patches of deep black. The tail is of a flattened form, with thin or ſharp edges, and with an acute termination: on each ſide of the tail, in the male, is a ſilvery-white broad band or ſtripe, accompanied by a bluiſh tinge: this lateral tail-ſtripe, as well as the dorſal creſt or proceſs, is generally far leſs conſpicuous, and even ſometimes entirely wanting, in the female. The eyes are of a bright gold-colour; the head rather ſmall than large; the limbs ſhort; the fore feet divided into four, and the hind into five, toes, all of which are deſtitute of claws. This animal is by no means an unfrequent inhabitant of the clearer and colder kinds of ſtagnant waters; and is alſo occaſionally met with in damp and ſhady ſituations, under trees, hedges, &c. &c. It is, in this country at leaſt, a much rarer ſpecies than the ſmall or common water-newt, with which it appears to have been confounded by ſome authors, and among others by Cepede, in his Hiſtory of Oviparous Quadrupeds. It lives principally on inſects. Though an innoxious ſpecies, and perfectly incapable of injuring any of the larger animals, yet it appears, from the experiments of Laurenti, that the natural exſudation or ſecreted moiſture of its ſkin is fatal, like that of the ſalamander, to the ſmall varieties of the Lacerta agilis, ſeveral of which, on biting this animal, ſoon became paralytic on the fore legs, were ſeized with a general weakneſs, and died without any convulſive motions. See fig. 6.

The aquatic lizard, known in Mexico by the name of *axolotl*, called *inguete de agua* by the Spaniards, is probably to be referred to this ſpecies. It has been miſtaken for a

fiſh, though it has four feet; but the ſcink has been likewiſe erroneouſly ſuppoſed a fiſh, in conſequence of its living in the water. The ſkin of the axolotl is deſcribed as very ſmooth, being ſcattered all over the belly with ſmall ſpots, which diminiſh in ſize from the middle of the body to the tail. The length and ſize of this animal are ſimilar to thoſe of the aſk: its feet have only four toes, *as in frogs*; from which we may ſuſpect, at leaſt, that the fifth toe is only wanting on the fore legs, as is the caſe in frogs, ſalamanders, and aſks. The head is large in proportion to the body; having a black mouth, which is almoſt conſtantly open. A very abſurd fable has been related concerning this animal; it being pretended that the female is ſubject to a monthly diſcharge. This ridiculous ſtory may proceed from the female producing her young alive, like the ſalamander; and perhaps it ought rather to have been referred to that ſpecies than to the preſent article. The fleſh of the axolotl is ſaid to be very good eating, and to reſemble that of an eel. If that be the caſe, it may perhaps be only a frog in its tadpole ſtate, before the tail has dropped off; but farther obſervations are required, to enable us to decide with certainty on this ſubject.

31. Lacerta lacuſtris, the fenny newt: colour black; tail middle-ſized, and lanceolate. It inhabits the lakes of Europe, and is very deſtructive to fiſh.

The following varieties of this ſpecies are added in the Syſtema Naturæ by Gmelin.

β. Salamandra paluſtris: dotted with black, and thrice the ſize of the common aſk.

γ. Triton Zeylanicus: variegated with white and yellow, and ſpotted with black. Seba obſerves, that this animal in its natural element, which is the water, breathes ſeldom; only about once in a quarter of an hour. For this purpoſe it comes to the ſurface, opens its mouth, ſends out a bubble of air, inſtantly ſwells its throat, which it as rapidly contracts, and then immediately retires. Even if it ſhould remain near the ſurface of the water, yet this buſineſs is done in an inſtant, and as it were by ſtealth; and none of the ſmaller motions of the throat are obſerved. But, as ſoon as it is taken out of this element, and the water has run from off its noſe, and its noſtrils are clear, it begins to move its throat, and that as rapidly as the ſalamander, or more ſo; theſe motions are accompanied by the greater ones, and the cloſing of the noſtrils; but, if water be dropped on the noſtrils, all theſe motions ceaſe.

δ. Triton carnifex: black and tuberculated, dotted on the throat, and ſpotted on the belly; the tail as if bloody. Inhabits Ceylon.

ε. Triton alpeſtris: black and tuberculated; having a yellow belly.

ζ. Triton utinenſis: having a globular head; the back being black, with yellow ſpots.

η. Triton Wurfbainii: black, with whitiſh ſtreaks.

θ. Triton Geſneri: black, the belly dotted with white.

32. Lacerta aquatica, the common water-newt: olive brown ſpotted with black, with orange-coloured abdomen, and ſharp-edged ſinuated tail. This, which in England occurs in almoſt every ſoft ſtagnant water, is a much ſmaller ſpecies than the paluſtris; and, though the different ſpecimens occaſionally vary very conſiderably as to the caſt of colour, yet the animal may at all times be readily diſtinguiſhed from others. Its general length is about three inches and a half, and it very rarely exceeds four inches. The male is diſtinguiſhable at firſt ſight from the female by its very conſpicuous dorſal creſt or proceſs, which is broader in proportion, more ſtrongly elevated, and more regularly ſinuated, than that of the larger ſpecies: the ſinuations are continued to the very tip of the tail on the upper part, and take place likewiſe in a ſimilar proportion on the under part at the junction of the tail with the abdomen; whereas in the larger ſpecies the upper part alone of the tail can properly be ſaid to be creſted: this wide proceſs, or ſinuated part, is remarkably tranſparent, and, when viewed with a lens of even moderately magnifying power, exhibits very diſtinctly the ramifications of the blood-veſſels diſperſed through it; but, if examined by the microſcope, is, perhaps, of all other objects that can be ſelected for that purpoſe, the moſt eligible for exhibiting a general view of the circulation; ſhowing, in the moſt diſtinct and beautiful manner, the rapid current of the blood, the particles of which, in this animal, as well as in the reſt of the amphibia, are of an oval form; not round, as in the mammalia. In the greater water-newt, on the contrary, this part, being nearly opake, can by no means advantageouſly exhibit the ſame phænomenon. The female is almoſt deſtitute of the dorſal creſt, but the tail is furniſhed with an approach to it, though far leſs conſpicuous than in the male.

The general colour of the male is olive-brown, beautifully and diſtinctly marked with numerous round black ſpots, diſperſed over every part, but largeſt and moſt conſpicuous on the ſides and tail: the abdomen is orange-coloured, the black ſpots often appearing rather leſs intenſe on that part than on the back. The female differs very conſiderably in colour, being generally of a pale yellowiſh brown, much leſs diſtinctly ſpotted; and, from the want of the dorſal creſt, might be almoſt miſtaken for a different ſpecies by a perſon not converſant in the hiſtory of the animal. On the top of the head, in both ſexes, are three or four longitudinal duſky ſtreaks; the eyes are ſmall and gold-coloured: the fore feet tetradactylous; the hind pentadactylous; all deſtitute of claws, and in ſome ſpecimens more or leſs approaching to a kind of palmated appearance towards the baſe, as in the ſixth figure of the ſixth plate of Latreille's work on the Salamanders of France; which figure appears, ſays Dr. Shaw, to repreſent no other than a very fine ſpecimen of the male of the preſent ſpecies, though conſidered as different by Monſ. Latreille, and diſtinguiſhed by the title of *punctata*. It is certain that the water-newt varies conſiderably in the caſt of its colour at different times of the year, and, in different ſtates of the weather, even in the courſe of the ſame day; and, if taken out of ſoft water, and ſuddenly plunged into that of a colder temperature, will almoſt immediately become of a conſiderably darker tinge than before.

The water-newt breeds in the early part of the ſpring, depoſiting ſmall oblong ſtrings or cluſters of ſpawn, from which are ſoon hatched the larvæ or young, which, for a conſiderable period, are furniſhed with a triple pair of ramified branchial fins or proceſſes on each ſide the neck; thus giving the animal, in ſome degree, the appearance of a ſmall fiſh. See Plate IV. fig. 7. *a*, *b*. Theſe parts, after having ſerved their temporary purpoſe of aſſiſting the reſpiration of the animal during its growing ſtate, are gradually obliterated. Water-newts frequently caſt their ſkins, which may be occaſionally obſerved floating in the waters they inhabit, and are ſometimes ſo perfect as to exhibit the whole form of the complete animal. They alſo are remarkable for a high degree of reproductive power, and have been known to exhibit the reſtoration of their legs, tails, and even, according to Dr. Blumenbach, of the eyes themſelves, after having been deprived of them by cutting. That the eyes of the common green lizard (L. agilis) have been reſtored to their former fullneſs and ſtrength after being punctured with a needle ſo as to let out the aqueous humour, is an obſervation recorded by Pliny; by which we may conclude, that wanton cruelty to animals is a thing of no late date. Water-newts have been found completely imbedded in maſſes of ice, in which they muſt have remained ſome weeks, or even perhaps months, and yet, on the diſſolution of the ice, have been reſtored to their former vigour. It is remarkable that they are very readily killed by being plunged into ſalt water, or rubbed on the back for a ſhort time with common ſalt.

Linnæus ſeems not to have underſtood clearly the nature of this animal; ſince, after its ſpecific character, in the 12th edit. of the Syſtema Naturæ, he propoſes a queſtion; whether it may not be the larva of the Lacerta vulgaris? and in a former edition of the ſame work he appears to think it the larva of the L. agilis; upon which

query Laurenti makes the following obſervation: "Linnæus interrogat, an forte larva Lacertæ agilis? Inepta quæſtio! Cl. Du Fay, in Act. Gall. oſtendit generare oviparam; oſtendit præterea, & pinxit metamorphoſes, &c. Legat Linnæus, et ceſſabit tandem interrogare." The L. paluſtris and aquatica have by ſome been conſidered as one and the ſame ſpecies; but this can ſurely be accounted for on no other ſuppoſition than the want of an opportunity of contemplating the animals in their living ſtate. Among thoſe who have thus conjoined, or rather confounded them, muſt be numbered Cepede, whoſe negligence in this reſpect affords a curious contraſt to the oppoſite extreme of Mr. Latreille and Mr. Schneider.

The varieties are: β. Brown or yellowiſh. γ. The dorſal line dotted with white and black.

In the Leverian Muſeum was a ſpecimen of an extremely large water-newt, ſuppoſed to be a non-deſcript ſpecies. Its total length ſeventeen inches and a half, of which the tail meaſures ſix inches and a half from the ſetting-on of the thighs, but, if meaſured from the commencement of the upper membranaceous edge, only four inches and three quarters. The head flattened, and ſhaped ſomewhat like that of a turbot; the mouth moderately wide; the upper jaw furniſhed in front with two concentric rows of very-numerous ſmall ſetaceous teeth; the rows about the eighth of an inch apart; in the under jaw a ſingle row only: the eyes ſmall, round, ſituated on each ſide the front of the head, and conſequently very remote from each other, and not near ſo far backward as the corners of the mouth. The body longiſh, moderately plump or thick, and pale brown, marked, in a confluent manner, with darker variegations: from the fore to the hind legs an obſcurely-elevated lateral line. The legs about an inch in length, and both fore and hind legs furniſhed along the whole length of their back part with a dilated ſkin or creſt, which, juſt above each foot, is ſinuated by two pretty deep ſcollops or inſections. The tail reſembles that of the common water-newt, but is neither ſo long nor ſo deeply finned or creſted in proportion, and its termination is rather obtuſe than acute. The feet very ſmall: the fore feet furniſhed with four, and the hind with five, toes, all deſtitute of claws; or at leaſt the appearance of thoſe parts is but very obſcure. No particular hiſtory was annexed to the ſpecimen, nor is its native place known.

33. Lacerta ſalamandra, the ſalamander: tail ſhortiſh, round; body porous, without ſcales, and variegated with black and yellow; four toes on the fore feet, five on the hind; no claws. This is ſhown on Plate V. fig. 8.

The ſalamander, ſo long the ſubject of popular error, and of which ſo many idle tales have been recited by the more ancient naturaliſts, is an inhabitant of many parts of Germany, Italy, France, &c. but does not appear to have been diſcovered in England. It delights in moiſt and ſhady places, woods, &c. and is chiefly ſeen during a rainy ſeaſon. In the winter it lies concealed in hollows about the roots of old trees; in ſubterraneous receſſes, or in the cavities of old walls, &c. The ſalamander is eaſily diſtinguiſhed by its colours; being a deep ſhining black, variegated with large, oblong, and rather-irregular, patches of bright orange-yellow, which, on each ſide of the back, are commonly ſo diſpoſed as to form a pair of interrupted longitudinal ſtripes; the ſides are marked by many large tranſverſe wrinkles, the intermediate ſpaces riſing into ſtrongly-marked convexities; and the ſides of the tail often exhibit a ſimilar appearance; on each ſide the back of the head are ſituated a pair of large tubercles, which are in reality the parotid glands, and are thus protuberant, not only in ſome others of the lizard tribe, but in a remarkable manner in the genus Rana. Theſe parts, as well as the back and ſides of the body, are beſet in the ſalamander with ſeveral large open pores or foramina, through which exudes a peculiar fluid, ſerving to lubricate the ſkin, and which, on any irritation, is ſecreted in a more ſudden and copious manner under the form of a whitiſh gluten of a ſlightly acrimonious nature; and, from the readineſs with which the animal, when diſturbed, appears to evacuate it, and that even occaſionally to ſome diſtance, has ariſen the long-continued popular error of the ſalamander's being enabled to live uninjured in the fire, which it has been ſuppoſed capable of extinguiſhing by its natural coldneſs and moiſture. The real fact is, that, like any of the cold and glutinous animals, as ſnails, &c. it of courſe is not quite ſo inſtantaneouſly deſtroyed by the force of fire as an animal of a drier nature would be.

The general length of the ſalamander is about ſeven or eight inches, though it ſometimes arrives at a much larger ſize; in the number and form of its ſpots it varies conſiderably, and is occaſionally ſeen entirely black; the tail is ſomewhat ſhorter than the body, and of a round or cylindric form, gradually tapering to the extremity, which is rather obtuſe than ſharp. Like other lizards of this tribe, the ſalamander lives principally on inſects, ſmall ſnails, &c. its tongue, however, is not ſo formed as to catch theſe in a ſudden manner, being ſhort, broad, and in ſome degree confined, ſo as not to be darted out with celerity. It is capable of living in water as well as on land, and is ſometimes found in ſtagnant pools, &c. Its general pace is ſlow, and its manners torpid. The ſalamander has no apparent openings to the ears, in which it reſembles the ſerpent-tribe. It has even been ſuppoſed entirely deaf, and is accordingly called *le ſourd*, or the deaf lizard, in ſome parts of France; and this opinion is confirmed by its having no voice whatever; as, in general, ſilence or dumbneſs is connected with deafneſs. Hence, as in all probability it is deſtitute of one of the ſenſes, and is entirely deprived of any means of communicating its ſenſations to other animals of the ſame ſpecies, even by the ſlighteſt ſounds, it muſt be endowed with very imperfect and inferior inſtinct. Accordingly, it is extremely ſtupid; and, though it has been conceived to be extremely courageous and to deſpiſe danger, it is really incapable of perceiving it, and conſtantly keeps on its way whatever attempts may be made, by geſtures or noiſe, to terrify and turn it back. But, as no animal whatever is entirely deſtitute of the neceſſary ſentiments for ſelf-preſervation, it compreſſes or ſqueezes its ſkin when irritated, and ſpirts out againſt its enemy ſome of the acrid milky liquid which it ſecretes. When ſtruck, it erects its tail, but ſoon becomes quite motionleſs, as if ſeized by a kind of palſy; for it cannot be conceived, as ſome naturaliſts pretend, that ſo ſtupid an animal ſhould have cunning enough to counterfeit death. It is extremely tenacious of life, and is difficultly killed; but, if wetted with vinegar, or ſprinked with powdered ſalt, it ſoon dies in convulſions, as is the caſe with ſeveral other lizards, and moſt worms.

The ſalamander has been conſidered as the moſt fatal of all animals, by the ancients; and even Pliny ſuppoſes it to be poſſeſſed of the moſt dangerous of all poiſons. It has even been alleged, that, by infecting all the vegetables of an extenſive country with its venom, it was capable of extirpating whole nations. Even the moderns have long given credit to the poiſonous qualities of the ſalamander, believing that its bite was equally mortal with that of the viper, and have eagerly inquired after remedies againſt its poiſon. Philoſophers at laſt had recourſe to obſervation and experiment, by which road they ought to have begun. The famous Bacon firſt recommended to inquire by means of experiment, whether the ſalamander were actually venomous. Geſner proved that no means of irritation could induce it to bite; and Wurfbain ſhowed that it might be touched with ſafety, and that the water of ſprings or fountains in which it inhabited might be drunk with impunity. M. de Maupertuis likewiſe employed himſelf in experiments to inveſtigate the truth of the pretended poiſon of the ſalamander, and has demonſtrated that it ſubmitted to the action of fire in the ſame manner with all other animals; according to his obſervations, the inſtant it touches the fire, its whole ſurface becomes covered with drops of the milky fluid, which exudes from every pore of the ſkin, particularly on the head, and from the little tubercular protuberances; but this liquid is quickly dried up by the heat. It ſeems ſcarcely

neceſſary

neceſſary to add, that this fluid can never be produced in ſufficient abundance to extinguiſh even the ſmalleſt fire; we hope therefore to hear no more of ſuch cruel experiments. M. de Maupertuis could never get a ſalamander to open its mouth by any degree of irritation, but was always obliged to open it by force. As its teeth are extremely ſmall, he found great difficulty in finding any animal with a ſkin ſufficiently delicate to be ſcratched or wounded by them. He tried ineffectually to make them penetrate the fleſh of a fowl, after being ſtripped of its feathers, by preſſing them againſt the ſkin; but they were diſplaced, inſtead of penetrating; he at laſt, however, ſucceeded in wounding the thigh of a fowl, after taking off the ſkin; and likewiſe contrived, in a ſimilar manner, to wound the tongue and lips of a dog, and the tongue of a turkey cock, with the teeth of a new-caught ſalamander; but in none of theſe inſtances was there the ſmalleſt inconvenience produced. He afterwards made a dog and a turkey-cock ſwallow ſome ſalamanders, either whole or cut in pieces, but without the leaſt appearance of injury. Since that time, M. Laurenti has made additional experiments on the ſame ſubject; having obliged other lizards to bite ſalamanders, and to ſwallow ſome of the milky liquor which exudes from their pores. In all theſe inſtances, the lizards died very ſoon after; ſo that the acrid exudation of the ſalamander is a mortal poiſon to ſome animals, particularly ſmall ones, while it does not ſeem at all noxious to larger animals.

It was long believed that the ſalamander was androgynous, each individual being capable of reproducing by itſelf, without the aſſiſtance of any ſexual intercourſe, as is the caſe in ſeveral ſpecies of worms. This is not the moſt abſurd of the fables that have been invented, relative to the natural hiſtory of the ſalamander: and, though their manner of coming into the world is not quite ſo ſingular, it is ſtill particular, and deſerves the notice of naturaliſts much more than thoſe wonderful fables that have been ſo long attributed to it; as it differs from that of almoſt all the other lizards, and is ſimilar to that of the ſeps, the chalcides, vipers, and ſeveral other ſerpents. M. de Maupertuis, having opened ſeveral ſalamanders alive, found in ſome of them both eggs and young ſalamanders perfectly formed. The eggs were collected in two longiſh cluſters, and the young animals were contained in two tranſparent tubes; theſe were equally well formed as the old animals, and much more active. Thus the female ſalamander produces its young into the world alive, after having hatched them within her own body, in the ſame manner with vipers. The young ſalamanders are at firſt black, almoſt without any yellow ſpots; and in ſome places they remain ſo through their whole life; from which circumſtance they have been ſometimes conſidered as diſtinct ſpecies.

The following extract of a letter, from D. Saint-Julien, a benedictine of the congregation of Cluni, gives ſome very intereſting obſervations on the manner in which the ſalamander is produced: "About the end of ſpring 1787, I found a fine ſpecimen of the ſalamander, of that kind which is called *ſcorpion* in Lower Guienne, and which is there confounded with the true ſcorpion. It meaſured ſomewhat more than eight inches in total length. Being very protuberant in the belly, I entertained great hopes of being able to throw ſome light on the nature of the generation of this animal, and immediately proceeded to diſſect it alive, beginning at the anus. Having made an opening of about half an inch in length, a kind of bag protruded, which I at firſt miſtook for part of the alimentary canal, but I ſoon perceived a very ſenſible motion within it, and could even diſtinguiſh, through its thin and almoſt tranſparent coats, that it contained certain ſmall moving bodies, which I no longer heſitated in ſuppoſing the young of the animal. Having laid bare this bag, till I found its neck, I opened it in its whole length; it was full of a ſanious fluid, in which the young animals were folded double, exactly in the ſame manner with the ſmall aquatic lizards which Spallanzani deſcribes as included in the amnios. When this liquor had run out on the table, the young ſalamanders extended themſelves, and leapt about very briſkly. There were ſeven or eight of theſe; and, having examined them attentively, both with the naked eye and with the aſſiſtance of a magnifier, I could readily ſee that they had much the appearance of minute fiſh, having two tolerably-long fins near the head. The head was large in proportion to the body; having large, bright, prominent, eyes. There was no appearance whatever of hind legs, or any thing elſe in their ſtead. As the mother was found in water, and ſeemed very near the time of bringing forth her young, it appeared to me that the water is the natural element of the new-born ſalamanders, which idea was ſtrongly confirmed by their fiſh-like ſtructure: I therefore placed them in a bowl of water, in which they ſwam about very nimbly. I proceeded to examine the mother, and ſoon diſcovered two ſimilar bags with the one already mentioned; all of them being divided from one another by ſtrangulations or narrow necks. On opening theſe bags, I procured a number of little animals, exactly reſembling thoſe in the firſt, and almoſt equally well formed; they were divided into little cluſters of eight or ten together, without any intervening ſeptum, or ſeparating membrane. In a fourth bag, ſimilar to the former, I found more of theſe animals, but not ſo completely formed; almoſt every one of theſe laſt had a deep yellow protuberance on its right ſide; theſe all poſſeſſed motion, but were unable to leap about like the former more advanced fœtuſes, and it was neceſſary to aſſiſt them with pincers to get out of the bag. In a fifth bag I found a number of ſimilar animalcules, of which only the poſterior half of the body and the tail were diſtinctly formed, which part had an evident power of motion; the fore-part of the body conſiſting only of the yellow protuberance juſt mentioned. I extracted all together twenty-eight or thirty of theſe little animals, perfectly formed, which ſwam about in the water, and continued to live for twenty-four hours; the abortions, if I may ſo call the incomplete animalcules, ſunk to the bottom of the water, without ſhowing any more ſigns of life. Continuing my reſearches beyond theſe five bags, which reſembled a ſingle narrow gut divided by ſeveral ſtrictures, I found two cluſters of eggs; each egg being of a ſpherical form about a line in diameter, and very much reſembling the yellow tubercles that I had ſeen adhering to the half-formed fœtuſes. I did not count the number of theſe eggs, but their diſpoſition was very ſimilar to a bunch of grapes, the ſtalk being fixed to the back-bone, immediately behind a deep brown membranous bag which hung a little behind the fore legs of the mother. This bag was evidently the ſtomach, as I found it to contain ſome ſmall ſnails, beetles, and blackiſh ſand."

34. Lacerta ſtrumoſa, the ſtrumous lizard: tail long and round; a conſiderable protuberance on the breaſt. This ſpecies, which inhabits Mexico and South America, is of a pale grey colour, with brown ſpots on the upper part of the body, and deep grey tranſverſe ſtreaks on the belly. The fore part of the breaſt has a large protuberance, (very different from the gular pouch we have deſcribed in ſome ſpecies,) pointing forwards, covered with ſmall red granulations: from this the trivial name is derived, as it has ſome reſemblance to the bronchial ſwellings ſo common in ſome diſtricts among the Alps, called *goitres*. The tail is long, round, and of a livid colour, which becomes greeniſh about the root. This lizard is very active in its motions, neat in its appearance, and prettily coloured; it is very familiar with mankind, running about in houſes without apparent fear, and even climbing on the tables and on the people that ſit round them. Its motions and attitudes are agreeable; it ſeems to examine every thing that comes in the way with attention, and has even the appearance of liſtening to what is ſaid. It climbs readily on trees, living on flies, ſpiders, and other inſects. When two of this ſpecies meet, they ſometimes

ſometimes fight with great violence; they approach each other boldly, agitating their heads in a menacing poſture; the protuberance on the breaſt and the throat become inflated; their eyes ſeem on fire with rage; and at laſt they attack each other with fury. When one of the combatants is worſted, it runs off, and is purſued by the victor, who devours his enemy, if he can ſeize him; the purſuer often, however, catches hold of the runaway by the tail, which breaks off; and, while he ſtops to ſwallow this part, the vanquiſhed enemy gets time to eſcape. Other lizards of the ſame ſpecies very often ſtand quiet ſpectators of this combat; theſe are probably females, which await the event, and become the prize of the victor. Individuals of this ſpecies are often met with that have loſt their tails, probably in theſe combats. Theſe mutilated lizards are timid, weak, and languid; a kind of callus or cicatrix forms at the part where the tail has been broken away; for the tail is not always reproduced when loſt.

VI. *Scarcely any claws; ſublobate, five-toed; body warty.*

35. Labrus vittata, the white-ſtriped lizard: tail round and long; a white dorſal ſtripe forked over the head. Length ſeven or eight inches, and of a ſomewhat ſlender form. The head is large in proportion to the body; the limbs of moderate length; and the tail, which is ſlightly verticillated towards the baſe, is rather ſlender, and ſcarcely equal to the body in length; the toes are lamellated beneath, marked by a ſulcus or middle diviſion, and terminated by curved claws. This ſpecies is readily diſtinguiſhed from all others yet diſcovered by its colours; being of a yellowiſh brown, marked on the back, from head to tail, by a very diſtinct white band, which on the head divides into a forked appearance, and at the commencement of the tail into two ſhort rounded tips; the ſlender part of the tail, commencing beyond the three firſt rings, is of the ſame pale or white colour, marked longitudinally with ſeveral ſhort brown ſcattered ſtreaks. The whole upper ſurface of the animal is beſet with extremely ſmall tubercles, ſo minute as not to be perceived without a cloſe inſpection. It is ſaid to be a native of India.

36. Lacerta tetradactyla, the four-toed lizard: yellow, varied with green, with tetradactyle feet, and flat tail. This was firſt deſcribed by Cepede, from an account communicated by Monſ. Bruyeres. It is very nearly allied to the preceding, but differs in wanting the fimbriated margin, and in the number of the toes on the fore feet, which are only four. Its length is about twelve inches. The head is flat and oblong; the eyes large, with the pupils vertical; the neck long, and covered above with a double row of yellow ſcales; the back with a granulated yellow ſkin, marked with green ſpots or variegations; the abdomen is covered with yellow ſcales; in the form of the feet and tail it agrees with the L. fimbriata, except, as before obſerved, in having only four toes on the fore feet, for which reaſon Cepede has ſtationed it among the ſalamanders. It is a native of Madagaſcar, where it is held in equal deteſtation with the fimbriated lizard. Its native name is *ſarroube*. It inhabits woods, and appears chiefly during the rainy ſeaſon, and by night.

37. Lacerta tridactyla, the three-toed lizard: a new ſpecies added by Cepede. It is allied to the ſalamander, but is furniſhed with ribs, and has only three toes on each of the fore feet, while the hind feet have each four toes. It was found by Mailli marquis de Neſle, on the crater of Mount Veſuvius, ſurrounded by the burning lava of that volcano; which circumſtance might be conſidered by ſome people as a proof of the power of reſiſting the force of fire, which has been attributed to the ſalamander. But it is extremely probable, that the ſingular ſituation in which this animal was diſcovered proceeded only from accident; as it can ſcarcely be conceived, that any animal whatever could exiſt for any length of time among the burning lava. It may, however, inhabit the neighbourhood of the crater; as great heat ſeems congenial with the nature of the lizard tribe in general. The head is flat on the top, and rounded at the muzzle. The tail is longer than the head and body, and tapers to the tip, being frequently rolled up at the end. The colour is dark brown, mixed with reddiſh on the head, feet, tail, and under parts of the body. The ſpecimen brought from Italy by M. de Neſle was ſo much dried, that its vertebræ and ribs could be diſtinctly counted. The head meaſured three lines in length, the body nine, and the tail ſixteen lines and a half.

38. Lacerta Turcica, the Turkiſh lizard: colour greyiſh-brown; ſomewhat rough; tail middling length, and irregularly ringed. A ſmall ſpecies, firſt deſcribed by Edwards; native of the eaſtern regions; head rather large; body thickiſh; tail rather ſhort, thickiſh at the baſe, and pointed at the tip; the whole animal roughened on the upper ſurface with ſmall granules or tubercles; colour dull brown, ſomewhat paler on the under parts.

39. Lacerta gecko, the gecko: tail round, middle ſize; toes lobate, with hardly any claws; body warty above, ears very open. The *gecko*, ſaid to be ſo named from the ſound of its voice, which reſembles the above word uttered in a ſhrill tone, is a native of many parts of Aſia and Africa, as well as of ſome of the warmer regions of Europe. It is one of the middle-ſized lizards, meaſuring, in general, about a foot in length, or rather more. It is of a thicker and ſtouter form than moſt other lizards, having a large and ſomewhat triangular flattiſh head, covered with ſmall ſcales; a wide mouth, large eyes, minute teeth, and a broad flat tongue. The limbs are of moderate length, and the feet are of a broader form than in many of the genus, each toe being dilated on the margins, and divided beneath into a great number of parallel tranſverſe lamellæ, without any longitudinal mark or furrow; all the toes, except the thumbs, are furniſhed with ſmall claws; the tail, which is generally longer than the body, is marked, more or leſs diſtinctly, according to the age of the animal, into diviſions or verticillated rings; the whole animal is covered on the upper parts with numerous diſtant round warts or prominences, approaching more or leſs to an acute form in different individuals, and ſometimes obtuſe; beneath each thigh is a row of perforated papillæ, as in the green lizard and many others; the under parts of the body are covered with ſcales of ſomewhat diſſimilar appearance, but all approaching to a round figure. See fig. 9.

According to Bontius, the general colour of this ſpecies is bright green, ſpotted with very brilliant red; and the ſame naturaliſt aſſerts, that the name of *gecko* is in imitation of the cry which it always emits before rain. It is found in Egypt and India, in Amboyna, the other Molucca Iſlands, and other hot countries, keeping moſtly in the hollows of rotten trees, and in damp places. It even ſometimes comes into houſes, where it excites ſo great dread, on account of its venomous properties, that the inhabitants uſe every exertion to deſtroy it as ſoon as poſſible. Bontius relates, that its bite becomes certainly mortal in a few hours, unleſs the part bitten be burnt or cut out immediately. The blood of the gecko, and its ſaliva, or more properly a kind of thick and frothy yellow liquor, which diſtils from its mouth, when irritated, or when it ſuffers any violent emotion, are conſidered as mortal poiſons; and both Bontius and Valentyn inform us, that the inhabitants of Java employ theſe liquors to poiſon the points of their arrows. Haſſelquiſt aſſerts, that the toes likewiſe of this terrible lizard give out a poiſonous liquid, and that it is very apt to run over any ſubſtance that is impregnated with ſea-ſalt, on which it leaves a very dangerous poiſon. He ſaw three women at Cairo, who had very nearly loſt their lives from having eaten ſome cheeſe, lately ſalted, on which a gecko had depoſited its poiſon. He was farther convinced of the coroſive nature of the fluid which oozes from the feet of this animal, by having ſeen the hand of a perſon over which a gecko had run, when attempting to catch it;

every part that had been touched by the feet of the lizard was covered with ſmall hot fiery pimples, like thoſe produced by nettles. Theſe facts confirm the teſtimony of Bontius; ſo that it appears inconteſtibly proved, that the gecko, in the hot countries of Egypt and India, contains a dangerous poiſon, which ſometimes produces mortal effects: hence, it is not at all ſurpriſing that people ſhould ſee it with horror, and either fly from, or uſe every exertion to deſtroy, ſo noxious an animal. It is probable, however, that theſe deleterious qualities may be modified in their degrees by different circumſtances in the ſeaſon of the year, the climate, food, &c. in different individuals of the ſpecies. Seba ſays, "I can ſcarcely believe that their venom is ſo deſtructive as is commonly reported." The eggs of the gecko are repreſented by Seba, in the ſame plate with the figure of the animal itſelf; theſe the female carefully covers over with a little earth, leaving them to be hatched by the heat of the ſun. Wurfbainius, in his Salamandralogia, miſtakingly reports that the gecko lays no eggs.

The Jeſuit mathematicians, whom Louis XIV. ſent to India, have given the figure and deſcription of a lizard which they found in Siam, named *tokaie*, which is evidently the ſame animal with the gecko. The individual examined by them meaſured twelve inches and a half from the point of the muzzle to the tip of the tail. It is named *tokaie* by the Siameſe, in imitation of its cry; which proves that the voice of this ſpecies conſiſts of two ſounds harſhly uttered, which are difficultly imitated by the human organs, and which ſome have endeavoured to render by the ſyllables *tokaie*, and others by *gecko*.

40. Lacerta dubia, the geckotte, or doubtful gecko: colour livid, with pointed warts on the upper ſurface; no femoral papilæ. This is deſcribed by Cepede, who informs us that it is ſo nearly allied to the gecko, as, without an attentive ſurvey, to be eaſily confounded with it; yet he appears to ſuppoſe it the L. Mauritanica of Linnæus, but Mr. Schneider aſſures us, that this is a miſtake. It differs from the common gecko by three conſtant and very obvious characters. The body is ſhorter and thicker; it is deſtitute of the particular rows of hollow tubercles on the inſide of the thighs, which have been deſcribed in the gecko and many other ſpecies of the genus; and, laſtly, the tail is ſhorter and thicker in proportion. While young, the tail of the geckotte is covered with ſcales, that are all armed with prickly tubercles, and which are ranged in ſuch a manner as to reſemble circular rings; but, as the animal grows older, the rings neareſt the tip of the tail diſappear; this obliteration gradually extends towards the root, till at laſt only a few remain, cloſe to the origin of the tail, and theſe are at laſt obliterated as well as the reſt; ſo that, when the geckotte has attained its full ſize, the tail is only covered with very ſmall ſcales, without the leaſt verticillated appearance. At this period the tail is conſiderably thicker and ſhorter in proportion than during the youth of the animal. This is the only ſpecies in which that ſingular change in the ſtructure of the tail has been hitherto obſerved. Theſe pointed tubercles are found on other parts of the geckotte, particularly on the legs, the head, neck, back, and ſides; they are round, projecting, and ſharp-pointed, being ſurrounded at their baſes by other ſmaller tubercles, in the form of roſes.

As the geckotte inhabits almoſt the ſame countries with the gecko, they cannot be conſidered as varieties of the ſame ſpecies, produced by the influence of different climates. The geckotte is found in Amboyna, India, and Barbary, from which laſt country it was ſent by M. Brander to Linnæus. There is a ſmall ſpecimen in the Paris cabinet, marked by the name of St. Domingo lizard, which is diſtinctly a geckotte; ſo that in all probability this ſpecies may likewiſe inhabit the weſtern world. M. Olivier informs us, that the geckotte is very common in the ſouthern parts of Provence, where it is called *tarente*; a name applied in ſome places to the ſtarry lizard, and to a variety of the green lizard. It is there found among the ruins of old buildings, avoiding cool, low, or damp, ſituations, and generally keeping about the roofs. It prefers a warm expoſure, and baſks much in the rays of the ſun. During winter, it retires under the cover of the tiles, or into chinks of the walls, but without undergoing any perfect hybernation or torpor; for, when uncovered, it immediately endeavours to eſcape, but with a ſlow pace. It quits theſe retreats in the early part of ſpring, to warm itſelf in the ſun-beams, but never goes far from its hole, into which it retires on the ſmalleſt alarm. In the warmeſt ſeaſon of the year it moves quickly, but not with the amazing agility of ſome lizards. It feeds chiefly on inſects. It climbs readily, by means of its hooked claws, and the ſcales which cover the under ſurface of the toes, being able to run about very nimbly on the walls, and even under the beams of houſes. M. Olivier, from whom the foregoing account of this ſpecies was received, has often ſeen them fixed on the under ſide of the vault in a church. Thus the geckotte reſembles the gecko both in its manners and appearance. It has likewiſe been conſidered as venomous, probably on account of its reſemblance to that other ſpecies, which, according to the accounts of a great number of voyagers, emits a mortal poiſon; but M. Olivier declares, that he never could receive any proof of this fact, and that it always endeavours to eſcape, when ſeized, without making any attempts to bite. The geckotte always keeps in its hole before rain; but it never emits any cry on theſe occaſions, like the gecko; and M. Olivier, who has often caught it with pincers, aſſures us that he never heard from it the ſmalleſt ſound on any occaſion.

41. Lacerta Sinenſis, the Chineſe gecko: tail flat, all the toes unguiculated, and the face perforated by ſeveral pores. This was firſt deſcribed by Oſbeck, who obſerved it in China, where it is frequently ſeen in houſes, running about the walls, and climbing with extreme readineſs on the ſmoothest ſurfaces, preying chiefly on the ſmaller kind of blattæ. The head is broad and flat; the teeth ſmall; the tongue flat and emarginated at the tip. The body is flat, broad, and compreſſed at the ſides; the back beſet with black and whitiſh tubercles; the tail rather longer than the body, and flat or ancipital; the toes lamellated beneath, and all furniſhed with claws. The colour of the upper parts is cinereous; the abdomen white; and the tail variegated by ten or eleven blackiſh clouds or bars; about the ſides of the noſe and eyes are ſeveral ſcattered pores. This ſpecies is conſidered as perfectly innoxious. It appears to be omitted in the Gmelinian edition of the Syſtema Naturæ.

42. Lacerta geitje, Sparmann's gecko: body papillated above; tail lanceolate, of moderate length; the fore feet tetradactyle. This ſmall ſpecies, which does not exceed three inches in total length, is found at the Cape of Good Hope, where it is conſidered as a poiſonous animal, the ſaliva, ſecreted moiſture from its pores, &c. being ſaid to produce tumours, and even gangrenes, which are ſometimes cured by the application of lemon-juice, but, if too much neglected, are productive of dangerous ſymptoms. It ſeems to have been firſt deſcribed by Sparmann. Its colour on the upper parts is a variegation of darker and lighter ſhades, and on the under parts whitiſh.

43. Lacerta rapicauda, the turnip-tailed lizard: tail turbinate, ears concave. The body is white ſpotted with brown; the warts are ſmall, and thickly ſprinkled; the claws hollowed out in the middle underneath. Dr. Shaw deſcribes this ſpecies as ſo nearly allied to the common gecko, that it might paſs for the ſame animal, except that it is of a ſomewhat thicker form, with ſhorter limbs, and is leſs diſtinctly marked by tubercles on the back, which is rather covered by ſmall conical ſcales or granules; it is alſo deſtitute of ſubfemoral papillæ; the lamellæ of the feet are divided by a midrib, or longitudinal furrow, and the

the claws are ſheathed or retractile; the tail is of ſimilar form to that of the gecko, but appears to be liable to a ſingular variation, in which it is remarkably ſwelled immediately beyond its origin, and gradually tapers again to the extremity, ſo as to reſemble the form of a young turnip-root; being ſhorter than the body itſelf. Mr. Schneider names it the *perfoliated gecko*, from the appearance of the under ſurface of the feet, the lamellæ of which, being traverſed by a longitudinal midrib, repreſent in ſome degree the ſtructure of the leaves in a perfoliate plant. The colour of this ſpecies is cinereous, clouded or marbled with brown.

44. Lacerta fimbriata, the fimbriated lizard: a membranaceous fimbriated border on each ſide of the body; tail flat; lamellæ of the feet divided by a furrow. This remarkable ſpecies ſeems to have been firſt deſcribed by Cepede, who informs us that it appears in ſome degree to connect the chameleon, the gecko, and the water-newts; the head, ſkin, and general form of the body, reſembling thoſe of the chameleon; the tail that of the water-newts, being of a compreſſed form, though in a different manner, (not vertically but horizontally flattened;) while the feet reſemble thoſe of the gecko. The largeſt ſpecimen examined by Cepede meaſured about eight inches and ſix lines in length, of which the tail meaſured two inches and four lines. The head is very large, and much flattened; the eyes large; the opening of the mouth wide; the teeth very ſmall and numerous, and the tongue broad, divided, and reſembling that of the gecko; the lower jaw is ſo thin or flat, that one would at firſt imagine the lower part of the head to be wanting; the outline of the whole head, viewed from above, is almoſt triangular, as in the chameleon; but the triangle is of a much longer form, and without any riſing caſque or creſt as in that animal; the body is about twice the length of the head, and is bordered by a membrane or prolongation of the ſkin, which, commencing on each ſide the head, is continued along thoſe of the body, forming a kind of fringed or fimbriated proceſs, which alſo paſſes down each leg, ſeparating the upper ſurface from the lower; the tail, which, as before obſerved, is much ſhorter than the body, is ſo formed as to reſemble, in ſome degree, the ſhape of an oar, being expanded into a wide membranaceous part on each ſide; the true tail, or middle part, being taper and ſmall; the legs are rather ſhort; the feet divided into five toes, connected at their origin by the ſkin of the legs, but much divided and expanded at their tips, and are all furniſhed beneath with a number of tranſverſe lamellæ. The ſkin on all parts reſembles that of the chameleon, being covered with ſmall protuberances, ſo as to give it a ſomewhat ſhagreen-like appearance.

The colour of this animal is not conſtant or permanent, as in moſt lizards, but variable like the chameleon, preſenting ſucceſſively different ſhades of red, yellow, green, and blue. This variation of colour is, however, confined to the upper ſurface of the animal; the lower always continuing of a bright yellow. Theſe changes, we are informed, have been obſerved in the living animal by Monſ. Bruyeres in its native country, viz. Madagaſcar, where it is not very uncommon, and where, though a harmleſs animal, it is held in great abhorrence by the natives, who conſider it as of a poiſonous nature, and fly from it with precipitation; pretending that it darts on their breaſt, and adheres with ſuch force by its fringed membrane, that it cannot be ſeparated from the ſkin without the aſſiſtance of a raizor. The principal cauſe of this popular dread of the animal, is its habit of running open-mouthed towards the ſpectator, inſtead of attempting to eſcape when diſcovered. Its chief reſidence is on the branches of trees, where it lives on inſects, holding itſelf ſecure by coiling its tail, ſhort as it is, half round the twig on which it ſits. It chiefly appears in rainy weather, when it moves with conſiderable agility, often ſpringing from bough to bough. On the ground it walks but ſlowly, the fore legs being ſhorter than the hinder.

VII. *Five toes on each foot, but ſome of them connected; tail ſhort, moſtly round and incurved.*

45. Lacerta chamæleon, the chameleon. Specific character, head flat, body cinereous; toes joined by two and three. Few animals have been more celebrated by poets and hiſtorians than the chameleon, which has been ſometimes ſaid to poſſeſs the power of changing its colour at pleaſure, and of aſſimilating it to that of any particular object or ſituation. This, however, muſt be received with very great limitations; the change of colour which the animal exhibits varying in degree, according to circumſtances of health, temperature of the weather, and many other cauſes, and conſiſting chiefly in a ſort of alteration of ſhades from the natural greeniſh or bluiſh grey of the ſkin into pale yellowiſh, with irregular ſpots or patches of dull red; but not juſtifying the application of the Ovidian diſtich:

Non mihi tot cultus numero comprendere fas eſt:
Adjicit ornatus proxima quæque dies.

No numbers can the varying robe expreſs,
While each new day preſents a different dreſs.

The chameleon of the poets certainly never exiſted in nature; but it may and will always exiſt as the creature of genius and fancy. After throwing away all the fabulous qualities that have been attributed to the chameleon, when we ſhall have deſcribed it ſuch as it really is, it will ſtill deſerve to be conſidered as one of the moſt intereſting animals to naturaliſts; by the ſingular conformation of its various organs, by the remarkable habits which depend on theſe, and even by its extraordinary real properties, which are not extremely different from thoſe that have been falſely attributed to it by the poets. In the natural hiſtory of Pliny, lib. xxviii. cap. 29. may be ſeen all the chimerical virtues attributed to this animal by the ancients; and the ſecond book of Geſner contains all the abſurd fables that have been publiſhed relative to this animal.

Chameleons are found of various ſizes, but are ſeldom above fourteen inches long, of which the tail is ſeven inches; the length of the legs, including the toes, is about three inches. The head is flattened on the top and at both ſides; two elevated ridges, riſing from the muzzle, paſs almoſt immediately over each eye, of which they follow the curvature, and unite in a point at the back of the head, where they are joined by a third that riſes from the middle of the head, and by two others that reach upwards from each corner of the mouth. Seba compares it to the cap of a Netherland fiſherman. The whole ſkin of the chameleon is ſtrewed over with little knobs, like ſhagreen; theſe are extremely ſmooth, and more remarkable on the head, and are ſurrounded with minute, and almoſt imperceptible, grains. A row of ſmall pointed and conical eminences adorns the edge of each of the projecting ridges on the head, and ſimilar rows extend along the back, the tail, and the under ſide of the body from the muzzle to the anus. The noſtrils are placed at the tip of the muzzle, which is ſomewhat rounded. Theſe noſtrils muſt be of more than ordinary uſe in the reſpiration of this animal, ſince the mouth is frequently ſo very accurately cloſed, as to render it difficult to perceive the line which ſeparates the lips. The brain is extremely ſmall, ſeldom exceeding the twelfth part of an inch in diameter. The openings of the ears are either ſo ſmall as not to be perceptible, or they are altogether wanting; even the internal organs of hearing are ſo minute as to have eſcaped the obſervation of the gentlemen of the academy, who believed that they did not exiſt; but M. Camper has lately informed us, that he had undoubtedly detected them. This circumſtance is an additional proof of the ſlight ſenſibility of the organs of hearing in oviparous quadrupeds in general, and is, in all probability, one of the cauſes which produce the appearance of ſtupidity that has been obſerved in this ſpecies. The mouth is wide, and the

bones

bones of the jaws denticulated, ſo as to repreſent ſmall teeth. The tongue is of a very extraordinary form; being compoſed of a white ſolid fleſh, about ten lines long, and three broad, round, a little flattiſh towards the end, hollow, and open, ſomewhat like the end of an elephant's proboſcis. This tongue is faſtened to the *os hyoides* by means of a ſort of trunk, ſhaped like an inteſtine, ſix inches long, and a line broad, having a membrane without, and a nervous ſubſtance within, which is ſolid and compact, though ſoft, and not eaſily diviſible into fibres; this trunk ſerves to caſt out the tongue, which is faſtened to it, by extending it, and to draw it back by contracting it, which motion it is enabled to perform by a kind of cartilaginous ſtylus to which its inveſting membrane is attached, and over which it is plaited like a ſilk ſtocking on the leg: this ſtylus is an inch long, and takes its origin from the middle of the baſe of the os hyoides, as in the tongue of ſeveral birds; a number of blood-veſſels are diſtributed on the tongue.

The form, ſtructure, and motion, of the eyes, is very peculiar; they are very large, viz. above five lines in diameter; appearing ſpherical, projecting in the living animal full half of their diameter; they are covered with one ſingle eyelid or ſkin, pierced in the middle with a ſmall hole of not more than a line in diameter, through which the pupil appears, ſurrounded by a gold-coloured iris; the eyelid, or inveſting ſkin, is granulated like the reſt of the animal; the fore part of the eye is faſtened to the lid, ſo that the lid follows all the motions of the eye. Seba compares the lid to the ſpoked wheel of a coach, and the pupil to the nave. This ſtructure reſembles a good deal the artificial defence employed by the Laplanders, and other northern nations, for defending their eyes againſt the exceſſive reflection of light from the ſurface of the ſnow, by means of a narrow ſlit in a thin piece of wood. Perhaps, inſtead of this natural defence being intended to preſerve the acuteneſs of viſion in the eyes of the chameleon, it may be the cauſe of that property; as their eyes, leſs fatigued by too ſtrong admiſſion of light, may thereby acquire greater ſenſibility and acuteneſs. Beſides the above-deſcribed ſingularity in ſtructure, the eyes of the chameleon have another property, which ſeems to belong excluſively to this animal, as well as that other circumſtance; they are each moveable independent of the other, ſo that one eye ſometimes looks forward, while the other is turned backward; or one looks up, while the other ſees ſuch things as are below. Its feet are by no means fitted to ſerve as oars for ſwimming, but they are admirably adapted for keeping faſt hold of the branches of trees and ſhrubs which it frequents in ſearch of food. It is able to graſp theſe branches, holding one of the bundles of toes forward and the other behind, or one on each ſide, as is done by woodpeckers, cuckows, parrots, and other birds, which enables it to fix itſelf very firmly. In walking on the ground, however, this conformation by no means affords a firm ſupport; hence it keeps almoſt continually on trees. In this it is farther aſſiſted by the nature of its tail, which is long and prehenſile, like that of the ſapajous, (ſee SIMIA bulzebul,) and is very ſtrong; being enabled to lap it round the branches, with conſiderable force, it may be ſaid to uſe it as a fifth hand or paw, to prevent it from falling, and to aſſiſt in paſſing, with greater eaſe and ſafety, from one branch to another. Belon informs us, that the hedges in the gardens near Cairo, eſpecially along the banks of the Nile, contain great numbers of chameleons, which, he alleges, keep in that ſituation, on purpoſe to avoid the vipers and ceraſtes, which ſwallow them whole when they can get hold of them. They are not, however, ſafe from the ichneumon, or from birds of prey, even in theſe hedges, for their motions are extremely ſlow, in travelling from one branch to other; ſo that they may rather be ſaid to lie in ambuſh under the leaves, to catch ſuch inſects as may alight on, or come within reach of, its adheſive tongue, than to go in ſearch of prey. The quickneſs with which the chameleon ſeizes inſects, renders it uſeful to the Indians, who are rejoiced to ſee this otherwiſe innocent animal in their houſes. Its manners are ſo very gentle, that, according to Proſper Alpinus, a perſon may puſh the finger into its mouth, and it makes no attempt to bite.

Whether climbing ſlowly along the branches of trees, or concealing itſelf below the leaves in expectation of inſects, or walking deliberately on the ground, the chameleon is always extremely ugly in its appearance, having neither agreeable proportions, nor beauty of form, nor elegant movements, to pleaſe the eye of the obſerver; ſo that no one can attempt to catch, or even to touch, it without diſguſt. When walking on the ground, it ſteps forward in a cautious groping manner, never lifting one foot until well aſſured of the firmneſs of all the others. In conſequence of theſe precautions, its motions have a ridiculous appearance of gravity, when contraſted with the ſmallneſs of its ſize, and the activity one would expect to find in an animal ſo ſimilar to thoſe lizards that move about with ſo much quickneſs. Thus, this animal, which is ſo intereſting to naturaliſts, by the ſingular covering and mobility of its eyes, by the form and ſtructure of its feet and tail, and by almoſt every circumſtance in its figure, manners, and habits, ſeems only calculated to excite diſguſt or contempt in ſuperficial obſervers; and, but for its very extraordinary property of preſenting a variety of changing colours, according to circumſtances, which has attracted a very marked attention, it would never have become the favourite object of ſo many poets, and the common alluſion of almoſt the whole world. See fig. 10.

That it depended in a very conſiderable degree on the will of the animal to exert this power, was too apparent to be denied; but in what manner this effect was produced, and operated on the frame of the chameleon, was reſerved for the inveſtigations of later naturaliſts to determine with competent accuracy. Seneca maintained it was effected by ſuffuſion; Solinus, by reflection; and others, as the Carteſians, by the different diſpoſition of the parts that compoſe the ſkin, which give a different modification to the rays of light. Kircher aſcribes the change of colour in the chameleon to the power of imagination in the animal, becauſe it loſes it when dead. Dr. Goddard attributes it to the grains in the ſkin; which, in the ſeveral poſtures, he thinks, may ſhow ſeveral colours, and, when the creature is in full vigour, may have, as he terms it, *rationem ſpeculi*, or the effect of mirrors, and reflect the colours of the bodies adjacent. That the colours are not by any means determined by ſurrounding objects, has been the aim of late obſervers to demonſtrate; that they change with frequency and rapidity is admitted, but it is not true that they are influenced by the colour of any object in contact with it. The changes of colour which this animal exhibits vary according to the ſtate of its health, the temperature of the weather, the age or ſex, and a variety of other ſubordinate circumſtances, all which tend to operate a change in the variable aſpect of this ſingular creature. Theſe tranſitions conſiſt chiefly in the alteration of the ſhades from the natural green or bluiſh-grey of the ſkin into pale yellowiſh with irregular ſpots and variegations of dull red; or duſky inclining to blackiſh. The epidermis of this animal is tranſparent, the ſkin beneath yellow, and the blood of a lively violet blue. The tranſitory combination of thoſe colours therefore becomes apparent externally when the blood of the heart is impelled to the ſurface of the ſkin and the extremities, changing to violet, yellow, blue, and green, in a variety of hues, as the blood circulates near the ſuperficies. When the animal is ſick, it turns to a greyiſh dirty yellow, or browniſh, like a decayed leaf, this being the true colour of the ſkin when the blood is withdrawn; but, expoſe it to the rays of the ſun, the genial heat revives and invigorates the whole ſyſtem, and, ſetting the blood, before torpid, in motion towards the ſkin, the violet and bluiſh prevail

prevail again, and by their intermixture with the yellowneſs of the ſkin the green will alſo re-appear. Return it again into the cold, the blood is withdrawn from the ſurface of the ſkin inwardly, and theſe colours, which depend on the immediate preſence of the blood, will naturally fade away. Thus it happens alſo, that the colours of the chameleon are paleſt in the night-time, or in the dark, as Opſonville and Golberry have ſhown. The ſame effect, and depending on the ſame cauſes as in the chameleon, is alſo obſervable in the Lacerta bullaris, with this difference only, that the tranſitions of colour are not ſo decidedly evinced as in the chameleon; but this latter animal, which expoſed to the ſunſhine is of a clear green, changes to a duſky blackiſh green, or yellowiſh, and in the cold to grey blending into brown; this animal, like the chameleon, poſſeſſing the faculty of impelling its blood to the ſurface of the ſkin, or withdrawing it, and by that means of varying its tints at pleaſure. The ſame circumſtances are to be remarked, but in a ſtill leſs degree, in ſeveral other animals of the lizard tribe.

Chameleons have been ſometimes brought alive into this country. In the year 1780 a ſpecimen of this animal was kept in a living ſtate for ſome time in the Apothecaries' Phyſic Garden at Chelſea, which, though in a comparatively ſickly ſtate, exhibited thoſe tranſitions of colour from bluiſh-aſh to green, or yellowiſh ſpotted with brown, before-mentioned. Several chameleons have been preſerved alive at different times in Paris. One of theſe afforded the French academicians a favourable opportunity of inveſtigating the manners and ſtructure of this curious animal. The reſults of their inquiries are intereſting, and ſerve to throw conſiderable light upon the hiſtory of the chameleon. The following paſſages in particular ſeem to merit particular attention. "The colour of all the eminences (ſay thoſe writers) of our chameleon, when it was at reſt in the ſhade, and had continued a long time undiſturbed, was a bluiſh grey, except under the feet, where it was white inclining to yellow, and the intervals of the granules of the ſkin were of a pale and yellowiſh red. This grey, which coloured all the parts expoſed to the light, changed when in the ſun; and all the places of its body which were illuminated, inſtead of their bluiſh colour, became of a browniſh grey. The reſt of the ſkin, which was not illuminated by the ſun, changed its grey into ſeveral briſk and ſhining colours, forming ſpots about half a finger's breadth, reaching from the creſt of the ſpine to the middle of the back; others appeared on the ribs, fore legs, and tail. All theſe ſpots were of an iſabella colour, through the mixture of a pale yellow, with which the granules were tinged, and of a bright red, which is the colour of the bottom of the ſkin, viſible between the granules: the reſt of the ſkin, not enlightened by the ſun, and which was of a paler grey than ordinary, reſembled a cloth made of mixed wool; ſome of the granules being greeniſh, others of a minime-grey, and others of the uſual bluiſh grey, the ground remaining as before. When the ſun did not ſhine, the firſt grey appeared again by little and little, and ſpread itſelf all over the body, except under the feet, which continued of the ſame colour, but a little browner; and, when in this ſtate ſome of the company handled it, there immediately appeared on its ſhoulders and fore legs ſeveral blackiſh ſpots about the ſize of a finger-nail: theſe were evidently produced by fear, for they did not take place when it was handled by thoſe who uſually took care of it. Sometimes it was marked with brown ſpots, which inclined towards green. We afterwards wrapped it up in a linen cloth, where having been two or three minutes, we took it out whitiſh; but not ſo white as that of which Aldrovandus ſpeaks, which was not to be diſtinguiſhed from the linen on which it lay. Ours, which had only changed its ordinary grey into a very pale one, after having kept this colour ſome time, loſt it inſenſibly. This experiment made us queſtion the truth of the chameleon's taking all colours but white, as Theophraſtus and Plutarch report; for ours ſeemed to have ſuch a diſpoſition to retain this colour, that it grew pale every night; and when dead it had more white than any other colour; nor did we find that it changed colour all over the body, as Ariſtotle reports; for when it takes other colours than grey, and diſguiſes itſelf to appear in maſquerade, as Ælian pleaſantly ſays, it covers only certain parts of the body with them. Laſtly, to conclude the experiments relative to the colours which the chameleon can take, it was laid on ſubſtances of various colours, and wrapped up therein; but did not take them as it had done the white, and it took that only the firſt time the experiment was made, though it was repeated ſeveral times on different days. In making theſe experiments, we obſerved, that there were a great many places of its ſkin which grew brown, but very little at a time; to be certain of which, we marked, with ſmall ſpecks of ink, thoſe granules which to us appeared the whiteſt in its pale ſtate; and we always found, that when it grew browneſt, and the ſkin ſpotted, thoſe grains which we had marked were always leſs brown than the reſt." It appears in other reſpects, that its colour is liable to vary according as it is ſubjected to a greater or leſs degree of heat. In general, its colours are brighter when it is in motion, when it is handled, or when it is expoſed to the direct influence of the ſun in thoſe warm countries which it inhabits: they are, on the contrary, conſiderably paler when it is at reſt, when deprived of the ſun's influence, &c. Perhaps the whiteneſs it aſſumes after being wrapped up in linen or any other ſtuff, may proceed from its being thereby cooled. It becomes paler at night, becauſe the evenings are uſually colder. It likewiſe becomes white after death, becauſe then all internal heat and motion are extinguiſhed. Thus fear, anger, and heat, ſeem to be the cauſes of all the changes of colours to which it is ſubject, and which have given riſe to ſo many fables.

This ſpecies poſſeſſes, in a very eminent degree, the power of inflating moſt parts of its body, ſo as to increaſe its general ſize, and to give a full round figure to ſuch parts as are naturally flat and lank. This inflation, or blowing up, is produced by ſlow and irregular efforts; and proceeds ſometimes to ſuch a degree, as to double the uſual flaccid ſize of the animal, extending even into the feet and tail. The inflation continues ſometimes during two hours, leſſening a little at times, and increaſing again, the diminution being always ſlower in its progreſs than the increaſe. The chameleon is often for a great while entirely flaccid; and has then ſo complete an appearance of leanneſs, that the ribs, the vertebræ of the back, and all the tendons of its legs, may be ſeen and counted with great diſtinctneſs. In this ſtate, eſpecially when it turns round, it ſeems a mere animated ſkin, incloſing a few bones. The power of inflation is poſſeſſed, in a greater or leſs degree, by almoſt all the other oviparous quadrupeds, particularly frogs, but by all in a much inferior degree to the chameleon. The palpitation of the heart, in this ſpecies, is often ſo extremely feeble, as not to be felt on placing the finger directly oppoſite to it. The chameleon, like moſt other lizards, can live a very long time, ſometimes almoſt a whole year, without food; and it is probably from this circumſtance, that ſome authors have ſuppoſed it to feed entirely on air. Its mode of feeding, by means of the ſingular ſtructure of its tongue, has been already noticed; and Haſſelquiſt informs us, that he has ſeen the remains of butterflies and other inſects in its ſtomach. The chameleon which was kept for examination by the French academicians, occaſionally evacuated from its inteſtines certain ſmall ſtony concretions of about the ſize of a pea, of an apparently calcareous ſubſtance, and readily diſſolving in vinegar: one of them was found to contain in its middle the head of a fly; ſo that they muſt neceſſarily have been formed in the ſtomach or inteſtines of the animal.

The ſtructure of the chameleon is not fitted for producing any cry or diſtinct voice; but, when frightened, it opens its mouth, and makes a kind of hiſſing noiſe, like

that of ſerpents and ſeveral oviparous quadrupeds. It was known to Ariſtotle and Pliny, that in temperate regions, where there is ſome degree of winter, the chameleon retires, during the cold weather, into holes of rocks or other retreats, where it probably ſuffers hybernation, or becomes torpid, till the return of warmth again reſtores the languid energy of its functions. When it is carried from its native country into others only a little colder, it refuſes nouriſhment almoſt entirely; keeps itſelf fixed continually on a branch or ſome ſimilar body, only moving its eyes occaſionally, and ſoon dies. The female lays from nine to twelve eggs every year. The eggs are oval, their greater diameter being about ſeven or eight lines, and they are covered by a ſoft membrane, like thoſe of the guana, of ſea-tortoiſes, &c. The chameleon is found in all the warm countries both of the Old and New Worlds, in Mexico, in Africa, at the Cape of Good Hope, in Ceylon, Amboyna, &c. It has been the lot of this animal to intereſt mankind in a variety of ways; having been the ſubject of many ridiculous tales and agreeable fables, mixed with abſurd and fantaſtic ſuperſtitions. In Africa, particularly near the rivers Senegal and Gambia, it is the object of religious veneration. In ſome of theſe diſtricts, the negroes are enjoined by their religious inſtructors to aſſiſt the chameleon, when it is obſerved to be in any danger or difficulty; and yet, when dead, they do not ſcruple to dry its fleſh and eat it. The Moors and Arabs of Barbary carry the dried ſkins of chameleons about their necks, as an amulet to preſerve them from the malign influence of an evil eye.

The popular error, of the chameleon living on air alone, is thought to have ariſen from the long abſtinence which this animal can occaſionally ſupport; inſtances having, it is ſaid, occurred of its paſſing ſeveral months without any apparent nouriſhment. This, though aſſerted by reſpectable writers, is contradicted by the obſervations of the ingenious Sonnini, who, during his travels in Egypt, had an opportunity of aſcertaining this circumſtance, and actually did beſtow ſome pains, as appears from his writings, to determine this point to his ſatisfaction. "It is now well known (ſays Sonnini) that the changing of the colours in the chameleons is not to be aſcribed to the objects preſented to them; that their different affections increaſe or diminiſh the intenſity of the tints with which the very delicate ſkin which covers them is, as it were, marbled; that they are not ſatisfied with nouriſhment ſo unſubſtantial as air; that they require more ſolid aliment, and ſwallow flies and other inſects; and that, finally, the marvellous ſtories which have been told reſpecting this ſpecies of lizard are merely a tiſſue of fictions which have diſgraced the ſcience of nature down to this day. I have preſerved ſome chameleons; not that I was tempted to repeat the experiment of Cornelius le Bruyn, who, after having gravely aſſured us, that the chameleons which he kept in his apartment at Smyrna *lived on air*, adds that *they died one after another in a very ſhort ſpace of time*; but I wiſhed to ſatisfy myſelf to what a point they would ſubſiſt without food. I had employed every precaution to prevent entirely their having any, without ceaſing to be expoſed to the open air. They lived thus for twenty days; but what kind of life? From being plump, as they were when I caught them, they ſoon became extremely thin. With their good plight they gradually loſt their agility and their colours; the ſkin became livid and wrinkled; it adhered cloſe to the bone, ſo that they had the appearance of being dried before they ceaſed to exiſt."

β. The *Cuapapalcatl*, or Mexican chameleon, is thus deſcribed by Seba: The back is very crooked; the body thick, and of an ugly form. The head, however, is ornamented by a triangular crown of a hard bony ſubſtance; the angular ſides of which are not toothed, but are fringed with tubercles all round like rows of pearls, as well as in the forehead and noſe. The throat and all the lower part of the body appears ſet with ſaw-like teeth; the tail, all but the curled end, is of a ſimilar appearance. The back and venter are of a deep cinereous grey. The curled tail is belted with bands. The ſides of the venter are of a pale cinereous yellow, covered with ſmall round reddiſh ſcales variegated and ſhaded like marble. The tail of the female is more curled than that of the male. *Laur.* No. 59. *Seba*, t. 82. f. 1.

δ. The *great-headed chameleon*. In the Phil. Tranſ. for 1768, Mr. Parſons gave a figure and deſcription of a chameleon, that had been ſent along with other ſubjects of natural hiſtory to one of his friends, but of which he could not learn the native country. It might have been called with more propriety the large-creſted chameleon; for it did not differ, in any remarkable degree, from the other chameleons, either of the Old or New World, except in the form of its creſt; this appendage was not confined to the back of the head, but extended forwards, in two indented protuberances, to the tip of the muzzle over the noſtrils. It muſt require additional obſervations to determine whether this individual, which Mr. Parſons has deſcribed with great accuracy, belongs to a conſtantly-different race, or if it be only an accidental variety.

46. Lacerta Africana, the African chameleon: colour blackiſh, with a white ſtripe on the back; crown of the head carinate; toes all connected, but the claws diſtinct; bottoms of the feet very hard and firm. This, ſays Seba, came from the coaſts of Barbary, and is one of the largeſt yet known: along the back, to the end of the tail, runs a pure white ſtripe, bounded by a broad blackiſh band: the reſt of the animal is variegated with pale cinereous undulations. In the ſpecific character, as given by Dr. Gmelin, the word *nigricans* ſhould be ſubſtituted for *nigra*, ſince the ſtripes alone on the top of the back are of a black colour, as is evident from the deſcription and figure of Seba.

47. Lacerta pumila, the dwarf chameleon: body bluiſh on each ſide, marked with two yellowiſh lines. This, according to Seba's deſcription and figure, has the head ſomewhat flatter than the former, though ſtill elevated towards the middle part: it is alſo edged on each ſide by a denticulated margin. The body is of a bluiſh colour, marbled or variegated with white. It may well be doubted, however, whether either this or the former can properly be conſidered in any other light than as varieties of the common or firſt-deſcribed ſpecies. Cepede conſiders them both as varieties.

VIII. *Collar double; abdominal ſcales ſquare.*

48. Lacerta ameiva, the ameiva: tail verticillate, or ſurrounded by rings of ſcales, and long; thirty ſquared ſcales on the belly arranged in eight rows; a double wrinkled collar on the under ſide of the neck only.

The hiſtory of this ſpecies labours under more ambiguities than that of any other oviparous quadruped. The name *ameiva*, or *ameira*, has been applied to other lizards belonging to very different ſpecies. The real ameiva has received a number of names in different countries; ſuch as *temapara*, *taletec*, and *tamacolin*; which very names have likewiſe been applied to other ſpecies, particularly to the guana. Beſides theſe, the animal itſelf is liable to conſiderable variation in its colours, according to its age and ſex, and to the climate in which it lives, or to the ſeaſon of the year; ſo that different individuals of the ſame ſpecies have been conſidered as forming ſo many diſtinct ſpecies. Seba has no leſs than ſeven figures, diſtinguiſhed by different names. To reſtore preciſion to this part of natural hiſtory, the name *ameiva* is here excluſively appropriated to a lizard that is found in both Americas, and which has conſiderable connection, in ſeveral reſpects, with the nimble lizard and the green ſpecies of our more temperate regions. At firſt ſight, it may be confounded with one or other of theſe; but a very ſlight examination is ſufficient to point out the difference. It wants the double collar, compoſed of large ſcales, which is always

found in these two other species; instead of which, the skin on that place, covered only by small scales, forms one or two transverse wrinkles or folds. This differential character has been very happily applied by Linnæus; but Cepede has added several others, from an inspection of individuals preserved in the imperial cabinet at Paris. The head is more lengthened and more flattened at the sides; its upper part is narrower; and the muzzle more pointed, than in these two other species. The tail is generally longer in proportion to the body. The ameiva grows in general to a size nearly equal to that of our green lizard. The individual from which Cepede described the species, and which was sent from Cayenne by M. Léchevin, was twenty-one inches long from the tip of the muzzle to the tip of the tail; and of this the tail measured twelve inches and a half: the circumference of the body, where thickest, was four inches and three quarters. The mouth opens as far as behind the eyes; and the jaws, which are covered by a double row of large scales, are armed with a great number of very small teeth, which resemble somewhat those of the guana, the smallest being towards the muzzle. The top of the head is covered with large scales, as in the green and nimble lizards. The upper part of the body and of the legs is covered with scales of so small a size, as to be hardly sensible; but those which cover the under part of the body are large, square, and ranged in transverse rows or bands. The tail is surrounded with rings of scales, of a long four-sided figure. The insides of the thighs have each a row of tubercles. The toes are long, separated from each other, and armed with tolerably-strong claws. It has been already mentioned, that the colour of this species varies considerably, according to age and sex, to peculiarities in the climates of the different countries in which it is found, and to the temperature of the atmosphere and season of the year in the same countries: in general, however, it seems that the ground or prevailing colour is green or greyish, less or more diversified with spots, blotches, or streaks, of more lively colours; and these are sometimes so disposed as to form round spots, or eyes; from which circumstance both this and the green species have sometimes been called the *Argus* lizard. Perhaps, like the lizards of our country, the ameiva may form a family, in which the grey and the green individuals ought to be considered as permanent varieties: but it would require more accurate and more extended observations than have yet been communicated, to enable naturalists to decide precisely on this question. The ameiva is not confined to America, but is likewise found in the Old World; a specimen was brought from India by M. le Cor, the colour of which was a very beautiful green, mixed in different places with yellow. Gronovius has described, under the name of *anolis*, a lizard of Surinam, evidently of the same species with ameiva of Cayenne.

β. The *Surinam ameiva*. In this variety, a broad dark band, ornamented with a light hem or fringe marked with white specks, extends along each side of the back. The back itself is of a lighter blue, and covered with small white scales variegated with black spots. The forehead, which is of a pale blue, is covered with remarkable large scales, as are the ventral and the fore feet. The tail is ornamented with narrow belts and black spots. *Seba*, t. 88. f. 1.

Seba also mentions a larger Surinam lizard, which, according to Jonston, is called *ameiva* by the inhabitants of the Brasils, from its elegance and beauty. The forehead in particular displays white, black, and red, scales upon a white ground, intermixed with small tubercles. All the rest of the body is blue, variegated like marble, with black and white intermixed here and there with small red spots. The legs are ornamented in like manner. The feet yellow, with strong black nails. The tail long, belted to the end with black and red. *Seba*, t. 88. f. 2.

49. Lacerta tiliguerta, the tiliguerta lizard: tail verticillate, twice the length of the body, abdominal scuta eighty. This, which is a small species, measuring between seven and eight inches in length, is allied to the green lizard, and is a native of the island of Sardinia, where it is said to be found in fields, about walls, &c. The male is green, spotted with black; the female brown.

50. Lacerta agilis, the nimble lizard. Specific character, a longish round tail, surrounded by rings of sharp scales; and having a kind of collar underneath the neck, composed of scales.

This elegant small species, which is known, as the plaything of youth, to almost every person in the temperate regions of Europe, seems to be the most gentle and inoffensive, and at the same time the most useful, of all the lizard tribe. Though its colours are not so brilliant as those of several other oviparous quadrupeds, its covering is however very elegant, and its appearance very engaging. It is fond of basking in the sun; yet, unable to bear excessive heat, it seeks shelter in the hottest weather. In spring, during fine weather, it is often seen extended on a sloping green bank, or on a wall exposed to the sun, which, by reflecting its rays, augments the natural warmth of the season. In this situation, it enjoys the full effects of the reviving heat; expressing its delight by gently agitating its slender tail; and its lively eyes are animated with pleasure. Should any of the minute animals appear on which it feeds, it springs upon them with the quickness of thought; and, if any danger occur, it seeks a more secure retreat with equal rapidity. Far from flying the approach of man, it seems to eye him with satisfaction; but on the smallest noise, even the falling of a single leaf, it turns suddenly round, falls down, and seems for some instants perfectly stupefied by its fall; or, it suddenly shoots away and disappears, returns again, seems agitated, conceals itself again, returns, describes several circuitous contortions so rapidly as hardly to be followed by the clearest eye, and finally retires into its concealment until its terror is removed. This wonderful agility and rapidity of motion is chiefly to be seen in the warm countries; for in more temperate regions its evolutions are greatly more languid.

The head of this species is triangular, and flattened on the top; its upper part being covered by large scales, of which two are placed in such a manner over the eyes as to resemble shut eyelids. Its muzzle is small, elegant, and of a rounded form. The openings of the ears are tolerably large. The two jaws are of equal size and length, and are covered on the outside by large scales, being armed with very small hooked teeth, having their points turned inwards. The feet have five slender toes on each, furnished with hooked claws, which assist it in climbing trees, and in running nimbly along the surface of walls; and, having the hind legs somewhat longer than the fore, as in most lizards, it is thereby greatly assisted in the agility of its motions, even in running up walls and trees. There is a small string or row of tubercles along the inside of each hind thigh, similar to what has been already remarked in the guana and several other species. The whole figure and appearance of this small lizard is delicate and agreeable. The grey colour, which for the most part adorns its upper parts, is variegated by a great number of whitish blotches, and by three longitudinal stripes along the back, almost completely black, that in the middle being narrower than the rest. The belly is green, changing with blue. There is no part of its external scaly covering but exhibits an agreeable appearance of mild but changing reflections of coloured light; and, to give additional beauty to this elegant simplicity of its natural dress, the under part of the neck is adorned with a double collar, usually composed of seven scales, somewhat larger than those on the rest of the body, particularly than those immediately contiguous; and these have the colour and brilliancy of burnished gold. In other respects, as in almost all lizards, the distribution and shades of colours in this species are subject to considerable variation, according to differences in age, sex, and climate; but, so far as can be judged of, by the inspection of many living specimens, the general colour is always such as has been above described. The belly is covered by scales of consi-

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derably larger ſize than thoſe on the upper parts of the body: which ſcales are of a quadrangular figure, and are ranged in tranſverſe bands or fillets; and this circumſtance forms a peculiar character in the ſubdiviſion of the genus in which this ſpecies is placed.

This ſpecies is uſually five or ſix inches long, by about half an inch broad. The tail is nearly twice the length of the body, and tapers from its root to the extremity, where it ends in a point. It is blotched or ſpotted with white and a moderately-deep black, being ſurrounded by numerous diſtinct rings of ſcales, often as far as eighty circles, that lap over each other downwards. When this tail has been broken off by any accident, it is ſometimes reproduced: and even when it has been ſplit, or divided lengthways, it is occaſionally replaced by two or even three tails; of which one only contains vertebræ, and the reſt have only a kind of tendon in the centre. That this ſpecies has ſometimes two tails is an obſervation which has been made by Pliny and ſeveral other writers long ago; but, as it is very common to ſee this animal tormented in a variety of manners by children, it is extremely probable, that, having ſplit the tail lengthways, each of the portions rounded itſelf in healing, and thus each became an apparently-complete tail. Numerous examples of this fact are continually occurring; for they are extremely liable to ſuch a loſs, even when ſporting together; becauſe the ſmall vertebræ, or joints, of which their tails are compoſed, are exceſſively brittle, and eaſily ſeparate from each other by the ſlighteſt degree of violence. Hence it is very common to find lizards having tails of various lengths, while naturally their tails have always a certain fixed proportion. According to M. Marchand, the new or re-produced tail is only ſupported by a kind of central tendon, inſtead of the cartilaginous vertebræ which naturally belong to this member. The ſame naturaliſt ſays, that he had endeavoured to try this fact experimentally, but that it had never ſucceeded in any of his trials, and that he could not diſcover the cauſe of his failure. Nothing remained to him but the ſatisfaction of having fruitleſsly tormented a few of the moſt harmleſs animals in nature. Snuff, or the powder of tobacco, is an almoſt-certain poiſon for this ſpecies. When that ſubſtance is put into its mouth, it falls almoſt inſtantly into convulſions, and generally dies very ſoon after. As uſeful as it is agreeable in its appearance, this ſpecies would become infinitely more ſalutary to mankind, if it were more numerous. It feeds on flies, crickets, graſshoppers, earth-worms, and almoſt all thoſe inſects and worms that deſtroy our fruit and grain. Hence, the more it multiplies, the more the enemies of our fields and gardens muſt be diminiſhed. Were this the caſe, we ſhould then have ſome reaſon to look on it, as is done by certain ſavage nations, as a fortunate omen, and the harbinger of proſperous events. To ſeize the inſects on which it feeds, it darts out, with aſtoniſhing velocity, a large forked tongue, of a reddiſh colour, which is beſet with aſperities, that are ſcarcely ſenſible to the ſight, but which aſſiſt greatly in catching its winged prey. Like moſt other oviparous quadrupeds, it is capable of exiſting a long time without food. Seba kept one for ſix months in a bottle, without the ſmalleſt nouriſhment, and at the ſame time without voiding any excrement, for not a ſpot or ſtain appeared on the glaſs which incloſed it.

In the ſouthern countries of Europe, the nimble lizard revives very early in ſpring from the torpid ſtate in which it had paſſed the cold weather of winter; and, recovering its activity, begins its ſportive evolutions, which increaſe in agility in proportion to the heat of the atmoſphere. About the end of April, the two ſexes unite in ſuch cloſe embraces, that it is difficult to diſtinguiſh them from each other; and, if love is to be appreciated by the vivacity of its expreſſion, this ſpecies muſt be conſidered as one of the moſt ardent of the oviparous race. The eggs, which are almoſt round, and ſeldom above five lines in diameter, are carefully placed by the female in very warm ſituations, ſuch, for inſtance, as the foot of a wall fronting the ſouth; and, being laid in the warm ſeaſon, are hatched entirely by the heat of the ſun and atmoſphere. Before the commencement of the ſexual intercourſe, this ſpecies, like almoſt all other lizards, changes its ſkin; and then, in its new dreſs, joins in ſatisfying the reproductive appetite. It changes its ſkin a ſecond time, about the beginning of winter, and paſſes that ſeaſon in a ſtate of torpor, more or leſs complete, according to the rigour of the ſeaſon, either in holes of trees or of walls, or in ſubterraneous places; and again quits theſe melancholy retreats at the firſt appearance of the genial warmth of ſpring.

Varieties. β. With the loweſt ſcales of the collar looſe, and the ſcuta of the middle ſeries round.

γ. The *Green Lizard.* This is made a diſtinct ſpecies by Cepede; and Shaw's deſcription of the L. agilis belongs to this variety. It reſembles the nimble lizard in every thing, except in being conſiderably larger, and in having much more lively colours. The colouring of this ſpecies is ſeen in its greateſt brilliancy about the beginning of ſpring; when, after having thrown off its old covering, it expoſes its new ſkin, with all its bright enamelled ſcales, to the genial warmth of the ſun's rays, which, playing on the ſcales, gild them with undulating reflections. The upper parts of the body are of a beautiful green, more or leſs variegated with yellow, grey, brown, and even ſometimes with red; the under parts being always more of a whitiſh colour. The colours of this ſpecies are ſubject to variety, becoming pale at certain ſeaſons of the year, and more particularly after the death of the animal; and it is chiefly in the warm countries that it ſhines in all its ſuperb ornaments, like gold and precious ſtones. In theſe regions it grows to a larger ſize than in more temperate countries, being ſometimes found thirty inches in length. The ſpecimen from which the preſent deſcription was formed, was ſent from Provence to the royal cabinet at Paris, and meaſures twenty inches, including the tail, which almoſt equals the length of the head and body. The diameter of its body is two inches at the thickeſt part. The upper part of the head, as in the nimble lizard, is covered by large ſcales, regularly arranged at each others' ſides. The edges of the jaws are adorned by a double row of large ſcales. The openings of the ears are oval, the long diameter being four lines; and the tympanum is diſtinctly perceived. The kind of half-collar under the throat reſembles that of the nimble lizard, being formed of large ſcales, which were eleven in number in our ſpecimen. The ſcales on the back are the ſmalleſt, being of an hexagonal figure; but the angles are ſo little diſtinct as to make them ſeem round. The ſcales on the belly are large, and in form of lengthened hexagons, forming thirty half-rings, or tranſverſe bands. A row of thirteen tubercles extends along the inſide of each thigh: theſe are hollow; and a ſmall perforated nipple appears diſtinctly on the middle of each, riſing a little above the edge of the little cavity of the tubercle from which it projects. The tranſverſe furrow at the extremity of the under part of the body, which forms the anus, reaches almoſt completely acroſs. The tail, which begins immediately below this furrow, diminiſhes gradually in ſize from its origin to its extremity, where it ends in a point. It is covered by ſcales, which are longer than they are broad, and which are larger than thoſe on the back, being arranged in circular rings, uſually to the number of ninety. Of the reproductive power of this animal, Seba ſpeaks in the following ſtrange manner: If you cut off a ſmall piece of the tail, and place the piece cut off *at the diſtance of one or two feet from the remaining part*, they will both meet again, and are attracted by ſo ſtrong a ſuction, that the parts are united as if they had not been ſeparated. The letter D in his 5th plate is deſcriptive of the fact, which Seba himſelf proved. He acknowledges, however, that if a part of the tail is *pulled off*, the fleſh appears mangled, flabby, and jagged, nor can it again unite or grow together from the injury it has ſuſtained. The green lizards will play with children, in the ſame manner with the nimble ſpecies; but, when in confinement, they may be excited to fight,

and

and then bite each other with great fury. Being ſtronger than the nimble lizard, this ſpecies ſometimes fights with ſerpents; but is very rarely ſucceſsful, generally falling a victim to the unequal combat. It feeds on earthworms and inſects, and ſwallows ſpittle with great avidity. Geſner relates, that he has ſeen a green lizard drink the urine of a child. It likewiſe eats the eggs of ſmall birds; for which purpoſe it climbs the higheſt branches of trees with great agility. Though lower on its legs in proportion than the nimble lizard, it runs very ſwiftly; and its firſt motions, when it ſprings from among buſhes or dry-leaves, are often ſo rapid as to excite ſenſations of ſurpriſe, or even of fear. It leaps very high, and with great force. Being ſtronger, it is likewiſe braver, than the nimble lizard; and even defends itſelf, when attacked, againſt dogs. Being accuſtomed to fix upon the noſtrils of ſerpents, with different kinds of which it is often forced to engage, it flies inſtantly at the muzzle of dogs, and fixes itſelf ſo obſtinately, that it allows itſelf to be carried off, and even killed, rather than quit its hold. It is not, however, to be conſidered as dangerous, at leaſt in the temperate regions, though ſome people have falſely attributed to it the property of giving mortal, or at leaſt dangerous, bites. The inhabitants of Africa eat the fleſh of this animal. The green lizard is by no means confined to the warmeſt countries of both continents; it is found likewiſe in the temperate regions, though it is there ſmaller and leſs numerous. It is not unknown in Sweden, nor even in Kamtſchatka; and in both countries, in ſpite of its beautiful appearance, it is looked on by the inhabitants with horror, from ſome ſtrange ſuperſtitious prejudice.

A ſort of green lizard is found in the neighbourhood of Paris, which is diſtinguiſhed by a particular ſtripe from the ſummit of the head to the tip of the tail, extending to a little above the inſertion of the legs, eſpecially the hinder ones. This ſtripe is of a browniſh-grey colour, ſpotted with deep brown, dotted all over with yellow, and edged on each ſide by a narrow whitiſh line.

We may take notice in this place of an American lizard, mentioned by Cateſby, which has ſome reſemblance to the green ſpecies: it is called, by that writer, the *Carolina green lizard*; but Rochefort, and Ray after his example, give it the name of *gobemouche*, or fly-catcher. This beautiful ſpecies or variety ſcarcely exceeds five inches long; and ſome individuals, eſpecially the females, are only about the length and ſize of a finger. Though ſo much inferior to the green lizard in ſize, it equals that animal in beauty. Moſt of theſe lizards are of a very bright green colour: ſome appear as if adorned with gold and ſilver; and others are of a golden green, or are ornamented with various brilliant and agreeable colours. Theſe animals are extremely uſeful in houſes, by deſtroying flies and other troubleſome or noxious inſects. It is hardly credible with what induſtry, agility, and dexterity, they follow and ſeize their prey. They will ſometimes remain motionleſs for half a day, waiting for the inſects on which they feed; and, when one appears, they ſpring at it with the ſwiftneſs of an arrow, even from the tops of high trees, on which they climb with great agility. Their eggs are about the ſize of peaſe, which the female covers ſlightly with earth, and leaves to be hatched by the heat of the ſun. They are ſo familiar as to enter the rooms of the houſes without fear, and will mount on the tables, while people are employed at their meals, in ſearch of inſects, and leap after them even on people's clothes; yet are they ſo cleanly and ſo pretty, that they produce not the ſmalleſt diſguſt. Indeed this little animal has every quality that can delight the eye, or intereſt the beholder in its favour: it is beautiful, active, uſeful, patient, and induſtrious; it is however extremely delicate, and never appears except during ſummer, at leaſt in latitudes diſtant from the tropic. In theſe countries it remains all winter in holes of rocks or of trees. Sometimes a hot day in winter awakens it from the ſtate of torpor, ſo much as to make it venture out of its retreat; but as, on theſe occaſions, the cold returns ſuddenly, it is often unable to regain its hole, and dies with cold. Though very nimble, it finds great difficulty in evading the purſuit of cats and birds of prey. Its ſkin is ſo delicate as hardly to conceal the internal changes to which it is ſubject; for it changes colour, like the chamelion, according to its ſtate of health or activity, or, more properly ſpeaking, according to the temperature of the air. In a hot day it is of a bright green colour; and, if the next day be cold, its colour is then of a brown hue. The freſhneſs of its colour diſappears after death, when its ſkin becomes pale and livid.

δ. The *Silky Lizard*; of a brown colour, with a very thin ſkin.

ε. The *Argus Lizard*, with numerous ocellate ſpots on the body.

ζ. The *Earthy Lizard*; of a browniſh earthy colour, with a row of indiſtinct ſpots on each ſide.

η. The *Red Lizard*. The back tawny red, ſides brown.

θ. The *Bluiſh Lizard*. On each ſide a triple row of ocellate ſpots on a bluiſh ground.

ι. The *Variegated Lizard*. Green ſpeckled with brown; collar tawny.

κ. The *Blue Lizard*, ſpotted with white, from the iſland of Java. The whole ſurface of the body is of a bluiſh caſt, with bright white ſpots on each ſide the venter, the haunches, and tail. The head is marked with three bright lines, reaching from the mouth and eyes to the ears, which are deep in the head. As to the reſt, ſmall deep blue ſquamæ ornament alike the head, which is oblong and pointed, and the back. The colour on the belly, tail, and feet, is paler. The ventral ſquamæ are ſomewhat larger, of an oblong ſquare, and of an obſcure cinereous grey. The Indians ſay that they are very fond of, and feed upon, mice.

λ. The *Murine Lizard*. This is alſo blue; the ſides ſpeckled with white.

μ. The *Little Brown Lizard* is added by Dr. Shaw as a variety, being found in many parts of Europe, where the larger or green kind is not to be diſcovered. It is generally of the length of about ſix or eight inches, and is of pale greyiſh or greeniſh brown colour, with a pair of duſky or deep-brown dorſal or lateral ſtripes, ſpeckled with ſmall whitiſh ſpots, and accompanied by a few yellowiſh variegations; the under parts are of a very pale bluiſh or whitiſh green, and ſometimes yellowiſh. This variety is found in our own country, and is occaſionally ſeen baſking, during the hotter part of the ſummer, about the roots of trees, old walls, &c. &c. in purſuit of inſects, and generally eſcaping with great readineſs, if purſued.

51. Lacerta ſeps, the eft: tail verticillate, longiſh, ſcales on the body ſquare, and a ſuture or ſtripe along each ſide; legs ſhort, diſtant.

The eft forms a ſhade or link of connection between the lizard tribe and that of the ſerpents. Its ambiguous form and character ſerve as very diſtinct marks for diſtinguiſhing it from other ſpecies of this genus. The eyes are very ſmall; and the openings of the ears are much leſs obvious than in moſt lizards. The tail is commonly ſhort, but is ſometimes longer than the body, ending in a very ſharp point. The whole body is covered by quadrangular ſcales, generally in eight rows, which form a number of ſtreaks, both longitudinal and tranſverſe. The colour is generally paler on the belly than the back; and along the upper part of each ſide a pale ſtripe extends from behind the head almoſt to the end of the tail, bordered above and below by a very narrow ſtripe of black. The ſize of this ſpecies, like that of other lizards, varies according to climate, food, and tranquillity. In Provence, and the other ſouthern provinces of France, it ſeldom exceeds five or ſix inches in length; but, in other countries more congenial to its nature, it ſometimes grows to twelve or even fifteen inches. The legs are ſo extremely ſhort as only to meaſure two lines, or the ſixth part of an inch, when the body is twelve inches in length. They ſeem hardly capable of reaching the ground, and yet the animal uſes them very readily

readily in walking. Each of theſe feet have three minute toes, which are hardly viſible, but are all furniſhed with claws, as in moſt other lizards. Linnæus counted five, or at leaſt four and ſome appearance of a fifth, in the ſpecimen he examined in the collection of Prince Adolphus; but in ſeveral ſpecimens from different countries, we could never find more than three, even with the aſſiſtance of ſtrong magnifiers.

Several naturaliſts have conſidered the eft to be a ſpecies of ſalamander; and, as the ſalamander is believed by many to be venomous, the eft has been thought ſo likewiſe. It was even believed by the ancients to be a noxious animal; and the name *ſeps*, which they applied to this ſpecies, to the chalcides, to very venomous ſerpents, centipeds, and other dangerous reptiles, which is derived from σηπω, to corrupt, may be conſidered as a general expreſſion for moſt poiſonous animals. From the obſervations of M. Sauvage, it would appear that the eft is not in the leaſt venomous in the ſouthern parts of France, and that its bite is never followed by any diſagreeable conſequences. That naturaliſt relates, that he has ſeen a ſeps ſwallowed by a fowl, without producing the ſmalleſt inconvenience. He adds, that, the fowl having ſwallowed a ſmall living ſeps head foremoſt, it made its eſcape immediately after by the anus, as earth-worms often crawl from the guts of ducks: the fowl ſnatched it up a ſecond time, but with the ſame bad ſucceſs as at firſt; however, on a third attempt, the ſeps, being bit through the middle, remained in the ſtomach of its enemy. From the facility with which the ſeps, in this inſtance, glided through the bowels of the fowl, M. Sauvage propoſes it as a more effectual remedy, in certain diſorders, than the uſual preſcriptions of lead and mercury. M. Cetti ſays likewiſe, that he never heard of any accident in Sardinia occaſioned by the bite of an eft, and that it is univerſally conſidered as a harmleſs animal in that iſland; only it is believed, that, when cattle or horſes happen to ſwallow one among their graſs, they ſwell, and are in danger of dying, unleſs a drench of oil, vinegar, and ſulphur, be immediately adminiſtered. The eft ſeems to dread the effects of cold even more than the land-tortoiſe and moſt other oviparous quadrupeds, as it conceals itſelf earlier in the earth at the approach of winter. In Sardinia, it diſappears at the beginning of October, and is only found in holes below ground after that period: it leaves its retreat in ſpring, frequenting places covered with graſs; and remains in theſe ſituations all ſummer, even when the graſs is quite burnt up.

Gmelin adds the two following, as varieties, but with an expreſſion of doubt, whether they ſhould be conſidered as belonging to this ſpecies.

β. The *Variegated Eft:* marked with ſcarlet; the head varied with black and white.

γ. The *Marbled Eft:* of a blackiſh blue colour; having irregular white ſtripes, intermixed with round white ſpots.

M. Thunberg, in the Memoirs of the Academy of Stockholm for 1787, under the name of *Lacerta abdominalis*, has given the deſcription of a lizard that is found in Java and Amboyna, which has great reſemblance to the ſeps; from which it only differs in the tail being proportionally much ſhorter, and in the number of its toes. But, as Thunberg does not appear to have ſeen that animal alive, and as he mentions that the extremity of the tail was naked and without ſcales, we may readily conceive that his ſpecimen had loſt part of its tail by ſome accident. He likewiſe acknowledges, that it was extremely difficult to diſtinguiſh the toes of his ſpecimen with the naked eye: hence it may have been ſo far injured in drying as to give the appearance of five toes, when in reality it may only have three, as in the ſeps; in which caſe it will fall to be conſidered as belonging to this ſpecies.

52. Lacerta velox, the ſwift lizard: tail verticillate, longiſh: collar beneath ſcaly; body above cinereous, varied with five longitudinal paler ſtreaks and brown dots; ſides ſpotted with black and dotted with bluiſh. This ſmall lizard, deſcribed by Pallas in the Supplement to his Ruſſian Travels, ſeems only a variety of the *agilis*, or nimble lizard. It has the ſame general figure of body and tail; ſimilar ſcales under the throat, arranged in form of a collar, and ſimilar rows of tubercles on the inſide of its thighs. It is of a cinereous colour, longitudinally ſtreaked with paler; the back is marked with ſmall reddiſh brown dots, the ſides being marked with bluiſh dots and ſome black ſpots. This animal was found among rocks and ſtones, in very warm deſert places, in the neighbourhood of lake Inderſkoi: and its motions were as quick as an arrow.

53. Lacerta cruenta, the bloody lizard: tail verticillate, cinereous above, blood-colour beneath, with a whitiſh tip; a tranſverſe fold under the throat. This is a ſmall ſpecies, and reſembles the preceding, but conſidered by Cepede as a variety of the *algira*. It has a ſharper ſnout than the *velox*. The body is brown above, with ſeven white ſtripes on the neck, four of which are continued as far as the tail; limbs ſpotted with round white ſpots; body white beneath; a row of tubercles on the thighs. Native of the ſouth of Siberia, inhabiting the country about the ſalt lakes.

54. Lacerta arguta, the argute lizard: tail verticillate, ſhort, thickiſh at the baſe and filiform at the tip, with a collar of obſcurely marked ſcales, and a remarkable double creaſe under the neck. Native of the ſouth of Siberia: deſcribed by Dr. Pallas: allied to the green lizard, but of a ſhorter or more ventricoſe form, with a ſharper ſnout, and leſs numerous as well as leſs diſtinct ſubfemoral tubercles: colour glaucous above, with ſeveral ſubconfluent tranſverſe black bands, moſt diſtinct at the baſe of the tail, where they are marked by ocellated ſpots of the ground-colour of the back: under parts white.

55. Lacerta Algira, the Algerine lizard: tail verticillate, longiſh; two yellow lines on each ſide the body. This lizard, which ſeldom exceeds the length of a finger, does not certainly derive its minuteneſs from any defect of heat in Mauritania in Barbary, its native countries, from which it was ſent by M. Brander to Linnæus: neither can it be alleged, that it is ſmall on account of the ſcarcity of moiſture in theſe countries, ſince there is a ſpecimen of this ſpecies in the French royal cabinet, preciſely ſimilar to the African individuals, which came from Louiſiana, where moiſture is equally abundant with heat. The body is brown above, and yellowiſh underneath, the ſcales on the middle of the back being ſharpiſh and ſomewhat elevated into a kind of ridge; and on each ſide of this ridge there are two longitudinal yellow lines, the undermoſt of which divides the belly from the ſides. The tail is rather longer than the body, diminiſhing gradually to a point at the extremity, and is ſurrounded by regular rings of ſcales. In the relation of his Voyage into Barbary and the Levant, Mr. Shaw mentions a lizard, under the name of *zermouněah*, as very common among the hedges and on the high roads: he does not deſcribe the ſize of that animal, which is probably the ſame with the ſpecies of this article, only ſaying, that its ground-colour is bright brown, with three or four yellow ſtreaks from one end to the other.

56. Lacerta tiligugu, the Sardinian lizard: tail round, conical, middle-ſized; jaws equal; toes five, edged with a membrane, and furniſhed with claws. This ſpecies has very conſiderable reſemblance to the ſcink; but its legs are ſhorter in proportion, and the upper jaw does not exceed the length of the lower. It has been called *mabouya* by ſome writers, and the ſame name has been applied by others to the L. aurata. In that ſpecies, the tail is longer than the body, while in this it is conſiderably ſhorter. The word *mabouya* ſignifies, in the language of the American ſavages, any object which inſpires horror or diſguſt. The head of this ſpecies ſeems, as in the ſcink, to originate

nate immediately from the body, which gradually grows narrower towards the head and tail. The whole body, both above and underneath, is covered by rhomboidal ſcales, like thoſe of fiſhes, overlapping each other in alternate rows; their ground-colour is gold-yellow, while ſeveral of thoſe on the back are blackiſh, or dark brown, with a ſmall white line along the middle of each. On each ſide of the body, there is a longitudinal ſtreak of black ſcales, the ground-colour growing lighter on the inſide of theſe two ſtripes, where there are two other longitudinal ſtreaks almoſt white. The colours, however, are ſubject to variety: thoſe that live among rotten trees, in marſhy places, and in deep ſhady valleys, where the rays of the ſun ſeldom penetrate, are almoſt black; and, perhaps, theſe may be conſidered as juſtifying, in ſome degree, what has been ſaid reſpecting their hideous appearance. The ſcales of theſe ſeem ſmeared over with oil or varniſh. The muzzle is blunt; the openings of the ears are tolerably large; the claws are hooked; the tail is thick, blunt, and very ſhort. The individual in the French cabinet meaſures eight inches long; but thoſe deſcribed by Sloane are conſiderably ſmaller, probably becauſe they were not full grown. This ſpecies climbs trees, and crawls about the poſts and beams of the negro huts; but it more generally frequents the clefts and hollows of old rotten wood, from which it only comes forth during the heat of ſummer. The ſavages of America believe both this ſpecies and the aurata to have venomous properties; but Sloane and Brown aſſert that they could never learn any poſitive proof in ſupport of that opinion. Sometimes they attack boldly ſuch as irritate them, and keep ſuch faſt hold as to be very difficultly ſhaken off. This animal chiefly inhabits the Weſt-India iſlands, but is likewiſe found in the Old World, particularly in Sardinia, where it is known by the names of *tiligugu* and *tilingoni*. M. Cetti, from whoſe Natural Hiſtory of that iſland this information is derived, and who has given a very accurate deſcription, has obſerved with great acuteneſs the circumſtances of reſemblance and difference between it and the ſcink; and, not having been acquainted with the deſcription of Sloane, Rochefort, and Dutertre, very naturally ſuppoſed it an unknown ſpecies.

Profeſſor Thunberg of Upſal has given, in the Stockholm Memoirs for 1787, an account of a lizard of the iſland of Java, which he calls *Lacerta lateralis*, which appears to be only a variety of this ſpecies. He compares it with the ſcink and L. aurata, from both of which it differs in various circumſtances, particularly from the latter by the thickneſs and ſhortneſs of its tail. It is greyiſh on the back, with four rows of black ſpots, mixed with ſpots of brown, and having a longitudinal black ſtreak on each ſide.

M. Afzelius, another learned Swediſh naturaliſt, mentions having ſeen a lizard, in the collection of M. Baettiger at Weſteras, which only differed from that deſcribed by Thunberg, in wanting the ſpots on the back, and in having the lateral ſtripes of a deeper black, and more equal. Thus the *tiligugu* is found to inhabit Europe, Aſia, and America.

57. Lacerta Uralenſis, the Ural lizard: tail longiſh, round; neck plaited beneath, all the feet pentadactyle, and back livid, rugoſe, and ſubverrucoſe. Native of the deſert of Ural: length about four inches. Head roundiſh; colour of the upper parts livid brown, and covered with a wrinkled and ſlightly-tuberculated ſkin: under parts whitiſh: moves with great ſwiftneſs.

58. Lacerta bullaris the bladder-lizard: tail long and round, with a globular red protuberance under the throat. This, according to Cateſby, is uſually ſix inches long, and of a ſhining graſs-green colour. It is common in Jamaica, frequenting hedges and trees, but is not ſeen in houſes: when approached, it ſwells its throat into a globular form, the protruded ſkin on that part appearing of a bright red colour, which diſappears in its withdrawn or contracted ſtate; this action is ſuppoſed to be a kind of menace, in order to deter its enemy; but it is incapable of doing any miſchief by its bite or otherwiſe. Cepede aſſerts, that this ſpecies has no rows of ſquare ſcales on the belly. Should that be the caſe, it ought to be placed in a different ſub-diviſion.

59. Lacerta aurita, the eared lizard: tail round, middle-ſized, with callous dots each ſide; gular fold tranſverſe, almoſt double; angles of the mouth on each ſide dilated into a ſemi-orbicular, ſoft, rough, dentate, creſt. Inhabits the ſandy hillocks of ſouthern Siberia, and gravel-pits in the deſert Comani. Something larger than the gecko; of a thick or ventricoſe habit; with the body rather depreſſed, and the head rounded or blunt in front. From the corners of the mouth on each ſide is horizontally extended a flat ſemi-orbicular ſkin or wattle, of a red colour, with ſerrated edges, appearing like ears, and reaching as far as the ſhoulders: the remainder of the animal is clouded with yelloviſh and cinereous. Tail roughened above, as is the whole body, with ſmall pointed granules: toes five, of which the three intermediate ones are ſerrated on the edges.

60. Lacerta teguixin, the teguixin: tail long and round; ſeveral folds of the ſkin on the ſides, and a triple plait under the throat. This, which is by far the largeſt in this diviſion of the genus, ſometimes exceeds the guana in ſize. It has been extremely well repreſented in ſome of the plates of Seba, as well as by the celebrated Madame Merian, who has given a figure of it at the end of her ſplendid work on the inſects of Surinam. The head is covered, as in the green lizard, with large ſcales or plates; the body with ſmall and ſomewhat ſquare ſcales, which are ſo diſpoſed as to mark the ſides into numerous tapering annuli or ſtriæ, paſſing from the back perpendicularly downwards, and from the ſides perpendicularly upwards, the narrow end of each row alternating with the broader end of the oppoſite one. The tail is round, and conſiderably longer than the body, its outer extremity being pointed: the ſcales on the root of the tail are arranged in half-circles, while thoſe on the reſt of it go quite round. The particular diſtinguiſhing character of the teguixin is formed by ſeveral blunt folds of the ſkin along both ſides, from the head to the hind thighs, and by three tranſverſe folds under the throat. The colour is highly beautiful, conſiſting of an elegant and in general ſomewhat minute variegation of brown, blackiſh, and purple, ſpots, on a pale bluiſh-white, and in ſome parts yelloviſh, ground. The whole form of the animal is rather thick or plump, in compariſon with many other lizards: the tongue is broad, flat, long, forked at the tip, and curiouſly ſtriated on each ſide: the head ſhaped like that of the ameiva, to which this ſpecies is nearly allied. It is a native of South America, and probably of India.

61. Lacerta erythrocephala, the red-headed lizard: general colour blackiſh-green, with tranſverſe black undulations; abdomen longitudinally banded with black, white, and blue; the breaſt black, and the top of the head red. A middle-ſized ſpecies; native of the iſland of St. Chriſtopher; deſcribed by Cepede. Colour deep or dark green above, mixed with brown; back marked by ſeveral tranſverſe black undulations; top of the head, and part of the ſides of the neck, red: throat white; breaſt black; belly variegated with longitudinal black, blue, and whitiſh, bands, and covered with ſquare ſcales or plates; head covered with larger ſcales than the other parts; beneath the thighs a row of tubercles, ſimilar to thoſe on the nimble lizard and ſeveral other ſpecies. In the individual deſcribed by M. Badier, the body meaſured one inch in diameter, at the thickeſt part, and one inch eleven lines in length; the tail being ſeven inches eight lines long, and ſurrounded by rings of ſcales. The hinder legs meaſured two inches and one line to the firſt joint of the toes. It lives on inſects, and grows to three times the ſize of the individual here deſcribed.

62.

62. Lacerta lophura, the ſharp-tailed lizard: body covered by diſſimilar ſcales; back ſerrated; tail long, and compreſſo-carinated. A very large ſpecies; at firſt view much reſembling the teguixin in ſize, colour, &c. but is coated with ſcales of diſſimilar ſize on different parts; large, rounded, and oval, ones being ſcattered here and there among the ſmaller; tail long, carinated above, compreſſed, and ſharp-pointed; both back and tail ſerrated throughout their whole length. In the Britiſh Muſeum, and in that of Dr. William Hunter.

63. Lacerta helioſcopa, the ſun-gazing lizard: brownish, with imbricated tail, thick at the baſe and ſharp at the tip, a tranſverſe creaſe beneath the throat, and the head rough with calli. This appears to be in ſome degree allied to the geckos, being of a ſhort thickiſh form, and muricated on the upper parts with ſmall tubercles; the head is blunt or rounded in front; and the neck marked by a kind of ſtricture; tail moderately ſhort, and terminating acutely; colour of the upper parts grey, with brown and bluiſh ſpots and linear ſtreaks; neck often marked above by a red ſpot; under parts pale or whitiſh, and covered with ſmooth pointed ſcales; tip of the tail red beneath. This ſpecies is ſaid by Dr. Pallas to be very common in the ſouthern deſerts of Siberia, where it delights to ſit in hot ſunny ſituations, with its head turned up towards the ſun. It is a ſmall ſpecies, meaſuring not more than a finger's length, and is extremely nimble in its motions. Noted by Cepede as a variety of the next.

64. Lacerta plica, the plaited lizard: tail long and round; hind head callous, eye-brows excoriated above, neck warted at the ſides, and plaited beneath. A ſmall ſpecies, native of India and South America; length of a finger; covered on all parts with conical ſcales; on each ſide the neck two muricated tubercles; beneath the throat a double creaſe; down the back a row of larger ſcales than the reſt, and ſomewhat crenated; tail about twice the length of the body, covered with minute ſcales, and ſcarce diſtinctly verticillated; toes long, roughened beneath by ſharper ſcales; claws compreſſed.

IX. *No collar or fold on the neck; body lineate or banded, and ſcaly; tongue bifid.*

65. Lacerta ſex-lineata, the ſix-lined lizard: tail long and verticillate; ſix white lines on the back; legs long. This ſpecies, which is found in Carolina, does not differ very much from our nimble lizard. Three white lines, and an equal number of black, run along each ſide of the back, the middle of which is whitiſh. It has two tranſverſe wrinkles on the under part of the neck. The inſides of the thighs have each a ſimilar row of tubercles with thoſe already mentioned on the guana, nimble lizard, green lizard, ameiva, &c. The tail is long, and tapers gradually to a point; and this little animal almoſt always carries its tail in a round reflected form, which gives it a haughty appearance, and has induced the Britiſh inhabitants of Carolina to affix to it the name of *lion*; and in this they have been imitated by ſeveral naturaliſts. It is not at all noxious or dangerous. Having the legs of conſiderable length, it is very nimble, and runs about with great agility. It frequents the holes of rocks near the ſea, and becomes very frequently the prey of large ſea-fowl, notwithſtanding the nimbleneſs of its motions. It is not confined to Carolina, but is found in Cuba, Hiſpaniola, and the neighbouring iſlands.

66. Lacerta quinque-lineata, the five-lined lizard: tail round, not verticillate; five white lines on the back. This ſpecies alſo was found in Carolina, and communicated by Dr. Garden to Linnæus. The head is marked by ſix yellow ſtreaks, two of which are between the eyes, one over each eye, and one below each. The back is blackiſh, having five longitudinal whitiſh lines, extending from behind the head to the middle of the tail. The tail is round, and without ranges of ſcales, being one half longer than the body. The belly is ſtreaked, and covered by ſcales lapping over each other in alternate rows.

67. Lacerta Nilotica, the Nilotic lizard: tail long, triangular at the tip; body ſmooth; four diſtinct rows of ſcales on the back. This ſmall ſpecies inhabits the marſhy places near the Nile in Egypt, and has conſiderable analogy with the ſcink. Its diſtinguiſhing character is the three-cornered pyramidical form of the outer end of the tail; and the middle of the back is marked by four rows of ſcales, differing in ſize and figure from the other ſcales on the body.

68. Lacerta interpunctata, the black-ſpotted lizard: tail long and round; two yellow dorſal lines, with black ſpecks interſperſed. A ſmall ſpecies: native of Aſia. Head covered with large ſcales; body ſmooth and gloſſy, with two obſcure yellowiſh lines diſtinguiſhing the back from the ſides; down the dorſal area run ſix rows of black ſpecks or points, and down each ſide a ſimilar number; feet and tail alſo ſpotted in a ſimilar manner.

69. Lacerta lemniſcata, the eight-lined lizard: tail long and round; eight whitiſh lines on the back. This ſo much reſembles the *ameiva*, that, without a careful inſpection, it might be miſtaken for the ſame ſpecies; its general ſize, however, is rather ſmaller. Its colour is a duſky blue, marked above by eight longitudinal white lines or ſtripes, running from the head to the beginning of the tail; the ſides, beneath the ſtripes, and the outſides of the thighs, are marked with ſmall white ſpots; beneath the thighs is a range of tubercles, but there is no appearance of a creaſe or tranſverſe fold under the throat; the white ſtripes on the back vary in breadth, and even ſometimes in number, in different individuals. It is a native of Africa, and is principally found in Guinea; but is alſo ſaid to be met with in ſome parts of India, and even in America and the Weſt-India Iſlands, as two individuals were ſent to Paris from Martinico: theſe have nine dorſal lines.

The *Eleven-lined Lizard.* In the collection of M. d'Antic, there is a ſmall lizard, a variety of this ſpecies, which was ſent to him from St. Domingo. The general colour is a very deep green, having eleven ſtripes of whitiſh yellow on the back, which unite into ſeven near the head, and into ten near the tail; on which laſt theſe lines gradually and inſenſibly diſappear. The whole length of this variety is ſix inches, of which the tail meaſures four inches and one line.

70. Lacerta faſciata, the blue-tailed lizard: tail round, longer than the body, and of a blue colour; five yellowiſh lines on the back. Length eight inches. Inhabits Carolina in North America, and probably the neighbouring countries. It is of a brown colour, with five yellowiſh longitudinal lines on the back; the tail is ſlender, and of a blue colour; from which circumſtance the trivial name, adopted, both in French and Engliſh, from Cateſby, is derived; that employed in the Syſtema Naturæ is taken from the ſtripes along the back, though *faſciata* is generally uſed to denote tranſverſe ſtripes or bands. It frequently retires into the hollows of trees, probably to paſs the cold ſeaſon in a torpid ſtate. Cateſby ſays, that this animal is conſidered as venomous by ſeveral of the Carolineans; but that he was ignorant of any fact which could ſupport ſuch an opinion.

The lizard called *americima* in Braſil, which Ray deſcribes on the authority of Marcgrave, is probably of the ſame ſpecies. The americima is three inches long, and about the ſize of a gooſe-quill, the body being almoſt ſquare. The whole of the back is covered by grey-aſh ſcales; the ſcales on the head, the ſides, and the thighs, being brown, and thoſe on the tail blue. The whole ſurface is very bright and ſhining, and feels exceedingly ſmooth. The legs and feet reſemble thoſe of the guana in form and ſtructure, the toes being ſcarcely larger than hogs' briſtles. This alſo is believed by the Braſilians to be venomous.

71. Lacerta vulgaris, the brown lizard: tail round; a double brown line on the back; feet clawed, only four toes on the fore feet. Cepede conſiders this as a variety

of

of the L. paluſtris; and Dr. Shaw calls it the *common newt*, placing it immediately before that ſpecies. His deſcription is as follows: "This, which is the ſmalleſt of the Britiſh lizards, is altogether a terreſtrial ſpecies. It is commonly ſeen in gardens, and not unfrequently in the neighbourhood of dunghills, &c. It alſo occaſionally makes its way into cellars, in the manner of the ſlug, the toad, &c. Linnæus, in the twelfth edition of the Syſtema Naturæ, ſeems to ſuppoſe it an inhabitant of the water during its young or larva ſtate. I can, however, ſafely affirm, that I have more than once met with ſpecimens in perfectly-dry ſituations, and at a diſtance from any waters, ſo extremely minute as ſcarce to equal half an inch in length, and which yet appeared to differ in no reſpect, except in magnitude, from the full-grown animal. I am, therefore, inclined to ſuppoſe it a viviparous ſpecies. Its general length is about three inches and a half; and its colour yelloviſh brown above, with a double narrow dorſal line or ſtreak of a deeper tinge; the under parts bright orange, ſpotted with brown."

72. Lacerta Japonica, the Japaneſe lizard: tail long and round, four toes on the fore-feet, claws on all; a yellow ſtripe on the back. A ſmalliſh ſpecies; native of Japan. Colour livid brown above, with a broad dentated yellow ſtripe from the hind head to the beginning of the tail; eyes ſmall; eye-lids large and rough; tail ſomewhat compreſſed at the tip; claws black.

In the Memoirs of the Stockholm Academy, Thunberg deſcribes a lizard, under the name of Lacerta Japonica, which Cepede conſiders to be a variety of the ſalamander. That animal is almoſt black, with ſeveral irregular whitiſh ſpots on the upper part of the body and legs. The back has a longitudinal dirty white ſtreak, divided into two near the head, and extending irregularly and narrowing to the extremity of the tail; this ſtripe is ſprinkled all over with ſmall black ſpots. It is moſtly found in the mountains, and in ſtony places, in which circumſtance it reſembles our ſalamander. The Japaneſe attribute to this animal the ſame ſtimulant properties that have been ſuppoſed poſſeſſed by the ſcink, and by the aſk or water-newt; and, accordingly, numbers of theſe lizards may be ſeen at Jeddo, dried and hung up in the ſhops for ſale.

73. Lacerta deſerti, the deſert-lizard: tail longiſh, round; feet five-toed; body black above, with ſix longitudinal white lines. Length two inches or more; the body white beneath; the ſtripes of the back conſiſt of oblong ſpots, and between the exterior ſtripe and the next are five white ſpecks; native of the Ural deſert.

74. Lacerta quadrilineata, the four-lined lizard: tail long and round; four yellow lines on the body; fore feet four-toed, hind feet five-toed; claws hardly viſible. General colour dark blue. Suppoſed to be a native of North America.

75. Lacerta tæniolata, the ribbon lizard: tail long and round; body marked above with black and white ſtripes; beneath white. A ſmall ſpecies, much allied to the *faſciata* and others of this diviſion. Covered entirely with ſmooth rounded imbricated ſcales on all parts; colour cheſnut brown above; pale or whitiſh beneath. On the back, from the head to the middle of the tail, ſix narrow white linear ſtripes, the intermediate ſpaces of the central and lowermoſt ſtripes being black; tail long and ſlender; limbs ſtriped longitudinally with black; feet ſlender, five-toed. Native of New Holland.

76. Lacerta punctata, the dotted lizard: tail round; a double row of white ſpots down the back; fore-feet four-toed; no claws. This ſpecies, according to Cateſby, is an inhabitant of ponds, ditches, and other ſtagnant waters in Carolina. It is about five inches in length, with a rather large head; the fore feet have four, and the hind five, toes. Its colour is deep brown, with a double row of white ſpots from the top of the head to the tail, where it becomes a ſingle row to the end.

77. Lacerta ſputata, the ſpitting lizard: tail round, middle-ſized, with a longitudinal row of ſcales beneath; feet unarmed, five-toed; body cinereous, with white bands above, before and behind edged with liver-colour. The following deſcription of this ſpecies is taken from a ſpecimen ſent to M. d'Antic from St. Domingo; and is compared with the account given by Sparrman of ſeveral individuals from St. Euſtatius, ſent to the muſeum of the baron de Geer by M. Acrelius, who received them at Philadelphia from that iſland. It is two inches long, of which the tail is one inch. The whole ſurface of the body is very ſmooth and ſhining, being deſtitute of tranſverſe rows of ſcales on the belly. The ground-colour is whitiſh on the under parts of the body, and grey, mixed with dark brown, on the upper. Several broad belts of dark brown, almoſt black, ſurround the head, body, and tail; one of theſe goes round the back of the head, one round the neck, directly before the fore legs, two round the middle of the body, one directly behind the hind legs, at the root of the tail, and five more round the tail; a ſimilarly-coloured ſtripe ſurrounds the upper jaw. The external ears are either wanting altogether, or not apparent. The tongue is flat, broad, and ſlightly ſplit at the tip. The top of the head and muzzle are whitiſh, ſpotted with black. The legs are variegated with grey, black, and white. The feet have each five toes, which are garniſhed underneath with ſcales, being terminated by ſmall flat pellets, or ſcaly plates, without any apparent claws. M. Acrelius informed the baron de Geer, that this ſpecies inhabits the warm parts of America and its iſlands, being found moſtly in the houſes, climbing among the beams and other wood-work. It is named, in ſome of theſe diſtricts, the *wood-ſlave*. When not diſturbed, it does no harm; but muſt ever be looked at with circumſpection, as it is eaſily irritated. While running along the walls, if any perſon comes too near to look at it, it ſeems frightened; and, coming as near as poſſible to the perſon it conſiders as its enemy, it appears to look with great attention for a while, and then ſquirts out a black ſpittle to ſome diſtance. This liquor inflames and ſwells any part of the body it happens to fall on. The inflammation is, however, readily cured by waſhing with rum, or any kind of ſpirits, mixed with camphor; which is likewiſe the uſual remedy againſt the ſting of ſcorpions.

Along with this lizard, another ſpecimen from St. Domingo was ſent to M. d'Antic; and ſimilar ſpecimens were contained in the ſame bottle with the ſpitting lizard in baron de Geer's collection; theſe we conſider as only a variety of the ſpitting lizard, perhaps differing in ſex. This other lizard is of the ſame ſize and form, and only differs in colours; its upper parts being of a tolerably-uniform deepiſh grey, variegated with very ſmall longitudinal ſtreaks of blackiſh brown, and the under parts of the body being dirty grey, mixed with fleſh-colour. In the ſpecimen of this variety deſcribed by Sparrman, the tip of the tail was deſtitute of ſcales; probably owing to ſome accident, as in M. d'Antic's ſpecimen the tail was wholly covered with ſcales.

X. *Belly covered with round imbricate fiſh-like ſcales; tongue entire.*

78. Lacerta ſepiformis, the eft-like lizard: tail ſhort; body greeniſh-black; head armed; back flat; hind-thighs on the hinder-part covered with callous dots.

79. Lacerta ſtincus, the ſcink: tail round, middle-ſized, laterally compreſſed at the tip; toes edged with membranes, and deſtitute of claws. This ſpecies has long been famous for an imaginary property of reſtoring exhauſted vigour, and rekindling the fires of love, when cooled by age or by exceſs; and, on this account it has been much in requeſt in many parts. The Egyptian peaſants catch great numbers, which they carry to Cairo and Alexandria, from whence they are diſtributed through a great part of Weſtern Aſia. When recently killed, a juice is extracted from their bodies, which is employed as a medicine in ſeveral diſeaſes; or the body, after being dried, is reduced to powder, and that powder is uſed inſtead

ſtead of the juice, and with the ſame views. Even in Europe, this abſurd aphrodiſiac has been employed to ſupply a treacherous ſtrength to the exhauſted powers of nature; though, if it has any effect at all, it ſerves rather to precipitate than to retard decay, by inciting to premature enjoyment. Haſſelquiſt informs us, that ſcinks are brought to Alexandria from Upper Egypt and Arabia, and are ſent from thence to Venice and Marſeilles, to be diſtributed to different parts of Europe.

The head ſeems fixed directly to the body, without any intervening neck; and it has large ſmooth ſcales, like a fiſh, diſpoſed like tiles, or imbricated, both on the upper and under parts of the body. The upper jaw is longer and broader than the under. The tail is thick, ſhort, and tapering, its tip being compreſſed, or flattened laterally. The general colour of the upper parts of the body is reddiſh, with tranſverſe brown bars on the back; the under parts being whitiſh. It is ſubject, however, to variety; for the ſkin is ſo thin and weak as to ſuffer different changes of colour, in conformity with certain alterations in the internal organization of the animal. It is peculiarly liable to fade after death; and when dried and ſlightly ſalted, in which ſtate it is brought to Europe, it appears of a ſilvery yellowiſh white. According to Linnæus, this ſpecies is deſtitute of claws; though all the dried ſpecimens which Cepede examined ſeemed to have claws, and M. Cetti confirms the ſuppoſition. Haſſelquiſt ſays, that a ſmall naked ſpace at the tip of each toe, ſlightly convex above and concave below, ſupplies the place of claws.

The ſcink is found in almoſt every part of Africa, particularly in Egypt, Arabia, and Lybia, where it is ſaid to be of a larger ſize than ordinary: it is likewiſe found in India; and probably inhabits all the very warm countries of Europe and Aſia. The choice of its habitation ſeems to depend, beſides the warmth of the climate, on an abundant ſupply of aromatic vegetables, on which it is ſaid to feed; and on this, probably, depends the ſtimulant power which is attributed to it as a medicine. Pliny informs us, that it was in his days employed as an antidote againſt the wounds of poiſoned arrows. The ſcink frequents the water as well as the land; and yet it has been ridiculouſly called the land-crocodile by ſome writers: but ſurely it is extremely abſurd to apply the name of the largeſt of the oviparous quadrupeds to this ſmall lizard, which hardly ever exceeds ſeven or eight inches in length. Hence Proſper Alpinus ſuppoſes, that the ſcink of the moderns ought not to be conſidered as the ſame animal with that which has been called the *land-crocodile* by the ancients, particularly by Herodotus, Pauſanias, and Dioſcorides, and celebrated by theſe writers for its aphrodiſiac and alexipharmic virtues. He ſuſpects they meant another, and conſiderably larger, ſpecies of lizard, which is found in dry ſituations above Memphis. He gives a figure of that lizard; but neither his figure nor text give ſufficiently preciſe characters of the animal, to enable us to determine what ſpecies it ought to be referred to: the form and ſhortneſs of its tail does not admit of its being conſidered either as a dragon, tupinambis, or guana.

The ſcink has been more recently deſcribed and figured by Mr. Bruce, under the name of *el adda*, and is ſaid to be extremely common in the province of Athara, in Abyſſinia: "It burrows," ſays this author, "in the ſand; and performs this operation ſo quickly, that it is out of ſight in an inſtant, and appears rather to have found a hole than to have made one; yet it comes out often in the heat of the day, and baſks in the ſun; and, when frightened, will take refuge behind ſtones, or in the withered ragged roots of the abſinthium, dried in the ſun to nearly its own colour. Its length is rather more than ſix inches: though its legs are long, it does not make uſe of them to ſtand upright, but creeps with its belly almoſt cloſe to the ground. It runs, however, with very great celerity. It is very long from its ſhoulder to its noſe, being nearly two inches. Its body is round, having ſcarcely any flatneſs in its belly. Its tail too is perfectly round, having no flatneſs in its lower part: it is exceedingly ſharp-pointed, and very eaſily broken; yet I have ſeen ſeveral where the part broke off has been renewed, ſo as ſcarcely to be diſcernible: it is the ſame length between the point of the tail and the joint of the hinder leg, as between the noſe and the ſhoulder of the fore leg. Its forehead, from the occiput, is flat; its ſhape conical, not pointed, but rounded at the end, in the ſhape of ſome ſhovels or ſpades. The head is darker than the body; the occiput darker ſtill: its face is covered with fine black lines, which croſs one another at right angles like a net: its eyes are ſmall, defended with a number of ſtrong black hairs or eyelaſhes: its upper jaw is longer, and projects conſiderably over the under: both jaws have a number of ſhort, fine, but very feeble, teeth; and, when holding it in my hand, though it ſtruggled violently to get looſe, it never attempted to make uſe of its teeth; indeed it ſeems to turn its neck with great difficulty. Its ears are large, open, and nearly round. Its body is a light yellow, bordering on ſtraw-colour, croſſed with eight bands of black, almoſt equally diſtant, except the two next the tail: all theſe decreaſe both in breadth and length from the middle towards each extremity of the animal. The ſcales are largeſt along the back; they are very cloſe, though the diviſions are ſufficiently apparent: their ſurface is very poliſhed, and ſeems as if varniſhed over: the legs, from the ſhoulder to the middle toe, are nearly an inch and three quarters long; the feet are compoſed of five toes, the extremity of each is armed with a brown claw of no great ſtrength, whoſe end is tipped with black." Mr. Bruce adds, that the el adda is one of the few lizards which the Arabs in all times have believed to be free from poiſonous qualities, and yet to have all the medical virtues they have ſo abundantly laviſhed upon the more noxious ſpecies; their character, however, as a medicine, ſeems to be greatly on the decline in their native regions; and, though the books preſcribing them are in every body's hands, yet the medicine is not now made uſe of in the places where the books were written; which affords a pretty ſtrong proof that it was never very efficacious.

Mr. Bruce obſerves that lizards in general are peculiarly numerous in the eaſtern regions. The deſert parts of Syria, bordering on Arabia Deſerta, abound with them beyond a poſſibility of counting them. "I am poſitive," ſays Mr. Bruce, "that I can ſay, without exaggeration, that the number I ſaw one day, in the great court of the temple of the Sun at Balbec, amounted to many thouſands: the ground, the walls, and ſtones, of the ruined buildings, were covered with them; and the various colours of which they conſiſted made a very extraordinary appearance, glittering under the ſun, in which they lay ſleeping and baſking."

β. The *ſtarry long-tailed ſcink*. This is marked by Dr. Gmelin as a variety; yet it differs ſo much by its great length of tail, that we might readily agree with Dr. Shaw in conſidering it as a very diſtinct ſpecies. Its tail is twice as long as the body, whereas in the common officinal ſcink the tail is but half the length of the body. See Plate VI. fig. 11, 12. The long-tailed ſcink, according to Seba, is a native of America, frequenting the ſea-coaſts, and feeding on ſmall crabs and ſpiders. Colour greeniſh-yellow, darker or lighter in different individuals.

80. Lacerta ocellata, the ocellate lizard: tail round and ſhoft; body greeniſh-grey above, white beneath; marked above with roundiſh ocellated brown ſpots with white rectangular diſks. A beautiful ſpecies, in length about a ſpan: body depreſſed: feet ſhort, pentadactyle: no femoral warts. It is a native of Egypt, about the neighbourhood of houſes, &c. obſerved by Forſkal.

81. Lacerta aurata, the golden lizard: tail round, longiſh; ſcales round and ſmooth; colour golden when alive, ſides browniſh; jaws equal. This ſpecies much reſembles the common or officinal ſcink, but is conſiderably larger, meaſuring fifteen inches or more in length, from the noſe to the end of the tail, which latter is longer in proportion

proportion than that of the ſcink. The head is covered in front with large angular ſcales; the body, limbs, and tail, with rounded ones, which are more diſtinctly expreſſed, or not quite ſo gloſſy and cloſely preſſed to the ſkin as in the true ſcink: the legs are ſhort and thick, the feet pentadactyle, and furniſhed with ſmall claws. The general colour is ſilver grey, clouded with orange, growing whiter at the ſides. Like moſt other animals, the brilliancy of its colours fades after death; but, while animated by the vital warmth, they have a very ſplendid appearance, like burniſhed gold, from which circumſtance the trivial name is derived; and theſe colours are rendered conſiderably brighter, in conſequence of the ſurface being covered all over by a ſlimy fluid, which has the effect of a fine varniſh. It is ſaid, in the Syſtema Naturæ, to inhabit the iſland of Jerſey, on the authority of Edwards; but the ſpecies, cited from the works of that naturaliſt, appears eſſentially different from this. It is found in the iſle of Cyprus; but its principal habitation is America and the Weſt-India Iſlands; to which Dr. Shaw adds Arabia and Egypt, quoting Seba's L. maritima maxima for this ſpecies, which ſeems to belong to the common ſcink. Dr. S. alſo objects to the name golden or gilded lizard, preferring that of L. rufeſcens, and *greater ſcink*; yet he immediately produces a ſpecies greater ſtill, which however Cepede includes under the preſent ſpecies, and moſt probably it is the full-grown animal: we have thought beſt to note it as a variety.

L. occidua, the galliwaſp, is probably the L. auratus when full-grown; for Dr. Shaw obſerves, that hardly any appearance of gold-yellow is obſerved on that ſpecies except in the young or half-grown ſpecimens; for which reaſon he changed the name from *auratus* to *rufeſcens*. Both are of a browniſh colour; and the galliwaſp is deſcribed only as being of a larger ſize, and thicker form, and the tail appearing ſomewhat ſhorter in proportion; and accordingly Cepede includes the galliwaſp in his account of the auratus. The general length of the galliwaſp is nearly two feet from the noſe to the tip of the tail, which, like the body, is thick and ſtrong, tapering pretty ſuddenly towards the tip: the limbs are ſhort, and the whole appearance of the animal remarkably ſtout and plump: the teeth are ſmall in front, but as they approach the back part of the jaws they gradually increaſe in ſize, and much reſemble the molares in the Mammalia. The galliwaſp is a native of the American iſlands, and ſeems to be particularly common in Jamaica, where it is ſaid to frequent woody and marſhy diſtricts. It is commonly of a paliſh-brown colour, clouded with ſomewhat-irregular bands of a deeper caſt; but it is ſaid occaſionally to change its colour into a lively golden yellow. The galliwaſp, according to Browne, in his Natural Hiſtory of Jamaica, is reckoned the moſt venomous reptile in that iſland, and it is ſaid that no creature can recover from its bite; but this he very properly conſiders as a popular error.

L. ſcincoides, the Auſtralaſian galliwaſp. This, ſays Dr. Shaw, I conſider as a variety of the preceding, with which it agrees in ſize and general appearance, but has larger ſcales, a longer tail in proportion, and is of a ſomewhat darker colour; the ſides and tail being variegated with deep brown and ſomewhat irregular tranſverſe bands, and on each ſide the neck is commonly a longitudinal brown ſpot or patch. It is a native of New Holland, and is very accurately figured in White's Journal. The tongue, in this as well as in the other ſcinks, is ſhort, flat, rounded, and entire; not forked as in moſt lizards. Dr. Turton has introduced it after the aurata, and as a diſtinct ſpecies.

82. Lacerta guttata, the ſpotted ſcink: colour grey, ſpotted with white; tail long, marked with four tranſverſe black bands and with black tip; feet five-toed, with claws. A very ſmall ſpecies, not much exceeding three inches in length: native of the Ural deſert, where it was obſerved by Lepechin.

XI. *Crawling on the belly; reſembling both the lizard and the ſerpent.*

83. Lacerta chalcides, the chalcides lizard: tail long and round, not verticillated: legs very ſhort. The *ſeps*, or eft, is not the only animal which forms a connecting link between lizards and ſerpents, by the length and ſlenderneſs of its body, and the diſtance and minuteneſs of its almoſt-inviſible legs. The chalcides is equally remarkable by the ſmallneſs and poſition of its legs, and by the great length of its body. Linnæus and ſeveral other naturaliſts, who conſider the ſeps and chalcides as diſtinct ſpecies, have endeavoured to characteriſe them by ſaying, that in the ſeps the tail is *verticillated*, while in the chalcides it is *round*, and longer than the body. Whatever ſenſe may be affixed to the term verticillated, it can never be intended as a vague and unobvious character. Cepede therefore concludes the lizard named chalcides by Linnæus to be only a variety of the ſeps; and accordingly removes all the ſynonymes from the chalcides to the ſeps; while the lizard he calls *chalcides* is a very different animal, which we have placed at the end of this article as a variety.

The Linnæan chalcides is a native of many of the warmer parts of Europe, as well as of Africa, and is found of different ſizes, from the length of a few inches to that of a foot, or even more. Its general length, however, ſeems to be eight or nine inches. The head is covered in front with large ſcales, and is terminated by a ſlightly-tapering, but not pointed, ſnout. The eyes are ſmall, and the openings of the ears very diſtinct: there is, properly ſpeaking, no neck, the diameter continuing nearly equal from the head to the beginning of the tail, which is often longer than the body, and gradually tapers to a ſmall point. The legs are very ſhort, and the feet ſtill more ſo in proportion, conſiſting each of three toes, terminated by minute claws: the ſcales, on every part of the body, legs, and tail, are of a ſhape nearly reſembling thoſe of the ſcinks, lying ſmoothly over each other like thoſe of a fiſh. See fig. 13. The colour is pale ferruginous or cheſnut-brown, lighter, or of a yellow-brown, beneath: along the back are ſix deep-brown lines, or narrow bands, viz. two ſomewhat diſtant down the middle, and two approximated down each ſide. On the living animal the colour is generally ſaid to have a kind of metallic or braſſy caſt, which ſeems to have given riſe to the old name *chalcides* and *chalcidica*, from χαλκος, braſs. This ſingular lizard is deſcribed by Linnæus as having the feet furniſhed with five toes; but, whatever may have been the caſe with the individual ſpecimen which he examined, it ſeems pretty certain that the general number is three. In the Britiſh Muſeum is an elegant ſpecimen, with three toes only; and Columna calls it *tridactyla*, or three-toed. The chalcides is an animal of a harmleſs nature, frequenting moiſt ſhady places, moving rather ſlowly, and feeding on inſects, ſmall worms, &c. It is a viviparous ſpecies, and is ſaid to produce a great many young. The ſerpents to which it bears the neareſt alliance, in point of form, are thoſe of the genus Anguis, and particularly the A. fragilis, or common ſlow-worm.

The annulated chalcides, which is deſcribed by Cepede under the name of *chalcide*, appears very nearly allied to the former; but, inſtead of having imbricated fiſh-like ſcales, as in that animal, it is marked into a continued ſeries of rings throughout its whole length, the ſcales being ſquare inſtead of rounded. The ſpecimen deſcribed was of a dark colour, with a braſſy caſt: the body meaſured two inches ſix lines in length, being ſomewhat ſhorter than the tail: the feet ſtill ſhorter than in the former ſpecies, meaſuring ſcarcely more than a line in length, and being all tridactyle: the number of annuli on the body was forty-eight. The native country of this kind ſeems unknown.

84. Lacerta ſerpens, the ſerpent lizard: head, body, and tail, of a continued cylindric form, feet very ſmall, remote;

remote, pentadactyle, and clawed. This, which is a native of Java, meaſures about five inches and a half in length, and is entirely covered with imbricated ſcales: its colour is either cinereous or pale ferruginous above, marked with from fifteen to twenty duſky lines; and beneath cinereous with a ſilvery gloſs.

85. Lacerta anguina, the anguine lizard: tail verticillate, extremely long; ſubulated feet, without toes. Deſcribed by Linnæus, apparently from Seba's figure, which is about fifteen inches in length, the body meaſuring only four. The head is rather ſmall, the noſe taper, the legs very ſhort, placed very near the head and vent, and apparently terminating in one undivided toe or proceſs: the whole animal appears covered with ovate ſcales, and is brown above, aſh-coloured on the ſides, and yellowiſh beneath; the upper ſurface marked throughout its whole length by ſeveral dark lines or ſtripes. Native, according to Seba, of the Cape of Good Hope, where it is found in great plenty in the water and about the rocks in Table Bay. Cepede is of opinion that this alſo is a ſeps; and that it really has toes, though they eſcaped the notice of Linnæus.

86. Lacerta lumbricoides, the grooved biped: fore-feet ſhort, four-toed; no hind-feet; body cylindrical, covered with ſquare ſcales, diſpoſed in half-rings on the belly and back, and entire rings on the tail; tail ſhort.

The exiſtence of biped or two-footed reptiles was long doubted by naturaliſts; as moſt of the ſpecimens, which have been ſhown for ſuch, were only of the ſeps or chalcides ſpecies, which had loſt their fore or hind legs either by accident or deſign; in them all, the cicatrix was evident on inſpection. Other ſpecimens of pretended bipeds were male ſerpents, which had been killed in the pairing ſeaſon, at a time when their double organ happened to be out from the anus, juſt before uniting with the female. The two parts of this organ ſtand at ſome diſtance, and are covered with certain roughneſſes, which might be miſtaken at firſt ſight for ſcales. Serpents killed in this ſtate have frequently been tranſmitted to cabinets as two-footed ſerpents or bipeds: and perhaps (ſays Cepede) the animal deſcribed by Linnæus, under the name of *Anguis bipes*, and placed by Gmelin in the genus Lacerta, was one of theſe real ſerpents, ſurpriſed in the ſexual union. (See the next ſpecies.) Again; ſeveral of the pretended bipeds, which occur in authors or collections, muſt be conſidered as larvæ, or tadpoles, in a greater or leſs degree of developement, or in a later or earlier ſtage of growth, of the frog, toad, tree-frog, or water-lizard; as all of theſe oviparous quadrupeds have ordinarily only two feet in the earlier period of their exiſtence. Such, for inſtance, is the animal for which Linnæus conſidered it neceſſary to inſtitute a new genus, under the name of Syren lacertina; but now placed by Gmelin in the claſs of fiſhes, and genus Murena, under the name of MURENA ſyren. See that article.

Although moſt of the animals hitherto ſhown or preſerved as real bipeds muſt be referred either to the oviparous quadrupeds or to ſerpents, the preſent ſpecies has in reality only two feet, which yet ſeem perfectly developed, ſo it cannot in ſtrictneſs be referred to either of theſe orders. The grooved biped, firſt deſcribed by Cepede, was diſcovered in Mexico by M. Velaſques, who tranſmitted it to M. Polony, phyſician in St. Domingo, from whence it was brought to France by the vicomteſſe de Fontanges, lady to the commandant of that iſland. It is entirely deſtitute of hind legs; and the moſt attentive examination could not diſcover the ſmalleſt trace, by which one might ſuſpect they had been removed by accident. It has many circumſtances of reſemblance to the *chalcides* already deſcribed, having its ſcales ſimilarly diſpoſed in rings; but it differs from that oviparous quadruped, both in wanting the hind legs, and by having a very ſhort tail, while in that lizard the tail is very long in proportion to the body. The whole body is covered with ſcales, nearly of a ſquare form, which are diſpoſed in half-rings both on the back and belly: the half-rings of the two ſurfaces are ſo arranged, that the ends of thoſe on the belly regularly abut againſt the intervals or lines of ſeparation between the half-rings on the back; in which circumſtance it differs farther from the chalcides, the ſcales of which are diſpoſed in whole-rings entirely ſurrounding the body. The line where the upper and lower half-rings terminate forms a channel or groove along each ſide of the body, from the head to the anus. On the tail the ſcales are diſpoſed in complete rings, which entirely ſurround the body. The edges of all theſe ſcales form a great number of longitudinal and tranſverſe grooves or channels, from which, and the deeper groove along each ſide, the trivial name of the ſpecies is derived. In the ſpecimen which forms the ſubject of this article, there are 150 half-rings on the belly, and 31 entire rings on the tail, the extremity of which is thick, blunt, and rounded. The whole length of the ſpecimen is eight inches and a half; its tail meaſures one inch, and its greateſt diameter one-third part of an inch: the head is a quarter of an inch in length, rounded at the muzzle, and hardly diſtinguiſhable from the body; the upper ſurface being covered by one large ſcale, and the muzzle by three ſcales, larger than thoſe of the half-rings, the two outer ſcales having each a ſmall hole or opening for the noſtrils. The lower jaw is edged with ſcales ſomewhat larger than thoſe on the half-rings: the teeth are very ſmall: the eyes are extremely minute, and have no eyelids: nor can any traces of ears or auditory paſſages be diſcovered. The legs are each the third part of an inch long, being covered with ſmall ſcales, diſpoſed in rings like thoſe on the body; each foot having four divided toes, with long hooked claws; and on the ſide of the outer toe there is a protuberance, like the rudiment of a fifth toe. The tail of this biped, being as thick at the end as the head of the animal, gives it ſome general reſemblance to the genus of ſerpents named Amphiſbæna by Linnæus, of which the ſcales are diſpoſed in ſimilar rings: in them likewiſe the eyes are ſo ſmall as to be hardly diſcernable, and no auditory orifices can be diſtinguiſhed. The grooved biped would certainly fall to be arranged with that genus, were it not for the two feet directly behind the head; and it evidently forms a connecting link between ſerpents and oviparous quadrupeds, through the genus of amphiſbæna of the former, and the ſpecies chalcides of the latter. Having been ſent from America in ſpirits, it was impoſſible to aſcertain its natural colour; but it ſeemed to be green, rather lighter on the belly, and darker on the back. The habits of this animal are entirely unknown; but, from its reſemblance to the ſeps and chalcides, there is reaſon to preſume that its habits and manner of life are ſimilar to thoſe two lizards.

87. Lacerta bipes, the two-footed lizard: fore feet none; hind feet very ſmall, didactylous, without claws; abdominal ſcales 100, ſubcaudal 60. A ſmall ſpecies, ſaid to be found in South America and in India. Length about ſix inches: diameter ſcarcely that of a gooſe-quill. Colour pale yellow, minutely ſpeckled with brown: head ſmall; body cylindric, tail very ſhort and taper, but not ſharp-pointed: on each ſide the vent is a ſmall ſubulated foot, which, being cloſely examined, is found to be divided into two ſmall and unequal toes, without claws. This lizard is deſcribed by Linnæus in the Muſeum Adolphi Friderici as a ſpecies of ſnake, under the title of *Anguis bipes*. It is alſo figured in the ſame work, but more elegantly in that of Seba. Though removed by Gmelin into this genus, perhaps the reader, upon due conſideration of what has been advanced in the preceding article, may think it might better have remained where Linnæus firſt placed it. Seba's words rather confirm our opinion: "Juſt by the anus are two ſmall excreſcences like thorns; but whether for the purpoſe of generation is uncertain."

88. Lacerta apus, the apodal lizard: fore feet none; hind feet very ſmall, ſcarcely divided; tail very long. In this ſpecies the feet are as obſcure, and as doubtfully placed, near the vent, as the former; yet it is admitted

by Cepede as well as other naturaliſts among the lizards, which it is ſaid to reſemble in internal conformation. It is a native of Greece, the ſouthern parts of Siberia, and doubtleſs of many other parts of Europe and Aſia, though it ſeems to have been but recently known to naturaliſts, Dr. Pallas, who diſcovered it in the ſouth of Siberia, having been its firſt deſcriber. It is found of the length of near three feet, and ſo perfectly reſembles the general form of a large ſnake, that it is not without a near inſpection that it is aſcertained to belong to the race of lizards; being furniſhed merely with a pair of very ſhort and ſomewhat acuminated proceſſes by way of feet, ſituated at a vaſt diſtance from the fore parts of the body, nearly on each ſide the vent: the proceſſes have no diviſions or toes, but ſeem to form one ſimple projection, with a ſlight indenture only. The head is rather large, and covered with large ſcales: the ſnout rather taper; the upper jaw ſomewhat projecting over the lower: the mouth moderately wide: the ears very conſpicuous: there is no appearance of neck; the body tapering in the moſt gradual manner from the head to the end in the tail, which is longer than the body, and terminates in a point. The whole animal is covered with longitudinal rows of moderately-large ſcales with emarginated tips, and ſo diſpoſed as to form ſo many prominent or carinated lines along the ſurface, in conſequence of which a tranſverſe ſection of the body, in any part, preſents a multangular outline. Along each ſide of the body, from the head to near half the length of the tail, runs a deep continued furrow or channel. The colour of this lizard is a pale cheſnut or ferruginous above, and pale yellow-brown beneath. It is ſingular that an animal of ſo large a ſize ſhould ſo long have remained unknown to ſyſtematic naturaliſts. Two very fine ſpecimens were brought from Greece by the late Dr. John Sibthorp, profeſſor of botany in the univerſity of Oxford. The animal frequents moiſt and ſhady places, and appears to be of a harmleſs character. It is repreſented at fig. 14.

LACER'TA, the LIZARD, one of the new conſtellations of the northern hemiſphere, added by Hevelius to the 48 old ones, near Cepheus and Caſſiopeia. This conſtellation contains, in Hevelius's Catalogue 10 ſtars, and in Flamſteed's 16.

LACER'TA, a ſoothſayer in Domitian's age who acquired immenſe riches by his art. *Juvenal.*

LACER'TA, *ſ.* in old records, a fathom.

LACER'TUS, *ſ.* in anatomy, the arm from the elbow to the wriſt.

LACES'SION, *ſ.* [from *laceſſo*, Lat. to provoke.] The act of provoking to anger. *Not much uſed. Cole.*

LA'CEWOMAN, *ſ.* A woman that ſells lace.

LACFOD'ERY, mountains of Ireland, on the eaſt ſide of the county of Kerry, where it joins the counties of Limeric and Cork: twelve miles eaſt of Tralee.

LACH'A. See OLIMPO.

LACHANOP'OLIST, *ſ.* [from λαχανον, Gr. an herb, and πωλεω, to ſell.] A ſeller of herbs. *But not uſed. Cole.*

LACHA'NUM, *ſ.* A pot-herb of any kind. *Phillips.*

LA'CHAS, a town of South America, in the audience of Quito: ſixty miles north of Quito.

LACHAWAN'NOCK, a mountain in the north-weſtern part of Pennſylvania, in North America.

LACHAWAN'NOCK, a townſhip in Luzerne county, Pennſylvania.

LACHE, a river of Thuringia, which runs into the Elbe one mile north of Weiſſenſee.

LACHE, *ſ.* [from *laſcher*, Fr. to looſen; or *laſche*, ſlothful.] In our laws, ſignifies ſlackneſs or negligence; as it appears in Littleton, where *laches of entry* is a neglect in the heir to enter; and probably it may be an old Engliſh word; for, when we ſay there is *laches of entry*, it is the ſame as if it were ſaid, there is *lack of entry*; and in this ſignification it is uſed Litt. 136. No laches ſhall be adjudged in the heir within the age; and regularly laches ſhall not bar either infants or femes covert for non-entry or claim to avoid deſcents; but laches ſhall be accounted in them for non-performance of a condition annexed to the ſtate of the land. *Co. Litt.* 146. The law alſo determines, that in the king there can be no negligence, or laches; and therefore no delay will bar his right. *Co. Litt.* 90.

LACH'ELA, a town of Sweden, in Eaſt Bothnia: thirteen miles ſouth-ſouth-eaſt of Waſa.

LACHEL'LO, a town of France, in the department of the Seſia: nine miles weſt-ſouth-weſt of Vercelli.

LA'CHEN, a town of Swiſſerland, in the canton of Schweitz, on the ſouth ſide of the lake of Zurich. Near it are ſome mineral ſprings, and in the environs are found cryſtals and petrifactions: eight miles weſt of Utznach.

LACHENA'LIA, *ſ.* [from *Wernerus de Lachenal*, of Swiſſerland, who publiſhed Specimen Obſ. medicarum. Baſ. 1759. 4to. and Obſervationes botanicæ in vol. iv. Act. Helv.] In botany, a genus of the claſs hexandria, order monogynia, natural order of coronariæ, (aſphodeli, *Juſſ.*) The generic characters are—Calyx: none. Corolla: petals ſix, erected into a tube, oblong, connate at the baſe, unequal; the three exterior ones ſhorter, often callous at the tip. Stamina: filaments ſix, awl-ſhaped, upright, growing to the baſe of the petal, and of the ſame length with them; anthers oblong. Piſtillum: germ ſuperior, ſubovate; ſtyle awl-ſhaped, length of the ſtamens; ſtigma ſimple. Pericarpium: capſule ſubovate, three-winged, three-celled. Seeds ſeveral, globoſe, affixed to the receptacle.—*Eſſential Character.* Corolla ſix-parted; the three outer petals difform; capſule three-winged; cells many-ſeeded; ſeeds globular, affixed to the receptacle.

Species. 1. Lachenalia orchioides, or ſpotted-leaved lachenalia: corollas bell-ſhaped, the three inner petals longer; flowers ſeſſile, leaves lanceolate, ſhorter than the ſcape. Bulb roundiſh, whitiſh. The whole of the plant is ſmooth. Leaves uſually two from the bulb, from ſix inches to a foot in length, one always much narrower than the other; ſharpiſh, thick, ſpreading at top, flattiſh, ſheathing and channelled at bottom, rough and cartilaginous at the edge, dirty green, marked with lines on the inſide, and having duſky ſpots ſcattered over them. Scape round upright, pale green with duſky ſpots, commonly longer than the leaves. Flowers almoſt upright, the upper ones in the ſpike abortive: outer petals white with green tips; inner pale yellow; antheræ yellow. Native of the Cape of Good Hope.

2. Lachenalia pallida, or pale-flowered lachenalia: corollas bell-ſhaped; the three inner petals longer; flowers on very ſhort peduncles, horizontal: leaves linear-oblong, longer than the ſcape. Bulb roundiſh, flatted a little, the ſize of a hazel-nut. Root-leaves two, a foot long and more, acute, channelled and ſheathing at bottom, flat at top, linear-lanceolate, almoſt equal in length, one near an inch in width, the other much narrower, deep green on both ſides, unſpotted, ſhining, quite entire, and not rough about the edge. Scape round, ſhining, pale green, unſpotted, almoſt upright, weak. Raceme upright, three inches long, with about twenty flowers, ſomewhat remote, and inodorous. Jacquin named it *mediana*, becauſe he ſuppoſed it to be an intermediate ſpecies between *orchioides* and *pallida*. It ſeems however to be the ſame with the latter. Native of the Cape of Good Hope.

3. Lachenalia contaminata, or mixed-coloured lachenalia: corollas bell-ſhaped; the three upper petals longer; flowers peduncled; leaves linear, awl-ſhaped, channelled. Leaves ſmooth, with duſky red ſpots ſcattered over the upper ſurface, longer than the ſcape. Scape upright, ſemi-cylindric, ſcarcely a ſpan high, with dirty red ſpots. Found at the Cape by Maſſon, and introduced in 1774.

4. Lachenalia tricolor, or three-coloured lachenalia: corollas cylindrical, the three inner petals twice the length of the others, emarginate; flowers peduncled, pendulous. Leaves two, radical, lanceolate, like thoſe of the common white lily, thin, not fleſhy, duſky-ſpotted on the upper ſurface. Scape round, like that of the garden hyacinth, ſcarcely a foot high; almoſt comoſe with the abundance of awl-

awl-ſhaped bractes that ſpring out below the upper rudiments of flowers. It varies with yellow, ſaffron-coloured, blood-red purple at the tip, and greeniſh-yellow, corollas; alſo in the proportion between the inner and outer petals; and in the breadth of the leaves. Mr. Curtis remarks, that it is only at the middle period of its flowering, that the three colours which give this plant its trivial name are very diſtinguiſhable; for, as it advances, the brilliant orange of the upper flowers dies away. The ſpots alſo on the leaves, as it advances into bloom, become leſs conſpicuous. Jacquin obſerves, that in his *luteola*, which is probably not different from this, ſcarcely two plants in a hundred had ſpotted leaves. Native of the Cape.

5. Lachenalia pendula, or pendulous lachenalia: corollas cylindrical; the three inner petals longer, entire; flowers peduncled, pendulous. Leaves oblong-lanceolate, ſucculent, even, a ſpan long. Scape upright, round, the thickneſs of a gooſe-quill, a little longer than the leaves, having a few reddiſh ſpots above the middle. Found at the Cape by Maſſon, and introduced in 1774.

6. Lachenalia viridis, or green-flowered lachenalia: corollas cylindrical; the three outer petals very long, awl-ſhaped. Bulb roundiſh, of the ſame form and ſize as the garden hyacinth. The whole plant inodorous and ſmooth. Leaves few, linear, a foot long, ſharpiſh, quite entire, keeled. Scape ſlender, round, ſolitary, ſuberect, green, about the length of the leaves, terminating in a long raceme. Native of the Cape of Good Hope.

7. Lachenalia orthopetala, or ſtraight-petalled lachenalia: corollas funnel-form-tubular; the three outer petals a little ſhorter, bluntiſh; flowers erect, ſubpedicelled. Bulb roundiſh, whitiſh. Leaves generally four, a foot long, flaccid, about four lines wide at bottom, awl-ſhaped above the middle; thickiſh, channelled, acute, ſmooth, with duſky obſolete ſpots on the lower ſurface. Scape half a foot high, round, pale browniſh, red, upright, ending in a many-flowered upright ſpike. Flowers upright, on ſhort pale pedicels, inodorous, about thirty, the upper ones abortive. Native of the Cape of Good Hope.

8. Lachenalia puſtulata, or puſtuled lachenalia: corollas cylindrical; the three inner petals one fourth longer than the outer blunt; flowers erect, ſubſeſſile; leaves lanceolate-linear; puſtuled. Root-leaves two, ſmooth, unſpotted, acute, quite entire, almoſt a foot long, flaccid, reclining on one ſide, channelled and embracing at the baſe, flat above, revolute towards the end, from the middle to the tip having raiſed round ſcattered puſtules on the upper ſurface. Native of the Cape of Good Hope.

9. Lachenalia violacea, or violet lachenalia: corollas cylindrical-three-ſided; the three inner petals reflex, a little longer than the outer; flowers pendulous, peduncled; leaves oblong, ſpotted on the back. Bulb roundiſh, white, larger than a hazel-nut. The whole of the plant is ſmooth. Root-leaves two, oppoſite, ſharpiſh, thick, ſpreading, quite entire, ſheathing at the baſe and together forming a cylinder, marked with lines, ſpotted all over the back, thoſe on the pale ſheath ferruginous, the upper ſurface unſpotted, almoſt a foot long with the ſheath, one only half the width of the other. Scape a foot and half high, round, having oblong browniſh ſpots ſcattered over it, aſcending. Flowers ſmall, drooping, three-ſided with the baſe flatted, having the ſmell of rue: outer petals green; inner, with the filaments and ſtyle, violet; antheræ rufous. Native of the Cape.

10. Lachenalia patula, or ſpreading lachenalia: corollas bell-ſhaped; inner petals ſpreading or reflex, longer than the outer; flowers erect, peduncled; leaves linear-lanceolate, ſhorter than the ſcape, unſpotted. Scape a ſpan high, round, almoſt upright, green obſcurely variegated with ferruginous ſpots, racemed and many-flowered at top. Native of the Cape.

11. Lachenalia punctata, or dotted lachenalia: corollas tubular, incurved; inner petals a little longer than the outer; the loweſt a little ſhorter than the two others; flowers nodding peduncled; leaves lanceolate-linear, dotted. Root-leaves two, ſharpiſh, channelled, quite entire, upright, half a foot long, having bay-brown ſpots ſcattered over them on both ſides, duſky blood-red on the back, glaucous-green on the upper ſurface, whitiſh at the baſe with red dots and ſpots. Scape ten inches high, round, upright, ſhining, with red and pale ſpots all over it, few-flowered at top. Native of the Cape.

12. Lachenalia hirta, or rough lachenalia: corollas bell-ſhaped, peduncled; leaves linear, rough-haired. Native of the Cape of Good Hope, where it was obſerved, with ſeveral others not yet deſcribed, by Thunberg.

Propagation and Culture. Theſe plants muſt be preſerved with other Cape bulbs in a warm border covered with glaſſes, or in a dry ſtove, or glaſs-caſe. They will moſtly bear forcing, and their flowering may be haſtened by being kept warm in the ſtove. They are increaſed by offſets from the bulbs, or by ſeeds, when they produce any.

LACH'ESIS, *ſ.* [from λαχειν, Gr. to meaſure out by lot.] In mythology, one of the *Parcæ*, or Fates. She preſided over futurity, and was repreſented as ſpinning the thread of life, or, according to others, holding the ſpindle. She generally appeared covered with a garment variegated with ſtars, and holding ſpindles in her hand. See PARCÆ.

LA'CHISH, [Heb. one that goes.] In ancient geography, a city ſouthward of the tribe of Judah. Euſebius and St. Jerome tell us, that in their time there was a village called *Lachiſh*, ſeven miles from Eleutheropolis, ſouthward. Sennacherib beſieged Lachiſh, but did not take it. From thence it was that he ſent Rabſhakeh againſt Jeruſalem. Here king Amaziah was ſlain by his rebel ſubjects.

LACH'LADE, a village near Warrington in Lancaſhire, remarkable for the richneſs of its ſoil, on which clover and the fineſt graſſes naturally ſpring. The women here ſpin thread for ſail-cloth, the men weave it; the children make bone-lace. It has a handſome modern-built church.

LACHMANGUR', a town of Hindooſtan, in Mewat: five miles north of Macherry.

LACHNÆ'A, *ſ.* [from λαχνεος, Gr. woolly or hairy.] In botany, a genus of the claſs octandria, order monogynia, natural order of vepreculæ, (thymelææ, *Juſſ.*) The generic characters are—Calyx: perianthium one-leafed, permanent; tube long and ſlender; border four-parted, unequal; the upper ſegment the ſmalleſt; the other three ſegments reflex; the middle one larger. Corolla: none. Stamina: filaments eight, ſetaceous, upright, nearly the length of the flower; anthers ſimple. Piſtillum: germ ovate; ſtyle filiform, inſerted into the ſide of the germ; length of the ſtamens; ſtigma headed, hiſpid. Pericarpium: none; fruit in the bottom of the calyx. Seed ſingle, ovate, obliquely acute. This genus differs from Paſſerina only in having an unequal calyx.—*Eſſential Character.* Calyx none; corolla four-cleft, with an unequal border; ſeed one, like a berry.

Species. 1. Lachnæa eriocephala, or woolly-headed lachnæa: heads ſolitary, woolly; leaves imbricate, in four rows; linear, convex. 2. Lachnæa conglomerata, or cluſter-headed lachnæa: heads cluſtered; leaves lax, cylindric, truncate, in four rows. Theſe are both ſhrubs, and natives of the Cape of Good Hope. The latter was introduced here in 1773, by Meſſrs. Kennedy and Lee.

LACHNOSPER'MUM, *ſ.* [from the Gr. λαχνη, wool, and σπερμα, ſeed; on account of the woollineſs which inveſts the ſeed.] In botany, a genus of the claſs ſyngeneſia, order polygamia-æqualis, natural order compoſitæ diſcoideæ, *Linn.* (cinarocephalæ, *Juſſ.*)—*Eſſential Character.* Receptacle hairy; ſeeds inveſted with hairs; calyx cylindrical, imbricated.

Lachnoſpermum ericifolium, a ſingle ſpecies, the Stæhelina faſciculata of Thunberg. It is a native of the Cape of Good Hope. The branches of this ſhrub are divaricated, rigid, and downy. Leaves very ſmall, about half a line

a line in length, faſciculated, round, obtuſe, inveſted with down. Flowers ſolitary, at the tops of the little branches, on ſhort footſtalks, ſometimes in pairs, the ſize of Stæhelina fruticoſa. Calyx cylindrical, downy; ſcales ovate, acute, with a naked, elongated, ſpreading point. Seeds without a proper crown, enfolded with hairs. Receptacle hairy, the hairs as long as the florets.

LACHOW', a town of Poland, in Volhynia: twenty-eight miles north-weſt of Conſtantinow.

LACHOWIC'ZE, a town of Lithuania, in the palatinate of Brzeſc: twenty-eight miles ſouth-weſt of Pinſk.

LACH'RYMA JO'BI, or Job's Tears. See Coix.

LACH'RYMÆ, *ſ.* [Latin.] The name of a doleful kind of muſic:

Is your theorbo
Turn'd to a diſtaff, ſignior? and your voice,
With which you chanted "Room for a luſty galant,"
Turn'd to the note of *lachrymæ?* *Maſſinger's Picture.*

LACH'RYMAL, *adj.* [French.] Generating tears.—It is of an exquiſite ſenſe, that, upon any touch, the tears might be ſqueezed from the *lachrymal* glands, to waſh and clean it. *Cheyne.*

LACH'RYMARY, *adj.* [*lachryma*, Lat.] Containing tears.—How many dreſſes are there for each particular deity? what a variety of ſhapes in the ancient urns, lamps, and *lachrymary* veſſels? *Addiſon.*

LACHRYMA'TION, *ſ.* The act of weeping, or ſhedding tears.

LACH'RYMATORY, *ſ.* A ſmall glaſs or earthen phial, with a long neck, found in the ſepulchres of the ancients. Many antiquaries have ſuppoſed that theſe veſſels ſerved to collect the tears of the weeping friends that ſurvived, or of perſons hired for that purpoſe. This belief was grounded on the appearance of the opening of thoſe phials, which is generally furniſhed with a round concave part well adapted for embracing the convexity of the eye-ball. On ſome lachrymatories are even found impreſſions of an eye, and ſometimes of a pair of eyes. But here, as in many other caſes, the eye appears to be merely emblematical. It may alſo be ſaid that the opinion of tears being preſerved in theſe veſſels is unſupported by any ancient cuſtom we are acquainted with, or by any well-interpreted paſſage in ancient authors. This opinion, abſurd in itſelf, was firſt broached by Chiflet; it ſoon ſpread over Europe, and was, in ſpite of its improbability, adopted and ſupported by Kirchmann, Kipping, and many other antiquaries. At laſt it was combated by Schoepflin and Paciaudi; ſo that at preſent it appears to be agreed on all ſides that the lachrymatories did never contain any thing but balms deſtined to moiſten the funeral pile or the aſhes of the dead, or elſe the blood of martyrs. Many ſpecimens of theſe phials are preſerved in the cabinets of the curious; particularly in the Britiſh Muſeum.

LACH'SA, El Has'sa, or Had'sjar, a province of Arabia, bounded on the north by the territories of the wandering Arabs, in the neighbourhood of Baſſora, on the eaſt by the Perſian Gulf, on the ſouth by Oman, and on the weſt by the province of Nedsjed. It is alſo denominated *Hadsjar*, and ſometimes *Bahhrein*. The latter of theſe names, in ſtrict propriety, belongs only to the iſlands of Aual, or Bahhrein. Lachſa affords no great variety of productions. Its aſſes and camels are eſteemed to be of an excellent breed, and of the latter ſome thouſands are annually ſold into Syria. In the interior parts of this province, the inhabitants live much upon dates; upon the coaſts, pearl-fiſhing is followed with advantage; and there is a conſiderable trade in foreign commodities. This country was once a province of the Ottoman empire. The Arabs have long ſince, however, ſhaken off the Ottoman yoke. Many Turks, deſcended from the ancient pachas, ſtill remain in the province, and enjoy conſiderable eſtates; but have no ſhare in the government. The province of Lachſa belongs in ſovereignty at preſent to the ſheik of the Arabian tribe of Beni Khaled, one of the moſt powerful in Arabia. They are ſo far ſpread through the Deſert, as often to haraſs the caravans paſſing between Bagdad and Kaleb. The greater part of Lachſa is inhabited by Bedouins, and other petty tribes; but theſe all acknowledge the dominion of the ſheik of Beni Khaled. Little is known concerning the cities in the interior parts of this province.

LACH'SA, the capital of the above province, where the ſheik reſides; ſituated on the river Aftan, near the Perſian Gulf. Lat. 26. 56. N. lon. 48. 34. E.

LACH'TE, a river of Weſtphalia, which runs into the Allier four miles eaſt of Zelle.

LACH'WA, a town of Lithuania, in the palatinate of Brzeſc: fifty miles eaſt of Pinſk.

LACI'DES, a village near Athens, where Ceres and Proſerpine had a temple.

LA'CING, *ſ.* in ſhip-building, the name of one of the pieces compoſing the knee of the head, which is continued up to the top of the hair-bracket, and to which the figure and the ends of the head-rails are ſecured.

LACIN'IATED, *adj.* [from *lacinia*, Lat.] Adorned with fringes and borders; jagged or cut into irregular ſegments.

LACIN'IUM, in ancient geography, a promontory of the Bruttii, in Italy, the ſouth boundary of the Sinus Tarentinus and the Adriatic: all to the ſouth of it being deemed the Ionian Sea; it was famous for a rich temple of Juno, ſurnamed *Lacinia*, with a pillar of ſolid gold ſtanding in it. It received its name from Lacinius, a famous robber, killed there by Hercules. Now *Capo delle Colonne*, (from the columns of Juno's temple ſtill ſtanding,) on the north-eaſt coaſt of Calabria Ultra.

LACIP'PO, or Lacip'pus, a town of Spain, in Bœtica.

LA'CIS, *ſ.* [from λακις, Gr. a ſlit; ſo called on account of the leaves being elegantly cut.] In botany, a genus of the claſs polyandria, order digynia. The generic characters are—Calyx and corolla: none. Stamina: filaments very many, (forty,) capillary, winged on both ſides below, inſerted into the receptacle which is girt with twelve ſpines; antheræ oblong, bifid at the baſe, acute, incumbent. Piſtillum: germ oblong, angular-ſtriated; ſtyles two, incurved; ſtigmas obtuſe. Pericarpium: capſule ovate, eight-ſtreaked, one-celled, bivalve. Seeds very many, very ſmall, affixed to a free ovate receptacle.—*Eſſential Character.* Calyx and corolla none; filaments winged on both ſides below; receptacle girt with twelve ſpines; capſule ovate, eight-ſtreaked, one-celled, two-valved, many-ſeeded.

Lacis fluviatilis, a ſingle ſpecies. Stems branching, decumbent; branches cylindrical, rough to the touch. Leaves ſeſſile, alternate, cut deeply into ſeveral lobes which are again equally cut into curled lobes; they are rough to the touch on both ſides, divided their whole length by a large ſalient nerve, whence ariſe lateral nerves that diverge over each of the larger lobes; and theſe throw out others which ſpread over the ſmaller lobes: the larger leaves are two feet and a half in length, and one foot in breadth; underneath at each angle formed by the nerves, there is a ſpine four or five lines in length. At the ends of the ſtem and branches come out the flowering-branches, two feet long and more, the upper part of which for a foot in length is convex on one ſide, and channelled on the other; the flowers are placed along each edge of this imbricately in two rows; the bottom is cylindrical, naked, and has only one or two ſmall leaves near its origin. Bractes to each flower, three, two internal oppoſite, covered by a larger one, falling off ſoon after the expanſion of the flower. Peduncle an inch long, with a membranaceous ſheath and three ſcales at the baſe. Filaments purple with yellow antheræ. This plant is called *mourerou* by the Caribs; and thence Aublet, as is uſual with him, has formed his generic name. It is a native of Guiana, and

has

has been found only on the rocks of the great caſcade of the river Sinemari, the whole always under water, except the flowering branches. It is attached to the rocks by packets of ſmall fibres.

LACISTE'MA, *ſ.* [from the Greek λακις, a ſlit, and σημα, a filament; the filaments being bifid at top.] In botany, a genus of the claſs monandria, order digynia. The generic characters are—Calyx: ament; common imbricated on all ſides; columnar. Scales one-flowered, ovate, concave; two ſmall linear ſquamules being placed at the ſides beneath the corolla within the ſcale. Corolla: one-petalled, four-parted; tube none; diviſions lanceolate, ſharp, ſuberect. Nectary one-leafed, rotate, entire, ſmaller than the corolla, concave. Stamina: filaments ſingle, ſituated in the middle of the nectary with the germ, upright, incurved above the middle over the germ, bifid at the top; antheræ minute, roundiſh. Piſtillum: germ globoſe; ſtyles two, very ſhort, recurved; ſtigmas ſimple. Pericarpium: berry foot-ſtalked, obovate, oblong, one-celled. Seed ſingle, oblong.—*Eſſential Character.* Calyx; ſcale of the ament; corolla four-parted; filaments bifid; berry pedicelled, one-ſeeded.

Laciſtema myricoides, a ſingle ſpecies. Stem arboreſcent. Branches round, ſomewhat knotty, aſh-coloured, naked, ſmoothiſh, ſpreading, branched; branchlets greeniſh, leafy, ſmooth. Leaves alternate, ovate, acuminate, ſmooth, ſomewhat wrinkled, with very minute tranſverſe veins, quite entire, four inches long, ſpreading, with a longitudinal waving nerve. Petioles ſhort, flattiſh, channelled. Spikes only two or three lines in length, aggregate, round, ſtraight, ſeſſile, partly from the axils of the leaves, partly lateral from the ſcars of the branches. Obſerved in Surinam by Rolander, and at Jamaica by Swartz.

To LACK, *v. a.* [*laecken*, to leſſen, Dut.] To want; to need; to be without.—Every good and holy deſire, though it *lack* the form, hath notwithſtanding in itſelf the ſubſtance, and with him the force, of prayer, who regardeth the very moanings, groans, and ſighs of the heart. *Hooker.*

One day we hope thou ſhalt bring back,
Dear Bolingbroke, the juſtice that we *lack*. *Daniel.*

To LACK, *v. n.* To be in want.—The lions do *lack* and ſuffer hunger. *Com. Prayer.*—To be wanting.—Peradventure there ſhall *lack* five of the fifty righteous; wilt thou deſtroy all the city for *lack* of five? *Geneſis.*—There was nothing *lacking* to them; David recovered all. 1 *Samuel.*

LACK, *ſ.* Want; need; failure.—In the Scripture there neither wanteth any thing, the *lack* whereof might deprive us of life. *Hooker.*—He was not able to keep that place three days, for *lack* of victuals. *Knolles.*

The trenchant blade, toledo truſty,
For want of fighting was grown ruſty,
And eat into itſelf, for *lack*
Of ſomebody to hew and hack. *Hudibras.*

LACK, Laak, or Lauk, *ſ.* In Eaſt-Indian computation, 100,000.

LACK, a townſhip in Mifflin county, Pennſylvania.

LACK'-BRAIN, *ſ.* One that wants wit.—What a *lack-brain* is this? Our plot is as good a plot as ever was laid. *Shakeſpeare.*

LACK'-LINEN, *adj.* Wanting ſhirts.—You poor, baſe, raſcally, cheating, *lack-linen*, mate; away, you mouldy rogue, away. *Shakeſpeare.*

LACK'-LOVE, *ſ.* One that is indifferent to love:

She durſt not lye
Near this *lack-love*, this kill-courtſy. *Shakeſpeare.*

LACK-LUS'TRE, *adj.* Wanting brightneſs:

And then he drew a dial from his poke,
And, looking on it with *lack-luſtre* eye,
Says very wiſely, It is ten o'clock. *Shakeſpeare.*

LACK'AH, a river of Ireland, in the county of Donegal, which runs into Lough Glen.

LACKANWAD'DY, a town of Hindooſtan, in the circar of Aurungabad: forty-five miles eaſt of Jaffierabad.

LACK'AR, an iſland in the Eaſtern-Indian Sea, about thirty miles long, and ſix broad. Lat. 8. 18. S. lon. 128. 14. E.

LACKARA'GO, a town of Africa, in the kingdom of Kaſſon.

LACKA'RI, a town of Perſia, in the province of Irak: 129 miles weſt-north-weſt of Iſpahan.

LACK'ER, or Lacquer, *ſ.* A varniſh applied upon tin, braſs, and other metals, to preſerve them from tarniſhing, and to improve their colour.

The baſis of lacquers is a ſolution of the reſinous ſubſtance called ſeed-lac, or rather ſhell-lac, in ſpirit of wine. This ſpirit ought to be very much dephlegmated in order to diſſolve much of the lac. For this purpoſe, ſome authors direct dry pot-aſh to be thrown into the ſpirit. This alkali attracts the water, with which it forms a liquid that ſubſides diſtinctly from the ſpirit at the bottom of the veſſel. From this liquid the ſpirit may be ſeparated by decantation. By this method the ſpirit is much dephlegmated: but at the ſame time it becomes impregnated with part of the alkali, which depraves its colour, and communicates a property to the lacquer of imbibing moiſture from the air. Theſe inconveniences may be prevented by diſtilling the ſpirit; or, if the artiſt has not an opportunity of performing that proceſs, he may cleanſe the ſpirit in a great meaſure from the alkali, by adding to it ſome calcined alum, the acid of which uniting with the alkali remaining in the ſpirit, forms with it a vitriolated tartar, which, not being ſoluble in ſpirit of wine, falls to the bottom together with the earth of the decompoſed alum. To a pint of the dephlegmated and purified ſpirit, about three ounces of powdered ſhell-lac are to be added; and the mixture to be digeſted during ſome days with a moderate heat. The liquor ought then to be poured off, ſtrained, and cleared by ſettling. This clear liquor is now fit to receive the required colour, from certain reſinous colouring ſubſtances, the principal of which are gamboge and anotto, the former of which gives a yellow, and the latter an orange colour. In order to give a golden colour, two parts of gamboge are added to one of anotto; but theſe colouring-ſubſtances may be ſeparately diſſolved in the tincture of lac, and the colour required may be adjuſted by mixing the two ſolutions in different proportions. When ſilver-leaf, or tin, are to be lacquered, a larger quantity of the colouring materials is requiſite than when the lacquer is intended to be laid on braſs. The following compoſition for braſs-work, deſigned to reſemble gilding, has been much recommended: Take of turmeric ground, as it may be had at the dry-ſalters, one ounce, and of ſaffron and Spaniſh anotto each two drams: put them into a bottle, with a pint of highly-rectified ſpirit of wine, and place the bottle in a moderate heat, occaſionally ſhaking it, for ſeveral days; then ſtrain off the yellow tincture thus obtained, through a coarſe linen cloth, and, putting it back into the bottle, add three ounces of good ſeed-lac groſsly powdered; place the bottle again in a moderate heat, and ſhake it, till the ſeed-lac be diſſolved. The lacquer ſtrained as before will be fit for uſe, and muſt be kept in a bottle carefully ſtopped. By increaſing or diminiſhing the proportion of anotto, the lacquer will be rendered warmer and redder, or cooler and nearer a true yellow. A cheaper compoſition, little inferior to the former, may be formed of one ounce of tumeric-root ground, half a dram of the beſt dragon's blood, and a pint of ſpirit of wine, managed as the former.

The varniſh for tin may be made of one ounce of turmeric-root, two drams of dragon's blood, and one pint of ſpirit of wine, prepared in the ſame manner with the other. The dragon's blood may be increaſed or diminiſh-

ed, as the red or yellow is to be the moſt prevalent; and for a coarſer lacquer the quantity of ſhell-lac may be leſſened, and the deficiency ſupplied by the ſame proportion of reſin. The lacquer for locks, nails, &c. where very little colour is deſired, may be either ſhell-lac varniſh alone, or with a little dragon's blood; or a compound varniſh of equal parts of ſhell-lac and reſin, with or without the dragon's blood. The manner of laying on the lacquer is as follows: The pieces to be lacquered muſt firſt be made thoroughly clean; and, if they be new founded, aquafortis muſt be uſed for this purpoſe. When they are afterwards heated by a ſmall charcoal fire, the lacquer is laid on with a proper bruſh, like other varniſhes, and the pieces reſtored to the heat. After the lacquer is thoroughly dry and firm, the ſame operation muſt be renewed for four or five times, or till the work appears of the required colour and brightneſs. See VARNISH.

To LACK'ER, *v. a.* To ſmear over with lacker:

What ſhook the ſtage, and made the people ſtare?
Cato's long wig, flower'd gown, and *lacker'd* chair. *Pope.*

LACK'ERGAUT, a town of Thibet: forty-five miles ſouth of Deuprag.

LACK'ERING, *ſ.* The act of varniſhing.

LACK'EY, *ſ.* [*lacquais*, Fr.] An attending ſervant; a footboy.—*Lacqueys* were never ſo ſaucy and pragmatical as they are now-a-days. *Addiſon's Spectator.*

They would ſhame to make me
Wait elſe at door: a fellow-counſellor,
'Mong boys, and grooms, and *lackeys!* *Shakeſpeare.*

To LACK'EY, *v. a.* To attend ſervilely:

This common body,
Like to a vagabond flag upon the ſtream,
Goes to, and back, *lacqueying* the varying tide,
To rot itſelf with motion. *Shakeſpeare.*

So dear to heav'n is ſaintly chaſtity,
That, when a ſoul is found ſincerely ſo,
A thouſand liveried angels *lackey* her,
Driving far off each thing of ſin and guile. *Milton.*

To LACK'EY, *v. n.* To act as a footboy; to pay ſervile attendance.—Our Italian tranſlator of the Æneis is a foot-poet; he *lackeys* by the ſide of Virgil, but never mounts behind him. *Dryden.*

Oft have I ſervants ſeen on horſes ride,
The free and noble *lacquey* by their ſide. *Sandys.*

LACK'EYING, *ſ.* The act of attending as a lackey.

LACK'I, a town of Hindooſtan, in Bengal: fifty-ſix miles north of Dacca.

LACK'IPOLE, a town of Bengal: ſixteen miles north-eaſt of Calcutta.

LACKRICOT'TA, a town of Hindooſtan, in the circar of Cicacole: twenty-four miles ſouth-weſt of Vizianagram.

LACKRICOT'TA, a town of Hindooſtan, in Coimbetore: thirteen miles ſouth-weſt of Coimbetore.

LACKRITAPIL'LA, a town of Hindooſtan, in the circar of Cuddapa: twenty miles ſouth-weſt Cuddapa.

LACKWAL'SA, a town of Hindooſtan, in the circar of Cicacole: ſix miles ſouth of Tickeley.

LAC'MUS, or LITMUS. See ARCHIL, vol. ii.

LA'CO, a river of Naples, which runs into the Mediterranean in lat. 39. 50. N. lon. 16. E.

LACOBE'NA, in ancient geography, a town of Aſia, ſituated between the mountains north of Comagene, on a ſmall river which ran into the Euphrates ſouth-eaſt of this town.

LACOBRI'GA, a town of Spain, upon the Piſoraca, ſouth of Juliobriga, and north-eaſt of Pallantia, belonging to the Vaccei.

LACO'LE, a river which falls into Lake Champlain from the weſt, five miles ſouth-ſouth-weſt of Nut-Iſland, after a ſhort courſe.

LACONCEVAN', a town of Upper Siam, on the Mecon: eighty miles ſouth of Porcelon.

LACON'DY ISLES, two ſmall iſlands among the Laccadives, about three miles apart. Lat. 10. 33. N. lon. 71. 40. E.

LACO'NIA, in ancient geography. See LACEDÆMON.

LACO'NIA, in modern geography, the name of a large tract of land in the Iroquois country, North America. See IROQUOIS. When Lake Champlain and Lake George were firſt diſcovered, they were known by no other name than that of the Iroquois Lakes; the Indians alſo that were then called the Iroquois, are ſince known by the name of the Mohawk Nations, and the Mohawks of Canada. In the war between England and France, the former fought on the ſide of the Engliſh; the latter joined the French. A vaſt tract of land, that lies between the two above-mentioned lakes and Lake Ontario, was granted, in 1629, by the Plymouth Company, under a patent they had received from king James I. to ſir Ferdinando Gorges, and captain John Maſon, the head of that family afterwards diſtinguiſhed from others of the ſame name as the Maſons of Connecticut. The countries ſpecified in this grant are ſaid to begin ten miles from the heads of the rivers that run from the eaſt and ſouth into Lake George and Lake Champlain, and, continuing from theſe in a direct line weſtward, extend to the middle of Lake Ontario; thence, being bounded by the Cataraqui, or the River of Iroquois, they take their courſe through Montreal, to the junction of this river with the Richilieu; and from that point are incloſed by the laſt-mentioned river, till it returns back to the two lakes. This immenſe ſpace was granted by the name of the Province of Laconia.

LACON'IC, or LACONICAL, *adj* [*laconicus*, Lat. *laconique*, Fr.] Short, brief; from *Lacones*, the Spartans, who uſed few words.—I grow *laconic* even beyond laconiciſm; for ſometimes I return only yes, or no, to queſtionary or petitionary epiſtles of half a yard long. *Pope.*—The learned Plutarch, in his *laconical* apothegms, tells of a ſophiſter, that made a long and tedious oration in praiſe of Hercules. *Harrington's Apologie of Poetrie.*

LACON'ICALLY, *adv.* [from *laconic.*] Briefly; conciſely.—Alexander Nequam, a man of great learning, and deſirous to enter into religion there, writ to the abbot *laconically. Camden's Remains.*

LACON'ICISM, or LAC'ONISM, *ſ.* [*laconiſme*, Fr. *laconiſmus*, Lat.] A conciſe ſtyle.—I grow laconic even beyond *laconiciſm*; for ſometimes I return only yes, or no, to queſtionary or petitionary epiſtles of half a yard long. *Pope.*—As the language of the face is univerſal, ſo it is very comprehenſive: no *laconiſm* can reach it. It is the ſhort-hand of the mind, and crowds a great deal in a little room. *Collier of the Aſpect.*

LACON'ICUM, *ſ.* [from *Laconia.*] A dry ſtove to ſweat in; a ſtew; a hot-houſe.

To LAC'ONISE, *v. n.* [from *Laconia.*] To make uſe of laconiſms; to act the part of the Lacedemonians. *Not much uſed. Cole.*

LACO'VIA, a town of the iſland of Jamaica: fifty-five miles weſt of Kingſton.

LAC'QUER. See LACKER.

LACRIMO'SO, *adv.* [Italian.] A muſical term, ſeldom uſed now, which implies a plaintive movement, in a ſtyle of weeping.

LAC'SUR, a town of Perſia, in the province of Choraſan: fifty miles north-eaſt of Herat.

LAC'TA, *ſ.* [law Lat.] A defect in the weight of money; whence is derived the word lack. *Du Freſne.*

LAC'TANT, *adj.* [from the Lat. *lacto*, to ſuck.] Sucking; giving milk. *Scott.*

LACTAN'TIUS (LUCIUS CÆLIUS or CÆCILIUS FIRMIANUS), the moſt eloquent of the Latin Chriſtian fathers, flouriſhed in the early part of the fourth century. We are not acquainted with any circumſtances concerning his family; and of the date of his birth, any more than of

his native country, we have no certain information. Some have conjectured that he was a native of Firmum, now Fermo in Italy, and that from thence he was called Firmianus; but it is more generally believed that he was an African. The latter hypothesis derives some weight from the circumstance of his being educated under Arnobius, who taught rhetoric at Sicca in Africa; and it is confirmed by his writing an itinerary from Africa to Nicomedia, which probably contained a description of his own journey to that city. While he studied at Sicca, he wrote a book, entitled, *Sympofium*, or the Banquet; by which he acquired so great a reputation, that, when the emperor Diocletian entertained the design of rendering Nicomedia a rival to Rome, he was sent for by him to teach rhetoric in that city. As, however, he had not many scholars there, it being inhabited chiefly by Greeks, who had no great value for Roman eloquence, he employed himself principally in writing. It has been supposed by some, that Lactantius was originally a heathen, and converted when young to the Christian religion. This point has been examined by Lardner, with his usual attention and judgment; who, from there being no clear intimations of his heathenism, or of his conversion to Christianity, in his own works, or in any ancient writers who have mentioned him, was rather inclined to think, that he was from the beginning educated in the Christian religion; and that he was a Christian when Diocletian's persecution commenced at Nicomedia, is unquestionable. How he passed through that long and dreadful persecution, we are not informed. It appears, however, that, whether owing to the unprofitableness of his profession and literary pursuits, or to the difficulties of the time in which he lived, he was generally in narrow circumstances, and sometimes so poor as to want even necessaries. This extreme poverty Dupin and Tillemont are of opinion was chosen and voluntary, and a proof of his exalted virtue in the exercise of mortification and self-denial; but to such a notion, the language of St. Jerome, from which it is deduced, does not give any countenance. From this state of poverty it is reasonable to conclude that he was relieved, when invited by the emperor Constantine into Gaul, and appointed Latin preceptor to his son, Crispus Cæsar; and, when that prince had been put to death by his father, it seems probable that much notice was not taken of him afterwards, but that, to the disgrace of the emperor, he was left, without a proper provision, to struggle in his old age with inconvenience and penury. We do not know any thing more of the life of Lactantius, than the particulars already mentioned, excepting that he lived to a very advanced period, and that he never pleaded as an advocate at the bar. With respect to the time of his leaving Nicomedia, or of his coming into Gaul, or of his death, nothing can with any certainty be now determined.

We proceed to lay before our readers a summary of the leading opinions of this Christian father. He often speaks of the nature and design of the Christian revelation, as suited to promote the general good of all, of every age, sex, and condition; so that all may attain to just sentiments of God, and be directed and assisted in the way of holiness, and obtain everlasting happiness: and he asserts it to be in the power of the meanest and poorest of men to attain to righteousness. He asserts the freedom of man's will, or, his power to do good or evil. He was of opinion, that another life, or a future state of happiness for good men, may be proved by reason. He did not deny the eternity of hell-torments. He often asserts the great value of repentance, and says, that it entirely obliterates the iniquity, or guilt, of him who had sinned; founding his arguments upon the supposition, that true virtue alone recommends men to the divine acceptance, and that God desires nothing of men, but sincere virtue, or true holiness. Of the ends and views of Christ's coming, and particularly of his death, he says, that Christ was sent to teach all nations under heaven the knowledge and worship of the one only true God; as a master of virtue, to teach the doctrine of righteousness, and to be an example of it, that men following him might obtain eternal life; that he was also to deliver men from an excessive fear of death, and enable them to endure it with courage and patience; and that he lived in a mean condition, and underwent the ignominious death of the cross, that he might be a complete example of virtue, and of patience under sufferings, and that he might more especially encourage such as are poor and mean in this world. He says nothing of Christ's death, according to the creed of the modern orthodox, as a propitiatory sacrifice for sin, or a satisfaction made to divine justice for the sins of the human race. He, likewise, in his Epistles, according to Jerome, denied the personality of the Holy Ghost; and, in others of his writings, which have reached modern times, speaks differently from the present doctrine of the church concerning the trinity, and several other points. Hence he has been characterised by many learned moderns as a miserable divine, who had very little knowledge of the Christian doctrine. Some have charged him with Manichæism; but he is unanswerably vindicated from that accusation by Lardner. He entertained the common notion of that time concerning the fall of many of the angels; and he expected a terrestrial reign of Christ for a thousand years before the general judgment, which happy period he thought to be near, and that it could not be deferred more than two hundred years.

Speaking of his character as a writer, Dupin says, that he is the most eloquent of all the ecclesiastical authors who wrote in Latin. His style is pure, equal, and natural; in a word, it is extremely like Cicero's; and he justly deserves the name of the Christian Cicero, not only for the clearness and purity of his language, but also for the turn of his phrase, and his manner of writing; which so much resembles that of Tully, that the most accurate critics have found it difficult to point out any difference between them: nay, there have been some, as we are informed by Picus Mirandula, who have not hesitated in preferring his style to Cicero's. Lardner pronounces him to have been "an honour and ornament to the Christian profession in his day; who employed his fine parts and extensive learning in the service of religion, without worldly views of any kind. The time in which he lived secures him a kind of veneration. He saw the quiet and peaceful state of the church, before Diocletian's persecution; he was also witness of that dreadful scene, and afterwards saw the flourishing condition of Christians under Constantine. His eminent abilities recommended him to the esteem of two great emperors, of different religions. His uncommon honesty and simplicity, and earnest zeal for the Christian religion, and all truth in general, appear in his works; where also his learning is very conspicuous. But we had seen more proofs of this, if his Epistles, and other works now lost, had come down to us. He had, as it seems, a certain vehemence and impetuosity of natural temper, not uncommon in Africans, which upon some occasions hindered his considering and weighing what might be said on both sides of a question. At the same time, possibly, we are indebted to that fire, which supported him in the fatigues of acquiring knowledge, and then communicating it to others." His principal work is entitled *Institutionum Libri VII.* and is a noble production, containing a most solid and spirited confutation of the writings of two heathens of note, who published pieces against the Christian religion at the commencement of the persecution under Diocletian; and intended, at the same time, as a general answer to all others, who already had, or might afterwards oppose the Christian doctrine. Critics have widely differed in their judgment concerning the time of writing and publishing them; but we conceive that the weight of evidence preponderates in favour of the opinion of Cave and Lardner, who consider them to have been composed, for the most part at least, under the persecution of Diocletian, though perhaps they were not published till after it was over. Of the preceding we

have

have alſo an abridgment, entitled *Inſtitutionum Epitome*, inſcribed by Lactantius to his brother Pentadius. This was imperfect at the beginning, in St. Jerome's copy, and was ſo in thoſe which reached modern times, till, to the great joy of the learned world, a perfect or nearly perfect copy was found in the library of the king of Sardinia at Turin, by Dr. Chriſtopher Matthew Pfaff, and publiſhed by him at Paris in 1712. A curious account of the manuſcript, and the fortunate diſcovery of it, may be read in the preliminary diſſertation, and in M. la Roche's Memoirs of Literature. This abridgment is a uſeful book, containing in it ſome things not to be found in the Inſtitutions themſelves. In his treatiſe *De Ira Dei*, which is particularly commended by Jerome as a learned and elegant piece, and a complete treatiſe upon the ſubject, Lactantius endeavours to prove, that God is capable of anger as well as of mercy and compaſſion; and, in his treatiſe *De Opificio Dei*, he eſtabliſhes the doctrine of God's providence, by demonſtrating the excellence of his principal work, which is man, giving an elegant deſcription of the parts of the human body, and the properties or faculties of the ſoul. What we have already noticed are the only works remaining, which are univerſally allowed to be the genuine productions of Lactantius. Reſpecting the well-known book *De Mortibus Perſecutorum*, the learned world has been divided in opinion; one party maintaining that it is to be aſcribed to that father, and the other that it carries ſtrong intrinſic marks of having been written by another hand. The reader may find a reference to the authors on both ſides the queſtion in Lardner. Whether it be genuine or not, it is, however, a very valuable work, containing a ſhort account of the ſufferings of the Chriſtians under ſeveral of the Roman emperors, from the death and reſurrection of Chriſt to Diocleſian; and then a particular hiſtory of the perſecution raiſed by that emperor, and the cauſes and ſprings of it; as likewiſe the miſerable deaths of the chief inſtruments employed in it. This piece furniſhes us with ſeveral remarkable facts, which are recorded no-where elſe. It is a work which none of the ancients after the time of Jerome have noticed; and was firſt publiſhed by Stephen Baluze, in the ſecond volume of his Miſcellanea, in the year 1679. Nothing need be ſaid of the poems *De Phœnice*, *De Paſcha*, and *De Paſſione Domini*, which are joined with the works of Lactantius in moſt editions, but are now generally allowed to be ſpurious. The editions of this father's works are very numerous, and are moſt of them mentioned by Cave and Dupin. The firſt edition was publiſhed at Rome, in 1468, in folio, by Conrad Lewenheim; and the laſt, which is the moſt correct, was edited at Paris, in 1748, in two volumes quarto, by the abbé Lenglet. *Fabricii Bibl. Eccl. Cave's Hiſt. Lit. Lardner.*

LAC'TARY, *adj.* [*lactareus*, Lat.] Milky; full of juice like milk.—From *lactary* or milky plants, which have a white and lacteous juice diſperſed through every part, there ariſe flowers blue and yellow. *Brown.*

LAC'TARY, *ſ.* [*lactarium*, Lat.] A milk-houſe.

LACTA'TION, *ſ.* [*lacto*, Lat.] The act or time of giving ſuck. See INFANT.

LACTE'AL, *adj.* [from *lac*, Lat.] Milky; conveying chyle of the colour of milk.—As the food paſſes, the chyle, which is the nutritive part, is ſeparated from the excrementitious by the *lacteal* veins; and from thence conveyed into the blood. *Locke.*

LACTE'AL, *ſ.* The veſſel that conveys chyle.—The mouths of the *lacteals* may permit aliment, acriminious or not ſufficiently attenuated, to enter in people of lax conſtitutions, whereas their ſphincters will ſhut againſt them in ſuch as have ſtrong fibres. *Arbuthnot.*

Theſe veſſels were not known to Eraſiſtatus and Herophilus, but are diſtinctly mentioned by Galen. It was ſuppoſed, very early, that they conveyed the nutriment from the inteſtines; but, as uſually the liver was conſidered to be the part in which the blood was elaborated, theſe veſſels were ſaid to terminate in that organ. Plates ſtill exiſt in which they are repreſented as taking this courſe, though it had been contradicted by Galen. To Aſellius the credit of the diſcovery has been given, and the exact day fixed, viz. the 23d of June, 1622, when opening a dog for an experiment of a very different nature: but, in reality, he ſaw them only as Galen and his predeceſſors had done; and, ſo far from tracing their courſe to the thoracic duct, he deſcribed them as terminating in the liver. He ſaw, however, their valves; and conjectured, rather than demonſtrated, that they receive their contents by orifices opening into the inteſtines. It is ſingular that he had not connected with this diſcovery the deſcription of the thoracic duct by Euſtachius, in 1563, which would at once have cleared up the principal circumſtances of this courſe of the lymph or chyle. Aſellius never ſaw the lacteals in the human body, but ſuppoſed their exiſtence from analogy; and it was twelve years afterwards, viz. in 1634, that Veſlingius firſt diſcovered them, and added, in the year 1649, the revival of the diſcovery of Euſtachius, viz. the exiſtence of the common receptacle of the lacteals and lymphatics, the thoracic duct. Rudbeck, nearly at the ſame era, without any previous communication, diſcovered the lymphatics in quadrupeds; and about the year 1654 traced the duct in the human body. About the ſame time our countryman, Dr. Jolyfe, alſo diſcovered the lacteals and lymphatics, without any knowledge of Rudbeck's ſucceſs. As theſe authors diſcovered them in man and in quadrupeds, ſo Bartholine ſeems firſt to have ſeen them in fiſh.

The lymphatics and lacteals are the ſame in ſtructure, direction, and office. The lymphatics ſometimes carry a milky fluid, and the lacteals a ſerous one; each conveys occaſionally blood, diſſolved or ſuſpended oſſeous matter; in ſhort, every thing which nature requires to be removed from the cellular or other cavities of the body.

The lacteals ariſe from the cavity of the inteſtines, from beginnings almoſt imperceptible: they run along the inteſtines in a longitudinal direction, freely anaſtomiſing with each other; but the courſe of the contents of theſe veſſels is oppoſite to that of the blood. This longitudinal direction is continued for ſome way; and the lacteal then turns towards the meſentery, at an angle more or leſs acute. This lengthened courſe is probably deſigned for ſome peculiar purpoſe, probably for the animaliſation of this newly-introduced aliment. The veſſel then proceeds to the glands interpoſed, in which they are loſt, and from which ſimilar veſſels of larger ſize, but leſs numerous, emerge. Theſe are ſtyled glands of the firſt order, as in their courſe to the thoracic duct other glands are found. In the whole of their progreſs, numerous valves are interpoſed to prevent regurgitation; ſo that ſometimes a lacteal, injected with quickſilver, reſembles rather a ſtring of ſilver beads than a continuous veſſel. In the courſe of the lacteals to the firſt order of glands there are few anaſtomoſes; but before entering the glands they are minutely divided. It ſometimes happens alſo, that a lacteal, when it arrives at a gland, will creep over it without being immerſed in it; and, at others, a trunk will paſs at a little diſtance. The lacteals, which come off at the upper portion of the canal, paſs through fewer glands than thoſe from the ileon; and in old age many of the glands are obliterated. In the duodenum, perhaps, the more perfect chyle is ſeparated; and in old perſons the fluids are ſo highly animaliſed, that leſs precaution is neceſſary in preparing the new aliment. In the colon, the cœcum, and rectum, no lacteals have been diſcovered; though, from the numerous lymphatic glands in the meſocolon, lacteals muſt exiſt there. From the glands the lacteals paſs on to the thoracic duct, and probably, in their courſe, anaſtomoſe with ſome of the lymphatics. Dr. Harvey diſcovered the lymphatics in the year 1616. In 1627 they were publiſhed by another author. Uzzalius diſcovered the lacteals in a dog, running to the meſenteric glands, in the year 1662.

LACTE'OUS, *adj.* Milky.—Though we leave out the

lacteous circle, yet are there more by four than Philo mentions. *Brown.*—Lacteal; conveying chyle.—The lungs are ſuitable for reſpiration, and the *lacteous* veſſels for the reception of the chyle. *Bentley.*

LAC'TES, *ſ.* The ſmall guts; the ſweetbread; the row; the milt of fiſhes. *Not much uſed. Phillips.*

LACTES'CENCE, *ſ.* Tendency to milk, or milky colour.—This *lacteſcence* does commonly enſue, when, wine being impregnated with gums, or other vegetable concretions, that abound with ſulphureous corpuſcles, fair water is ſuddenly poured upon the ſolution. *Boyle on Colours.*

LACTES'CENT, *adj.* Producing milk, or a white juice.—Amongſt the pot-herbs are ſome *lacteſcent* plants, as lettuce and endive, which contain a wholeſome juice. *Arbuthnot.*

LAC'TIC, *adj.* Partaking of the nature of milk; prepared from milk.

LACTIC ACID. See the article CHEMISTRY, vol. iv. p. 360.

LACTIF'EROUS, *adj.* [*lac* and *fero*, Lat.] What conveys or brings milk.—He makes the breaſts to be nothing but glandules, made up of an infinite number of little knots, each whereof hath its excretory veſſel, or *lactiferous* duct. *Ray on the Creation.*—An appellation given to plants abounding with a milky juice, as the ſow-thiſtle and the like. But the name *lactiferous*, or *lacteſcent*, is given to all thoſe plants which abound with a thick coloured juice, without regarding whether it is white or not; for in ſome it is yellow, in others red.—Moſt *lactiferous* plants are poiſonous, except thoſe with compound flowers, which are generally of an innocent quality. *Ency. Brit.*

LACTIF'IC, or LACTIFICAL, *adj.* Producing milk. *Scott.*

LACTOM'ETER, *ſ.* The name of an inſtrument for the purpoſe of aſcertaining the different qualities of milk. It was invented by Mr. Dicas, mathematical inſtrument maker, in Liverpool; and a deſcription of it is given in the Survey of the County of Lancaſter. This lactometer is contrived ſo as to aſcertain the richneſs of milk from its ſpecific gravity compared with water, by its degree of warmth taken by a ſtandard thermometer, on comparing its ſpecific quality with its warmth, on a ſcale conſtructed for this particular purpoſe; and by which, *if the principle be right*, may be diſcovered, not only the qualities of the milk of different cows, paſtures, food, as turnips, potatoes, grains, &c. but alſo, probably, which may be the beſt milk or beſt paſtures for butter, and which for cheeſe. This inſtrument, however, is but in its infancy; and, till repeated experiments have confirmed its efficacy, it would be premature to give a detailed account of it. At preſent it is made uſe of in the Liverpool workhouſe in aſcertaining goodneſs of the milk conſumed there.

LACTU'CA, *ſ.* [*à lacte*, from its milkineſs.] LETTUCE; in botany, a genus of the claſs ſyngeneſia, order polygamia æqualis, natural order of compoſitæ ſemifloſculoſæ, (cichoraceæ, *Juſſ.*) The generic characters are—Calyx: common imbricated, cylindric; ſcales very many, ſharp, membranaceous on the margin. Corolla: compound imbricated, uniform; corollets hermaphrodite, very many, equal. Proper one-petalled, ligulate, truncated, four or five toothed. Stamina: filaments five, capillary, very ſhort; anther cylindric, tubular. Piſtillum: germ ſubovate; ſtyle filiform, length of the ſtamens; ſtigmas two, reflex. Pericarpium: none; calyx converging, ovate-cylindric. Seeds: ſolitary, ovate, acuminate, even, compreſſed. Down capillary; on a long ſtipe, attenuated below. Receptaculum: naked.—*Eſſential Character.* Calyx imbricate, cylindrical, with a membranaceous margin; receptacle naked; ſeeds even, with a ſimple ſtipitate down.

Species. 1. Lactuca quercina, or oak-leaved lettuce: leaves runcinate, toothletted, acute, even underneath; ſtem ſmooth. Root perennial, fleſhy. Stem upright, narrow, uſually from one to two feet in height, but ſometimes ſix feet high; even, unbranched, terminated by an upright narrow raceme of flowers. Lower leaves runcinated; upper pinnatifid, with toothletted acute ſegments; they are not at all prickly underneath, and reſemble thoſe of Sonchus oleraceus, or common ſow-thiſtle. Flowers as in L. ſativa, yellow; calyx ſmooth, ſometimes dotted with red; corollets five-toothed; down white. Ray, who cultivated it in his garden at Cambridge, remarks, that the leaves reſemble thoſe of the oak, are of a deeper green than thoſe of the garden-lettuce, ſmaller, and few at the root, before it grows up into a ſtalk. In its whole habit it approaches nearer to the wild than the garden lettuce. Native of Sweden and Germany.

2. Lactuca intybacea, or endive-leaved lettuce: leaves runcinate, tooth-ciliate, blunt, embracing; ſtem panicled. The whole plant is ſmooth and milky. From an annual root the ſtem riſes two or three feet in height, round, upright, green, leafy at bottom, dividing at top into rod-like leafleſs branches. Native of South America.

3. Lactuca ſativa, or garden-lettuce: leaves rounded; ſtem-leaves cordate; ſtem corymbed. Leaves large, milky, frequently wrinkled, uſually pale green, but varying much in colour, form, &c. in the different varieties. Stem ſtrong, round, two feet or three quarters of a yard in height, bearing abundance of ſmall yellow flowers. The ſeeds are a little ſmaller than in L. ſcariola, but more turgid, narrowing very much below, marked with ſeven crenulate ſtreaks, aſh-bay coloured or whitiſh. The down is very ſoft and fugacious, and placed on a ſtipe the length of the ſeed. The native place of the garden-lettuce is unknown; and it is not improbable that it may be a mere creature of cultivation, from one of the wild ones. The firſt printed authority we have for its cultivation in England is that of Turner in 1562; but we probably had it much earlier.

The common or cultivated lettuce has long been celebrated for its cooling and wholeſome properties; and, as it contains a milky juice of an opiate nature, it in conſequence promotes ſleep. Lettuce is alſo in ſome degree laxative and aperient, and is proper in hot bilious diſpoſitions. The ſeeds of lettuce are of an emollient nature, and are ranked amongſt the cold ſeeds of the old materia medica. They unite with water by trituration into an emulſion or milky liquor, which has nothing of the aperient bitterneſs of the milky juice of the leaves, and is nearly ſimilar to the emulſion of almonds: this emulſion of lettuce has however been ſuppoſed of a more refrigerating nature than that of almonds, and hence has been preferred in heat of urine and other diſorders ariſing from acrimony or irritation. The ſeveral varieties cultivated in kitchen-gardens for uſe are, 1. Common or garden lettuce. 2. Cabbage-lettuce. 3. Cilicia. 4. Dutch brown. 5. Aleppo. 6. Imperial. 7. Green capuchin. 8. Verſailles, or upright white Cos. 9. Black Cos. 10. Red capuchin. 11. Roman. 12. Prince. 13. Royal. 14. Egyptian Cos. Garden-lettuce is named in German *gartenſalat*; in Dutch, *tuinſalade*, or *latuw*; in French, *laitue cultivée*, ou *commune*. *Lactuca* a little changed is the prevailing word in the European languages for lettuce: in Ruſſian, Daniſh, and Swediſh, it is *laktuk*; in Italian, *lattuga*; in Spaniſh, *lechuga*; in Portugueſe, *leituga*.

It has long been known that lettuce poſſeſſes narcotic properties; till lately, however, none had extracted from it a ſubſtance poſſeſſing all the properties of opium. Dr. Coxe of Philadelphia has proved (American Philoſophical Tranſactions, vol. iv.) that the inſpiſſated milky juice of the common lettuce is *real opium*, and, according to every appearance, of a better quality than the eaſtern; for the principal virtues of this medicine are believed to reſide in the *extractive* matter; and, by comparative experiments, it was found that ten grains of extractive matter were taken up by two ounces of rain-water from twenty grains of lettuce-opium; while, from the ſame quantity of common opium, only nine grains were taken up by an

equal quantity of the ſame water. The ten grains of the former which were left on the filter, being affuſed with half an ounce of alcohol, and again filtered on the tenth day after, left on the filter ſeven grains. The quantity of reſinous matter, then, was three grains. The eleven grains left from the common opium, by a ſimilar treatment, were found alſo to contain three grains; the portion inſoluble either in water or alcohol being eight grains. The reſin being afterwards precipitated from the alcohol by the addition of water, that of the lettuce appeared whiter than the other. By trials made in the Pennſylvania hoſpital, and by experiments made by Dr. Coxe upon himſelf, the lettuce-opium was found to poſſeſs all the properties of the common.

The milky juice from which the opium is prepared exiſts in the ſtalk and in the leaves of the plant. It is not indiſcriminately depoſited throughout, but is placed in appropriate veſſels running longitudinally in the woody or fibrous part of the ſtalk. The internal or medullary part of the plant is ſoft, and perfectly bland to the taſte; abounding in a tranſparent mucilaginous juice, which has not the ſmalleſt analogy to the milky one above-mentioned. The beſt time for collecting the milky juice is when the plants are beginning to ſeed: before this it has not acquired its medical properties, and at a later period the produce is by no means ſo conſiderable. It is procured in the ſame manner as from the poppy, i. e. by inciſions; with this difference, that in the poppy they are longitudinal, but in the lettuce they muſt be circular. A very moderate depth ſuffices. It exudes freely in milky drops, which may be either immediately collected, or ſuffered to dry on the ſtalk, and then ſcraped off and depoſited in proper veſſels.

All the ſpecies of lettuce contain opium in a greater or leſs proportion. The common lettuce, as has before been obſerved, produced that made uſe of by Dr. Coxe; but our fifth ſpecies, the Lactuca viroſa, contains it moſt abundantly. The preſent ſpecies, however, ſhould perhaps be preferred; as it will ſerve the double purpoſe of cultivating for the table as well as for the druggiſt. The ſale of the ſupernumerary plants would probably more than repay the expence attending the cultivation of thoſe intended for opium; indeed, a number of plants generally run to ſeed and are loſt, at preſent, which might, and we hope in future will, be made to turn to good account. See the recent communications of Dr. Duncan to the Caledonian Horticultural Society, as printed in their Memoirs, or abridged in the Medical Journal for Aug. 1812.

4. Lactuca ſcariola, or prickly lettuce: leaves vertical, prickly on the keel. Root biennial, very full of milky juice, as is every part of the plant. Stem erect, two or three feet high, round, prickly, leafy, branched at the top into a ſort of panicle, conſiſting of numerous pale-yellow flowers; the flowering-branches do not ſpread out, but point upwards. Native of the ſouthern parts of Europe: with us in the Iſle of Ely, on the borders of fields, as near Denny-abbey, &c.

5. Lactuca viroſa, or ſtrong-ſcented lettuce: leaves horizontal, prickly on the keel, and toothed: ſtem from two to four feet high, prickly below. Root-leaves oblong-wedge-ſhaped, toothed at the edge: ſtem-leaves ſagittate, embracing, either entire or pinnatifid, ſharply toothed: floral-leaves ſagittate, half embracing, broad at the baſe, tapering to a ſharp point, one at the baſe of each flowering branch: theſe are ſpreading. Flowers numerous, yellow, ſeſſile, or on ſhort peduncles, with a ſmall leaf at the baſe of each, and others ſtill ſmaller on them. Seeds furrowed and rough; very like thoſe of L. ſativa in all reſpects, except that the edges and ſtreaks near the top of the ſeed are rendered rough by very minute prickles. According to Gerard and Haller, this is a variety of the preceding, which, though bitter, acrid, and fetid in ſome degree, is however much milder than this, and may eaſily be diſtinguiſhed from L. viroſa by its paler colour, its leſs-ſpreading branches, and its vertical leaves. Native of the ſouthern parts of Europe, by hedges, ditch-banks, and borders of fields. In England, at the World's End near Stepney, and on the banks of the Thames between Blackwall and Woolwich; Burwell-pit and other places in Cambridgeſhire; old walls in Bungay, Suffolk; Marſton-lane, Oxfordſhire; in a ſtone quarry at Thorp Arch in Yorkſhire.

This ſpecies abounds with a milky juice, of which the opiate power is of very conſiderable ſtrength, inſomuch that it may occaſionally be uſed in the manner of common opium. It may be collected by ſuffering the juice to drain from the wounded parts of the plant; and then by drying, in the manner of opium, it may be made into pills. Sir John Hill, in his Britiſh Herbal, recommends this to be practiſed in April and May. When dried, it diſſolves freely in wine, and is ſaid to be an excellent anodyne; the doſe of which is a tea-ſpoonful in a glaſs of water, anſwering all the purpoſes of laudanum. Dr. Collin relates twenty-four caſes of dropſy, out of which twenty-three were cured by taking the extract in doſes from eighteen grains to three drams in twenty-four hours. It commonly proves laxative, promotes urine and gentle ſweats, and removes the thirſt. It muſt be prepared when the plant is in flower.

6. Lactuca ſaligna, or leaſt lettuce: leaves haſtate-linear, ſeſſile, prickly on the keel. Leaves ſagittate at the baſe, the lower pinnatifid: ſegments few, alternate, ligulate, finely toothed, with a ſharp point at the end, ſomewhat hooked, the terminating one long; the upper entire, ligulate; the midrib not always prickly. Linnæus remarks, that the leaves are vertical, nearly as in L. ſcariola. Native of France, Saxony, the Palatinate, Sileſia, Switzerland, Auſtria, Carniola, Piedmont, England, on the banks of ditches, and in paſtures in a chalky ſoil.

7. Lactuca tuberoſa, or tuberous-rooted lettuce: leaves ſpinuloſe-toothed; ſtem almoſt ſimple; root tuberous, manifold. The whole plant, and even the calyx, abounding in a white milk, which turns to an orange-colour when expoſed to the air.

8. Lactuca Canadenſis, or Canadian lettuce: leaves lanceolate-enſiform, embracing, toothed, unarmed. This differs from L. ſativa in having a higher ſtem; the leaves four times longer, and narrower; the flowers in a long terminating compound raceme, not a corymb. Native of Canada. It was cultivated by Mr. Miller in 1726, and probably earlier at Badminton.

9. Lactuca Indica, or Indian lettuce: leaves lanceolate-enſiform, ſeſſile, unequally toothed. This bears a great ſimilitude to the preceding; it agrees with that in its lofty narrow ſtature, and the ſhort ſtipes to the ſeeds; but the leaves are more toothed, and the teeth are unequal; the leaves ſcarcely petioled, by no means embracing; the panicle more branched, and floriferous. Obſerved in the iſland of Java by Oſbeck. Native of the other parts of the Eaſt Indies.

10. Lactuca perennis, or perennial lettuce: leaves linear, tooth-pinnate; ſegments toothed upwards. Root perennial, compoſed of many long fleſhy fibres, which abound with a milky juice, and ſpread pretty far in the ground. Stems ſeveral, ſtrong, dividing towards the top into ſeveral branches. Root-leaves nine or ten inches long, having ſix or ſeven deep jags almoſt to the midrib, toothed on their upper ſide, the teeth acuminate; ſtem-leaves ſhorter, with fewer jags; thoſe immediately below the flower-ſtalks are almoſt entire. Flowers terminating, on ſlender branching peduncles, ſuſtaining from two to four flowers; corollas deep purple or blue. Native of Germany, Italy, and France. Cultivated in 1633.

11. Lactuca Auguſtana, or Aoſta lettuce: leaves entire, toothed, ſharply hooked, the midrib ſmooth. Root annual, fuſiform. Stem the height of a man, ſmooth, upright, very ſlightly ſtriated, branched about the middle; branches upright, ſubdivided. The whole plant is very ſmooth and milky, without any viroſe ſmell. Found in ſandy places by the torrent that deſcends from the Great St. Bernard, and in the valley of Aoſta between St. Pierre and Villanova.

Monſ. Villars has another ſpecies, which he names L. Chaixi, becauſe it was diſcovered by M. Chaix. According to him it is different from this. Parkinſon's Cichoreum Conſtantinopolitanum has ſome affinity to it. The leaves of Caſpar Bauhin's L. folio oblongo-acuto ſeem alſo to approach it a little; but it is diſtinct from both.

Propagation and Culture. The common lettuce is ſown for cutting very young, to mix with other ſmall ſallad-herbs; and is only different from the cabbage-lettuce in being a degeneracy therefrom, or rather the ſecond is an improvement by frequent cultivation from the firſt; for, if the ſeeds are ſaved from ſuch plants of the latter as did not cabbage cloſely, the plants produced from that ſeed will degenerate to the firſt ſort, which is by the gardeners called lapped-lettuce, to diſtinguiſh it from the other, which they call cabbage-lettuce. The ſeeds of the firſt, which are commonly ſaved from any of the plants, without having regard to their goodneſs, are generally ſold at a very cheap rate, eſpecially in dry ſeaſons, when theſe plants always produce the greateſt quantity of ſeeds; though ſometimes this ſeed is ſold in the ſeed-ſhops, and by perſons who make a trade of ſelling ſeeds, for the cabbage-lettuce, which is often the occaſion of people's being diſappointed in their crop; ſo that this ſort ſhould never be cultivated but to be cut up very young, for which purpoſe this is the only good ſort, and may be ſown any time of the year, obſerving only in hot weather to ſow it in ſhady borders, and in the ſpring and autumn upon warm borders; but in winter it ſhould be ſown under glaſſes, otherwiſe it is ſubject to be deſtroyed by ſevere froſts. The cabbage-lettuce may alſo be ſown at different times of the year, in order to have a continuation of it through the whole ſeaſon. The firſt crop is generally ſown in February, upon a warm ſpot of ground; and, when the plants are come up, they ſhould be thinned-out to the diſtance of ten inches each way, which may be done by hoeing them out, as is practiſed for turnips, carrots, onions, &c. provided you have no occaſion for the ſuperfluous plants; otherwiſe they may be drawn up, and tranſplanted into another ſpot of good ground at the ſame diſtance, which, if done before the plants are too large, they will ſucceed very well, though they will not be ſo large as thoſe which are left upon the ſpot where they were ſown, but they will come ſomewhat later, which will be of ſervice where people do not continue ſowing every fortnight or three weeks in the ſummer. You muſt alſo obſerve, in ſowing the ſucceeding crops, as the ſeaſon advances, to chooſe a ſhady moiſt ſituation, but not under the drip of trees, otherwiſe in the heat of ſummer they will run up to ſeed before they cabbage. In the beginning of Auguſt you ſhould ſow the laſt crop, which is to ſtand over the winter; the ſeeds ſhould be ſown thin upon a good light ſoil, in a warm ſituation; and, when the plants are come up, they muſt be hoed-out, ſo as they may ſtand ſingly; and cut down all the weeds to clear them. In the beginning of October they ſhould be tranſplanted into warm borders, where, if the winter is not very ſevere, they will ſtand very well; but, in order to be ſure of a crop, it will be adviſeable to plant a few upon a bed pretty cloſe together, where they may be arched over with hoops, and in ſevere froſts they ſhould be covered with mats and ſtraw, or peaſe-haulm, to ſecure them from being deſtroyed; and in the ſpring of the year they may be tranſplanted out into a warm rich ſoil, at the diſtance before-mentioned; but ſtill thoſe which grow under the wall, if they eſcape the winter, and are ſuffered to remain, will cabbage ſooner than thoſe which are removed again; but you muſt obſerve not to place them too cloſe to the wall, which would occaſion them growing up tall, and prevent their being large or hard. In order to ſave good ſeeds of this kind, you ſhould look over your lettuces when they are in perfection, and ſuch of them as are very hard, and grow low, ſhould have ſticks thruſt into the ground, by the ſides of as many of them as you intend for ſeed, to mark them from the reſt; and you ſhould carefully pull up all the reſt from amongſt them as ſoon as they begin to run up, if any happen to be left, leſt, when they are run up to flower, they ſhould, by the intermixing their farina with the good ones, degenerate the ſeeds. The ſeeds ſhould always be ſaved either from thoſe which ſtood through the winter, or thoſe which were ſown early in the ſpring; for the late ones very ſeldom perfect their ſeeds.

The Cilicia, imperial, royal, black, white, and upright, Cos-lettuces, may be ſown at the following times: The firſt ſeaſon for ſowing theſe ſeeds is at the latter end of February, or the beginning of March, upon a moderate hot-bed, or on a warm light ſoil in a ſheltered ſituation; and, when the plants are come up, and are fit to tranſplant, thoſe which are ſown on the hot-bed ſhould be planted on another warm bed about four inches aſunder row from row, and two inches diſtance in the rows, obſerving to ſhade them from the ſun till they have taken new root; after which they ſhould have a larger ſhare of air admitted to them daily, to prevent their drawing up weak; but, if the ſeaſon prove favourable, they ſhould be tranſplanted the beginning of April to the place where they are to remain, allowing them ſixteen inches room every way, for theſe large ſorts muſt not be planted too near each other. Thoſe which were ſown in the full ground will be later before they come up; ſo ſhould be either hoed out, or tranſplanted into another ſpot of ground, eſpecially if the ſoil be good; after they have taken new root, you muſt carefully keep them clear from weeds, which is the only culture they will require, except the black Cos-lettuce, which ſhould be tied up when they are full grown, in the manner as was directed (vol. iv. p. 594.) for blanching of endive, to whiten their inner leaves, and render them criſp, otherwiſe they are ſeldom good for much, rarely cabbaging without this aſſiſtance. When your lettuces are in perfection, you ſhould look over them, and mark as many of the beſt of them as you intend for ſeed, in the ſame manner as was before directed for the common cabbage-lettuce, being very careful not to ſuffer any ordinary ones to ſeed amongſt them, as was before obſerved, which would prove more injurious to theſe ſorts than to the common, as being more inclinable to degenerate with us, if they are not carefully ſaved. You may alſo continue theſe ſorts through the whole ſeaſon of lettuce, by ſowing them in April, May, and June, obſerving, as was before directed, to ſow the late crops in a ſhady ſituation, otherwiſe they will run up to ſeed before they grow to any ſize; but in the middle of September you may ſow of theſe ſorts to abide the winter; which plants ſhould be tranſplanted either under glaſſes, or into a bed, which ſhould be arched over with hoops, in order to be covered in the winter, otherwiſe in hard winters they are often deſtroyed; but you muſt conſtantly let theſe plants have as much free air as poſſible when the weather is mild, only covering them in hard rains or froſty weather; for, if they are kept too cloſely covered in winter, they will be ſubject to a mouldineſs, which ſoon rots them. In the ſpring theſe plants ſhould be planted out into a rich light ſoil, allowing them at leaſt ſixteen inches diſtance each way; for, if they are planted too cloſe, they are very ſubject to grow tall, but ſeldom cabbage well; and from this crop, if they ſucceed well, it will be proper to ſave your ſeeds; though you ſhould alſo ſave from that crop ſown on the hot-bed in the ſpring, becauſe ſometimes it happens, that the firſt may fail by a wet ſeaſon, when the plants are full in flower, and the ſecond crop may ſucceed, by having a more favourable ſeaſon afterwards; and, if they ſhould both ſucceed, there will be no harm in that, ſince the ſeeds will grow very well when two years old, and, if well ſaved, at three; but this will not always happen.

The moſt valuable of all the ſorts of lettuce in England, are the Egyptian green Cos, the Verſailles or white Cos, and the Cilicia; though ſome people are very fond of the royal and imperial lettuces; but they ſeldom ſell

ſo well in the London markets as the other, nor are ſo generally eſteemed. Indeed of late years, ſince the white Cos was commonly cultivated, it obtained the preference of all the other ſorts, until the Egyptian green Cos was introduced, which is ſo much ſweeter and tenderer, that it is by all good judges eſteemed the beſt ſort of lettuce yet known. This ſort will endure the cold of our ordinary winters full as well as the white Cos: but at the ſeaſon of its cabbaging, if there happen to be much wet, this, being very tender, is very ſubject to rot.

The brown Dutch and green capuchin lettuces are very hardy, and may be ſown at the ſame ſeaſons as was directed for the common cabbage-lettuce; and are very proper to plant under a wall or hedge, to ſtand the winter, where many times theſe will abide when moſt of the other ſorts are deſtroyed, and therefore they will prove very acceptable at a time when few other ſorts are to be had; they will alſo endure more heat and drought than moſt other ſorts, which renders them very proper for late ſowing; for it often happens, in very hot weather, that the other ſorts will run up to ſeed in a few days after they are cabbaged, whereas theſe will abide near a fortnight in good order, eſpecially if care be taken to cut the forwardeſt firſt, leaving thoſe that are not ſo hard cabbaged to be laſt. If ſome plants of theſe two laſt ſorts are planted under frames, on a moderate hot-bed in October, they will be fit for uſe in April, which will prove acceptable to thoſe who are lovers of lettuce; and being covered by glaſſes will render them tender. In ſaving theſe ſeeds, the ſame care ſhould be taken to preſerve only ſuch as are very large and well cabbaged, otherwiſe the ſeeds will degenerate, and be good for little.

The red capuchin, Roman, and prince, lettuces, are pretty varieties, and cabbage very early; for which reaſon a few of them may be preſerved, as may alſo ſome of the Aleppo, for the beauty of its ſpotted leaves; though very few people care for any of theſe ſorts at table, when the other more valuable ones are to be obtained; but in a ſcarcity theſe may ſupply the place pretty well, and theſe ſorts are very proper for ſoups. The ſeeds of theſe muſt alſo be ſaved from ſuch as cabbage beſt, otherwiſe they will degenerate, and be good for little. In ſaving ſeeds of all theſe ſorts of lettuce, you ſhould obſerve never to let two ſorts ſtand near each other; for, by their farina mixing, they will both vary from their original, and partake of each other. There ſhould be a ſtake fixed down by the ſide of each, to which the ſtem ſhould be faſtened, to prevent their being broken, or blown out of the ground by wind, to which the Cilicia, Cos, and the other large-growing, lettuces, are very ſubject when they are in flower. You muſt alſo obſerve to cut ſuch branches of the large-growing lettuce as ripen firſt, and not wait to have the ſeed of the whole plant ripe together, which never happens; but, on the contrary, ſome branches will be ripe a fortnight or three weeks before others; and, when you cut them, they muſt be ſpread upon a coarſe cloth in a dry place, that the ſeeds may dry, after which you ſhould beat them out, and dry them again, and then preſerve them for uſe, being careful to hang them up where mice and other vermin cannot come at them; for, if they do, they will ſoon eat them up.

The wild ſorts are eaſily raiſed from ſeed. Perennial lettuce ſpreads at the roots, and may be increaſed by ſuckers. See CHONDRILLA, PRENANTHES, SONCHUS, and ULVA.

LACTU'CA AGNI'NA. See VALERIANA LOCUSTA.

LACTUCIM'INA, *ſ.* With phyſicians, the aphthæ; ſmall ulcers in the mouth. *Phillips.*

LACTUCI'NA, *ſ.* In heathen mythology, the goddeſs who was ſuppoſed to preſide over the corn while ſoft and milky in the ear.

LACTU'MIA, *ſ.* With ſurgeons, the achor; a cruſted kind of ulcer on the head.

LACTU'MINA, *ſ.* The thruſh; ſmall ulcers in the mouth.

LACU'NA, *ſ.* [Latin.] In old records, a ditch in which water ſtands; a dike; a furrow for a drain; a blank in a writing.

LACU'NÆ, *ſ.* in anatomy, ſmall pores or paſſages in the urethra.

LACU'NAR, *ſ.* in architecture, an arched roof or cieling; the cieling of a portico.

LACUNA'TION, *ſ.* A perforation; the act of making holes. *Cole.*

LACUN'OSE, *adj.* in natural hiſtory, having many ſmall pits or dents in the ſurface.

LA'CUS, *ſ.* [Latin.] A ſtanding pool of water.

LACY'DES, a Greek philoſopher of the middle academy, was a native of Cyrene, and the diſciple of Arceſilaus, whom he alſo ſucceeded in the academic chair. He was very poor in his youth; but, notwithſtanding his humble circumſtances, he acquired great reputation by his intenſe application to his ſtudies, his graceful manner of ſpeaking, and entertaining converſation. At the death of Arceſilaus, in the fourth year of the hundred and thirty-fourth Olympiad, he ſucceeded to his office, and adhered to his doctrines without making any innovation in them. He taught in a new ſchool, which however was within the limits of the academic grove. This was a garden which Attalus king of Pergamus had cauſed to be made, and preſented to him, which was afterwards known by the name of the Lacydean garden. That prince, who was a lover of philoſophy, entertained a high eſteem for Lacydes, and ſent him an invitation to come to his court; to which he anſwered, that the portraits of kings ſhould be viewed at a diſtance. After teaching philoſophy twenty-ſix years, he reſigned the employment to his diſciples Telecles and Evander, in the ſecond year of the hundred and forty-firſt Olympiad. He had a gooſe, which was ſo much attached to him, that it followed him wherever he went, by night as well as by day; and, when the animal died, our philoſopher, not greatly to the credit of his wiſdom, ſolemniſed its funeral obſequies with as much magnificence as if it had been his ſon or brother. The cauſe of his death, which may be attributed to himſelf, was ſtill more unworthy of him; for he fell the victim of a paralytic attack, which was brought on him by an indulgence in exceſſive drinking, about the year 215 B.C. *Diog. Laert. Enfield's Hiſt. Phil.*

LAD, *ſ.* [leode, Sax. which commonly ſignifies people; but ſometimes, ſays Mr. Lye, a boy.] A boy; a ſtripling, in familiar language.—Too far from the ancient forms of teaching ſeveral good grammarians have departed, to the great detriment of ſuch *lads* as have been removed to other ſchools. *Watts.*

We were
Two *lads*, that thought there was no more behind,
But ſuch a day to-morrow as to-day,
And to be boy eternal. *Shakeſpeare.*

A boy; a young man, in paſtoral language:

For grief whereof the *lad* would after joy,
But pin'd away in anguiſh, and ſelf-will'd annoy. *Spenſer.*

LAD, old preterite of *to lead.*—And by her in a line
a milk-white lamb ſhe *lad*. *Spenſer.*

LAD, a town of Moldavia, on the Reut: thirty-ſix miles eaſt-north-eaſt of Stephanowze.

LA'DA, or LADE, *ſ.* Hath divers ſignifications, in old law-writings: 1ſt, From the Saxon laðian, to convene or aſſemble, it is taken for a lathe, or inferior court of juſtice. 2dly, It is uſed for purgation by trial, from laðian; and hence the *lada ſimplex*, and *lada triplex*, or *lada plena*, among the Saxons, mentioned in the laws of Ethelred and Henry I. 3dly, Lada is applied to a *lade*, or courſe of water; Camden uſes *water-lade*, or water-courſe; and Spelman ſays, that *lada* is a canal to carry water from wet grounds; ſometimes *lada* ſignifies a broad way. 4thly, The mouth of a river; from laðian, becauſe the water is there clearer; hence *Cricklade*, *Lechlade*, &c.

LAD'ANUM, *ſ.* in botany. See CISTUS, GALEOPSIS, and LAMIUM.

LA'DAS,

LA'DAS, a celebrated courier of Alexander, born at Sicyon. He was honoured with a brazen ſtatue, and obtained a crown at Olympia. *Martial. Juvenal.*

LAD'DER, *ſ.* [hlabne, Sax.] A frame made with ſteps placed between two upright pieces.—I ſaw a ſtage erected about a foot and a half from the ground, capable of holding four of the inhabitants, with two or three *ladders* to mount it. *Gulliver's Travels.*

Now ſtreets grow throng'd, and buſy as by day:
Some run for buckets to the hallow'd quire;
Some cut the pipes, and ſome the engines play,
And ſome more bold mount *ladders* to the fire. *Dryden.*

Any thing by which one climbs.—Then took ſhe help to her of a ſervant near about her huſband, whom ſhe knew to be of a haſty ambition; and ſuch a one, who, wanting true ſufficiency to raiſe him, would make a *ladder* of any miſchief. *Sidney.*

Lowlineſs is young ambition's *ladder*,
Whereto the climber upward turns his face. *Shakeſpeare.*

A gradual riſe.—Endow'd with all theſe accompliſhments, we leave him in the full career of ſucceſs, mounting faſt towards the top of the *ladder* eccleſiaſtical, which he hath a fair probability to reach. *Swift.*

Scaling-LADDERS, in the military art, are uſed in eſcalade, when a place is to be attempted by ſurpriſe. They are of various ſorts: ſome are of ropes, and ſome of wood; ſome are made of ſeveral joints, ſo as to be capable of being put together, and to form ladders of different length, according to the ſervice required. There is a ſort uſed in England, much of the ſame make as the common ladders, except that the ſteps turn about wooden pegs, ſo that the poles may be brought near each other, or to ſhut like a parallel ruler. Theſe are very convenient for carriage.

Ship-LADDERS, derive their names from the ſeveral hatchways or other parts where they are ſituated. Beſides theſe, there are ſome of a particular conſtruction, as the accommodation-ladder, and the quarter-ladder. The *accommodation-ladder* is a ſort of light ſtaircaſe, occaſionally fixed on the gangway of the admiral, or commander-in-chief of a fleet. It is furniſhed with rails and entering-ropes, covered with red baize, and the lower end of it is kept at a proper diſtance from the ſhip's ſide by iron-bars or braces, to render the paſſage more convenient to thoſe who enter or leave. *Quarter-ladders* are two ladders of rope, depending from the right and left ſide of the ſhip's ſtern, whereby to deſcend into the boats which are moored aſtern, in order to bring them up along-ſide of the ſhip, or to uſe them for any other occaſion.

LADDER-*Ways*, the openings in the decks where the ladders are placed.

LAD'DER TO HEAVEN, in botany. See CONVALLARIA.

LAD'DESS, *ſ.* [from *lad.*] A laſs.

LADE, *ſ.* See LADA.

To LADE, *v. a.* preter, *laded*; part. paſſive, *laded* or *laden:* [from hladen, Sax.] It is now commonly written *load.*—To load; to freight; to burden.—And they *laded* their aſſes with corn, and departed thence. *Geneſis.*—The experiment which ſheweth the weights of ſeveral bodies in compariſon with water, is of uſe in *lading* of ſhips, and ſhewing what burden they will bear. *Bacon.*—Thus, if the cargo with which a ſhip is laden is extremely heavy, her burden is determined by the weight of the goods; and, if it is light, ſhe carries as much as ſhe can *ſtow*, to be fit for the purpoſes of navigation. As a ton in meaſure is generally eſtimated at 2000lb. in weight, a veſſel of 200 tons ought accordingly to carry a weight equal to 400,000lb. when the matter of which the cargo is compoſed is ſpecifically heavier than the water in which ſhe floats; or, in other words, when the cargo is ſo heavy that ſhe cannot float high enough with ſo great a quantity of it as her hold will contain. *Ency. Brit.*

LADEN *in* BULK, the ſtate of being freighted with a cargo which is neither in caſks, boxes, bales, nor caſes, but lies looſe in the hold; being defended from the moiſture or wet of the hold by a number of mats and a quantity of *dunage*. Such are uſually the cargoes of corn, ſalt, or ſuch materials.

To LADE, *v. a.* [from hladan, Sax. to draw.] To heave out; to throw out.—They never let blood; but ſay, if the pot boils too faſt, there is no need of *lading* out any of the water, but only of taking away the fire; and ſo they allay all heats of the blood by abſtinence and cooling herbs. *Temple.*

He chides the ſea that ſunders him from them,
Saying he'll *lade* it dry to have his way. *Shakeſpeare.*

LADE, an iſland of the Ægean Sea, on the coaſt of Aſia minor, where was a naval battle between the Perſians and Ionians.

LADEINOEPO'LE, a town of Ruſſia, in the government of Olonetz: fifty-ſix miles ſouth of Petrozavodſk. Lat. 61. 56. N. lon. 33. 50. E.

LAD'ENAW, a town of Auſtria: two miles ſouth of Tulln.

LA'DENBURG, a town of Weſtphalia, in the biſhopric of Oſnabruck: nine miles ſouth-eaſt of Oſnabruck.

LA'DENBURG, a town of the duchy of Baden: ſix miles eaſt of Manheim, and forty ſouth-ſouth-eaſt of Mentz. Lat. 49. 27. N. lon. 8. 40. E.

LADET'SCH, a town of Bohemia, in the circle of Czaſlau: twelve miles ſouth-ſouth-weſt of Czaſlau.

LAD'JA, in Hindoo mythology, a being produced by Brahma, ſimilarly with Labha; a being which Brahma, or the creative power of the deity, produced from his *lips* when peopling the world. Labha is a perſonification of appetite or paſſion, and the word in Sanſcrit has, as in many other languages, a labial meaning, indicating the ſource of the being thus produced. On that occaſion Kama, a perſonification of love or deſire, ſprung from his heart in the form of a beauteous female; and Brahma, looking on her with amorous emotions, was informed by the Munis that ſhe was his own daughter; he ſhrunk back, and Ladja, a perſonification of ſhame, a bluſhing virgin, was produced. Brahma, deeming his body defiled by its emotions toward Kama, purified it by partially metamorphoſing it into ten females, who were reſpectively eſpouſed by the Munis. See MUNI.

LA'DIES I'SLAND. See LADY'S ISLAND.

LADIKI'EH, a town of Aſiatic Turkey, in Caramania, anciently *Laodicea:* twenty miles weſt of Cogni.

LA'DING, *ſ.* Weight; burden.—It happened to be foul weather, ſo that the mariners caſt their whole *lading* over-board to ſave themſelves. *L'Eſtrange.*

Some we made prize, while others, burnt and rent,
With their rich *lading* to the bottom went. *Waller.*

Bill of LADING. See BILL, vol. iii. p. 37.

LAD'ISLAUS I. king of Hungary, ſon of Bela I. was born in 1041. He was a very martial prince, and joined his brother Geyſa in a war againſt Solomon the ſon of Andrew, whom he was greatly inſtrumental in defeating at the bloody battle which deprived him of his crown, and placed it upon the head of Geyſa. On the death of the latter in 1078, Ladiſlaus was choſen by the ſtates to ſucceed him, but would not wear the crown till Solomon had abdicated the throne. He defeated the rebellious Walachians, and annexed to his dominions Dalmatia and Croatia, through the gift of his ſiſter, who was widow of the laſt king of Dalmatia. He expelled, with great ſlaughter, the Chuni, or Huns, who had invaded his kingdom, and killed their king with his own hand. He was ſucceſsful againſt the Ruſſians and Poles, and obliged both nations to ſue for peace. Having thus rendered his dominions ſecure on all ſides, he ſtudied to make them flouriſh by the arts of peace; built churches, encouraged commerce, and publiſhed an improved code of laws. He had made great preparations for joining the firſt cruſade, when, in an expedition into Bohemia, he was attacked by

by a diſeaſe which carried him off in 1095, after a glorious reign of ſeventeen years. His obedience to the papal ſee procured him the honour of canonization from pope Celeſtine III.

LAD'ISLAUS III. king of Hungary, ſurnamed *Kuhn*, or the Bold, came to the throne in 1272, after the death of his father, Stephen IV. Soon after his acceſſion, in conjunction with the emperor Rodolph, he defeated the Bohemian king Othogar, who loſt his life in the action. Returning victorious to his country, he gave himſelf up to voluptuouſneſs, and repudiated his lawful wife, in order to indulge in debauchery with ſome women of the Tartar nation of Cumans. He oppreſſed his nobles, and plundered the churches and monaſteries; and, paying no regard to the admonitions of a legate ſent from Rome to reclaim him, was excommunicated by him. Meantime his neglect of the government, and the diſaffection of his ſubjects, invited the incurſions of the Tartars, by whom Hungary was ſo deſolated, that, for want of beaſts, men, and even the nobles themſelves, were obliged to draw the plough. This circumſtance has been tranſmitted to poſterity in the proverbial phraſe of "the ploughs of Ladiſlaus." At length, continuing to give his confidence to the Cumans, he was aſſaſſinated by them in his tent in the year 1290.

LAD'ISLAUS IV. king of Hungary, alſo king of Poland under the title of Uladiſlaus V. See POLAND.

LAD'ISLAUS V. king of Hungary, the poſthumous ſon of Albert of Auſtria and Elizabeth of Hungary, born in 1440, was bringing up at the court of the emperor Frederic III. his uncle, when, at the death of Ladiſlaus IV. he ſucceeded to the throne of Hungary, being then in the fifth year of his age. The Hungarians ſent to demand their prince, who was alſo by inheritance king of Bohemia and duke of Auſtria; but it was not till 1452 that they obtained his reſtitution. It was agreed that, during his minority, Hungary ſhould be governed by John Corvinus, ſon of Huniades; Bohemia by George Podiebrad; and Auſtria by Ulric, count of Ciley, the young king's uncle, who was to have the guardianſhip of his perſon. The count endeavoured to ſupplant John Corvinus, but in vain; and he obtained great honour by his defeat of the Turks before Belgrade. At the death of John, the government was transferred to his ſon Ladiſlaus, to the great mortification of the count of Ciley, who endeavoured to procure his aſſaſſination; but he was himſelf killed at Belgrade by the friends of that family. The young king was greatly incenſed at the death of his uncle, but found it neceſſary to give a pardon to the ſons of Corvinus, which he confirmed by an oath over the holy ſacrament. On returning to Buda, however, he cauſed Ladiſlaus and his brother Matthias to be apprehended, and the former to be publicly executed. He ſoon after went to Prague, in order to celebrate his nuptials with Magdalen of France, daughter to Charles VII. but, in the midſt of the feſtivities, he was carried off by a ſudden diſeaſe, not without ſuſpicion of poiſon, in 1457, at the age of ſeventeen.

LAD'ISLAUS VI. king of Hungary, was ſon of Caſimir IV. king of Poland. In 1470 he was choſen king of Bohemia, and was ſoon involved in a war with Matthias king of Hungary, which was terminated by a peace in 1475. At the death of Matthias in 1490, Ladiſlaus was elected to ſucceed him, chiefly through the influence of the widow-queen, Beatrice, whom he promiſed to marry. He had to make his way to the crown againſt the hoſtile oppoſition of his competitors, one of whom was his own brother, and at length was quietly ſeated. He broke his word with Beatrice, under pretext of her ſterility, and married Anne, daughter of the count of Candale. His diſpoſition was pacific and indolent, little fitted to contend with the diſorders, foreign and domeſtic, which haraſſed his kingdom; and from his bulk and inactivity he acquired from his ſubjects the appellation of *ox*. The Turks having threatened Hungary, Ladiſlaus wiſhed to avert the danger by a treaty, but was prevented by the fanatic archbiſhop of Strigonia, who preached up a croiſade, and collected a large body of peaſants. Theſe turned their arms againſt their own nobles, and committed enormous exceſſes, which were quelled by the count of Scepus with equal cruelty. Ladiſlaus, though not warlike, was by no means inattentive to his regal duties, and employed much time in collecting all the Hungarian laws and the decrees of the king into one body, which has ever ſince formed the baſe of the conſtitution and juriſprudence of the country. He died in 1516, after a reign of twenty-five years over Hungary; and, in about ten years after, the whole kingdom came into the poſſeſſion of the houſe of Auſtria, as related under the article HUNGARY, vol. x. p. 465. Indeed the reigns of the kings of Hungary are ſo obſcure, and ſo connected with the kingdom of Poland and with the houſe of Auſtria, that Dr. Blair, in his Chronological Tables, does not aſſign to Hungary a column as a ſeparate kingdom at any time.

LAD'ISLAUS, or ULADISLAUS, the names of ſeveral kings of POLAND. See that article.

LAD'ISLAUS, or LAN'CELOT, king of Naples. See that article.

LAD'IZIN, a town of Poland, in the palatinate of Braclaw: fourteen miles ſouth of Braclaw.

LA'DLE, *ſ.* [hlæble, from hladan, Sax. *leaugh*, Erſe.] A large ſpoon; a veſſel with a long handle, uſed in throwing out any liquid from the veſſel containing it.—When the materials of glaſs have been kept long in fuſion, the mixture caſts up the ſuperfluous ſalt, which the workmen take off with *ladles*. *Boyle.*

A *ladle* for our ſilver diſh.
Is what I want, is what I wiſh. *Prior.*

The receptacles of a mill-wheel, into which the water falling turns it.

LADLE *of a Gun*, the inſtrument wherewith the powder is put into the piece. It is made of a plate of copper bowed in form of a half-cylinder, rounded at one end, the other being fixed upon a long ſtaff: this, filled with powder, the gunner carries, with his left hand under the end of it, to keep the powder from falling out, till he enters it in the muzzle of the piece; when he has carried the powder home to the charged cylinder, he turns the ladle, that the powder may fall out, and withdraws it. Ladles are fitted to the bore of each gun, and hold powder ſufficient for the charge. Small ladles, with ſhort handles of wood, are alſo uſed in filling the fuzes of ſhells, or any other compoſition for filling the caſes of rockets, &c.

LA'DLE-BEARER to the Janiſſaries in Turkey, a perſon of greater conſequence than his office, if we are to judge from European manners, would lead us to ſuſpect. The ſenſe of honour is not, as with us, attached to the *colours*; they may loſe them without much danger of diſgrace; but the loſs of their *ladle and kettle* is almoſt irreparable, and they eſteem it as their greateſt calamity. In order to avoid this, every *odah*, or regiment, of which there are a hundred and one, has two of each. When both are taken by an enemy, they conſider the regiment as deſtroyed, and a new one is formed, to whom new ladles and kettles are given. Theſe ladles and kettles are never removed without receiving ſome military honours When the ladle-bearer goes round, to ſerve out the ſoup, or meſſes, he is always attended by a guard. Attached as our citizens are to good eating and drinking, they never thought of thus honouring the ladle and kettle; nor of carrying them in proceſſion on lord-mayor's day. It is farther added that the Janiſſaries honour alſo their wooden ſpoons, and eſteem them as much a part of their military dreſs as ſwords are regarded by Engliſh or French ſoldiers. *Coſtume of Turkey*, 4to. 1802.

LA'DLE-FULL, *ſ.*—If a footman be going up with a diſh of ſoup, let the cook with a *ladle-full* dribble his livery all the way up ſtairs. *Swift.*

LADO'CO (los Codos de), mountains, which begin in Portugal, and are continued into Spain, dividing Galicia from the Aſturias.

LADO'DA, a town of Hindooſtan, in the ſubah of Agimere: twenty miles ſouth-eaſt of Roopnagur.

LADO'GA, or LADOZ'SKOI, a lake of Ruſſia, in the government of Vyborg, between the gulf of Finland and the lake of Onega; its ſouth-weſt extremity lying about thirty miles eaſt from Peterſburg. In ancient times it is ſaid to have been called *Nebo*. Being in length 130 miles, and in breadth near 80, it is reckoned one of the largeſt lakes in Europe. It produces a great number of ſeals. On account of the ſtorms to which it is liable, and the ſeveral ſand-banks that are ever ſhifting their poſition, Peter the Great, in 1718, cauſed the famous Ladoga canal to be dug along its ſhore, from the Volkhof into the Neva. It was begun by order of Peter, and finiſhed under the reign of the empreſs Anne. This canal is 78 miles long, and has twenty-five ſluices. By the Neva the Ladoga is connected with the Baltic; by the Svir, with the Onega; and by the Volkhof, with the Ilmen. Into the canal flow the rivers Lipke, Naſia, Sheldika, Lava, and Kabona; into the lake the rivers Paſha, Sias, Oiat, &c. whereas the Neva alone runs out of it. Both ſhores of the lake belong to Ruſſia, which have every-where a flat coaſt and a ſandy beach. On this ſhore it has alſo a few low fiſhery-iſlands, and a ſandy bottom. That part of the northern ſide which lies in the government of Olonetz has marble on its coaſt, whence ſome of theſe beautiful kinds of Finniſh marble are brought to St. Peterſburg. As the bed of this lake, for a great extent, is in the loweſt part of the country, it receives, beſides the above-mentioned rivers, the waters that come from the Alum hills; all of which have no other outlet than the Neva. *Tooke's Ruſſ. Emp.*

LADO'GA (New), a town in the Ruſſian government of Peterſburg, ſeated on the Volkhof, between the canal and lake of Ladoga: ſeventy miles eaſt of Peterſburg. Lat. 60. 0. N. lon. 30. 32. E.—Old Ladoga is higher up the river, and a place of no great extent.

LADOG'NA. See LACEDOGNA.

LA'DON, in ancient geography, a river of Arcadia falling into the Alpheus. The metamorphoſis of Daphne into a laurel, and of Syrinx into a reed, are fabled to have happened near its banks.

LA'DON, a town of France, in the department of the Loiret: nine miles weſt of Montargis, twenty-ſeven eaſt-north-eaſt of Orleans.

LA'DOS, a ſmall iſland in the Eaſtern Indian Sea. Lat. 6. 11. N. lon. 99. 40. E.

LADRO'NES, or MARIANA ISLANDS, a cluſter of iſlands in the North Pacific Ocean, diſcovered by Magellan, which occupy a ſpace of 450 miles in extent. Magellan is ſaid to have firſt called them *Las Iſlas de las Velas*, i. e. The Iſlands of Sails; or *de las Velas Latinas*, i. e. of Triangular Sails, from the appearance of their prows; but afterwards *Las Iſlas de las Ladrones*, or The Iſlands of Thieves; becauſe the Indians who firſt viſited him ſtole every thing that was made of iron within their reach. The latter end of the ſeventeenth century, they obtained the name of the *Mariana*, or Marianne Iſlands, from the queen of Spain, Mary-Anne of Auſtria, the mother of Charles II. at whoſe expence miſſionaries were ſent over thither to propagate the Chriſtian faith.

In the year 1564 or 1565, Andreas Miguel Lopes Legaſpi took poſſeſſion of theſe iſlands in the name of the crown of Spain; but he neglected them as unworthy of his attention, and purſued his voyage to the Philippines. The Ladrones were then forgotten till the zeal of a celebrated Jeſuit, Santevores, intereſted the devotion of queen Mary-Anne of Auſtria, regent during the minority of her ſon Charles II. and excited her to cauſe the goſpel to be carried into theſe iſlands, which Magellan had found means to annex to the poſſeſſions of Spain, by diſcovering a new route, that eluded the ridiculous line of demarcation eſtabliſhed by the ſee of Rome in the plenitude of its power. In 1688, the Spaniards preſented themſelves at the Mary-Anne iſlands, with the croſs in one hand and the ſword in the other; and with theſe two weapons, which lent one another mutual aid, their pretended right to the poſſeſſion of theſe iſlands could not fail to be acknowledged. They had no difficulty in making themſelves maſters of Guahan, or Guaham, now called GUAM, the principal of theſe iſlands, and the moſt ſouthern of the Archipelago; and by degrees they ſubdued all the others. Pigafetta, who accompanied Magellan, deſcribes the people of theſe iſlands as naked, their hair and beards long, tall and well-proportioned, with an olive complexion. Till the arrival of the Spaniards, the inhabitants of theſe iſlands conſidered themſelves as the only men in the world, being aſſured that the firſt man was made of a piece of rock taken from Funa, a little iſland near Guam; but, according to others, he was made of earth in the latter iſland. When they were viſited by the Spaniards and Dutch, they inferred that theſe ſtrangers were brethren who had loſt the primitive Guameſe language. In colour, ſpeech, manners, and government, they much reſemble the Tagals, or people of the Philippines, before the Spaniſh conqueſt. They were then very populous; Guam, which is forty leagues in circuit, having 30,000 inhabitants. The women employed themſelves in dyeing their teeth black, and their hair white.

Many things looked upon by us as abſolutely neceſſary to our exiſtence, were utterly unknown to theſe people. They had no beaſts of any ſort; and they had but one ſpecies of birds, ſomewhat like the turtle-dove, which they never killed for eating, but only tamed them, and taught them to ſpeak. But, what is more ſurpriſing and incredible in their hiſtory is, that they were utterly unacquainted with the element of fire till Magellan, provoked by their repeated thefts, burned one of their villages. When they ſaw their wooden houſes blazing, they at firſt thought that the fire was a beaſt which fed upon the wood; and, ſome of them who came too near being burnt, the reſt ſtood at a diſtance, leſt they ſhould be devoured or poiſoned by the breathings of this terrible animal.

Though Guam is the largeſt of the Ladrone iſlands, Tinian has attracted the greateſt degree of attention, in conſequence of the romantic deſcription given of it in Anſon's voyage. See TINIAN. The number of theſe iſlands has been differently ſtated from nine to ſixteen; but it does not appear that above three or four are inhabited. Their ſailing veſſels, called *proas*, evince conſiderable ſkill in naval architecture. In theſe veſſels, before they had any acquaintance with the Europeans, they made conſiderable voyages from one iſland to another; and, when overſet, ſhowed great preſence of mind in turning them, refitting, and getting again on-board; ſo that, taking all circumſtances together, they might be eſteemed as briſk and bold ſeamen as any in this part of the world.

La Perouſe leads us to conclude that theſe iſlands are volcanic; but their natural hiſtory is little known. They cultivate various ſeeds and fruit, and particularly the bread-fruit. In ſir George Staunton's Account of the Embaſſy to China, we have ſome information of a recent and authentic kind with reſpect to theſe iſlands. The Grand Ladrone he repreſents as a high-peaked iſland; and he mentions another near it, whoſe ſummit is ſomewhat lower and more level. The latitude of the Grand Ladrone appeared to be 21. 52. N. and the longitude 113. 36. E. of Greenwich. The latitude of another iſland, called *Chooktchoo* was 21. 55. N. and the longitude 113. 44. N. The obſervations from which theſe latitudes and longitudes are deduced were carefully made, and therefore they may be deemed correct; though they differ from thoſe ſtated by other geographers. The margins, or rocks, of the Ladrone Iſlands next to the ſea are of a black or dark-brown colour, owing to the action of the ſalt water; and the ſpray and daſhing of the waves have corroded their ſurface, ſo as to give them a honey-comb appearance. Some ſprings are found on theſe iſlands; and the water is neither brackiſh nor chalybeate, nor in any reſpect mineral in its taſte. The ſoil upon the ſurface appears to be of the ſame nature with the component parts of the rocks below;

below; and, indeed, is merely the upper layer of the rock, decompoſed and pulverized by the joint action of the ſun and rain in a ſucceſſion of ages. The rock conſiſts of a mixture of clay, calx of iron in a ſmall proportion, and a great deal of ſiliceous earth and mica. The ſea all round is of a dirty-yellowiſh muddy colour, and of no great depth. The bottom is mud and clay.

The Ladrones, and cluſters of iſlands between them and the ſouthern extremity of China, are ſo near to each other, and to the main land, and are alſo ſo broken, as well as ſo irregular in their form and poſition, as to appear like fragments, disjointed from the continent, and from each other, at remote periods, by the ſucceſſive violence of miglity torrents, or in ſome ſudden convulſions of nature. Theſe fragments have now a very barren and unpromiſing aſpect. In particular ſpots, however, there are ſome ſcattered patches of pleaſing verdure; but, in general, little better than naked rocks appear; and ſcarcely ever a tree or ſhrub is viſible among them. Theſe iſlands ſerve chiefly as retreats for pirates, and for the temporary abode of fiſhermen.

To the north of the Ladrones are many ſmall iſlands, extending to Todos los Santos, lat. 30. N. thoſe further to the north belonging to Japan. This group may either be arranged, ſays Pinkerton, among the Ladrones, or might, perhaps, admit of a diſtinct appellation. The Golden and Silver Iſles ſeem to be ſo ſtyled from Japaneſe fables, and, with a few other ſcattered iſles on the north of the Carolines, merit little attention. In theſe ſeas is the ſtupendous rock called Lot's Wife, riſing in the form of a pyramid, and thus deſcribed by Mr. Meares in his Voyage: "The latitude was 29. 50. N. the longitude 142. 23. E. of Greenwich. The waves broke againſt its rugged front, with a fury proportioned to the immenſe diſtance they had to roll before they were interrupted by it. It roſe almoſt perpendicular to the height of near three hundred and fifty feet. A ſmall black rock appeared juſt above the water, at about forty or fifty yards from the weſtern edge. There was a cavern on its ſouth-eaſtern ſide, into which the waters rolled with an awful and tremendous noiſe. In regarding this ſtupendous rock, which ſtood alone in an immenſe ocean, we could not but conſider it as an object which had been able to reſiſt one of thoſe great convulſions of nature that change the very form of thoſe parts of the globe which they are permitted to deſolate." *Gibſon's Geography. Staunton's Embaſſy. Pinkerton.*

LADRO'NES, three ſmall iſlands in the Pacific Ocean, on the coaſt of Veragua: eight miles ſouth-eaſt of Cape Boruca. Lat. 8. 20. N. lon. 83. 16. W.

LADROO'N, a river of Africa, which runs into the Indian Sea in lat. 22. 36. S.

L'ADVOCA'T (John-Baptiſt), a man of letters in France, born in 1709, was ſon of the ſubdelegate of Vaucouleurs, in the dioceſe of Toul. He ſtudied firſt under the Jeſuits at Pont-à-Mouſſon, and afterwards at the Sorbonne, of which ſociety he was admitted a member. For ſome time he occupied the cure of Domremi, the birthplace of Joan of Arc; but in 1740 he was called by the Sorbonne to fill one of its royal profeſſorſhips, and in 1742 was made librarian. In 1751 he was appointed to the chair of Hebrew founded in the Sorbonne by the pious duke of Orleans, which ſtation he held till his death in 1765. M. L'Advocat was a perſon of a highly eſtimable character, mild, humane, and undiſguiſed. As a writer he is chiefly known by his *Dictionnaire Geographique portatif*, 8vo. frequently reprinted; and his *Dictionnaire Hiſtorique portatif*, two vols. 8vo. an uſeful compendium of biography, of which ſeveral editions have been given with ſucceſſive improvements. He alſo publiſhed a Hebrew Grammar, for the uſe of his pupils; and after his death appeared ſeveral theological tracts of his compoſition.

L'ADVOCA'T (Louis-Francis), a French counſellor and philoſophical writer, was born at Paris in the year 1644. He was admitted counſellor to the king, appointed maſter in ordinary in the chamber of accounts in 1671; and died dean of that chamber, in 1735, in the ninety-firſt year of his age. He was an able magiſtrate, had ſucceſſfully cultivated literature, and was well converſant with philoſophy. He was the author of "Dialogues relating to a new Syſtem of moral and natural Philoſophy, or a Search after Happineſs under the Guidance of the Light of Nature," 1722, 12mo. which Dupin ſpeaks of as a well-written production, abounding in ſolid reflections, and juſt well-connected reaſonings. The authors of the Memoires de Trevoux, when giving an analyſis of them, in one of their numbers for that year, brought forward a variety of objections againſt this work. To theſe the author replied in 1728, by publiſhing "A New Syſtem of Philoſophy, founded on the indiſputable Nature of Things, compared with the Opinions of the ancient Philoſophers relating to the firſt Principles of Nature, &c. to which is added a Treatiſe on the Nature of the Soul and the Exiſtence of God, &c." in two vols. 12mo. *Moreri.*

LA'DY, *ſ.* [derived from two Saxon words, hlæf dig, which ſignify *loaf-day*, which words have in time been contracted into the preſent appellation. As to the original application of this expreſſion, it may be obſerved, that heretofore it was the faſhion for thoſe families whom God had bleſſed with affluence to live conſtantly at their manſion-houſes in the country, and that once a-week, or oftener, the lady of the manor diſtributed to her poor neighbours, with her own hands, a certain quantity of bread; but the practice, which gave riſe to this title is now as little known as the meaning of it; however, it may be from that hoſpitable cuſtom, that to this day the ladies in this kingdom ſerve the meat at their own tables. *Ency. Brit.*] A woman of high rank; the title of *lady* properly belongs to the wives of knights, of all degrees above them, (except the wives of biſhops,) and the daughters of earls, and all of higher ranks.—I would thy huſband were dead; I would make thee my *lady*.—I your *lady*, Sir John? alas, I ſhould be a pitiful *lady*. *Shakeſpeare.* An illuſtrious or eminent woman.—We find on medals the repreſentations of *ladies*, that have given occaſion to whole volumes on the account only of a face. *Addiſon on Ancient Medals.*

Should I ſhun the dangers of the war,
With ſcorn the Trojans would reward my pains,
And their proud *ladies* with their ſweeping trains. *Dryden.*

A word of complaiſance uſed of women.—I hope I may ſpeak of women without offence to the *ladies*. *Guardian.*

Say, good Cæſar,
That I ſome *lady*-trifles have reſerv'd,
Immoment toys, things of ſuch dignity
As we greet modern friends withal. *Shakeſpeare.*

Miſtreſs, importing power and dominion; as, *lady of the manor*:

Of all theſe bounds, even from this line to this,
With ſhadowy foreſts, and with champaigns rich'd
With plenteous rivers and wide-ſkirted meads,
We make thee *lady*. *Shakeſpeare's King Lear.*

LA'DY's-BED'STRAW, *ſ.* A plant of the ſtellate kind. See GALIUM.

LA'DY-BIRD, LADY-COW, or LADY-FLY, *ſ.* A ſmall red inſect. See COCCINELLA, vol. vi.

This *lady-fly* I take from off the graſs,
Whoſe ſpotted back might ſcarlet red ſurpaſs. *Gay.*

LADY's BOW'ER. See CLEMATIS.

LADY's CHAPEL, a name invented by modern architects and virtuoſi to ſignify the chapel which is generally found in our ancient cathedrals behind the ſkreen of the high altar. It is ſo denominated from its being generally dedicated to the Virgin Mary, called Our Lady.

LADY's CO'MB. See SCANDIX.

LA'DY COURT, *ſ.* The court of the lady of a manor.

LADY's CUSH'ION. See SAXIFRAGA.

LADY-DAY', in law, the 25th of March, being the annunciation

annunciation of the Holy Virgin. See ANNUNCIATION, vol. i.

LADY's FIN'GER. See ANTHYLLIS.

LADY's HA'IR. See BRIZA.

LADY's I'SLAND, an iſland in the Atlantic, near the coaſt of America, between Port Royal Iſland and St. Helena. Lat. 42. 30. N. lon. 80. 32. W.

LA'DY KIRK, a town on the iſland of South Ronaldſha. Lat. 58. 38. N. lon. 2. 49. W.

LADY's LA'CES, *ſ.* in botany, a kind of ſtriped graſs.

LA'DY-LIKE, *adj.* Soft; delicate; elegant:

Her tender conſtitution did declare,
Too *lady-like* a long fatigue to bear. *Dryden.*

LADY's MAN'TLE, *ſ.* A plant. See ALCHEMILLA.

LADY's MOUTH, *ſ.* The name of a plant.

LADY's ROCK. See LISMORE.

LADY's SE'AL, *ſ.* in botany, the name of a plant. See TAMUS.

LADY's SLIP'PER, *ſ.* A plant. See CYPRIPEDIUM, vol. v.

LADY's SMOCK, *ſ.* A plant. See CARDAMINE, vol. iii.—See here a boy gathering lilies and *lady-ſmocks*, and there a girl cropping culverkeys and cowſlips, all to make garlands. *Walton's Angler.*

When daiſies pied, and violets blue,
And *lady's-ſmocks* all ſilver white,
Do paint the meadows much bedight. *Shakeſpeare.*

LADY's TRA'CES. See OPHRYS.

LA'DYSHIP, *ſ.* The title of a lady.—Madam, he ſends your *ladyſhip* this ring. *Shakeſpeare.*

I the wronged pen to pleaſe,
Make it my humble thanks expreſs
Unto your *ladyſhip* in theſe. *Waller.*

LÆLIA'NUS, a general, proclaimed emperor in Gaul by his ſoldiers (A. D. 268) after the death of Gallienus. His triumph was ſhort; he was conquered and put to death after a few months reign by another general called Poſthumus, who aſpired to the imperial purple as well as himſelf; but who, with other pretenders, was ſoon ſwept off the ſcene by Claudius. See the article ROME.

LÆ'LIUS (Caius), a noble Roman, the intimate friend of the firſt Scipio Africanus, accompanied that general as commander of his fleet into Spain, and was inſtrumental in the taking of Carthage. (See vol. iii. p. 851.) After Spain was reduced under the Roman dominion, Lælius was ſent by Scipio to treat with Syphax, and was afterwards employde to ravage the coaſt of Africa. In conjunction with Maſſiniſſa he defeated Syphax, and brought him priſoner to Rome. At the battle of Zama he commanded the Italian horſe, and had a great ſhare in the ſucceſs of the day. He was made conſul in 190 B.C. *Livy.*

LÆ'LIUS (Caius), ſurnamed the Wiſe, ſuppoſed to have been the ſon of the preceding, was equally diſtinguiſhed with the former by his friendſhip with the *ſecond* Scipio Africanus. He was likewiſe an eminent orator, and a cultivator of polite literature, having been a diſciple of Diogenes the Stoic, and of Panætius. He ſignalized his courage, in the war againſt Viriathus in Spain, but was chiefly known by his civil honours. His oratory is by Cicero deſcribed as of the mild and elegant kind, to which his temper of mind was adapted; for he is ſaid never on any occaſion to have diſplayed a change of countenance. His ſurname, according to Cicero, was derived from the philoſophic temperance of his mode of living; but Plutarch aſcribes it to the prudence with which he dropped a project for improving the condition of the plebeians, when he found that it would meet with a violent oppoſition. He was a member of the college of augurs, and pronounced one of his moſt famous orations in that capacity. He attained the conſulſhip in the year B.C. 140. When his friend Scipio quitted all concern in public affairs, Lælius accompanied him to his country retreat of Liternum; and Cicero has immortalized their connexion by making it the baſis of his Dialogue on Friendſhip, in which Lælius appears as the chief ſpeaker. He is ſuppoſed to have had a ſhare in the compoſition, or at leaſt the correction, of Terence's comedies. *Cicero de Oratore. Voſſii Poet. Lat.*

LÆ'NA, *ſ.* in antiquity, a gown worn by the Roman augurs, and peculiar to their office. In this gown they covered their heads, when they made their obſervations on the flight of birds, &c.

LÆ'NA, or LEÆ'NA, the miſtreſs of Harmodius and Ariſtogiton. Being tortured becauſe ſhe refuſed to diſcover the conſpirators, ſhe bit off her tongue, totally to fruſtrate the violent efforts of her executioners.

LÆ'NEUS, a river of Crete, where Jupiter brought the raviſhed Europa. *Strabo.*

LA'ER (Peter). See BAMBOCCIO, vol. ii.

LA'ERN, a town of France, in the department of the Scheldt: five miles eaſt of Ghent.

LAER'TES, a king of Ithaca, ſon of Arceſius and Chalcomeduſa, who married Anticlea the daughter of Autolycus. Anticlea was pregnant by Siſyphus when ſhe married Laertes, and eight months after her union with the king of Ithaca ſhe brought forth a ſon called Ulyſſes. Ulyſſes was treated with paternal care by Laertes, though not really his ſon; and Laertes ceded to him his crown, and retired into the country, where he ſpent his time in gardening. He was found in this mean employment by his ſon at his return from the Trojan war, after twenty years abſence; and Ulyſſes, at the ſight of his father, whoſe dreſs and old age declared his ſorrow, long heſitated whether he ſhould ſuddenly introduce himſelf as his ſon, or whether he ſhould, as a ſtranger, gradually awaken the paternal feelings of Laertes, who had believed that his ſon was no more. This laſt meaſure was preferred; and, when Laertes had burſt into tears at the mention which was made of his ſon, Ulyſſes threw himſelf on his neck, exclaiming, "O father, I am he whom you weep." This welcome declaration was followed by a recital of all the hardſhips which Ulyſſes had ſuffered, and immediately after the father and ſon repaired to the palace of Penelope the wife of Ulyſſes, whence all the ſuitors who daily importuned the princeſs were forcibly removed.

LAER'TES, a city of Cilicia which gave birth to Diogenes, ſurnamed *Laertius* from the place of his birth.

LAER'TIUS. See DIOGENES LAERTIUS, vol. v. p. 837.

LA'ERWOLDE, a town of Germany, in the county of Bentheim: three miles ſouth-ſouth-weſt of Covorden.

LÆS'SOE. See LESSÖE.

LÆSTRYG'ONES, the moſt ancient inhabitants of Sicily. Some ſuppoſe them to be the ſame as the people of Leontium, and to have been neighbours to the Cyclops. They fed on human fleſh; and, when Ulyſſes came on their coaſts, they ſunk his ſhips and devoured his companions. They were of a gigantic ſtature, according to Homer's deſcription. A colony of them, as ſome ſuppoſe, paſſed over into Italy with Lamus at their head, where they built the town of Formiæ, whence the epithet of *Læſtrygonia* is often uſed for that of *Formiana.*

LA'ET (John de), a copious writer in geography and civil hiſtory, was a native of Antwerp. Scarcely any thing is known of his life; but the title is given him of director of the Dutch Eaſt-India company. He was intimate with Saumaiſe, or Salmaſius, and was converſant with a variety of languages. He died at Antwerp in 1649. Of the works which he compoſed, or edited, the following are the principal: 1. Hiſpania. 2. Gallia. 3. De principibus Italiæ tractatus varii. 4. Belgii confæderati reſpublica. 5. Turcici imperii ſtatus. 6. Perſia. 7. De imperio magni Mogolis. 8. Portugailia. 9. Reſpublica Poloniæ, Lithuaniæ, Pruſſiæ, and Livoniæ. All theſe ſmall volumes, deſcribing the geography, government, manners, productions, &c. of the ſeveral countries treated of, though not extremely accurate in their information, we re

well received, chiefly from their portable ſize, and the beauty of Elzevir's types, and are ſtill ſought after, under the name of the *Reſpublicæ*. A more conſiderable work was his, 10. Novus Orbis, ſeu Deſcriptio Indiæ Occidentalis, fol. Leyd. 1633, which he alſo tranſlated into French, and publiſhed in 1640; it likewiſe appeared in Flemiſh. This account of America, though not always exact, has been much uſed by later geographers. De Laet edited Piſo's and Marcgrave's Account of Brazil, with additions; and gave a complete edition of Vitruvius, with the notes of various critics, and the treatiſes of various other authors on architectural ſubjects; folio, Amſt. 1649. *Moreri.*

LAE'TIA, *ſ.* [ſo named by Loefling, from the ſubject of the preceding article.] In botany, a genus of the claſs polyandria, order monogynia, natural order of tiliaceæ, (*Juſſ.*) The generic characters are—Calyx: perianthium five-leaved; leaflets oblong, concave, reflex, coloured, withering. Corolla: none, or elſe five petals. Stamina: filaments numerous, capillary, rather ſhorter than the calyx; antheræ roundiſh. Piſtillum: germ oblong, ending in a filiform ſtyle, longer than the ſtamens; ſtigma headed, depreſſed. Pericarpium; berry globoſe, three-ſided, furrowed with three lines, one-celled; increaſed internally by a cartilaginous membrane. Seeds very many, neſtling, cornered, coated with a pulpy aril.—*Eſſential Character.* Calyx five-leaved; corolla five-petalled, or none; fruit one-celled, three-cornered; ſeeds with a pulpy aril.

Species. 1. Laetia apetala, or apetalous laetia: flowers apetalous, calyxes five-leaved reflex; leaves oval ſerrulate, ſmooth on both ſides. This is an upright tree, about twenty feet in height, putting out ſpreading branches from the very ground. From the tubercles and ends of theſe come out oval or obovate leaves, blunt, ſometimes emarginate; the ſerratures ferruginous, and ſcarcely viſible; they are ſhining, petioled, alternate, an inch and a half long. Common peduncles three-flowered, axillary, ſuſtaining white flowers, like thoſe of Cratægus oxyacantha, or hawthorn, in appearance, ſize, and ſmell. Native of Carthagena in New Spain; flowering in April and May, and fruiting in Auguſt.

2. Laetia completa, or petaloid laetia: flowers petaloid complete. This is a ſmall branching tree, about nine feet in height. Fruit reddiſh yellow, often obſcurely triangular. Native of Carthagena; flowering in June, and fruiting in Auguſt and September.

3. Laetia Guidonia, or Guidonia laetia: flowers apetalous; peduncles one-flowered, terminating, leaves oblong acuminate, ſerrate pubeſcent. In the fruit of this tree the lines between the valves are of a beautiful red colour, as well as the placentæ. The filaments of the flower are very numerous. The tree grows to a conſiderable ſize, is eſteemed a fine timber-wood, and is much uſed in all ſorts of buildings. Native of Jamaica, where it is called rod-wood.

4. Laetia Thamnia, or Thamnia laetia: flowers apetalous; peduncles many-flowered, ſubdivided, axillary; leaves oblong-acute, ſubcrenate, ſhining. This ſhrub is found in the red hills, above the Angels, in the iſland of Jamaica; but is not common.

LÆTIFICAN'TIA, *ſ.* Cordials; a medical term.

LÆTI'TIA, the name of a woman.

LAEU'ANGER, a town of Norway, in the dioceſe of Drontheim: forty-ſix miles eaſt-north-eaſt of Drontheim.

LÆVI'NUS TORRENTI'NUS, commonly called *Vander Bekin*, was a native of Ghent, and bred in the univerſity of Louvain. He afterwards made the tour of Italy, where his virtues obtained him the friendſhip of the moſt illuſtrious perſonages of his time. On his return to the Low Countries, he was made canon of Liege, and vicar-general to Erneſt de Baviere, biſhop of that ſee. At length, having executed a ſucceſsful embaſſy to Philip II. of Spain, he was rewarded with the biſhopric of Antwerp; from whence he was tranſlated to the metropolitan church of Mechlin, and died there in 1595. He founded a college of Jeſuits at Louvain, to which he left his library, medals, and curioſities. He wrote ſeveral poems that obtained him the character of being, after Horace, the prince of lyric poets.

LÆ'VIUS, a Latin poet. It is not well known at what time he lived, but probably before the age of Cicero. A poem of his, entitled *Erotopagnia*, i. e. Love-Games, is quoted by Aulus Gellius. Apuleius alſo quotes ſix lines from the ſame poet; but he does not tell from what work he borrowed them. Lævius had alſo compoſed a poem entitled The Centaurs, which Feſtus quotes under the title of *Petrarum*.

LAFEL'DT, or LAVELD, a village of France, in the department of the Ourthe, late in the biſhopric of Liege; where a battle was fought in 1747 between the allies under the command of the duke of Cumberland, and the French under marſhal Saxe, in which the former were defeated: four miles weſt of Liege.

LAFE'RE. See FERE (La).

LAFITAU' (Joſeph-Francis), born at Bourdeaux, entered into the ſociety of Jeſuits, and was employed as a miſſionary among the North-American ſavages. On his return he publiſhed a work entitled Les Meurs des Sauvages Americains comparés aux meurs des premiers tems, 2 vols. 4to. 1723; which is regarded as one of the moſt exact accounts that have been given to the public of the manners of the aboriginal tribes in the new world. He wrote alſo, 2. A Hiſtory of the Diſcoveries of the Portugueſe in the New World, 2 vols. 4to. 1733, and 4 vols. 12mo. 1734, which is eſteemed; and, 4. Remarks upon Ginſeng, 12mo. 1728. This author died about 1740.

LAFITAU' (Peter-Francis), a French prelate, and author of various works, was the ſon of a wine-cooper at Bourdeaux, where he was born in the year 1685. When very young he was admitted among the Jeſuits, and exhibited proofs of genius and talents, which were judiciouſly cheriſhed by his ſuperiors. The firſt line in which he diſtinguiſhed himſelf was that of pulpit-eloquence, which he practiſed a conſiderable time with very high reputation. Afterwards he was deputed to Rome, to negociate on the ſubject of the diſputes in France relative to the bull *Unigenitus*; where his addreſs and lively converſation rendered him a great favourite with pope Clement IX. He did not neglect the opportunity which this circumſtance afforded him to puſh his fortune; and, after quitting the ſociety of Jeſus, obtained from his holineſs the biſhopric of Siſteron in Provence. Over this dioceſe he preſided, diſcharging his epiſcopal duties in the moſt faithful and exemplary manner, till his death, which took place at the caſtle of Lurs, 1764, when he was about ſeventy-nine years of age. He was through life a zealous enemy to Janſeniſm, which he aſſailed more with the weapons of ridicule than of ſerious argument or learning. He was the author of, 1. A Hiſtory of the Conſtitution *Unigenitus*, 2 vols. 12mo. 2. The Hiſtory of Clement IX. 2 vols. 3. Sermons, 4 vols. and ſeveral devotional and practical treatiſes. *Nouv. Dict. Hiſt.*

LAFOR'CE. See FORCE (La), vol. vii.

LAF'ORDSWIC, *ſ.* [Saxon; from hlaford, lord, and wic, treachery.] The betraying of a lord or maſter. This word is found in king Canute's laws, and in thoſe of Henry I.

LAFOS'SE, father and ſon, were farriers to the French king's ſtables. The former died in 1753. The latter diſcovered the true ſeat of the glanders to be in the pituitary membrane, and invented the method of trepanning for that diſorder: he publiſhed in 1749 a Treatiſe upon Glandered Horſes, and afterwards ſeveral other pieces upon farriery. Dr. Bracken tranſlated into Engliſh the treatiſe on the glanders, and inſerted it in his work on the Diſeaſes of Horſes: the other pieces were tranſlated in the year 1759, and publiſhed in 8vo. with plates. His works were tranſlated into Spaniſh in 1760, and dedicated to king Charles III. He died Jan. 24, 1765.

LAFOS'SE (D.D.), ſon of the preceding, was regularly bred from his youth to the veterinary art. "Having wil-

lingly embraced the profeſſion of my father and grandfather," ſays he, "my father determined to render me complete maſter of it, by making me paſs through every ſtage. I had previouſly ſtudied the languages at college, and was now thirteen years of age, when he took me under his own care. Though he had plenty of ſervants and workmen, he choſe that I ſhould ſleep in a ſtable, that I might become perfectly acquainted with horſes, by attending them night and day. He made me dreſs all his own horſes, as well as the diſeaſed ones that were under his care. No one was allowed to aſſiſt me, though I had oftentimes ſeven or eight horſes to attend every morning. In this employ I continued more than a year, and became a good groom. From the ſtable I went to the forge, as an apprentice; and for two years I applied myſelf to the handling of iron, and giving it various forms under the hammer; at intervals during this time I ſtudied human anatomy, and learned to ride a horſe in a proper manner. My father thought proper that I ſhould learn alſo the uſe of arms, drawing, the Engliſh language, geography, muſic, and natural hiſtory. When my father perceived that I had acquired ſome knowledge of the ſymptoms of the diſeaſes of horſes, and of the treatment of wounds, he took me wherever he went, and under his inſpection I performed every kind of treatment and operation. I now began ſeriouſly to ſtudy comparative anatomy. I frequented the layſtalls, and the ſlaughterers of horſes were my firſt aſſiſtants. Being previouſly acquainted with the anatomy of the human frame, their leſſons indeed were not of much ſervice to me; but I availed myſelf of the ſlaughtered carcaſes, diſſecting different parts of them as my fancy ſuited, for diſcovering the ſeat of various diſorders. Hereby I gained a vaſt inſight into the diſorders of the bones and of the foot, and collected a number of pieces for demonſtrating the nature of thoſe diſorders to ſuch as I might have occaſion to inſtruct; and I could not fail to detect a number of errors that diſfigured the hippiatric art." Such is the account M. Lafoſſe gives of himſelf in the Preface to his Cours d'Hippiatrique, p. vii. He began at eighteen years to give lectures upon his art. His *Guide du Maréchal* appeared in 1766, in 4to. and in 1771 he publiſhed his great work, entitled *Cours d'Hippiatrique, ou Traité complet de la Médecine des Chevaux*, in folio, with 65 plates. This magnificent work has never been tranſlated; but the ſubſtance of it, and many of the plates, will be found in our article FARRIERY, vol. vii.

LAFRESNA'YE. See FRENAYE, vol. viii.

LAFVENSA'RI, a ſmall iſland in the gulf of Finland. Lat. 59. 57. N. lon. 45. 32. E.

LAG, *adj.* [læn3, Sax. long; *lagg*, Swediſh, the end.] Coming behind; falling ſhort.—The ſloweſt footed, who come *lag*, ſupply the ſhow of a rearward. *Carew's Survey.*

I am ſome twelve or fourteen moonſhines
Lag of a brother. *Shakeſpeare's King Lear.*

Sluggiſh; ſlow; tardy. It is out of uſe, but retained in Scotland:

We know your thoughts of us, that laymen are
Lag ſouls, and rubbiſh of remaining clay,
Which Heav'n, grown weary of more perfect work,
Set upright with a little puff of breath,
And bid us paſs for men. *Dryden.*

Laſt; long delayed:

Pack to their old play-fellows; there I take
They may, *cum privilegio*, wear away
The *lag* end of their lewdneſs, and be laugh'd at. *Shakeſp.*

LAG, *ſ.* The loweſt claſs; the rump; the fag end.—The reſt of your foes, O gods, the ſenators of Athens, together with the common *lag* of people, what is amiſs in them, make ſuitable for deſtruction. *Shakeſpeare.*—He that comes laſt, or hangs behind.—The laſt, the *lag* of all the race. *Dryden's Virgil.*—What makes my ram the *lag* of all the flock? *Pope.*

To LAG, *v. n.* To loiter; to move ſlowly;

She paſs'd, with fear and fury wild;
The nurſe went *lagging* after with the child. *Dryden.*

The remnant of his days he ſafely paſs'd,
Nor found they *lagg'd* too ſlow, nor flow'd too faſt. *Prior.*

To ſtay behind; not to come in.—Behind her far away a dwarf did *lag*. *Fairy Queen.*

The knight himſelf did after ride,
Leading Crowdero by his ſide,
And tow'd him, if he *lagg'd* behind,
Like boat againſt the tide and wind. *Hudibras.*

LAG'-MAN, *ſ.* One that lags behind; a loiterer; one who falls ſhort of the virtue of his anceſtors. *Aſh's Dict.*

LA'GA, *ſ.* An old word for the law.

LA'GA, a river of Sweden, which runs into the North Sea four miles weſt of Laholm.

LAG'AMAN, a town of Candahar: ſixty miles north of Cabul.

LA'GAN. See FLOTSAM, and WRECK.

LAG'AN-WA'TER, a river of Ireland, which runs into Belfaſt Lough at Belfaſt.

LAGA'RES, a town of Portugal, in the province of Beira: fourteen miles ſouth-ſouth-weſt of Viſeu, and thirty eaſt-north-eaſt of Coimbra.

LAGAU', a town of Brandenburg, in the New Mark: five miles eaſt of Sternberg, and twenty-five ſouth-eaſt of Cuſtrin. Lat. 52. 28. N. lon. 15. 26. E.

LAG'BEN, a town of Germany, in the county of Feldkirch: three miles ſouth of Feldkirch.

LA'GE, a town of Weſtphalia, in the county of Lippe: three miles ſouth-weſt of Lemgo.

LA'GE, a town of Mecklenburg: nine miles ſouth-weſt of Roſtock.

LA'GE-DAY, *ſ.* [a Saxon law-term.] A day of open court; the day of the county court.

LA'GE-MAN, *ſ.* [a Saxon law-term.] A man qualified to ſerve on the jury; a juror.

LA'GEN, *ſ.* [*lagena*, Lat.] In ancient time, was a meaſure of wine containing ſix ſextarii: whence probably is derived our *flagon*. The lieutenant of the tower has the privilege to take *unam lagenam vini ante malum et retro*, of all wine-ſhips that come upon the Thames; and ſir Peter Leiceſter, in his Antiquities of Cheſhire, interprets *lagena vini*, "a bottle of wine."

LA'GEN BAY, a bay on the weſt coaſt of the iſland of Ila, ſouth of Lagen Point.

LA'GENS, a town of the iſland of Flores, one of the Azores, containing near 1400 inhabitants.

LAGEN'ULA, *ſ.* [from *lagena*, Lat. a bottle, becauſe the form of the fruit is like that of a little bottle or flagon.] In botany, a genus of the claſs tetrandria, order monogynia. The generic characters are—Calyx: perianthium inferior, of four ovate-oblong, reflexed, permanent, leaves. Corolla: petals none; nectary fleſhy, with four erect, ſomewhat-approximated, lobes. Stamina: filaments four, awl-ſhaped, equal to the calyx; antheræ ovate, incumbent. Piſtillum: germen concealed by the nectary; ſtyle thick, ſhorter than the ſtamens; ſtigma ſimple. Pericarpium: berry ſmall, bottle-ſhaped, with a narrow neck, of two cells, and containing two ſeeds. Seeds: ſolitary, convex on one ſide, angular on the other.—*Eſſential Character.* Calyx of four leaves, inferior; petals none; nectary four-lobed; berry of two cells; ſeeds ſolitary.

Lagenula pedata, called by the Cochin-chineſe *cây rât nho lá*; a ſingle ſpecies. It is a moderate-ſized ſhrub, found on the hills of Cochin-china. The ſtem climbs by means of tendrils, and is branched, deſtitute of prickles. Leaves pedate, of five ovate, crenate, downy, leaflets. Flowers whitiſh green, in terminal, ſpreading, ſubdivided, cluſters. *Loureiro.*

LAGERSTRŒ'MIA, *ſ.* [ſo named by Linnæus from *Magnus Lagerſtræm*, of Gottenburgh, director of the Eaſt-India Company, who procured many curioſities from China, and gave them to the public.] In botany, a ge-

LAGERSTRŒMIA, LAMPYRIS, AND LANGAYA.

1. Royal Lagerstrœmia. 2.3. The common Glow-worm. 4 to 8. Other species of Lampyris.
9. The Langaya Serpent.

J. Pass Sc.

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nus of the claſs icoſandria, order monogynia, natural order of ſalicariæ, (*Juſſ.*) The generic characters are—Calyx: perianthium one-leafed, ſix-cleft, bell-ſhaped, rather acute, ſmooth, permanent. Corolla: petals ſix, ovate, obtuſe, criſped, undulated, contorted; claws filiform, longer than the calyx, inſerted into the receptacle. Stamina: filaments very many, filiform, longer than the calyx, inſerted into the calyx below the germ; the ſix exterior ones are twice the thickneſs of the reſt, and are longer than the petals; antheræ oval, incumbent. Piſtillum: germ ſubgloboſe; ſtyle filiform, length of the longer ſtamens; ſtigma ſimple. Pericarpium: capſule ſubgloboſe, crowned with the ſtyle on its bluntiſh top, ſix-furrowed, ſix-celled, ſix-valved, the diſſepiments coaleſcing with the ſutures. Seeds: ſeveral, ovate, awl-ſhaped at the baſe, compreſſed, adhering to a central hexagonal pillar.—*Eſſential Character.* Calyx ſix-cleft, bell-ſhaped; petals ſix, curled; ſtamina very many, the ſix outer thicker than the reſt, and longer than the petals.

Species. 1. Lagerſtrœmia Indica, or Indian lagerſtrœmia: leaves alternate, ovate; calyxes naked, even. The trunk of this ſmall tree is about a fathom high, or ſomewhat more, ſmooth all over. Branches alternate, ſomewhat angular, flexuoſe, rigid, ſpreading. Leaves alternate, ſubſeſſile, on the twigs ovate, on the branches oblong, obtuſe, entire, nerved, ſtiffiſh, from half an inch to an inch in length. Flowers in a decompound, trichotomous, naked, ſpreading, panicle at the ends of the twigs; calyx inflated, hexagonal, green, five-parted; ſegments ovate, upright; corolla purple. Linnæus ſays that this tree is the ſize of a pomegranate; that the leaves are oppoſite, but ſometimes alternate, ſubſeſſile, oblong, quite entire, ſmooth; the floral leaves roundiſh; that the flowers are fleſh-coloured, in a looſe terminating thyrſe, on trifid or three-flowered pedicels; the petals on long claws, ſix in number, curled and waved like the meſentery. Native of the Eaſt Indies, China, Cochin-china, and Japan. It was introduced here in 1759, by Hugh duke of Northumberland; and flowers from Auguſt to October.

2. Lagerſtrœmia ſpecioſa, or ſightly lagerſtrœmia: leaves alternate, ovate; calyxes and leaves tomentoſe underneath. If this be the ſame with Munchhauſia ſpecioſa, it is a ſmall tree, with round, ſmooth, even, branches; and a native of China.

3. Lagerſtrœmia reginæ, or royal lagerſtrœmia: leaves oppoſite, oblong, ſmooth; calyxes grooved. Trunk erect; branches horizontal, ſpreading; bark ſmooth, ruſt-coloured; young ſhoots angular, with the angles winged as in L. Indica. Leaves oppoſite or nearly ſo, ſhort-petioled, oblong, entire, ſmooth, four or five inches long, and about two broad. Flowers much larger, and much more beautiful, than thoſe of L. Indica; colour in the morning that of a pale roſe, growing deeper through the day, and acquiring a purple tinge. Native of the Eaſt Indies; on many woody mountains of the northern parts of the Circars, where it grows to a tree of a middling ſize; flowering during the hot ſeaſon, and ripening the ſeeds in Auguſt. It is very beautiful when in flower, and well deſerves a conſpicuous place in our ſtoves. This ſpecies is ſhown in the annexed Engraving.

4. Lagerſtrœmia parviflora, or ſmall-flowered lagerſtrœmia: leaves oppoſite, oblong; ſmooth above, downy underneath; calyxes grooved. Trunk erect, with a ſmooth aſh-coloured bark. Branches very numerous, the large and lower ſpreading, the ſmaller nearly erect. Leaves oppoſite, or in numbers, from ſcabrous tubercles, very ſhort-petioled, oblong, above ſmooth and ſhining, below covered with a whitiſh down, entire, from two to four inches long, and one or two inches broad. Flowers three to ſix; ſmall, white; capſule ſmooth, oval, ſize of a ſmall nutmeg, three or four celled, three or four valved; ſeeds winged. This is a ſmall tree, a native of the Circar Mountains. It flowers during the hot ſeaſon, and the ſeeds are ripe in Auguſt and September. The wood is uſed by the natives for various economical purpoſes; but neither the beauty of the flowers, nor the appearance of the tree, recommend it for ornament on a footing with the others.

LAGET'TA, *ſ.* in botany. See DAPHNE lagetto, vol. v. p. 597.

LAG'GA, a town of Sweden, in the province of Upland: nine miles ſouth-eaſt of Upſal.

LAG'GER, *ſ.* A loiterer; an idler; one that loiters behind.

LAG'GING, *ſ.* The act of loitering.

LAGH, *ſ.* [from the Sax. laȝa.] The law. *Obſolete. Phillips.*

LAGH-LITE, *ſ.* A breach of the law, a puniſhment for breaking the laws. *Phillips.*

LAG'HI, a town of Arabia, in the province of Hadramaut, on the coaſt of the Arabian Sea: twelve miles north-eaſt of Aden.

LAGI'DA, a river of the iſland of Cuba, which runs into the ſea at the Havannah.

LAGLE'RA, a river of Spain, which riſes in New Caſtile, and runs into the Ebro a little to the north of Calzada.

LAGNAS'CO, a town of the Ligurian Republic: eleven miles north-weſt of Genoa.

LAGNAS'CO, a town of France, in the department of the Stura: five miles weſt of Savigliano, and twenty-four ſouth of Turin.

LAGNIEU', a town of France, in the department of the Ain: four miles ſouth-weſt of St. Rambert, and twenty-two north-eaſt of Lyons.

LA'GNY, a town of France, in the department of the Seine and Marne, on the Marne. In the year 835, Louis the Debonair held a parliament in this town; and in the year 1432 it was beſieged by the Engliſh, but without ſucceſs. In the year 1590 it was taken by the duke of Parma. Lagny contains three pariſh-churches: nine miles weſt-ſouth-weſt of Meaux, and fifteen eaſt-north-eaſt of Paris. Lat. 48. 53. N. lon. 2. 46.

LA'GNY (Thomas Fantet de), a very eminent French mathematician, was born at Lyons in the year 1660. He was deſigned by his father for the bar, and was ſent to purſue his ſtudies in the college of the Trinity at Lyons, and afterwards in the univerſity of Thouloufe. But, having met accidentally with Fournier's Euclid and Pelletier's Algebra, his genius for the mathematics was developed, and from that time he gave himſelf up wholly to the purſuit of his favourite ſcience. He came to Paris in the year 1686, and was ſoon afterwards appointed tutor to the duke de Noailles. In 1691 he publiſhed A general and brief Method of extracting Roots; of which, in the following year, he printed an enlarged and improved edition, entitled, "New and conciſe Methods for the Extraction and Approximation of Roots," &c. 4to. This work at once eſtabliſhed his fame in the mathematical world, and ſhowed him to be worthy of the honour which he received in 1695, when he was nominated an aſſociate member of the Academy of Sciences. In 1697 he publiſhed his "New Elements of Arithmetic and Algebra, or Introduction to the Mathematics," 12mo and in the ſame year, the abbé Bignon, protector-general of letters, procured him the appointment of profeſſor royal of hydrography at Rochfort. In that ſituation he ſpent ſixteen years, to the great benefit of the royal marine eſtabliſhment, and zealouſly applied his ſcientific knowledge to the improvement of navigation. In 1699, upon the renewal of the Academy of Sciences, he was named aſſociate geometrician. In the year 1715, the duke of Orleans, then regent of France, recalled him to Paris, and made him ſub-director of the general bank, in which he loſt the greater part of his fortune by the failure of that eſtabliſhment. During the ſame year he was appointed a penſioner of the Academy of Sciences; and ſoon afterwards obtained the place of ſub-librarian to the king, for philoſophical and mathematical books. In 1724 he was choſen ſub-director of the academy, and was gratified by the regent with a penſion of two thouſand livres; and in the following

following year he was elected director of the academy. He died on the 12th of April, 1734, about the age of seventy-four. He particularly excelled in arithmetic, algebra, and geometry, in which he made many improvements and discoveries. He, as well as Leibnitz, invented a binary arithmetic, in which only two figures are concerned. He rendered much easier the resolution of algebraic equations, especially the irreducible case in cubic equations; and the numeral resolution of the higher powers, by means of short approximating theorems. He delivered the measures of angles in a new science, called *Goniometry*; in which he measured angles by a pair of compasses, without scales or tables, with great exactness; and thus gave a new appearance to trigonometry. *Cyclometry*, or the measure of the circle, was also an object of his attention; and he calculated, by means of infinite series, the ratio of the circumference of a circle to its diameter, to 120 places of figures. He gave a general theorem for the tangents of multiple arcs; and he was the author of many other curious or useful improvements, which are found in the great multitude of his papers that are printed in the different volumes of the Memoirs of the Academy of Sciences; namely, in almost every volume from the year 1699 to 1729. Besides the articles already mentioned, he published, in a separate form, a treatise On the Cubature of the Sphere, 1702, 12mo. As for the "General Analysis, containing New Methods of resolving Problems of every Kind," &c. published in 1733, 4to. under the name of de Lagny, by M. Richer, a very able mathematician, it is said to be the undoubted production of the editor, who was assisted by the papers of his friend M. de Lagny, of which he was allowed the free use. *Hutton.*

LA'GO, a town of Italy, in the department of the Lower Po: four miles north of Comacchio.

LA'GO LIAS'TRO, a gulf or bay on the east coast of Sardinia. Lat. 39. 50. N.

LA'GO MAGGIO'RA, or LAKE MAJOR, a large lake of Italy, between the bailiwicks and the Milanese; near fifty miles in length, and four in breadth; in many places eighty feet deep; the bottom is stony, the water clear and greenish; on all sides it is surrounded by hills planted with vineyards, and plantations of chesnuts interspersed with villas. There are several islands, two of which, Isola Bella, and Isola Madre, called *Boromæan Islands*, are laid out in gardens and pleasure-grounds, with palaces erected on them, adorned with paintings, sculptures, &c. The lake abounds with fish, particularly trout and perch.

LA'GO NE'RO, a town of Naples, in Basilicata, at the foot of the Apennines, near a lake from which it receives its name. In March 1806, a battle was fought here between the French and the troops of the king of Naples, in which the former were victorious, and took possession of the town. An edict was soon after published by Joseph Bonaparte, in which it is declared that "the dynasty of Naples has ceased to reign over that city and its beautiful kingdom." Lago Nero is twelve miles north-east of Policastro.

LAGO'A, a town of the island of May, one of the Cape Verde Islands.

LAGO'A, a town of Portugal, in Algarva: five miles north-east of Silves.

LAGO'A, a river of Africa, which runs into the Atlantic in lat. 6. 55. N.

LAGO'A, a bay of the Indian Sea, on the coast of Africa. Lat. 33. 10. S.

LAGO'A. See DELAGOA, vol. v. p. 672.

LAGO'A D'ALBAFEI'RA, a lake on the west coast of Portugal, near the sea: twelve miles south-south-west of Lisbon.

LAGO'A DE OBI'DOS, a lake on the west coast of Portugal, which empties itself into the sea, four miles north-east from Cape Carvaeiro, in the province of Estramadura.

LAGO'A DE PA'TOS, a bay on the coast of Brasil. Lat. 29. 25. S.

LAGO'A DE PESCA'RA, a bay on the coast of Brasil. Lat. 21. 30. S.

LAGO'AS, a town of Africa, in the country of Matamba, on the river Sierra Leone. Lat. 8. 40. N. lon. 10. 50. W.

LAGOCH'ILUS, *s.* [from the Greek λαγως, a hare, and χειλος, a lip.] One who has a hare-lip.

LAGO'DA, a town of Brasil: eighty-five miles west of Fort Rio Negro.

LAGOE'CIA, *s.* [so named by Linnæus, from λαγως, a hare, and οικος, Greek, a dwelling, or seat; the plant being, according to Bellonius, called in the Isle of Lemnos *lagochymeni*, which means the form or seat of the hare.] WILD CUMIN; in botany, a genus of the class pentandria, order monogynia, natural order of umbellatæ or umbelliferæ. The generic characters are—Calyx: involucre universal, eight-leaved; leaflets feathered-toothed, ciliated, reflex; containing the umbellule. Involucre proper, four-leaved; leaflets hair-feathered; involving a single footstalk shorter than the leaflet itself. Perianthium proper, five-leaved, hair-many-cleft, superior. Corolla: petals five, two-horned, shorter than the calyx. Stamina: filaments five, capillary, length of the corolla; antheræ roundish. Pistillum: germ roundish, below the receptacle of the perianthium; style length of stamens; stigmas two; the one truncated. Pericarpium: none. Seeds: solitary, ovate-oblong, crowned by the perianthium. The alternate seed is abortive.—*Essential Character.* Involucre universal and partial; petals bifid; seeds solitary, inferior.

Lagoecia cuminoides, wild or bastard cumin; a single species. This is an annual plant, about a foot high. The leaves resemble those of honeywort (Cerinthe). The flowers are collected into spherical heads at the extremity of the stalks, and are of a greenish-yellow colour. The fruit is small, pedicelled, ovate-acuminate, crowned with a ciliate calyx, villose, one seed only ripening, the other abortive, and fixed laterally to the apex of the other, like a withered scalelet. The fertile seed is of a dusky black colour, sprinkled all over with hoary villose hairs, convex on one side, with five capillary raised whitish streaks, flattish on the other, with three very slender streaks, marking out the place of the abortive seed; which is constantly and easily found, when the fruit is well softened in water. Native of the Levant; cultivated in 1708, by the duchess of Beaufort; flowers in June and July.

Propagation and Culture. Sow the seeds in autumn on a warm border, soon after they are ripe; or, if they be permitted to scatter, they will come up of themselves. When the seeds are sown in the spring, they commonly remain in the ground a year, and sometimes two or three years, before they grow.

LAGOO'N, or LAGU'NE, *s.* [from *lacuna*, *à lacus*, Lat.] A lake. The *Lagunes of Venice* are marshes or lakes in Italy on which Venice is seated. They communicate with the sea, and are the security of the city. There are about sixty islands in these Lagunes, which together make a bishop's see. Eurano is the most considerable, next to those on which Venice stands.

LAGOO'N (Middle), a gulf on the coast of Yucatan, in the bay of Honduras. Lat. 18. 7. N. lon. 88. 59. W.

LAGOO'N (North), a gulf on the coast of Yucatan, on the bay of Honduras. Lat. 18. 40. N. lon. 88. 58. W.

LAGOO'N (South), a gulf on the coast of Yucatan, in the bay of Honduras. Lat. 17. 54. N. lon. 88. 59. W.

LAGOO'N I'SLAND, an island in the South Pacific Ocean, discovered by captain Cook in the year 1769, who describes it of an oval form, with a lagoon, or lake, in the middle, which occupied much the larger part of it; whence the name. The border of land which circumscribes the lagoon is in many places very low and narrow, particularly on the south side, where it consists principally of a beach or reef of rocks; it has the same appearance also in three places on the north side; so that, the firm land being disjoined, the whole looks like many islands covered with wood. Capt. Cook approached it on the north

north ſide; but within a mile no bottom was found with 130 fathom of line, nor did there appear to be any anchorage about it. The whole is covered with trees of different verdure; but none could be diſtinguiſhed, even with glaſſes, except cocoa-nuts and palm-trees. Lat. 18. 47. S. lon. 139. 28. W.

LAGOPHTHAL'MUS, *ſ.* [from the Greek λαγως, a hare, and οφθαλμος, an eye.] One who has eyes like a hare, one whoſe eyelids are ſo contracted as to prevent their cloſing.

LAGOPO'NUS, *ſ.* [from the Greek λαγως, a hare, and πονος, pain.] The griping of the guts.

LAGO'PUS, *ſ.* in botany. See TRIFOLIUM.

LA'GOR, a town of France, in the department of the Lower Pyrenées: eight miles ſouth-eaſt of Orthez, and fourteen north-weſt of Pau.

LA'GOS, a ſeaport of Portugal, in the province of Algarva, ſituated in a bay of the Atlantic to which it gives name; not regularly fortified, but defended by ſeveral forts. The harbour is deep but full of rocks. It is the reſidence of the viceroy of Algarva; and contains two pariſh-churches, four convents, and about 4600 inhabitants: ninety-ſix miles ſouth of Liſbon. Lat. 37. 0. N. lon. 8. 39. W.

LA'GOS, a river of Africa, which riſes in Benin, and runs into the Atlantic in lat. 5. 10. N. with a bar at its mouth, which, joined to the roughneſs of the ſea, prevents its navigation.

LA'GOS, a town of Mexico, in the province of Guadalajara: thirty-ſix miles north-eaſt of Guadalajara.

LAGOS'TA. See AGOSTA, vol. i. p. 204.

LAGOSTO'MA, *ſ.* [from the Gr. λαγως, a hare, and στομα, the mouth.] A term in ſurgery, ſignifying the hare-lip.

LAGOT'ROPHY, *ſ.* [from the Greek λαγως, a hare, and τρεφω, to nouriſh.] A warren of hares.

LAGOU'SA, a ſmall iſland in the gulf of Engia: three miles north of Engia.

LAGO'W, a town of Auſtrian Poland: ſixteen miles north of Sandomirz.

LAGU'A, a town of the iſland of Cuba: eighty miles weſt-north-weſt of Villa del Principe.

LA GRA'VE. See GRAVE (La), vol. vii.

LA GUAY'RA, a ſeaport of South America, in the government of the Caraccas; and the harbour of the town of Leon de Caraccas; it is fortified, and contains about 8000 ſouls. The trade is very conſiderable, though the harbour is only a roadſted ſecured by a mole, and the anchorage is bad. During winter, La Guayra is not unhealthy; but in the ſummer-months the caſe is far otherwiſe: in that ſeaſon, the heat reflected from the mountains is intolerable to Europeans, and the fever makes dreadful ravages among thoſe who have not been long inured to the climate. The uſe of carriages for the conveyance of goods being unknown, all packages muſt be reduced to ſuch a ſize as to admit of being placed on the backs of mules; 180lbs. being the general burden of each. News has lately arrived that this town was deſtroyed by an earthquake on the 26th of March, 1812; that very few houſes remain, and that 1500 perſons periſhed. Lat. 10. 40. N. lon. 67. 0. W.

LAGU'EN, one of the ſmall Philippine Iſlands, near the north coaſt of Samar. Lat. 12. 43. N. lon. 125. 9. E.

LAGUER'RE (Louis), a painter of hiſtories on ceilings, ſtaircaſes, halls, &c. and an aſſiſtant and imitator of Verrio; with whoſe name his own has been moſt unpropitiouſly immortalized by Pope, in that characteriſtic verſe, "Where ſprawl the ſaints of Verrio and Laguerre." Laguerre, though the ſon of a Catalan, was born in France; and, his father being maſter of the menagerie at Verſailles, he had the honour of having Louis XIV. for his godfather, and after him he was named. At firſt he was intended for the church, and was placed in the Jeſuits' college for education; but, having a heſitation in his ſpeech, and therefore not ſuited to ſupport their ambitious projects, and having exhibited ſome taſte in drawing, the godfather recommended to his parents to bring him up to the profeſſion of painting. He then ſtudied in the ſchool of Le Brun, and in the Royal Academy of Paris; and made ſo much progreſs, that, in the year 1683, at the age of twenty, he came to England, and was immediately employed by Verrio upon the large work at St. Bartholomew's Hoſpital; in which he ſucceeded ſo well, that he ſoon obtained conſiderable employment on his own account, and executed a great number of ceilings, halls, and ſtaircaſes, in the houſes of the principal nobility of the country, particularly at lord Exeter's at Burleigh, at Devonſhire-houſe, Piccadilly, Petworth, and Blenheim. King William gave him lodgings at Hampton-court, where he painted the Labours of Hercules, and repaired the large pictures called the Triumphs of Cæſar, by Andrea Mantegna. His talents were not of a caſt to demand very high reſpect, but they were fully equal to the mode in which they were employed, which, requiring only a certain portion of ingenuity, is a waſte of talents of a ſuperior claſs. His death happened in the year 1721, at the theatre of Drury-lane. He had gone there to ſee the Iſland Princeſs acted for the benefit of his ſon, who was newly entered upon the ſtage as a ſinger; but, before the play began, he was ſeized by an apoplexy, and carried away ſenſeleſs.

LAGU'NA, *ſ.* in botany. See LAGUNÆA.

LAGU'NA, or LACUNA (Andrew), an eminent Spaniſh phyſician, was born at Segovia, in Old Caſtile, in the year 1499. He ſtudied philoſophy at Salamanca, and afterwards went to Paris, partly for the purpoſe of improving his knowledge of the Greek language, and partly for the ſtudy of medicine. In 1536 he returned to Spain, and followed the courſes eſtabliſhed in the colleges of Alcala, Henarez, and Toledo, in the latter of which he received the honours of the doctorate. After this, he immediately repaired to the Low Countries, in conſequence of a command from the emperor Charles V. and he paſſed the greater part of his life at the court of that monarch. In 1540 he went to the imperial city of Metz, and reſided there five or ſix years, rendering great ſervices to the citizens during the prevalence of an epidemic peſtilence; and by his influence, thus acquired, he contributed to ſtrengthen their adherence to the church of Rome and to the emperor. He viſited Italy, Germany, and France, again, where he received many honours from the learned corporations, and at Rome was created count palatine, and knight of the order of St. Peter. He died in his native country in the beginning of the year 1560. He proved himſelf a learned critic by his corrections and commentaries on the works of Dioſcorides, and on many parts of thoſe of Hippocrates, Ariſtotle, Galen, &c. His own works are numerous, conſiſting of a Treatiſe on Anatomy; an Account of the Epidemic at Metz; a Life of Galen, an epitome of his works, and notes on the labours of his tranſlators, &c. He likewiſe publiſhed a treatiſe on gout, on excreſcences in the neck of the bladder, and on diet, and an epiſtle to Cornaro; and tranſlated the works of Dioſcorides into Spaniſh. *Eloy. Dict. Hiſt. de Med.*

LAGU'NA, a town of Peru, ſituated on Amazon River, ſouth-eaſt of the town of Borja.

LAGU'NA, a town of South-America, in the province of Venezuela, on the weſt ſide of Lake Maracaybo: eighty miles ſouth of Maracaybo.

LAGU'NA, or ST. CHRISTOBAL DE LA LAGUNA, a town of Teneriffe, and capital of the iſland; ſituated on a ſmall eminence, and every day refreſhed with a breeze of wind. It is well ſupplied with water, and contains two pariſh-churches, ſeveral convents, and an hoſpital; the ſtreets are large and handſome; it takes its name from a lake a little to the eaſt of the town. Lat. 28. 28. N. lon. 16. 20. W.

LAGU'NA ESCU'RA, a cape of Portugal, in the province of Beira: ſeven miles ſouth-weſt of Guarda.

LAGUNÆ'A, *ſ.* [from *Andrew Laguna*, mentioned above.] In botany, a genus of the claſs monadelphia, order polyandria, natural order of columniferæ, (malvaceæ, *Juſſ.*)

Juſſ.) The generic characters are—Calyx: perianthium one-leafed, bell-ſhaped, ſomewhat cornered, half-five-cleft, permanent, (deciduous, *Cav.*) Corolla: petals five, ovate-oblong, obtuſe, ſpreading, affixed to the baſe of the tube of the ſtamens. Stamina: filaments ſeveral (25–30), conjoined into a tube below, in the top and ſides of the tube receding from it and free; antheræ roundiſh. Piſtillum: germ ovate-oblong; ſtyle thread-ſhaped, longer than the ſtamens, five-cleft at the tip; diviſions ſpreading, (or undivided;) ſtigmas headed. Pericarpium: capſule ovate-oblong, ſomewhat five-cornered, five-celled, five-valved; partitions contrary. Seeds: ſome, roundiſh-three-ſided.—*Eſſential Character.* Calyx ſimple, five-cuſped; ſtyle ſimple; ſtigma peltated; capſule five-celled, five-valved.

Species. 1. Lagunæa aculeata, or prickly lagunæa: ſtem prickly-tomentoſe; leaves deeply many-parted; flowers axillary, ſolitary. Stem round, tomentoſe, armed with ſmall upright prickles, ſomewhat branched, a foot and a half high. Leaves alternate, ſhorter than the petioles, very deeply divided into three or more ſerrate-toothed ſegments, the middle one more lengthened than the others, ſeeming to be curled. Flowers on ſhort peduncles; corolla yellow, twice as long as the calyx, ſpreading; ſtigma red, peltate, ſcarcely ſtanding out. Seeds kidney-form, black. Native of Coromandel near Pondicherry, where it is called *cattacacheree* by the inhabitants.

2. Lagunæa ſolandra, or maple-leaved lagunæa: leaves ſubcordate, three-cuſped, ſerrate; flowers corymbed. This plant is about two feet high, and hirſute. Stem upright, round, ſtiff, the thickneſs of a gooſe-quill, hirſute, with horizontal hairs, where the branches ſpring knobbed. Branches many, from top to bottom, alternate, ſpreading, ſubflexuoſe, red towards the baſe on the inſide; the lower about a hand in length, and more remote, the upper about a a foot, and nearer, the internodes being ſcarcely an inch long. Flowers corymb-racemed at the ends of the ſtem and branches; corolla purpliſh-white. This ſpecies, according to Monſ. l'Heritier, has the habit of Napæa, and the root is annual. He joins it with Hibiſcus becauſe it agrees in all points with that genus, eſpecially in the pericarpium; and the ſimplicity of the calyx is not of itſelf ſufficient to make it of a diſtinct genus. See his deſcription, &c. under Hibiscus ſolandra, vol. ix. p. 839. Murray on the contrary makes it a *Solandra*; and Cavanilles has deſcribed it under the name of *Triguera*, from Trigueros, a Spaniſh botaniſt. It was found in the Iſle of Bourbon by Commerſon; introduced into the Paris garden about the year 1774, and into Kew garden in 1786 by Mr. Zier.

3. Lagunæa ternata, or three-leaved lagunæa: ſtem herbaceous, villoſe; lower leaves ternate, with the middle leaflet very long; upper leaves ſubhaſtate; flowers axillary, ſolitary. Root round, not very fibrous. Stems branched at bottom, herbaceous, a foot high, villoſe, as is the whole plant. Native of Senegal, where it was found by Adanſon.

Propagation and Culture. The ſame with thoſe ſpecies of Hibiſcus which come from hot countries. The ſecond ſort ripens the ſeeds in England, and may be increaſed by them.

LAGUNIL'LA, a town of South America, in the vice-royalty of New Grenada: fourteen miles ſouth-weſt of Merida.

LAGUNIL'LA, a town of South America, in the province of Cordova: thirty miles eaſt of Cordova.

LAGUNIL'LAS, a town of Peru, in the dioceſe of La Paz: thirty-nine miles north of Potoſi.

LAGUP'P, a river of Pruſſian Lithuania, which runs into the Piſſa four miles ſouth of Stulluponen.

LAGU'RUS, *ſ.* [from λαγως, a hare, and ουρα, a tail.] Hare's-tail Grass; in botany, a genus of the claſs triandria, order digynia, natural order of gramina, gramineæ, or graſſes. The generic characters are—Calyx: glume one-flowered, bivalve; valves long, linear, ſpreading, very thin, each ending in a villoſe awn. Corolla: bivalve, thicker than the calyx; valve exterior, longer, terminated by two ſmall upright awns; a third awn from the middle of the back of the ſame valve, reflex-twiſted; valve interior, ſmall, ſharp. Nectary two-leaved; leaflets lanceolate, obtuſe, gibboſe at the baſe. Stamina: filaments three, capillary; antheræ oblong. Piſtillum: germ top-ſhaped; ſtyles two, ſetaceous, villoſe; ſtigmas ſimple. Pericarpium: none; corolla grows to the ſeed. Seed: ſolitary, oblong, covered, awned.—*Eſſential Character.* Calyx two-valved, with a villoſe awn; corolla having on the outer petal two terminating awns, and a third dorſal one twiſted back.

Lagurus ovatus, a ſingle ſpecies. It is an annual graſs, growing to the height of a foot or eighteen inches, and even more, very ſoft and hoary, as are alſo the leaves and ſpikes. Theſe are about two inches long, and almoſt round, beſet with ſoft hairs of a pale ſtraw-colour. The corolla, when ripe, is more rigid than the calyx, and protects the ſeed; which is ovate, acuminate at both ends, on one ſide convex and ſmooth, on the other concave, with a raiſed ſtreak in the middle, bay-coloured. Native of the South of Europe, France, Italy, Sicily, Portugal. Ray obſerved it in Narbonne, Italy about Baiæ, and Sicily in ſandy grounds, lower and ſmaller than is deſcribed above. It was cultivated here in 1640, according to Parkinſon. See Andropogon.

LAGU'RUS CYLIN'DRICUS. See Saccharum sericeum.

LA'GUS, a Macedonian of mean extraction. He received in marriage Arſinoe the daughter of Meleager, who was then pregnant by king Philip; and, being willing to hide the diſgrace of his wife, he expoſed the child in the woods. An eagle preſerved the life of the infant, fed him with her prey, and ſheltered him with her wings againſt the inclemency of the air. This uncommon preſervation was divulged to Lagus, who adopted the child as his own, and called him Ptolemy, conjecturing that, as his life had been ſo miraculouſly preſerved, his days would be ſpent in grandeur and affluence. This Ptolemy became king of Egypt after the death of Alexander; and is called *Lagus*, to diſtinguiſh him from his ſucceſſors of the ſame name. See the article Egypt, vol. vi. p. 298. He wiſhed it to be believed that he was the legitimate ſon of Lagus; and the ſurname of Lagides was tranſmitted to all his deſcendants on the Egyptian throne till the reign of Cleopatra, Antony's miſtreſs. Plutarch mentions an anecdote, which ſerves to ſhow how far the legitimacy of Ptolemy was believed in his age. A pedantic grammarian, ſays the hiſtorian, once diſplaying his great knowledge of antiquity in the preſence of Ptolemy, the king ſuddenly interrupted him with the queſtion of, "Pray tell me, ſir, who was the father of Peleus?" "Tell me," replied the grammarian without heſitation, "who was the father of Lagus?" This reflection on the meanneſs of the monarch's birth did not in the leaſt irritate his reſentment, though the courtiers all glowed with indignation. Ptolemy praiſed the humour of the grammarian, and ſhowed his moderation and the mildneſs of his temper by taking him under his patronage.

LAGUY'O, a town of Africa, in the country of Fantin.

LA'HA-RO'I, [Hebrew.] The name of a well. *Gen.* xxiv. 62.

LAHA'AR, a town of Hindooſtan, in the circar of Gohud: ſeventy-five miles ſouth-ſouth-eaſt of Agra, and forty eaſt of Gwalior. Lat. 26. 9. N. lon. 79. 35. E.

LA'HAD, [Hebrew.] A man's name.

LAHAD'SI, a town of Arabia, in the province of Yemen: ſixteen miles north-weſt of Aden.

LAHALL', a town of Sweden, in Weſt Gothland: ten miles north of Gothenburg.

LAHAR'PE (John Francis). See Harpe, vol. ix. p. 231.

LAHAS'SA. See Lassa.

LAHAWAN'OCK CREEK, a river of Pennſylvania, which

which runs into the Susquehanna in lat. 41. 20. N. lon. 75. 58. W.

LAH'DACK, or LEH, a town of Thibet, capital of a district: 380 miles north of Delhi. Lat. 35. N. lon. 78. 14. E.

LA'HEL, [Hebrew.] A man's name.

LAHI'GIAN, or LANIGIEN, a town of Persia, in the province of Ghilan, on the Isperud, and at one time the metropolis of the province, situated on an eminence: thirty-five miles north-west of Amol, and eight east of Resht.

LAHIS'ZIN, a town of Russian Poland, in the palatinate of Brzesc: twelve miles north-east of Pinsk.

LAHM, a town of Germany, in the principality of Culmbach: nine miles west of Bayreuth.

LAH'MAN, [Hebrew.] The name of a place. [Saxon.] An old word for a lawyer.

LAHMEDIE', a town of Egypt, on the east branch of the Nile: fourteen miles south-south-west of Damietta.

LAH'MI, [Hebrew.] A man's name.

LAHN, or LÖHN, a town of Silesia, in the principality of Jauer, on the Bober: seven miles south-south-east of Lowenburg, and twenty-two west of Jauer. Lat. 50. 58. N. lon. 15. 44. E.

LAHN, or LÖHN, a river of Germany, which rises about ten miles east-north-east from the town of Siegen, passes by Laasphe, Marburg, Giessen, Wetzlar, Vilmer, Runckel, Limburg, Dietz, Nassau, &c. and runs into the Rhine near Lahnstein.

LA'HNBURG, a town of Germany, in the comté of Nassau Weilburg, on the right bank of the Lahn: two miles north of Weilburg.

LAHN'STEIN, or LÖHNSTEIN, a town of Germany, at the conflux of the Lahn and the Rhine: four miles east of Coblentz, and ten miles west of Nassau.

LA'HO, a town of Africa, on the Ivory Coast, which has been represented as a large and populous place, extending a league along the coast; the shore being composed of a beautiful yellow sand, against which the sea beats with great violence. The natives, who are well supplied with all kinds of provisions, are of a mild, tractable, and gentle, disposition; but ready to seize any opportunity for raising the price of their ivory, according to the demand, and the number of ships they observe on the coast. They are visited by interlopers of all nations; the free ships of England, Holland, Denmark, and formerly the Hanse-towns; whence the occasions of raising their price frequently occur. Laho is planted like Axim, with a great number of cocoa-trees; and thus the neighbouring countries of both districts very much resemble one another. *Cape Laho* is situated in lat. 5. 10. N. equally distant from Cape Palmas and Cape Tres Puntas, and the western frontier of that district, called the country of the "Good People." Beyond Cape Laho the coast falls in directly north-east, forming a fine bay, at the head of which opens the mouth of the little river, called Jaque Lahu, or Das Balbas, running directly north and south, but not navigable. Farther eastward is *Korbi Laho*, the little pool, called the Bottomless Pit, both by the English and Dutch, because several unsuccessful attempts had been made to sound it; but at last it was found to be no more than sixty fathoms; the difficulty of sounding it resulting from a tide at the bottom which carried away the lead faster than they could furnish line. Excepting this pool, there is no anchorage for several leagues along the coast. The produce of the adjacent country consists of cloths and stuffs of Quâquas, ivory, and provisions.

LA'HO, or LAOS, a district in Asia. See LAOS.

LAHO'LM, or LAGEHOLM, a seaport town of Sweden, in the province of Halland, at the mouth of the Laga, near the sea, with a good salmon-fishery; this town was fortified by the Danes, and ceded to Sweden by the peace of Bromsebro: twelve miles south-south-east of Halmstad, and thirty north of Helsingborg. Lat. 56. 40. N. lon. 12. 45. E.

LAHOO'R, a town of Thibet, on the Setledge: twenty-four miles north-west of Gangotri. Lat. 23. 10. N. lon. 76. 25. E.

LAHO'RE, or PANJAB, a country in the north-west part of Hindoostan, bounded on the north by Cachemire, on the east by the mountains of Thibet, on the south-east by Delhi, on the south by Moultan, and on the west by the Indus, which separates it from Cabul and Candahar; near 300 miles in length from east to west, and about 100 miles from north to south. It is one of the richest and most considerable of the empire, abounding in rice, corn, and fruit of every kind. It is watered by the Indus, which bounds it on the west; by the Behat, Chunaub, Rauvee, Setledge, &c. which last bounds it on the east, and partly on the south. Between the Behat and the Indus are some salt springs, where they manufacture an excellent kind of salt. This country is now in the possession of the sheiks.

LAHO'RE, a city of Hindoostan, and capital of the above country, situated on the Rauvee. It is ancient and of great extent, forming with its fauxbourgs a circumference of seven miles: surrounded with walls of brick, and adorned with beautiful edifices and gardens. It has twelve gates. Lahore was once the residence of the Mogul kings; but at present, since the sheiks have established themselves in the country, and made it their capital, it has lost much of its former splendour, and, many of the inhabitants having retired from the place, the fauxbourgs are almost totally ruined. The Jesuits at one time enjoyed a free exercise of their religion: here are manufactures of cotton, carpets, &c. It is 420 miles east of Candahar, and 280 north-west of Delhi. Lat. 31. 1. N. lon. 72. 48. E. See the article HINDOOSTAN.

LAHO'REY, a town of Hindoostan, in Baglana: twenty miles south of Bahbelgong.

LAHORPO'RUM, a town of Hindoostan, in Oude: twenty-five miles west-north-west of Kairabad.

LAHOU'E, a town of Africa, on the Ivory Coast. Lat. 5. 20. N. lon. 5. 5. W.

LAHR, a town of Germany, in the bishopric of Munster: twelve miles north-west of Munster.

LAHR, or LOHR, a town of the principality of Nassau Saarbruck Usingen, the capital of a lordship, on the river Schutter. In the year 1676, this town was laid waste by the French. In 1802, the lordship was given to the elector of Baden. It is eighteen miles south-south-east of Strasburg, and nineteen north of Friburg. Lat. 48. 21. N. lon. 7. 57. E.

LAH'SA. See LACHSA.

LA'I-KIANG', a river of China, which runs into the Heng near Heng-tcheou.

LA'I-NGAN', a town of China, of the third rank, in Kiang-nan: ten miles north-east of Kin.

LA'I-PING', a town of China, of the third rank, in Quang-si: forty-two miles west-north-west of Sin-tcheou.

LA'I-TCHEOU', or TAI-TCHEOU, a city of China, of the first rank, in Chan-tong, built on a promontory; bounded on one side by the sea, and on the other by mountains: 255 miles south-east of Pekin. Lat. 37. 9. N. lon. 119. 46. E.

LA'I-VOU', a town of China, of the third rank, in Chan-tong: twenty-seven miles east of Tai-ngan.

LA'I-YANG', a town of China, of the third rank, in Hou-quang, on the river Lai-kiang: twenty-seven miles south-south-east of Heng-tcheou.

LA'I-YANG', a town of China, of the third rank, in Chan-tong: forty-two miles south-west of Ngin-hai.

LA'JA, a town of Peru, in the diocese of La Paz: fourteen miles north-west of La Paz.

LAJAPOU'R, a town of Hindoostan, in Guzerat: ten miles south of Surat.

LAIBEE'DY, a town of Africa, in the country of Tunis: eighteen miles south-east of El Jemma.

LA'IC, *s.* One who is not in holy orders; one not engaged in the ministry of religion.

LA'IC, or LA'ICAL, *adj.* [*laique*, Fr. *laicus*, Lat. from

Aaa 3

λαὸς, Gr. common people.] Belonging to the laity, or people, as diſtinct from the clergy.—In all ages the clerical will flatter as well as the *laical*. *Camden*.

LAI'CA, a town of Abyſſinia: 100 miles ſouth of Miné.

LAICAL'ITY, *ſ.* The ſtate or quality of a layman. *Scott*.

LAID, participle preterit of *To lay*.—Money *laid* up for the relief of widows and fatherleſs children. 2 *Macc*.

LAI'DA, a town of Bengal: fourteen miles ſouth of Curruckdeah.

LAIDAL'LA, a town of Hindooſtan, in Golconda: ten miles north of Warangole.

LAI'GLE. See AIGLE, vol. i.

LAIGNE', a town of France, in the department of the Mayenne: four miles weſt of Chateau Gontier, and thirteen ſouth of Laval.

LAIGNES, a town of France, in the department of the Côte d'Or: nine miles weſt-ſouth-weſt of Châtillon ſur Seine, and twenty-one north of Semur en Auxois.

LAILAKA'RI, a ſmall iſland on the eaſt ſide of the gulf of Bothnia. Lat. 65. 14. N. lon. 25. 9. E.

LAI'LLY, a town of France, in the department of the Loiret: twelve miles eaſt of Beaugency, and twelve ſouth-weſt of Orleans.

LAIN, participle preterit of *To lie*.—Mary ſeeth two angels in white, ſitting, the one at the head, and the other at the feet, where the body of Jeſus had *lain*. *John*.—The parcels had *lain* by, before they were opened, between four and five years. *Boyle*.

LAINE, *ſ.* In maſonry, a courſe of brick or ſtone laid in a wall.

LAI'NECK, a town of Germany, in the principality of Bayreuth: eight miles eaſt-north-eaſt of Bayreuth.

LAI'NEZ, or LAYNEZ (James), a Spaniſh Jeſuit, and the firſt general of the order after the death of the founder, was born in the year 1512. He was educated at the univerſity of Alcala, where he was admitted to the degree of doctor; and afterwards he removed to Paris, to ſtudy divinity. Here he aſſociated with Loyola, and was one of the ſeven who bound themſelves by a vow, at Mont-Martre, to erect the new community. According to ſome writers, he had the principal hand in drawing up the conſtitutions for their government. Upon the death of Loyola in 1556, he ſucceeded him as ſuperior of the ſociety; but was not formally elected general till two years afterwards. He now directed his views to extend the power belonging to his office, and by his policy and addreſs raiſed it to an enormous pitch. His firſt meaſure was to obtain a decree, that the office of general ſhould not be temporary, but permanent in the perſon who ſhould be elected to it; in which he ſucceeded, notwithſtanding that pope Paul IV. was not unaware of the dangerous conſequences that might ſpring from ſuch an eſtabliſhment. His next ſtep was to ſecure to the general the right of entering into all kinds of engagements, without ſubmitting them to the deliberation of the community; to give authority and authenticity to the commentaries and declaration relating to the conſtitutions; to make new conſtitutions, and to change and interpret the old ones; and alſo to eſtabliſh priſons for refractory and diſobedient members. To theſe no leſs than monarchical prerogatives he procured the ſubmiſſion of the order, at the firſt congregation which was held after the death of Loyola; and may therefore be conſidered as the real founder of that ſyſtem of worldly policy, by which the Jeſuits afterwards acquired ſuch aſtoniſhing influence in every part of the globe. He aſſiſted at the council of Trent, in the character of divine to the papal ſee, under the pontificates of Paul III. Julius III. and Pius IV. and diſtinguiſhed himſelf by his knowledge of buſineſs, by his genius, and, above all, by his zeal for the pretenſions of the papacy. In the twenty-third ſeſſion, held in 1563, he maintained the bold poſitions, "that the hierarchy was concentred in the perſon of the pope; that the biſhops poſſeſſed neither juriſdiction nor power, which they did not hold under him; that Jeſus Chriſt had delegated his authority to St. Peter, from whom the other apoſtles had received their commiſſions; that the tribunal of the pope on earth is equally extenſive and paramount with that of Jeſus Chriſt in heaven," &c. In the year 1561, he went to France, in the ſuite of cardinal de Ferrara, the legate of pope Pius IV. and attended the conference at Poiſſi, where he diſputed with Beza and Peter Martyr. In the commencement of a diſcourſe which he pronounced on this occaſion, he addreſſed himſelf to queen Catharine de Medicis, and took the freedom of telling her, that a woman had no buſineſs to appoint conferences for religious diſcuſſions, and that ſhe had uſurped the right of the pope. After his return to Rome, he refuſed a cardinal's hat, which pope Paul IV. offered him; and died in 1565, about the age of fifty-three. He was the author of ſome theological and moral treatiſes. *Moreri*.

LAI'NO, a town of Naples, in Calabria Citra: nineteen miles weſt-north-weſt of Caſſano.

LAI'NO, or LAO, a river of Naples, which runs into the Mediterranean two miles ſouth-eaſt from Scalea.

LA'INSTON, a pariſh in Hampſhire, about three miles from Wincheſter. Here is Lainſton-houſe, formerly the ſeat of the Bathurſt family. It is a noble houſe, but it is the only one in the pariſh, though there is a regular pariſh-church near the houſe, ſubject to the viſitation of the biſhop, &c. in which is a vault, the burying-place of the family of the Bathurſts. The pariſh-officers of courſe muſt be choſen out of the ſervants in this ſaid houſe; and they are not over-burdened with poor. A regular regiſter or entry of marriages, chriſtenings, and burials, is kept in this church; which brings to our mind the circumſtance of Miſs Chudleigh (afterwards called ducheſs of Kingſton) being married here to captain Hervey, afterwards earl of Briſtol. When this lady became thoroughly tired of her huſband, a ſtratagem occurred to her by which ſhe might at once deprive captain Harvey of the power to claim her as his wife. The clergyman who married them was dead; the regiſter-book was in careleſs hands. A handſome compliment was paid for the inſpection; and, while the perſon in whoſe cuſtody it was liſtened to an amuſing ſtory, ſhe tore out the regiſter. Thus imagining the buſineſs accompliſhed, ſhe for a time bade defiance to her huſband. But, in the natural courſe of events, captain Hervey ſucceeded to the earldom of Briſtol. With rank there was fortune; and both were moſt inviting objects to the mind of this lady. When a ſucceſſion to the family honours and revenue became highly probable, a ſhort period before it took place this lady went again to the houſe of Mr. Merril, in whoſe chapel ſhe was married, to procure, if poſſible, the re-inſertion of her marriage with captain Hervey in the book, which, to deſtroy the written evidence of that marriage, ſhe had formerly mutilated. With this view ſhe dealt out promiſes with a liberal hand. The officiating clerk, who, like Scrub in the play, was a perſon of various avocations, was to be promoted to the extent of his wiſhes. The book was managed by the lady to her content, and ſhe returned to London, ſecretly exulting in the excellence and ſucceſs of her machination. She did, it is true, ſucceed; but it was in laying the groundwork of that very evidence which operated afterwards to her conviction, when tried for bigamy after the death of the duke of Kingſton.

LAJOU'N, a town of Perſia, in the province of Mazanderan, near the coaſt of the Caſpian Sea: twenty-one miles eaſt of Reſhd.

LAIR, *ſ.* [*lai*, in French, ſignifies a wild ſow, or a foreſt: the derivation is eaſy in either ſenſe: or from *leger*, Dut.] The couch of a boar, or wild beaſt:

Out of the ground uproſe,
As from his *lair*, the wild beaſt, where he wons
In foreſt wild, in thicket, brake, or den. *Milton*.

[From

[From lea, Sax. a field.] Paſture; the ground.—More hard for hungry ſteed t'abſtaine from pleaſant *lare*. *Spenſer*.

Have the winters been ſo ſet
To raine and ſnow, they have wet
All his drieſt *laire?* *W. Browne.*

LA'IR-WITE, *ſ.* [*a law term.*] A fine for adultery or fornication anciently paid to the lords of ſome manors.

LAIRD, *ſ.* [hlaꝼoꝛꝺ, Sax.] The lord of a manor in the Scottiſh dialect:

Shrive but their title, and their moneys poiſe,
A *laird* and twenty pence pronounc'd with noiſe,
When conſtru'd but for a plain yeoman go,
And a good ſober two-pence, and well ſo. *Cleaveland.*

LAIRE (Francis Xavier), born at Vadans in France in 1739, and died at Sens in the year 1800, was celebrated for his knowledge of bibliography. He publiſhed, 1. Memoirs towards the Hiſtory of Great Men of the fifteenth and ſixteenth Centuries; with a Supplement to Mattaire's Annals of Typography. 2. Specimen Hiſtoricum Typographiæ Romanæ. 3. Epiſtola ad Abbate Ugolini. 4. On the Origin and Progreſs of Printing in Franche Compté; and ſome other pieces.

LAIRES'SE (Gerard), an eminent painter, was born at Liege in 1640. His father, who was a painter, gave him inſtructions in his art, and he was alſo a diſciple of Bartolet, whom he cloſely imitated. From him, and from the works of Teſta and Nicholas Pouſſin, he derived that taſte for the antique which appears extraordinary in one who never viſited Italy. He began to paint portraits at the age of fifteen, and alſo made himſelf known by ſome hiſtory-pieces. The money he gained was ſquandered in idle expence; for, although remarkably ugly, he was fond of dreſs, and aſpired to pleaſe the fair ſex. He married, and ſettled at Utrecht; where he was reduced to very diſtreſſed circumſtances. A picture which he offered to ſale for preſent ſupport made him known to a Dutch picture-merchant, who invited him to Amſterdam. On coming thither, a canvas was preſented to him for proof of his abilities; and, before ſitting down, he ſurpriſed the by-ſtanders by drawing out a violin, and playing a tune: he then made a ſketch of a nativity, with ſeveral figures; reſumed his violin, and finiſhed his picture the ſame day. This anecdote ſuffices to give an idea of his ſingularities, and of that aſtoniſhing facility of invention and quickneſs of hand for which he was remarkable. Of the latter he once gave an extraordinary proof, by finiſhing, for a wager, in a ſingle day, a picture of Parnaſſus, with Apollo and the nine muſes, as large as life; of which the face of Apollo was a ſtriking portrait of a perſon who was obſerving his labour. Laireſſe was not, however, only commendable for expedition: he was a real genius in his art. His taſte in deſign was grand and poetical, his expreſſion lively, his colouring true and glowing, his touch light and firm, his draperies diſpoſed in broad and natural folds. His figures were ſomewhat too ſhort, and deficient in grace, though not univerſally ſo. The reputation he acquired gave him much employment; but want of economy made him needy. In his latter years he was afflicted with blindneſs; but was ſtill reſorted to by artiſts and amateurs, on account of his inſtructions, of which he was remarkably communicative. The treatiſes on deſign and colouring which paſs under his name were collected from his detached obſervations. He died at Amſterdam in 1711, and was buried by the ſociety of artiſts in that city. His pictures are met with in moſt great collections, and ſome of them are highly valued. Several have been engraved. He himſelf etched a great deal; and the plates from his deſigns amount to two hundred and fifty-ſix, of which more than half are by his own hand.

There were ſeveral artiſts of this family. Beſides the father, Gerard had three brothers, of whom *Erneſt* and *John* excelled in painting animals, and *James* in flowers. Two of Gerard's ſons were his own pupils. *D'Argenville. Pilkington's Dict.*

LA'IS, a celebrated courteſan, daughter of Timandra the miſtreſs of Alcibiades, born at Hyccara in Sicily. She was carried away from her native place, when Nicias the Athenian general invaded Sicily. She firſt began to ſell her favours at Corinth for 10,000 drachmas; and the immenſe number of princes, noblemen, philoſophers, orators, and plebeians, which courted her embraces, ſhow how much commendation is owed to her perſonal charms. The expences which attended her pleaſures gave riſe to the proverb of *Non cuivis homini contingit adire Corinthum.* Even Demoſthenes himſelf viſited Corinth for the ſake of Lais; but, when he was informed by the courteſan, that admittance to her bed was to be bought at the enormous ſum of about 200l. Engliſh money, the orator departed, and obſerved that he would not buy repentance at ſo dear a price. The charms which had attracted Demoſthenes to Corinth had no influence upon Xenocrates: when Lais ſaw the philoſopher unmoved by her beauty, ſhe viſited his houſe herſelf; but there ſhe had no reaſon to boaſt of the licentiouſneſs or eaſy ſubmiſſion of Xenocrates. Diogenes the cynic was one of her warmeſt admirers; and, though filthy in his dreſs and manners, yet he gained her, and enjoyed her moſt unbounded favours. The ſculptor Mycon alſo ſolicited the favours of Lais, but he met with coldneſs: he, however, attributed the cauſe of his ill reception to the whiteneſs of his hair, and dyed it of a brown colour, but to no purpoſe: "Fool that thou art (ſaid the courteſan) to aſk what I refuſed yeſterday to thy father." Lais ridiculed the auſterity of philoſophers, and laughed at the weakneſs of thoſe who pretend to have gained a ſuperiority over their paſſions, by obſerving that the ſages and philoſophers of the age were not above the reſt of mankind, for ſhe found them at her door as often as the reſt of the Athenians. The ſucceſs which her debaucheries met at Corinth encouraged Lais to paſs into Theſſaly, and more particularly to enjoy the company of a favourite youth called Hippoſtratus. She was however diſappointed: the women of the place, jealous of her charms, and apprehenſive of her corrupting the fidelity of their huſbands, aſſaſſinated her in the temple of Venus, about 340 years before the Chriſtian era. Some ſuppoſe that there were two perſons of this name, a mother and her daughter.

LA'ISBY, a town of Swediſh Lapland, in the Lapmark of Umea: 100 miles north-weſt of Umea.

LAIS'CHEV, a town of Ruſſia, in the government of Kazan, at the union of the Kama and Volga: twenty miles ſouth of Kazan. Lat. 55. 20. N. lon. 49. 14. E.

LA'ISH, *ſ.* [Heb. a lion.] The name of a man; the name of a country.

LAI'SON, a river of France, which runs into the Dive, three miles eaſt-ſouth-eaſt of Troarn, in the department of the Calvados.

LAIS'SAC, a town of France, in the department of Aveyron, and chief place of a canton, in the diſtrict of Milhau. The place contains 1083, and the canton 7453, inhabitants, on a territory of 172½ kiliometres, in 12 communes.

LAIS'SE, a town of France, in the department of Mont Blanc: three miles eaſt of Chambery.

LAIS'SE, a river of France, which paſſes through lake Bourget, and runs into the Rhône near Chanas.

LA'ITY, *ſ.* [λαὸς, Gr.] The people, as diſtinguiſhed from the clergy.—An humble clergy is a very good one; and an humble *laity* too, ſince humility is a virtue that equally adorns every ſtation in life. *Swift.*—The ſtate of a layman.—The more uſual cauſe of this deprivation is a mere *laity*, or want of holy orders. *Ayliffe's Parergon.*

LA'IUS, ſon of Labdacus, who ſucceeded to the throne of Thebes, which his grandfather Nycteus had left to the care of his brother Lycus till his grandſon came of age. He was driven from his kingdom by Amphion and Zethus, who were incenſed againſt Lycus for the indignities which Antiope had ſuffered. He was afterwards reſtored, and married Jocaſta the daughter of Creon. An oracle

informed him that he ſhould periſh by the hand of his ſon; and in conſequence of this dreadful intelligence he reſolved never to approach his wife. A day ſpent in debauch and intoxication made him violate his vow, and Jocaſta brought forth a ſon. The child as ſoon as born was given to a ſervant, with orders to put him to death. The ſervant was moved with compaſſion, and only expoſed him on mount Cithæron, where his life was preſerved by a ſhepherd. The child, called Œdipus, was educated in the court of Polybus; and an unfortunate meeting with his father in a narrow road proved his ruin. Œdipus ordered his father to make way for him, without knowing who he was; Laius refuſed, and was inſtantly murdered by his irritated ſon. See Œdipus.

LAIZE, a town of France, in the department of the Saône and Loire: ſix miles north of Mâcon.

LAIZE, a river of France, in the department of the Calvados, which runs into the Orne two miles ſouth-weſt of St. Martin de Fontenay.

LAK, a town of Hungary: eighteen miles eaſt-ſouth-eaſt of Caniſcha.

LAKE, *ſ.* [*lac*, Fr. *lacus*, Lat.] A large diffuſion of inland water:

He adds the running ſprings and ſtanding *lakes*,
And bounding banks for winding rivers makes. *Dryden.*

A ſmall plaſh of water.

The three chief lakes of Judea were, the Lake Aſphaltites, the Lake of Tiberias, and the Lake Semechon; there was alſo, towards Egypt, the Lake Sirkon. Beſides theſe, ſome pools were alſo called lakes; as that of Cendervia, whence the little river Beleus flowed, eaſt of Ptolemais; that near Caſarea Paleſtina; the Lake Phiala, at the foot of Libanus; the Lake Jazer, and that of Heſhbon beyond Jordan.

Lacus is often uſed for a ciſtern: *Look unto the hole of the pit* (lacus) *from whence ye are digged*, ſays Iſaiah, li. 1. that is, "the covenant of your fathers and mothers." And, as their tombs were generally holes in rocks, or under ground, wherein the bodies of the dead were diſpoſed in a ſort of niches, the Scripture often calls tombs *lakes*; ſo, in the Vulgate verſion, "*Lacum* aperuit et effodit eum, et incidit in terram, quam fecit;" *He made* a pit, *and digged it, and is fallen into the ditch which he made.* Pſ. vii. 15. Again: *Unto thee will I cry, O Lord my rock*; *be not ſilent to me*; *anſwer me*; *leſt, if thou be ſilent to me, I become like them that go down into the pit*, (in lacum.) Pſ. xxviii. 1. The Hebrew בור ſignifies a pit, a ciſtern, a lake, a ſepulchre, a hollow deep place, wherein wild beaſts are ſhut up, (ſuch as lions,) or ſlaves, as ſtill practiſed in Africa and other places. Zechariah ſays, ix. 11. *I have ſent forth thy priſoners out of the pit*, (de lacu;) i. e. out of priſon. Jeremiah was caſt into a priſon in which was a well of *mire*, without water. *Jer.* xxxviii. 6. *Lacus noviſſimus* ſignifies the deepeſt, the furtheſt, part of the tomb, or priſon: *I called upon thy name, O Lord, out of the low dungeon*, (de lacu noviſſimo.) *Lam.* iii. 55. And Ezekiel xxxii. 23, ſpeaking of the king of Aſſyria's ſepulchre, ſays, that it is placed *in the ſides of the pit*, (in noviſſimis laci.)

In Paleſtine, wine and oil are preſerved in great tubs, or ſubterranean ciſterns, nearly in the ſame manner as water is preſerved by us; theſe are likewiſe called *lakes*: ſo that, when talking of a *preſs*, they ſay, they dig a *lake*, or ſubterraneous great tub, for receiving the wine. Thus, Matth. xxi. 33. *A houſeholder planted a vineyard, and digged a wine-preſs*; here the word in the Vulgate verſion is *lacum*. And St. John, Rev. xiv. 19, 20, ſays, that the angel gathered the grapes to *caſt into the great wine-preſs*, or lake, *of the wrath of God*.

Lakes, in the common acceptation of the term, may be divided into four kinds: 1. Such as neither receive nor ſend forth rivers. 2. Such as emit rivers, without receiving any. 3. Such as receive rivers, without emitting any. And, 4. Such as both receive and ſend forth rivers.

Of the firſt kind, ſome are temporary, and others perennial. Moſt of thoſe that are temporary owe their origin to the rain, and the cavity or depreſſion of the place in which they are lodged; thus in India there are ſeveral ſuch lakes made by the induſtry of the natives, of which ſome are a mile, and ſome two, in circuit; theſe are ſurrounded with a ſtone wall, and, being filled in the rainy months, ſupply the inhabitants in dry ſeaſons, who live at a great diſtance from ſprings or rivers. There are alſo ſeveral of this kind formed by the inundations of the Nile and the Niger; and in Muſcovy, Finland, and Lapland, there are many lakes, formed, partly by the rains, and partly by the melting of the ice and ſnow: but moſt of the perennial lakes, which neither receive nor emit rivers, probably owe their riſe to ſprings at the bottom, by which they are conſtantly ſupplied. Dr. Halley is of opinion, that all great perennial lakes are ſaline, either in a greater or leſs degree; and that this ſaltneſs increaſes with time; and on this foundation he propoſes a method for determining the age of the world.

The ſecond kind of lakes, which emit without receiving rivers, is very numerous. Many rivers flow from theſe as out of ciſterns; where their ſprings, being ſituated low within a hollow place, firſt fill the cavity and make it a lake, which, not being capacious enough to hold all the water, it overflows and forms a river: of this kind is the Lake Soliger, at the head of the river Volga; the Lake Odium, at the head of the Tanais; the Adac, from whence one branch of the river Tigris flows; the Ozero, or White Lake, in Muſcovy, which is the ſource of the river Shakſna; the great Lake Chaamay, which emits four very large rivers, which water the countries of Siam, Pegu, &c. viz. the Menan, the Ava, the Caipoumuo, and the Laquia, &c.

The third ſpecies of lakes are thoſe which receive rivers but emit none. Moſt of theſe formerly both received and ſent forth a river; but the one emitted has become dry, on account of the diminution of the influent river; or the cavity that contains it may have enlarged to ſuch a degree, that the river it receives is barely ſufficient to repair, by new ſupplies, the loſs which the lake ſuſtains by evaporation. To this claſs belong, among others, the Caſpian Sea, as it is improperly called, which receives the waters of the Volga, the Ural, and ſome other rivers. This vaſt lake, which formerly occupied a much more conſiderable ſpace than at the preſent day, and not only included the Lake of Aral, but probably had even a communication with the Euxine Sea, ſtill continues to decreaſe, in proportion as the capacity of the rivers which ſupply it is found gradually to diminiſh. Another lake of this kind is the Dead Sea, or Lake Aſphaltites, in Paleſtine. Such was the lake that formerly covered Cachemire, which ſee. Lakes of this kind will be naturally formed in every caſe, where the waters of a river are incloſed, in any part of their courſe, by elevated lands. The firſt conſequence of this ſtoppage is, of courſe, the converſion of the incloſed lands into a lake; and, if this happens near the fountains of the river, and the ground is ſolid, it is likely to remain a lake for ever; the river not having force enough in its infant ſtate to work itſelf a paſſage through the mountains. Hence it is that more lakes are found near the ſources of rivers than in the lower parts of their courſe. If the river be incloſed after it has gained a great acceſſion of water, and, of courſe, ſtrength; it will, indeed, at firſt, form a lake, as before; but, in time, the place at which it runs over will be gradually fretted away. Thus, the Euphrates opens itſelf a paſſage through Mount Taurus, and the Ganges through Mount Imaus; and, even though the baſe of the mountain be of the firmeſt texture, it will give way to the inceſſant friction, through a courſe of ages; for either of theſe paſſages may have been an operation of many thouſand years.

The fourth ſpecies, i. e. lakes which both receive and ſend forth rivers, is the moſt numerous of all. They are generally found in valleys, or in plains, in the proximity

of

of great chains of mountains. Of theſe we reckon three kinds, as the quantity they emit is greater, equal, or leſs, than they receive. If it be greater, it is plain that they muſt be ſupplied by ſprings at the bottom; if leſs, the ſurplus of the water is probably ſpent in exhalations; if it be equal, their ſprings juſt ſupply what is evaporated by the ſun.

That there are in many places immenſe *ſubterranean lakes*, can ſcarcely be doubted, becauſe we ſee them in ſome places; but their effects are often perceived where they are not ſeen, and puzzle the people who attempt to account for thoſe effects upon other principles. The famous Zirchnitzer Lake in Carniola, which fills and empties itſelf, at times, in an impetuous manner, bringing up with its waters fiſh, and even wild fowl, communicates with another immenſe ſubterranean lake in the mountain Savornick; and, according to its filling or emptying, the upper one is alſo filled and emptied. The grotto Podſpetſchio, in the ſame country, gives another inſtance of ſuch a ſubterranean lake. The people of the neighbouring country enter the ſide of the mountain where this lake is, by a ſmall opening, through which they go to a cavern of a great width and height; and at the end of this is a ſmall opening again, through which they go on to the edge of a vaſt ſubterranean piece of water. They go with torches, and find the water very clear and fine. It is ten cubits deep at the edge, and doubtleſs is much more in the middle. The water runs into this lake by a large channel, and runs out of it again by another, falling down a precipice into another lake, and that with ſuch a noiſe, that the report of a piſtol cannot be heard near it. Stones thrown in every way are heard to fall into water; and there is great reaſon to ſuppoſe the lake a German mile long; for at this diſtance there is another water diſcovered through ſuch another cleft of the rock, which ſtands at the ſame horizontal height as this, and is ſubject to the ſame accidents at the ſame time. This vaſt body of water ſometimes all runs off in a few minutes, and leaves the baſon dry; and after ſome weeks it fills again with a frightful noiſe. As theſe accidents always happen to both the waters above-mentioned at the ſame time, they appear very plainly to be only the two ſides of the ſame lake. *Phil. Tranſ.* No. 191.

We have in England many of theſe reſervoirs, the water of which is always remarkably clear and cold, and is ſo loaded with ſpar, that it generally incruſts things very quickly that are put into it; and when raiſed into vapours, as a part of it ſometimes is, by the ſubterranean heat, or carried up with other vapours, ſtops at the ceiling of the vaults, and there forms ſtalactitæ, and other ſuch concretions. In Pen-park hole, in Glouceſterſhire, there is a remarkable inſtance of this, that ſtrange cavern containing one of the largeſt of the lakes in our kingdom. It was accidentally diſcovered by ſome miners; it is twenty-nine fathoms deep from the ſurface, being a vaſt cavern in the ſhape of a horſe-ſhoe, ſurrounded with rugged rocks and rough walls of earth, containing in the midſt of it a river or ſubterranean lake, twenty fathom broad and eight fathom deep, of the ſame cold and petrifying water with the other reſervoirs of this kind.

LAKE, or LACQUE, *ſ.* A preparation of different ſubſtances into a kind of magiſtery for the uſe of painters. One of the fineſt and firſt-invented of which was that of *gum lacca* or *lacque*; from which all the reſt, as made by the ſame proceſs, are called by the common name *lacques*. See LAC, p. 27; and the article PIGMENT.

LAKE RIVER, a river of America, which runs into the Miſſiſſippi in lat. 46. 30. N. lon. 95. W.

LAKE RIVER (Little), a river which runs into the Miſſiſſippi in lat. 45. 36. N. lon. 94. 23. W.

LAKE OF THE TWO MOUNTAINS, a piece of water in North America, that lies weſterly from Montreal, being properly the mouth of Ottawa River; twenty miles long, and five broad. It is ſurrounded by cultivated fields of the Iroquois and Algonquin Indians, whoſe village ſtands on a delightful point of land, that projects into the lake. Each tribe has a Roman-catholic miſſionary: they attend public worſhip in the ſame church. Their paſtors have taught them to read and write. Their warriors are about 500.

LAKE OF THE WOODS, the moſt northern lake in the United States; and ſo called from the large quantities of wood growing on its banks; ſuch as oak, pine, fir, ſpruce, &c. This lake lies nearly eaſt of the ſouth end of Winnipeg Lake, and is ſuppoſed to be the ſource or conductor of one branch of Bourbon River. Its length from eaſt to weſt is about 90 miles; and in ſome places it is 40 miles wide. The Killiſtinoe Indians encamp on its borders to fiſh and hunt. This lake is the communication between the lakes Winnipeg, Bourbon, and Superior. Lat. 50. 25. N. lon. 95. 20. W.

LA'KEN, a town of Pruſſia, in the province of Oberland: eight miles eaſt of Mulhauſen.

LA'KENHAM, a village in Norfolk, near Norwich, ſo named from its ſituation by the Broad-Water, or Lake. The church ſtands on the cliff by the water-ſide. This place is divided from the walls of Norwich by Brakendon, or the Barky-Downs or Hills, on which were formerly brakes, and where was a chapel founded in the Conqueror's time, and much frequented by fiſhermen and watermen, who came to offer to its patron St. Nicholas.

LAK'SHMI. See LECHEMY.

LAKTE'A, a ſeaport of Sweden, in Eaſt Bothnia, at the mouth of a river near the gulf of Bothnia. Lat. 64. 25. N.

LA'KUM, [Hebrew.] The name of a place.

LA'LA, in ancient geography, a town of Aſia, in the Greater Armenia.

LAL'ADA, a town of Hindooſtan, in Golconda: fifteen miles weſt-north-weſt of Culloor.

LAL'AGE, a woman's name; a miſtreſs of the poet Horace.

LALAMSER'AI, a town of Hindooſtan: twenty-eight miles weſt of Benares.

LA'LAND. See LAALAND, p. 1.

LALAN'DE (James de), an eminent French counſellor and profeſſor of law, was born at Orleans in 1622. He diſtinguiſhed himſelf by his profound erudition, and by the private and public virtues with which he paſſed through a long life in the exerciſe of various important functions. He was made counſellor in the bailiwick and preſidial ſeat of Orleans in 1652, doctor and profeſſor of law in the univerſity in 1653, receiver of the city in 1684, and mayor in 1691. His integrity, beneficence, and zeal for the intereſts of his countrymen, conferred upon him the glorious title of Father of the People. He died in 1703. Lalande was the author of ſeveral eſteemed works in his profeſſion, of which the moſt important were an excellent Commentary upon the Cuſtom of Orleans, folio, 1677, and 1704; and a Treatiſe on the Ban and Arrierban, 4to. 1674.. *Moreri.*

LALAN'DE (Michel-Richard de), maſter of the king of France's band, and compoſer in ordinary of the chapel royal, born in 1657, was the fifteenth ſon of a tailor at Paris, and brought up a choriſter at St. Germain l'Auxerrois. Excited by a ſtrong paſſion for muſic, he ſoon ſurpaſſed his maſter Chaperon. The violin was the firſt inſtrument to which he ſeriouſly applied; but, being recommended to Lulli, as a performer in the opera-orcheſtra, he was ſo piqued at being rejected, that he broke his fiddle, and renounced the practice of it for ever. The era of his proſperity was, the being employed in teaching mademoiſelle de Noailles, who married the maréchal de Grammont; and the maréchal ſaid ſo many kind things of him to the king, that he was appointed muſic-maſter to mademoiſelles de Blois and de Nantes. In 1683, his majeſty, having created two new places of chapel-maſter, gave one of them to Lalande, whoſe compoſitions pleaſed the king ſo much,

that

that he appointed him ſucceſſively to the two places of chapel-maſter, that of chamber-muſician to his majeſty, and maſter of his band; and ſoon after conferred on him the order of St. Michel. He died in 1726, at the age of 67; forty-five years of which he had ſpent in the ſervice of Louis XIV. and XV. Lalande left behind him ſixty motets, or anthems, which have had the higheſt reputation; and ſet ſeveral operas, but he never would let any of them be performed under his name.

LALAN'DE (Joſeph-Jerome le Français de), a celebrated French aſtronomer, was born at Bourg, in the department of l'Ain, on the 11th of July, 1732, of very reſpectable parents. His father, who was poſſeſſed of property, intended him for the bar; and accordingly ſent him to Paris to ſtudy the law, to which, for ſome time, he applied with ſo much aſſiduity, as to more than anſwer the moſt ſanguine expectations of his friends, when the ſight of an obſervatory awakened in him a propenſity, which deranged the projects of his parents, and became the ruling paſſion of his life. He put himſelf under the inſtructions of Le Monnier, one of the then moſt celebrated aſtronomers of France, and profited ſo much by the leſſons of his able inſtructor, as to afford him the higheſt degree of ſatisfaction, who, on his part, conceived for the young man a truly paternal affection, and was determined to promote his intereſts. An opportunity ſoon offered. The great aſtronomer Lecaille was preparing to ſet out for the Cape of Good Hope, in order to determine the parallax of the moon, and its diſtance from the earth. To accompliſh this purpoſe, it was neceſſary he ſhould be ſeconded by an obſerver placed under the ſame meridian, and at the greateſt diſtance that could be conveniently choſen on the globe. Berlin was fixed on, and Le Monnier ſignified his intention of undertaking the buſineſs himſelf; but, the moment when he ſhould have been ready to depart, he had the credit to get his pupil appointed in his ſtead. Frederic, to whom Maupertuis had explained the delicacy and difficulty of the enterpriſe, could not forbear ſhowing ſome aſtoniſhment when the youthful aſtronomer was preſented to him: "However," ſaid he, "the Academy of Sciences has appointed you, and you will juſtify their choice." From that moment his age, being only eighteen, was an additional recommendation; he was admitted at court, welcomed by the academy, and became intimate with the moſt diſtinguiſhed perſons at Berlin. On his return, the account which he gave of his miſſion procured him free acceſs to the Academy of Sciences, and its Tranſactions were enriched every year by important communications from the young aſtronomer. The active part which he took in the labours of the academy was not confined to the aſtronomical ſcience: we have from his pen a deſcription of ſeven arts, as different from each other as they are remote from the objects of his habitual meditations. He publiſhed the French edition of Dr. Halley's Tables, and the hiſtory of the comet of 1759, and he furniſhed Clairault with immenſe calculations for the theory of that famous comet. Being charged in 1760 with the compilation of the Connoiſſance des Temps, he entirely changed the form of that work; and of this collection he publiſhed thirty-two volumes, viz. from 1775 to 1807.

In 1764 appeared the firſt edition of his Traité Aſtronomique, which he afterwards completed, and upon which his chief claim to glory reſts. Lalande was the firſt who calculated the perturbations of Mars and Venus; and in the theory of ſatellites, in which but little progreſs had been made, he explained a motion which Baillie claimed as his own diſcovery. A literary diſpute aroſe out of this circumſtance, which, however, was conducted with every regard to decency; and the probable reſult, as ſeen by diſintereſted ſpectators, was, that both had been led to the ſame diſcovery. He compoſed all the aſtronomical articles for the Encyclopædia of Yverdun, thoſe for the ſupplements to the Encyclopédie de Paris, and thoſe for the Encyclopédie Methodique, ſubſtituting for the articles furniſhed by d'Alembert, and which he had compiled from the works of Le Monnier, ſuch as were more complete and more modern, from his own obſervations and improved theories.

To his written works he joined oral inſtructions during a ſpace of forty-ſix years; for, from the year 1761, he had replaced the firſt maſter, Deliſle, in the chair of aſtronomy, in the college of France, and gave a new luſtre to this curious part of public inſtruction in a celebrated ſchool, which poſſeſſed the moſt diſtinguiſhed profeſſors of every kind, and which enjoyed and merited the extraordinary privilege of outliving the tremendous ſtorms of a revolution, and eſcaping the almoſt univerſal deſtruction which levelled all around it. As a profeſſor, he taught with ſo much ability, that his ſchool became a ſeminary of diſciples who peopled the different obſervatories of the world. In the midſt of his other labours he drew up his Voyage d'Italie, the moſt complete collection of curious objects that travellers can conſult; his Traité des Canaux; and his Bibliographie Aſtronomique, which is an immenſe catalogue of all the works that have appeared on the ſubject of that ſcience.

In the year 1793, Lalande publiſhed "Abregé de Navigation hiſtorique, theorique, et practique," containing many valuable rules and tables; and in 1802 he publiſhed a new edition of Montucla's Hiſtory of Mathematics, in 4 vols. 4to. the laſt two volumes being prepared from Montucla's papers, with the aſſiſtance of La Place, La Croix, and other French mathematicians. He publiſhed alſo this year a collection of tables of logarithms, ſines, tangents, &c. adapted to the pocket.

Aſſociated to almoſt all the diſtinguiſhed ſcientific ſocieties in the world, he was their common bond of union by the correſpondences which he maintained; and he promoted a circulation of intelligence from one to another. He employed the credit ariſing from the univerſal reputation which he enjoyed, for the general benefit of the ſciences and their cultivators. To the extraordinary ardour and activity of his character, he joined a love for the truth, which he carried to the borders of fanaticiſm. Every degree of concealment appeared to him unworthy of an honeſt man; and he therefore, without reſerve, uttered his ſentiments on all occaſions; and by the bluntneſs of his manners, he ſometimes made himſelf enemies, who not only called in queſtion his real merits, but who excited againſt him a crowd of detractors; and, becauſe they could not rival his high reputation, they attempted to blaſt his well-earned fame. He was not without his ſingularities and failings, but they were trifling in compariſon of his commendable qualities. One of his eulogiſts ſays, "he always manifeſted a benevolent diſpoſition, and approved himſelf a man of honour, probity, courage, full of activity for all uſeful things, and of love and zeal in behalf of his fellow-creatures. To imitate the great Benefactor is the moſt worthy homage we can pay to the infinite goodneſs, the ſupreme intelligence which governs the univerſe." He rendered ineſtimable ſervice to ſcience during his life, and conſulted its intereſts after his death, by founding an annual prize to the author of the beſt aſtronomical memoir, or moſt curious obſervation. He died April 4th, 1807, in the 75th year of his age. *Eulogy by Delambre.*

LALANG', an iſland near the north coaſt of the iſland of Sumatra, in the Straits of Malacca. Lat. 1. 45. N. lon. 99. 20. E.

LALAN'NE (Noel de), a famous champion of the Janſeniſt tenets, and abbé of the Notre Dame de Val-Croiſſant, was deſcended from a noble family, and born at Paris in the year 1618. He was educated at the college of Navarre, and when very young was admitted to the degree of D.D. by the faculty of the Sorbonne. He became eminently converſant in the writings of St. Auguſtine and St. Thomas, and a zealous defender of the followers of the biſhop of Ypres. The numerous treatiſes which he publiſhed in ſupport of their principles diſplayed ſuch learn-

ing and ability, that, when he was only thirty-five years of age, he was placed at the head of the divines who were ſent to Rome by the biſhops of France, in 1653, to defend the doctrine of St. Auguſtine concerning grace; and, after his return home, his pen was diligently employed in the ſame cauſe. Many of the pieces which he publiſhed were his own ſeparate productions, and were either anonymous, or appeared under feigned names; others were the joint labour of himſelf and ſome of the principal writers among the Janſeniſts, particularly MM. Claude Girard, Arnauld, and Nicole. The abbé Lalanne died in 1673, about the age of fifty-five; and is highly praiſed for liberality, modeſty, and piety, as well as learning. The titles and dates of between thirty and forty articles publiſhed by him, chiefly controverſial, are given by *Moreri*.

LAL'ANT, a village in Cornwall, near the bottom of St. Ive's Bay; with a fair on the 15th of Auguſt.

LALAS'IDE, in ancient geography, a country of Aſia Minor, which, according to Ptolemy, made part of Cilicia; ſo called from the name of *Lalaſis*, its capital. In the 4th century of the Chriſtian era, when the province of Iſauria was formed of a part of Cilicia and Cataonia, this country became a part of Iſauria.

LAL'BENC, a town of France, in the department of the Iſere: ſeven miles north-north-eaſt of St. Marcelin.

LALCOT'TA, a town of Hindooſtan, in Golconda: ſeventeen miles north-eaſt of Racore.

LALE, a town of Samogitia: twelve miles north-weſt of Roſienne.

LALE CROSS, or Minrusticka Pockahatwan, a lake of North America. Lat. 55. 25. N. lon. 107. 50. W.

LA'LEHAM, a village in Middleſex, between Shepperton and Staines, two miles ſouth-eaſt from the latter, is famed for the entertainment it affords to the lovers of angling. The Thames narrows conſiderably here; and, about the ſhallows or gulls, the water is beautifully tranſparent. Here the late earl of Lonſdale had a handſome ſeat, which has been pulled down and ſold.

LA'LI, a town of Thibet: ninety miles ſouth of Sarangpour.

LALIBA'BA, a town of Abyſſinia: 140 miles ſouth-ſouth-eaſt of Gondar.

LALIBA'LA, a town of Abyſſinia: ninety miles ſouth-ſouth-eaſt of Gondar.

LA'LIM, a town of Portugal, in the province of Beira: nine miles ſouth-weſt of Lamego, and eight north of Viſeu.

LALIN'DE. See Linde.

LAL'LARY POINT, a cape on the ſouth-weſt coaſt of the iſland of Banca. Lat. 2. 48. N. lon. 106. 2. E.

LALLEMA'NT (John), a phyſician, and man of learning, was of a good family of Autun, where he flouriſhed in the ſixteenth century, about the end of which he died. He was eminent in his profeſſion, and publiſhed verſions of ſeveral treatiſes of Hippocrates and Galen. He alſo publiſhed a French tranſlation of the Four Philippics of Demoſthenes, Paris, 1549; and a Latin Verſion of Seven Tragedies of Sophocles, Paris, 1577. In this laſt work he has been convicted of plagiariſm, in borrowing, without acknowledgment, ſeveral lines from George Ratallier. His moſt valuable labours relate to the different modes of computing the year, uſed by different nations of antiquity. They are contained in the following work: "Anni Hebræi & exterarum fere omnium anni ratio, & cum Romano collatio," Genev. 1571, 8vo. from this, three diſſertations, on the Macedonian and Attic years and months, have been inſerted by Gronovius in the ninth tome of Grecian Antiquities. *Moreri*.

LALLEMA'NT (James-Philip), a learned French Jeſuit, was a native of St. Valery in Picardy, and died at Paris in the year 1748. He was one of the moſt zealous defenders of the conſtitution *Unigenitus*, and uncommonly ſevere againſt its opponents. Father Tellier and he were particularly intimate, and of the number of thoſe whom the Janſeniſts deſcribed by the name of the *Norman cabal*. Beſides a number of controverſial tracts, he was the author of, 1. The true Spirit of the Diſciples of St. Auguſtine, 1705 and 1707; 4 vols. 12mo. 2. The New Teſtament, 12 vols. 12mo. with meditations and remarks, intended to counteract the effects of the celebrated and very popular work of Queſnel. 3. A Paraphraſe on the Pſalms, proſe, 1710, 12mo. which is very highly ſpoken of by Fletcher. *Nouv. Dict. Hiſt.*

LAL'LI (Giambatiſta), an Italian lawyer and poet, was born at Norcia, in 1572. Although poetry was his favourite occupation, he did not neglect graver purſuits, particularly the ſtudy of juriſprudence, his knowledge of which cauſed him to be employed by the courts of Parma and Rome in the government of ſeveral places. In theſe offices he obtained general eſteem, as well for his abilities as the ſuavity of his manners. He afterwards retired to his native place, where he died in 1637. His ſerious poems, one of which was upon the deſtruction of Jeruſalem, gave him a place among the good Italian poets of his time; he was, however, more happy in his attempts at burleſque, for which he had a natural diſpoſition. His *Piſtole Ciocoſe*, and his *Moſcheide* and *Franceide*, are reckoned among the beſt pieces of this kind. He alſo tried his powers in burleſque parody, and traveſtied in this manner ſome poems of Petrarch, and the Eclogues and Æneid of Virgil. In theſe trifles he ſucceeded as might be expected from one who poſſeſſed great facility of verſifying, with a jocular caſt of imagination. He publiſhed a work in his proper profeſſion, entitled *Viridarium Practicarium Materiarum in utroque Jure*, which was eſteemed. *Moreri. Tiraboſchi.*

LALLOUET'TE (Ambroſe), a French prieſt whoſe writings are in eſteem among Catholics, was born at Paris in the year 1653. He was educated in his native city, and was for ſome time a member of the congregation of the oratory. He was admitted a bachelor of divinity in the faculty of the Sorbonne; was appointed chaplain of Notre Dame; and nominated canon of St. Opportune, at Paris. Having acquired conſiderable reputation as a preacher and confeſſor, he was ſent on a miſſion to the ſouth of France by Louis XIV. to inſtruct and confirm thoſe new converts from proteſtantiſm whom his majeſty's troops had dragooned into a profeſſion of the catholic faith; and is reported to have been very ſucceſsful in his undertaking. He died in 1734, in the ſeventy-firſt year of his age. For the benefit of the new catholics, he publiſhed, in 1687, and addreſſed to them, a Diſcourſe on the real Preſence of Jeſus Chriſt in the Euchariſt, and a Treatiſe on the Communion in one Kind; which were afterwards reprinted in a 12mo. volume. He was alſo the author of, 2. A Hiſtory of the French Tranſlations of the Holy Scriptures, both printed and manuſcript, as well by Catholics as by Proteſtants, with the Alterations made by the latter at different Periods, &c. 1692, 12mo. which, though not free from errors, is ſaid to contain intereſting and uſeful information. 3. The Life of Antoinette de Gondi, Superior-general of Calvary, 1717, 12mo. 4. The Life of Cardinal de Camus, Biſhop and Prince of Grenoble, &c. 1720, 12mo. And he is the reputed author of a curious little piece, entitled, 5. The Hiſtory and an Abridgment of Latin, Italian, and French, Treatiſes, in Defence of, and againſt, Comedy, and the Opera, &c. 1697, 12mo. *Moreri.*

LALM, a town of Sileſia, in the principality of Jauer: ſixteen miles ſouth of Buntzlau, and twenty weſt of Jauer.

LALO'DA, a town on the weſt coaſt of the iſland of Gilolo. Lat. 1. 48. N. lon. 127. 22. E.

LALOO', a town of Hindooſtan, in Bengal: twenty miles eaſt of Silhet.

LAL'PET, a town of Hindooſtan, in the Carnatic: ſeventy-four miles north of Arcot.

LALSK, a town of Ruſſia, in the government of Vologda, on the river Luza: forty miles eaſt of Uſtiug. Lat. 60. 50. N. lon. 47. 14. E.

LALSOO'ND, a town of Hindooſtan, in the ſubah of Agimere: ten miles north of Rantampour, and eighty ſouth-eaſt of Jyepour. Lat. 26. 44. N. lon. 76. 53. E.

LAL'VITON, a town on the weſt coaſt of the iſland of Samar. Lat. 11. 35. N. lon. 124. 52. E.

LA'MA, a town on the weſt coaſt of the iſland of Celebes. Lat. 1. 48. S. lon. 119. 15. E.

LA'MA, a town of Naples, in Abruzzo Citra: twelve miles eaſt of Sulmona.

LA'MA, or LAMAS, *ſ.* The title of an order of prieſts among the weſtern Tartars, on the frontiers of China, and particularly in Thibet, who are held in great veneration. See the article THIBET.

LAMAL'MON, a town of Abyſſinia: fifty miles ſouth of Siré.

LA MAN'CHA. See MANCHA.

LAMANO'N (Robert Paul), a member of the Academy of Sciences at Paris, and member of the Muſeum in the ſame city, was born at Salon, in Provence, in 1752, of an old and reſpectable family. He was deſtined for the church, and ſent to Paris to complete his theological ſtudies. He roſe to the dignity of canon; but by the death of his father and elder brother he came into property, which enabled him to follow the bent of his inclinations, by devoting himſelf to the phyſical ſciences. Two traits of diſintereſtedneſs in the character of Lamanon are highly worthy of notice: that he refuſed to accept of his paternal inheritance, but as an equal ſharer with his brothers and ſiſters; and that, when offered a conſiderable ſum to reſign his office of canon in favour of a certain individual, he replied, "The chapter of Arles did not ſell me my benefice; I ſhall therefore reſtore it in the ſame manner that I received it." Anxious to remove the veil which conceals the ſecrets of nature from mortal eyes, he travelled through Provence and Dauphiné, and ſcaled the Alps and Pyrenees. At the ſight of theſe vaſt natural laboratories, the bent of his mind burſt forth inſtantaneouſly; he climbed to the ſummit of rocks, and explored the abyſs of caverns, weighed the air, analyſed ſpecimens, and, in this ardent fancy, having attained the ſecrets of creation, he formed a new ſyſtem of the world. Upon his return home, he applied with great ardour to the ſtudy of meteorology, natural philoſophy, and the other branches of the hiſtory of nature. He ſpent three years at Paris, and gave to the learned ſocieties there many very valuable papers; a memoir on the Cretans, a memoir on the theory of the winds, and a treatiſe on the alteration in the courſe of rivers, particularly the Rhone. He again viſited Swiſſerland and Italy, going firſt to Turin, where he allied himſelf to the learned of that country; after his return, laden with the ſpoils of the countries which he traverſed, he employed himſelf in the arrangement of the intereſting fruits of his journey. It was at the time when Lamanon was preparing for the preſs his great work On the Theory of the Earth, that the French government conceived the vaſt project of completing the diſcoveries of captain Cook. The Academy of Sciences was entruſted with the care of electing men capable of rectifying the common notions of the ſouthern hemiſphere, of improving hydrography, and advancing the progreſs of natural hiſtory; they invited, at the recommendation of the illuſtrious Condorcet, Lamanon to ſhare the danger, and to partake in the glory, of this great enterpriſe. He eagerly caught at the offer, haſtened to Paris, refuſed, in a conference with the miniſter, the ſalary offered him, and, taking a haſty leave of his friends, departed for Breſt. On the 1ſt of Auguſt, 1785, the armament ſet ſail under the orders of La Perouſe. The commencement of the voyage was highly proſperous. After ſome delays, and having embraced every opportunity of making obſervations, the veſſels arrived at the iſland of Maouna, one of the ſouthern Archipelago. Lamanon, eager to aſſure himſelf of the truth of the accounts of that country, debarked with Langle, the ſecond in command. Having explored the place, and being upon the point of returning, they were attacked by the natives; a combat enſued, and they, with ſeveral of the boat's crew, fell a ſacrifice to the fury of theſe barbarians. Thus periſhed Lamanon, a young man ardent in the purſuits of ſcience, diſintereſted in his principles, and a zealous advocate for the intereſts of freedom. His euloguiſt, M. Ponce, ſaid of him, "that he ſeemed born to bring about a revolution in ſcience; the depth of his ideas, the energy of his character, the ſagacity of his mind, united to that lively curioſity, that can draw inſtruction out of every thing which he ſaw, and which leaves nothing unexplored, would have led him to the moſt valuable diſcoveries."

LAMANTE'A, a town of Naples, in Calabria Citra: twelve miles ſouth-weſt of Coſenza.

LAMARCK'IA, *ſ.* in botany, a cryptogamic and very obſcure genus of marine plants, founded by the abbate Joſeph Olivi, in his Zoologia Adriatica. It was named in honour of the celebrated French botaniſt, John-Baptiſt Monet, chevalier de la Marck, who, ſince the French revolution, has adopted *Lamarck* as his ſurname. Of his claims to botanical commemoration, there can be no doubt; but he has already received this reward of his labours, in the *Monetia* of l'Heritier, now generally adopted. The generic characters are—Plant rooted, ſomewhat coriaceous, ſoft, compoſed of minute bladders, perpendicular to the axis, which are membranous, green, cylindrical, approximated, terminating at each end in very ſlender, tubular, connecting filaments. Fructification conſiſting of ſmall globes, ſcattered among the bladders and filaments.

Species. 1. Lamarckia burſa, or pouch lamarckia: globoſe, depreſſed, hollow, with fine ſcattered internal threads. Found in the ſea in various places, eſpecially upon limeſtone rocks, moſt commonly attached by its roots to ſome ſmall calcareous fragments. Each plant is a hollow ſpongy ball, from one to ten inches diameter, green, compoſed of entangled pellucid jointed fibres, bearing numerous concentric oblong veſicles, whoſe obtuſe ſummits, reaching to the outſide of the ball, give it a papillary or velvety appearance. Olivi ſays, that when cut it contracts mechanically, by means of the internal fibres, which he ſuppoſes gave riſe to the opinion of its being an animal, or alcyonium. See ALCYONIUM burſa, vol. i.

2. Lamarckia vermilara, or branching obtuſe lamarckia: branched, ſomewhat forked, cylindrical, and obtuſe. Native of the Mediterranean ſea, in deep water.

LAMARCKIA is alſo the name of a genus eſtabliſhed by Moench, and adopted by Decandolle in his new edition of Lamarck's Flore Françaiſe, as well as by Bivona Bernardi, in his Sicularum Plantarum. This genus conſiſts of one ſpecies only, which is the CYNOSURUS aureus of Linnæus. See vol. v. p. 523.

A New-Holland ſhrub, belonging to tetrandria monogynia, has been called LAMARCKIA dentata, in Donn's Hort. Cantabr. We are not acquainted with its characters, but preſume it is what ſome have named HOYA ſerrata, of which we know as little.

LA'MAS, a town of Portugal, in the province of Tras os Montes: thirteen miles north-eaſt of Mirandela, and eighteen ſouth-weſt of Bragança.

LA'MAS, a town of Spain, in Galicia: fifteen miles eaſt-ſouth-eaſt of Lugo.

LA'MAS, a town of Peru, in the dioceſe of Truxillo: 180 miles eaſt-north-eaſt of Truxillo.

LAMB, *ſ.* [*lamb*, Gothic and Saxon.] The young of a ſheep:

The *lamb* thy riot dooms to bleed to-day,
Had he thy knowledge would he ſkip and play? *Pope.*

Typically, the Saviour of the world.—Thou *Lamb* of God that takeſt away the ſins of the world, have mercy upon us. *Common Prayer.*—For the management of lambs on a farm, ſee the article HUSBANDRY, vol. x. p. 523, 5. and, for the natural hiſtory, ſee OVIS.

LAMB HEAD, a cape on the ſouth-eaſt coaſt of the iſland of Stronſa, one of the Orkneys. Lat. 58. 57. N. lon. 2. 25. W.

LAMB's HEAD, a cape of Ireland, on the ſouth-weſt coaſt of Kerry, at the mouth of the Kenmare river: thirty-

four miles ſouth-ſouth-weſt of Killarney, and ſix north of Cod's Head. Lat. 51. 42. N. lon. 10. 1. W.

LAMB I'SLAND, a ſmall iſland of Scotland, in the mouth of the Forth: one mile north-north-weſt from North Berwick.

LAMB's LET'TUCE, *ſ.* in botany, the name of an herb. See VALERIANA.

LAM'B-LIKE, *adj.* Having the diſpoſition of a lamb; meek; humble.

SCYTHIAN LAMB. See POLYPODIUM.

LAMB's TONGUE, *ſ.* The name of a plant.

LAMB's WEED, *ſ.* The name of a plant.

LAM'B's WOOL, *ſ.* Ale mixed with the pulp of roaſted apples.—A cup of *lamb's wool* they drank to him there. *Song of the King and the Miller.*

LAM'BA, one of the ſmaller Shetland Iſlands, between Shetland and Yell. Lat. 60. 45. N. lon. 1. 39. W.

LAM'BACH, a town in Auſtria, where Bonaparte aſſembled his forces preparatory to the capture of Vienna in November 1805. It is four miles north-eaſt of Schwannaſtadt.

LAMBA'LE, a town of Africa, in the country of the Foulis, on the Senegal: ſeventy-five miles ſouth-eaſt of Goumel.

LAMBAL'LE, a town of France, and principal place of a diſtrict, in the department of the North Coaſts: two poſts and a half eaſt of St. Brieuc, 50½ weſt of Paris. Lat. 48. 3. N. lon. 2. 26. E.

LAM'BAN, a town of the country of Guriel, on the Black Sea: fifty miles ſouth-weſt of Cotatis.

LAMBANESS', a cape on the north-eaſt coaſt of the iſland of Unſt. Lat. 61. 10. N. lon. 1. 4. E.

LABANLUO'TO, a ſmall iſland on the eaſt ſide of the gulf of Bothnia. Lat. 61. 39. N. lon. 21. 15. E.

LAMBAS'SA, in ancient geography, a town of Africa, in Numidia, which became an epiſcopal ſee.

LAM'BATIVE, *adj.* [from *lambo*, Lat. to lick.] Taken by licking.—In affections both of lungs and weazon, phyſicians make uſe of ſyrups and *lambative* medicines. *Brown.*

LAM'BATIVE, *ſ.* A medicine taken by licking with the tongue.—I ſtitch'd up the wound, and let him blood in the arm, adviſing a *lambative*, to be taken as neceſſity ſhould require. *Wiſem. Surg.*

LAMBAY', a ſmall iſland in the Iriſh Sea, near the weſt coaſt of Ireland. Lat. 53. 30. N. lon. 6. W.

LAMBAY'A, or LANIBAI, a town of Africa, where the king of Baol reſides.

LAMBAYE'QUE, a town of Peru, and capital of the juriſdiction of Sana, in the biſhopric of Truxillo; containing about 1500 houſes, built ſome of bricks, ſome of cane and plaſter, others entirely of cane. Some of the inhabitants are opulent; but the generality are poor Spaniards, Mulattoes, Meſtizos, and Indians. The pariſh-church is of ſtone, large and beautiful, and the ornaments ſplendid. It has four chapels, called *ramos*, with an equal number of prieſts, who take care of the ſpiritual concerns of the Indians, and alſo attend, by turns, on the other inhabitants. The families which formerly inhabited the city of Sana, on its being ſacked, in 1685, by Edward Davis, an Engliſh adventurer, removed hither; being under a farther neceſſity of changing their dwelling from an inundation of the river of the ſame name, by which every thing that had eſcaped the ravages of the Engliſh was deſtroyed. It is the reſidence of a corregidor; having under his juriſdiction many other towns. One of the two officers of the revenue appointed for Truxillo reſides here. A river, called Lambayeque, waſhes this place, which, when the waters are high, is croſſed by a wooden bridge; but at other times may be forded; and often is quite dry. It is ninety-five miles weſt-north-weſt of Truxillo. Lat. 6. 40. S. lon. 79. 56. W.

LAM'BDA, *ſ.* The letter of the Greek alphabet which anſwers to our *l*.

LAM'BDACISM, *ſ.* The too frequent repetition of the letter *l*.

LAMBDOI'DAL, *adj.* [from *lambdoides.*] Belonging to the lambdoides; having the form of the letter A.

LAMBDOI'DES, *ſ.* in anatomy, one of the ſutures of the ſkull.

LAMB'EAUX, *ſ.* in heraldry, a kind of croſs patee.

LAMBE'CIUS (Peter), a man of diſtinguiſhed erudition, was born at Hamburg in 1628. He received the early part of his education in his native place, and afterwards, at the expence of his maternal uncle, Luke Holſtein, viſited the univerſities of Holland and France, where he made a great progreſs in polite literature and law. At the age of nineteen he became advantageouſly known to the learned world by a work upon Aulus Gellius. He paſſed eight months with the archbiſhop of Toulonſe, in which city he was made a licentiate in law. He then ſpent two years at Rome with cardinal Barberini. On returning to Hamburgh, he was appointed to the profeſſorſhip of hiſtory in 1652; and, in 1660, was made rector of the college in that city. He underwent many uneaſineſſes in conſequence of criticiſms on his writings, and charges brought againſt him in matters of faith; and theſe were not alleviated by his marriage with a rich, but old and covetous, wife, who kept her money to herſelf. Diſguſted with his ſituation, he abandoned his family and country in 1662, and went firſt to Vienna, and then to Rome, where he was very favourably received by queen Chriſtina of Sweden, and pope Alexander VII. In the ſame year he abjured Lutheraniſm, and publicly declared himſelf a Catholic, to which religion he had been ſecretly converted in France many years before, by father Sirmond. Returning to Vienna, he was appointed in 1663 librarian to the emperor, in which poſt he died in 1680. Beſides the work on A. Gellius already mentioned, Lambecius publiſhed, 2. Origines Hamburgenſes, in two parts, 4to. 1652, 1661. 3. Codini et alterius Anonymi excerpta de Antiquitatibus Conſtantinopol. Gr. with a Latin verſion and remarks, Paris, fol. 1655. 4. Prodromus Hiſtoriæ Litterariæ, Hamb. fol. 1659. 5. A Collection of Latin Diſcourſes on various Occaſions, 4to. 1660. The moſt laborious of his performances was entitled, 6. Commentariorum de auguſta Bibliotheca Cæſaria Vindobonenſi, lib. viii. fol. 8 vols. 1665–1679: this great work contains a hiſtory of the imperial library at Vienna, with a deſcriptive catalogue of its numerous manuſcripts, upon a critical and hiſtorical plan, which renders it much ſuperior to all preceding catalogues of the kind. He did not live to complete his labour; but the ſucceeding librarian, Dan Neſſelius, gave a ſupplement, together with an abridgment of the eight volumes of Lambecius, in one volume folio. Our author publiſhed ſome other works, one of which may be regarded as that kind of penitential taſk which ſeems to have been enjoined on ſeveral learned converts to a ſuperſtitious faith; it is a Latin diary of the pilgrimage made by the emperor Leopold, in 1665, to a famous monaſtery, on account of a victory over the Turks. *Bayle.*

LAM'BENT, *adj.* [*lambens*, Lat.] Playing about; gliding over without harm:

From young Iülus head
A *lambent* flame aroſe, which gently ſpread
Around his brows, and on his temples fed. *Dryden.*

His brows thick fogs, inſtead of glories, grace,
And *lambent* dulneſs play'd around his face. *Dryden.*

LAM'BERHURST, a village of England, in the county of Kent, formerly celebrated for its iron forges and furnaces; the rails round St. Paul's church-yard were caſt at this place: ten miles ſouth-eaſt of Tunbridge, and forty-one ſouth-eaſt of London.

LAM'BERT, [Saxon.] A man's name.

LAM'BERT OF ASCHAFFENBURG, a Benedictine monk, in the eleventh century, wrote ſeveral works; among which is a Hiſtory of Germany from the year 1050 to 1077.

LAM'BERT (Francis), one of the firſt French monks who

who quitted their convents to embrace the reformed religion, was deſcended from a noble family, and born at Avignon in the year 1487. At the age of fifteen, he entered among the friars minors, or Franciſcans, and continued in their community twenty years; during which time he acquired celebrity as a preacher, and was preferred to the poſt of general of the order; or, as Bayle rather imagines, to that of ſuperior of a monaſtery. Having, in the courſe of his inquiries, ſeen reaſon to renounce the doctrines of the catholic church, and to adopt thoſe of the reformation, he found it neceſſary to withdraw from his native country, in the year 1522, and to retire into Swiſſerland. In this country he preached the proteſtant doctrines in various places, with much acceptance; and, after continuing ſome time at Baſil, where he obtained ſtrong certificates in favour of his moral character, went to viſit Luther at Wittemberg, in the year 1523. With that eminent reformer he grew into high eſteem; and it was projected that he ſhould go to Zurich, to aſſiſt in diſſeminating the principles of the reformation through France. It appears, however, that this miſſion was thought proper to be exchanged for ſome employment in the univerſity of Wittemberg, where he moſt probably continued till the year 1526. In that year, he was one of the principal perſons invited by the landgrave of Heſſe, to eſtabliſh the reformation in his dominions; and, upon the foundation of the univerſity of Marpurg, in 1527, he was appointed to the chair of profeſſor of divinity. He died in 1530, about the age of forty-three. He was the author of, 1. Commentaries on Solomon's Song, Hoſea, Amos, Obadiah, Jonah, Micah, Nahum, and Habakkuk, 1525, 8vo. 2. Exegeſis in Apocalypſin, printed at Baſil in 1539, 8vo. 3. Antitheſis Verbi Dei, et Inventorum Hominum, 1525, 8vo. 4. De Prophetia, Eruditione, Linguis, &c. 5. In Acta Apoſtolorum, et Libros Regum. 6. Commentarii Evangelici in Regulam Minoritarum, &c. 8vo. 7. Farrago omium fere Rerum Theologicarum, 8vo. 8. Controverſial treatiſes, &c. *Bayle.*

LAM'BERT (John), a diſtinguiſhed parliamentarian general in the civil wars of Charles I. was deſcended of a good family, and was a ſtudent of law at the commencement of the troubles. He acted as a colonel at the battle of Marſton-Moor, and had a ſuperior command at that of Naſeby. When the Scotch, under Hamilton, joined the royaliſt party, Lambert was oppoſed to Langdale and Muſgrave in the north, and gained ſeveral advantages over them. He was a favourite of the independent party, who endeavoured to obtain for him the lieutenancy of Ireland; but the preſbyterians carried it againſt him in favour of Waller. He was much truſted by Cromwell, to whom only he was conſidered as ſecond in vigour and military talents, and whom he equalled in ambition. He ſerved under him in Scotland, and gained a conſiderable victory in Fife; and, when the young king, Charles II. puſhed into England, he was diſpatched to hang upon his rear with a body of cavalry. After the cauſe of royalty was totally overthrown by the battle of Worceſter, to Lambert was entruſted the motion in the council of officers for placing a protector at the head of the ſtate, which dignity of courſe fell upon Cromwell. He, however, oppoſed the deſign of making Cromwell king, foreſeeing that hereditary power would, by that means, be eſtabliſhed in his family, to the defeat of his own ambitious ſchemes. This conduct cauſed him to be deprived, by the protector, of all his commiſſions, but with the allowance of a penſion of two thouſand pounds a-year for paſt ſervices. Upon this diſmiſſion he retired to Wimbledon-houſe, where he ſeemed to have exchanged his aſpiring views for the humble ambition of excelling as a horiſt. But after the death of Cromwell he returned to public life, and formed the ſoul of the party of malcontents to the protectorate of Richard, which aſſembled at Wallingford-houſe. He was employed by the parliament to quell the dangerous inſurrection of ſir George Booth, in Cheſhire, in which he completely ſucceeded, and received the preſent of a thouſand pounds to purchaſe a jewel. A petition to parliament which he inſtigated his officers to draw up was conſidered as ſo dangerous by that body, that they immediately caſhiered him; but ſuch was his influence over the army, that he turned the balance againſt them, and procured the appointment of a committee of ſafety, in which the ſupreme power was veſted. The great rival of Lambert was Monk; who now, being at the head of an army in Scotland, began to entertain the deſign of reſtoring the former monarchy. As he fell under ſuſpicion, Lambert advanced northward with a body of troops to overawe him. Monk, however, croſſing the Tweed in January, 1660, while at the ſame time the parliament had reſumed their authority, Lambert was deſerted by almoſt the whole of his men, and ſoon after was arreſted, and committed to the Tower. His ſudden eſcape, in April, threw Monk and the council into great alarm, as they dreaded his vigour and popularity; but, before he could aſſemble any conſiderable number of the troops who were flocking to him on all ſides, he was taken, near Daventry, by colonel Ingoldſby. At the reſtoration, he, together with ſir Henry Vane, though neither of them regicides, were excepted from the act of indemnity. He was brought to his trial, when he behaved with ſuch humble ſubmiſſion, that, though condemned, he was reprieved at the bar. He was then baniſhed for life to the iſle of Guernſey, where he ſurvived above thirty years, forgetting and forgotten. He died in the Roman-catholic faith. *Hume. Walpole's Anecd.*

LAM'BERT (Michael), was the favourite ſinging-maſter and compoſer of ſongs in France, about the middle of the ſeventeenth century. He had ſo many ſcholars, that he was obliged to teach a conſiderable number at a time, and at his own houſe, where he formed a kind of academy, and where he finiſhed every leſſon with ſinging, to his own accompaniment, ſeveral ſongs to a brilliant and enraptured audience. Marcel, the celebrated dancing-maſter, did the ſame, dancing with his beſt ſcholars at the end of the leſſons which he gave at home on his public days. The reputation of Lambert, like that of Abelard, was ſo great, that his pupils followed him into the country as far as Puteaux, where he had a villa. Lulli married the daughter of this muſician, who was born in 1610, and died in 1696.

LAM'BERT (Saint), publiſhed, in 1702, "Les Principes du Clavecin," or Inſtructions for the Harpſichord, containing a clear explanation of all that concerns the clavier, or keys, in their rotation on that inſtrument; and "A Treatiſe of Accompaniment," for many inſtruments.

LAM'BERT (Anna-Thereſa Marguenot de Courcelles, marchioness of), an illuſtrious literary lady, was born at Paris in 1647. Her father died while ſhe was an infant, and her mother then married the ingenious Bachaumont. He took pains to cultivate the promiſing talents of his ſtep-daughter, and accuſtomed her to make extracts from the books ſhe read. She was united, in 1666, to Henry Lambert, marquis of St. Brie, then a captain in the army, and afterwards governor of Luxemburg. She loſt him in 1686, and was left with one ſon and a daughter. She was involved in tedious law-ſuits, in which her whole fortune was at ſtake, and by her addreſs brought them to a happy concluſion. At length, unembarraſſed, and miſtreſs of a conſiderable eſtate, ſhe fixed at Paris, and devoted herſelf to letters, and to the ſociety of thoſe who cultivated and honoured them. Her's was one of the few houſes not infected with the ſpirit of gaming, and in which company met for the ſake of rational converſation. Her heart was as warm as her underſtanding was enlarged; ſhe ſerved her friends with zeal, and delighted in acts of generoſity. The latter years of her life were clouded with ſufferings, which the conſolations of religion enabled her to ſupport. She died in 1733, at the age of eighty-ſix. The principal writings of Madame de Lambert are, 1. Les Avis d'une Mere à ſon Fils & à ſa Fille, 1729, 12mo. theſe maternal precepts breathe

breathe all the tenderneſs of a parent, joined to the correctneſs of ſentiment of a philoſophical moraliſt. 2. Nouvelles Reflexions ſur les Femmes, ou Metaphyſique d'Amour; a work of a lively and delicate imagination. 3. Traité de l'Amitié; of this, Voltaire ſays (Siecle de Louis XIV.), that it proves how well ſhe deſerved to poſſeſs friends. 4. Traité de la Vieilleſſe. 5. La Femme Hermite, an affecting little romance. 6. Some detached Pieces on Morals and Literature. Of all theſe, the ſtyle is elegant, and the thoughts ingenious. *Moreri.*

LAM'BERT (Joſeph), a pious French prieſt, whoſe practical and devotional writings are held in great eſtimation, was born at Paris in the year 1654. He was admitted to the degree of doctor by the faculty of the Sorbonne, and was preſented to the living of St. Andrew des Arcs, as well as to the priory of St. Martin de Palaiſeau, near Paris. He poſſeſſed a conſiderable ſhare of learning, and was intimately converſant in the ſcriptures and the fathers. He had alſo a ſweet voice, and a very perſuaſive eloquence. With theſe qualifications, at the age of thirty, he commenced preacher in his pariſh-church, and attracted thither a vaſt concourſe of hearers. The ſtyle of his ſermons was plain and ſimple, but remarkably ſcriptural, and full of what the French call *onction*. Theſe circumſtances led many Proteſtants to become his occaſional hearers; and he is ſaid to have been the means of converting ſeveral Calviniſts to the catholic faith. During the latter years of his life, he devoted himſelf entirely to the ſervice of the poor, whom he made it a point to viſit every day, edifying them with his pious converſation and advice, relieving their neceſſities, and for their inſtruction he founded ſchools, and wrote a variety of uſeful works; and to theſe purpoſes of benevolence did he apply the whole income of his priory. He died in 1722, when he was ſixty-eight years of age. He was the author of, 1. The Evangelical Year, or Homilies, in 7 vols. 12mo. 1692 and 1695. 2. Diſcourſes relating to the eccleſiaſtical Life; 2 vols. 12mo. 1701. 3. The Epiſtles and Goſpels of the Year, with Reflections; 12mo. 1713. 4. Select Hiſtories from the Old and New Teſtament, with Reflections, 12mo. 5. Short and familiar Inſtructions for Sundays, and the principal Feſtivals of the Year, intended for the Uſe of the Poor, 12mo. 1721. And various other pieces.

LAM'BERT (George), was among the firſt Engliſh artiſts who obtained celebrity upon the revival (if it may be ſo called) of painting in this country; which now ſtands ſo juſtly exalted, in arts as well as arms, among the nations of Europe. Lambert's taſte led him to admire and to imitate the ſtyle of Gaſpar Pouſſin in landſcape; and he has produced ſeveral works of conſiderable merit; which, if they have not the brilliancy and force of Gaſpar, are rich, and abound with beauties of a gentler kind. He alſo painted ſcenes from common nature; and at the Foundling Hoſpital may be ſeen one he preſented to that inſtitution, which is deſerving of very great praiſe. He was engaged to paint ſcenes for the play-houſes, for which his pencil was peculiarly qualified; and, in concert with Scott, painted ſix large pictures of their ſettlements for the Eaſt-India Company, which are placed at their houſe in Leadenhall-ſtreet. He died in 1765.

LAM'BERT (John-Henry), a very eminent mathematician and aſtronomer, was a native of Muhlhauſen in the Sundgaw, a town in alliance with the Swiſs cantons; and born Auguſt the 29th, 1728. His father, whoſe anceſtors were emigrants from France on the revocation of the edict of Nantes, was by trade a tailor, who with great difficulty maintained himſelf and family by his induſtry. Having no proſpect of providing for his ſon but by inſtructing him in his own buſineſs, he endeavoured to obtain for him an education ſuitable to ſuch an humble ſituation in life, and ſent him to the public ſchool, where he was taught the rudiments of learning at the expence of the corporation till he was twelve years old. Here he diſtinguiſhed himſelf ſo eminently from his ſchoolfellows, that his father was prevailed upon, by the repeated ſolicitations of his maſters, and the averſion which John-Henry diſcovered from the trade for which he was intended, to permit him to ſtudy theology. Not meeting, however, with the ſupport and encouragement neceſſary for that purpoſe, he was ſoon reduced to the neceſſity of relinquiſhing all thoughts of a learned profeſſion, and of learning his father's occupation. While he continued to follow this employment, he read with uncommon eagerneſs all the Latin books of which he could obtain poſſeſſion; and, happening to meet with an old work on mathematics, his genius for this ſcience ſoon manifeſted itſelf in the ardour with which he ſtudied it, and the complete knowledge which he acquired from it of the method of computing almanacs, notwithſtanding the numerous errors which he diſcovered in it, without being able to correct them. Being wholly occupied in the day-time, he was obliged to devote a part of the night to his ſtudies; and, in order to furniſh himſelf with money for the purchaſe of candles, he ſold ſmall drawings which he delineated while employed in rocking with his foot his infant ſiſter. One day, while ſome workmen were engaged in repairing his father's houſe, he took the opportunity of propoſing ſeveral queſtions, reſpecting the practical application of the principles which he had found in his book, to the principal of them, who was induced to lend him a treatiſe on the mathematics. It was with inexpreſſible joy that he found himſelf enabled, by the help of this treatiſe, to correct the errors which he had diſcovered in his own book; and with the aid which they both together afforded him, without any additional aſſiſtance, he learned the rudiments of arithmetic and geometry.

The enthuſiaſm for the ſciences which young Lambert thus diſplayed, at length induced ſome learned men to inſtruct him gratis; and they had the ſatisfaction of ſeeing him improve with a rapidity which exceeded their moſt ſanguine expectations. By their generous aſſiſtance, he acquired in a ſhort time a knowledge of philoſophy and of the oriental languages, and learned to write ſo elegant a hand as recommended him to the ſituation of a copyiſt in the chancery of his native town. This place he reſigned in his fifteenth year, upon being appointed book-keeper of ſome iron-works in the vicinity of Muhlhauſen; and from the advantages of this employment he found the means of obtaining inſtruction in the French language. Two years afterwards, M. Iſelin, of Baſil, who then conducted the publication of a newſpaper, engaged him in the capacity of amanuenſis. This ſituation furniſhed Lambert with an opportunity of making further progreſs in the belles-lettres, as well as philoſophy and the mathematics; and his paſſionate attachment to the latter ſcience frequently led him to neglect his regular occupations. In the year 1748, M. Iſelin recommended him to baron Salis, preſident of the Swiſs confederacy, to become tutor to his children. The excellent library which he found in the houſe of his new patron, the leiſure hours with which he was indulged, together with the inſtructive intercourſe which he had with all the members of the family, and with a great number of ſcientific ſtrangers who viſited the baron, proved to him excellent means of ſatisfying his thirſt for knowledge, and enabled him to become more familiarly acquainted with aſtronomy and the other branches of the mathematics, as well as with phyſic, phyſiology, theology, and even with juriſprudence, eloquence, poetry, and the Greek, Latin, French, Italian, and German, languages.

Mr. Lambert's uncommon talent for mathematics now began to diſplay itſelf advantageouſly in his inventions and compoſitions. Paſcal's example ſtimulated him to the invention of an accounting-machine; while the numerous occaſions which he had for an accurate chronometer led him to invent a time-piece of mercury, which went twenty-ſeven minutes without producing the ſlighteſt error. Here he alſo invented his logarithmic accounting-ſcales; and was likewiſe led, from the error which one of his pupils had committed in the ſolution of an algebraic propoſition,

ſition, to the invention of a machine for deſigning perſpective drawings. He ſurveyed and made a drawing of the country around Coire; and employed himſelf in numerous phyſical obſervations among the mountains in that diſtrict. In 1752, he began to keep a regular journal of his daily occupations, which he uninterruptedly continued to the end of his life, and which is highly eſteemed by the learned. A literary ſociety being at that inſtituted at Coire, he was choſen one of its members; as he was, in 1753, of the Helvetic Society, to whoſe tranſactions he was a large contributor of mathematical and phyſical treatiſes. After reſiding eight years at Coire, in 1756 he repaired with his pupils to the univerſity of Gottingen, where he was nominated a correſponding member of the Scientific Society in that place; and from thence he removed in the following year to Utrecht, where he continued twelve months. During this interval he made ſeveral excurſions to Leyden, the Hague, and Amſterdam; in one of which he became acquainted with the celebrated Muſchenbroeck, and on another publiſhed his firſt work, *De la Route de la Lumière par les Airs*; or, on the moſt remarkable circumſtances attendant on the paſſage of light through the atmoſphere. In the autumn of 1758 he went with his pupils to Paris, where he acquired the eſteem and friendſhip of d'Alembert and Meſſier; and from thence travelled to Marſeilles, at which place he firſt formed the plan of his work On Perſpective, which he publiſhed in the following year at Zurich. After his return to Coire, he made an excurſion to Augſburg in 1760, and there became acquainted with the celebrated philoſophical inſtrument-maker, Brander, who was afterwards of great ſervice to him in carrying his ideas into execution; and there he alſo publiſhed, in the ſame year, his Photometry, by which he added a new branch to the ſcience of mixed mathematics. In 1760, likewiſe, he was elected a member of the Electoral Bavarian Scientific Society, upon the condition that he ſhould give them his aſſiſtance, and tranſmit papers for their tranſactions. He is ſaid faithfully to have performed his engagement with them, and to have received much ill uſage on their part. Be that as it may, the differences between them were followed by the deprivation of his ſalary; on which he returned the diploma which he had received as a member of their body.

About the year 1751, Mr. Lambert viſited Erlangen, where he publiſhed his Letters on the Conſtruction of the Univerſe, as well as his Treatiſe on the principal Qualities of the Orbits of the Comets. In 1763, he went to Leipſic; at which place he publiſhed his New Organon, in 1764. During the year laſt-mentioned, he made an excurſion to Berlin, where he was introduced to Frederic II. who was fully ſenſible of the ſervices which he had rendered to the intereſts of ſcience, and gave directions for his being admitted a regular member of the academy at that place. This appointment enabled him to devote himſelf wholly to the purſuit of his favourite ſtudies, and to communicate to the world the fruits of his labours. The tranſactions of the literary ſocieties of Leipſic and Berlin are enriched with a great number of his treatiſes; and many of them have been publiſhed ſeparately. They all bear the ſtamp of an eminent genius, who had derived his knowledge more from his own reflections than from books, and who always ſucceeded in placing the ſubject on which he treated in a point of view in which it had not been before conſidered. His principal metaphyſical work is his Architectonic; which he compoſed with a view of ſhowing the application of logic to metaphyſics, and of evincing the poſſibility of carrying it to algebraic evidence. Moſt of his mathematical treatiſes were publiſhed in a collective form by himſelf, in three volumes, under the title of *Beytrage zum Gebrauch der Mathematic und deren Anwendung*; in which almoſt every branch of mathematical ſcience has been enriched with additions and important improvements. Frederic II. made a conſiderable addition to his penſion a little before his death; which was occaſioned by a decline, the effect of his too cloſe and aſſiduous application, and took place September the 25th, 1777, ſoon after he had completed the forty-ninth year of his age.

John-Henry Lambert was as univerſally eſteemed for his amiable character, as he was reſpected for his ſcientific merits. He never, indeed, was able to diveſt himſelf of the manners and taſte which he had contracted in his originally low ſituation in life; which manifeſted themſelves in his timid and awkward behaviour, his neglect of propriety and neatneſs in his dreſs and the furniture of his apartments, his coarſe witticiſms and antic geſtures, and the pleaſure which he took in frequently mixing with low company. Theſe defects, however, were abundantly counterbalanced by his poſſeſſing a moſt excellent heart, and uncommon mental perfections. He was unaffectedly modeſt, ſtrictly chaſte and ſober, honeſt and frank in his manner of thinking and converſation, decidedly averſe from all double-dealing, falſehood, and injuſtice, prompt to repair any injury which he thought he might have committed, patient and forbearing, anxiouſly deſirous of avoiding all occaſions of diſſenſion and diſpute, actively compaſſionate towards the wretched, and totally free from moroſeneſs and ill-humour. He was alſo diſtinguiſhed by the ardour of his piety, his zeal for the intereſts of religion and virtue, and his genuine philanthropy. His cuſtom of ſpeaking as decidedly and freely of his own merits and defects as of thoſe of others, made him frequently appear a boaſter to thoſe who did not ſufficiently know him; but he generally judged impartially and correctly relative to matters within his own ſphere of knowledge. His diligence and aſſiduity were, perhaps, never exceeded. He generally was at his writing-deſk from five o'clock in the morning until noon; and from two o'clock in the afternoon until midnight, without indulging himſelf in any kind of recreation, a ſolitary walk on a fine day excepted. The moſt indifferent occurrence led him to mathematical or philoſophical analyſes; to which he gave himſelf up ſo completely, that no other object whatever could make the leaſt impreſſion upon him. He was thoroughly acquainted with the theological ſyſtem of his age, well verſed in the oriental languages, and poſſeſſed a conſiderable knowledge of juriſprudence; but logic, metaphyſics, and mathematics, were the leading ſubjects of his ſtudies. The latter ſcience, in particular, occupied his reſearches; and the greatneſs of his genius manifeſted itſelf in the facility with which he reduced to an eaſy conſtruction the reſult of extenſive and intricate computations. His memory was uncommonly faithful in matters that related to his favourite ſciences; but indifferent in others. He was intimately acquainted with the hiſtory of theſe ſciences, their epochas, and the great men who had formed them; though he was little acquainted with hiſtory in general. Such are the outlines of the life and character of a man who roſe to diſtinguiſhed eminence in ſcience, after overcoming the moſt arduous difficulties, merely by his own exertions and induſtry, and the unaſſiſted application of his uncommon genius. *Phil. Mag.*

LAM'BERT (Daniel), was born on the 13th of March, 1770, in the pariſh of St. Margaret, at Leiceſter. From the extraordinary bulk to which he attained, the reader may naturally be diſpoſed to enquire, whether his parents were perſons of remarkable dimenſions? This was not the caſe, nor were any of his family inclined to corpulence, excepting an uncle and aunt on the father's ſide, who were both very heavy. The former died during the infancy of Lambert, in the capacity of gamekeeper to the earl of Stamford, to whoſe predeceſſor his father had been huntſman in early life. The family of Mr. L. ſenior, conſiſted, beſides Daniel, of another ſon, who died young, and two daughters, of the common ſize. The habits of young Lambert were not, in any reſpect, different from thoſe of other young perſons; they were indeed very far from being of that kind as to induce to extraordinary obeſity, for at an early period he was ſtrongly attached to the ſports of the field. We have already mentioned the

profeſſion

Lambertia formosa from New South Wales.

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profeſſion of his father and uncle; and have yet to obſerve, that his maternal grandfather was a great cock-fighter. Born and bred among horſes, dogs, and cocks, and all the other appendages of ſporting, it cannot be a matter of wonder that he ſhould be fond of thoſe exerciſes and amuſements which are comprehended under the dominion of field-ſports. About the year 1793, when Mr. L. weighed 32 ſtone, he had occaſion to viſit Woolwich, in company with the keeper of the county-gaol of Leiceſter. As the tide did not ſerve to bring them up to London, he walked from Woolwich to the metropolis, with much leſs apparent fatigue than ſeveral middle-ſized men who were of the party. Such were the feelings of Mr. Lambert, that no longer than four years previous to his deceaſe he abhorred the very idea of exhibiting himſelf. Though he lived exceedingly retired at Leiceſter, the fame of his uncommon corpulence had ſpread over the adjacent country to ſuch a degree, that he frequently found himſelf not a little incommoded by the curioſity of the people, which it was impoſſible to repreſs, and which they were continually deviſing the means of gratifying, in ſpite of his reluctance. Finding, at length, that he muſt either ſubmit to be a cloſe priſoner in his own houſe, or endure all the inconvenience, without receiving the profits, of an exhibition, Mr. Lambert determined to viſit the metropolis for that purpoſe. As it was impoſſible to procure a carriage large enough to admit him, he had a vehicle conſtructed expreſsly to carry him to London, where he arrived in the ſpring of 1806, and fixed his reſidence in Piccadilly. His apartments there had more the air of a place of faſhionable reſort than an exhibition; and, as long as the town continued full, he was viſited by a great deal of the beſt company. The dread he felt on coming to London, leſt he ſhould be expoſed to indignity and inſult from the curioſity of ſome of his viſitors, was ſoon removed by the politeneſs and attention which he univerſally experienced. From that period to his death, he had been chiefly engaged in travelling to the principal provincial towns, where many thouſands have beheld with admiration his aſtoniſhing bulk. He was a cheerful companion; poſſeſſed a generous heart; and was as fond of rural ſports as any man in England. His game-chickens and his dogs, when he was at home, were his chief amuſement, and the Racing Calendar his ſtudy. He died in July 1809, at Stamford in Lincolnſhire, to which place he had travelled the day preceding his death from Huntingdon; and on his arrival in the evening he ſent a meſſage to the office of the Stamford News, requeſting that, as "the mountain could not wait upon Mahomet, Mahomet would go to the mountain;" or, in other words, that the printer would call upon him, and receive an order for executing ſome hand-bills, announcing Mr. Lambert's arrival, and his deſire to ſee company. The orders he gave upon that occaſion were delivered without any preſentiment that they were to be his laſt, and with his uſual cheerfulneſs. He was in bed, fatigued with his journey; but anxious that the bills might be quickly printed, in order to his ſeeing company next morning. Before nine o'clock, on that morning, however, he was a corpſe. He was in his 40th year; and, upon being weighed a few days before his death, by the famous Caledonian balance (in the poſſeſſion of Mr. Ring, of Ipſwich), was found to be 52 ſtone 11lbs. in weight (14lbs. to the ſtone), which is 10 ſtone 11lbs. more than the celebrated Bright, of Eſſex, ever weighed. He had apartments at the Waggon and Horſes Inn, St. Martin's, on the ground-floor; for he had been long incapable of walking up ſtairs. His coffin, in which there was great difficulty to place him, was 6 feet 4 inches long, 4 feet 4 inches wide, and 2 feet 4 inches deep: the immenſe ſubſtance of his legs made it neceſſarily a ſquare caſe. This coffin, which conſiſted of 112 ſuperficial feet of elm, was built upon two axle-trees and four cog-wheels; and upon theſe his remains were rolled into his grave, which was in the new burial-ground at the back of St. Martin's church. A regular deſcent was made, by ſloping it for ſome diſtance. It was found neceſſary to take down the window and wall of the room in which he lay to allow his exit. *Monthly Mag.* Aug. 1809.

LAM'BERT, a town of Canada, on the river St. Laurence. Lat. 45. 34. N. lon. 73. 14. W.

LAM'BERT BAY, a bay on the north-eaſt coaſt of the iſland of St. Chriſtopher: two miles ſouth-weſt of Muddy Point.

LAM'BERT-CASTLE and HILL, a village in the county of Dorſet, eaſt of Axminſter; has fairs on Wedneſday before June 24, and Wedneſday 9 weeks after. The caſtle which is on the top of the hill, is in the form of a Roman D, fortified with three trenches and ramparts, and has three entrances: its area twelve acres.

LAM'BERT's POINT, a cape of the iſland of Barbadoes, on the weſt-ſouth-weſt coaſt: two miles weſt-ſouth-weſt of High Point.

LAMBER'TIA, *ſ.* [ſo named by Dr. Smith in the Linn. Tranſ. in honour of Alymer Bourke Lambert, F.R. and A.S. one of the moſt ardent and experienced botaniſts of the preſent age.] In botany, a genus of the claſs tetrandria, order monogynia, natural order aggregatæ, *Linn.* (proteæ, *Juſſ.*) The generic characters are—Calyx: involucrum of many oblong, imbricated, coloured, leaves, the inner ones gradually the largeſt, containing from one to ſeven flowers, deciduous. Perianth none. Corolla: petals four, cohering at the baſe, linear-lanceolate, equal, revolute from above their point of union, bearing the ſtamens. Nectary of four glandular ſcales at the baſe of the germen, ſometimes united. Stamina: filaments none; anthers four, ſeſſile at the inner ſide of the revolute part of each petal, linear, at length recurved. Piſtillum: germen ſuperior, turbinate, fringed at the top; ſtyle thread-ſhaped; ſtigma rather thicker, prominent, awl-ſhaped, furrowed. Pericarpium: follicle roundiſh-wedge-ſhaped, ſomewhat woody, more or leſs horned or tubercular, of one cell. Seeds two, orbicular, compreſſed, each encompaſſed with a rounded wing; common receptacle flat, without ſcales.—*Eſſential Character.* Petals four, cohering, ſpirally revolute, bearing the ſtamens; nectary of four ſcales; ſtigma awl-ſhaped; follicle woody; ſeeds two, bordered; involucrum of many leaves, imbricated, coloured, deciduous. Receptacle flat.

Species. 1. Lambertia uniflora: flowers ſolitary in each involucrum. Leaves obovate, with a point, ſmooth, reticulated. Follicle pointed at one ſide, without horns. Gathered by Mr. Brown in Lewin's Land, on the ſouth coaſt of New Holland; growing about rocky inlets, near the ſhore.

2. Lambertia inermis: flowers ſeven in each involucrum: twice as long as its inner leaves; ſtyle ſmooth; follicles pointed at one ſide, without horns; leaves oblanceolate or obovate, pointleſs. Native of the ſtony ſides of hills in Lewin's Land.

3. Lambertia formoſa: flowers ſeven in each involucrum; the length of its inner leaves; ſtyle hairy; follicle pointed at one ſide, two-horned at the other; leaves linear-lanceolate, ſharp-pointed, recurved at the edges. Native of ſtony heaths near Port Jackſon, New South Wales, from whence ſpecimens were ſent to Europe by Dr. John White. The leaves are green and ſmooth above; white, and reticulated with veins, beneath. Involucrum and flowers of a fine roſe-colour or crimſon. This was the only ſpecies originally deſcribed by Dr. Smith; the reſt were added by Mr. Brown.

4. Lambertia echinata: leaves linear, ſmooth, reticulated: dilated, lobed and pointed at their extremities; follicles two-horned, thorny all over. Native of the ſtony ſides of hills in Lewin's Land, where Mr. Brown gathered it in fruit, but never ſaw the flowers. Hence its genus remains doubtful, eſpecially, as that intelligent writer obſerves, on account of the leaves being lobed, which is contrary to the nature of the other ſpecies. *Linn. Tranſ.* vol. iv. x.

LAMBE'SA, or LAMBESE, in ancient geography, a town

town of Mauritania Sitifenſis, ſituated on Mount Audus. It was the moſt conſiderable town of the country, and the third legion of Auguſtus was quartered in it. Its ruins and inſcriptions are ſtill noticed. Now TEZZOUTE.

LAMBESC', a town of France, in the department of the Mouths of the Rhône: fifteen miles ſouth of Apt, and twelve north-weſt of Aix.

LAM'BETH, or LAMEHITHE, i. e. a dirty harbour or haven; an extenſive pariſh, ſeated on the ſouthern bank of the river Thames, in the hundred of Brixton, and county of Surrey, England. It is directly oppoſite to Weſtminſter, to which city it is connected by a handſome ſtone bridge acroſs the river. The whole is bounded by Southwark to the eaſt, Newington-Butts and Camberwell to the ſouth, and Batterſea to the weſt. The circumference is about ſixteen miles. In Domeſday-book, it is ſaid to contain 20½ plough-lands. At the beginning of the ſeventeenth century, it appears by the churchwardens' accounts to have conſiſted of 1262 acres of arable land, 1026 of paſture, 125 of meadow, thirteen of ozier, twenty-ſeven of garden ground, and 150 of wood, making in the whole 2603; the commons and waſte land, ſuppoſed to be about 330 acres, not being charged, will increaſe it to 2933 acres. At preſent, the whole extent is about 4000 acres; of which about 1390 are occupied by houſes and other buildings, wharfs, manufactories, ſtreets, and roads; 415 by pleaſure-gardens, including thoſe of Vauxhall; 80 by market-gardens; 300 by farming-gardens; 40 by nurſeries; 250 are now incloſing from common; and 30 are to remain common. The pariſh is divided into ſix liberties or precincts, reſpectively called the Biſhop's, the Prince's, Vauxhall, Marſh and Wall, Lambeth-Dean, and Stockwell; the whole containing, according to the return to parliament in the year 1800, 5009 houſes, and 27,985 inhabitants, of whom 5148 were ſtated to be employed in various trades and manufactures, and 955 in agriculture. Archbiſhop Hubert Walter obtained from king John a grant of a weekly market, and a fair of fifteen days, upon condition that the ſame ſhould not be detrimental to the intereſts of the city of London. In the archbiſhop's manuſcript library, is a charter from the city, ſignifying their conſent, ſtipulating only, that the fair ſhould begin on the morrow after the anniverſary of St. Peter ad vincula. The market and fair are both diſcontinued.

The earlieſt hiſtorical fact on record relating to Lambeth, is the death of Hardicanute, which happened here in the year 1041, while he was celebrating the marriage-feaſt of a noble Dane. Here alſo Harold, who uſurped the throne on the death of Edward the Confeſſor, is ſaid to have placed the crown on his head with his own hands. Henry III. held a ſolemn Chriſtmas here in the year 1231; and a parliament on September 14, in the year following.

This village has been for many ages the reſidence of the archbiſhops of Canterbury, as it had been, long before, that of the biſhops of Rocheſter. Lambeth-palace was originally built in 1189, by Baldwin, metropolitan in the time of Richard I. on a ſpot of ground purchaſed of the biſhops of Rocheſter, as a reſidence for himſelf and ſucceſſors, in the vicinity of the court, where their preſence was frequently neceſſary. It appears to have been, in a great meaſure, if not wholly, rebuilt by Boniface in 1262, when, by his compliance with the meaſures of the court, and his own imperious temper, he had rendered himſelf obnoxious to the people, particularly to the citizens of London, of whom he was in ſuch dread, that he ſhut himſelf up in his palace for ſafety. From that time it became the conſtant reſidence of theſe prelates. Henry Chichele, archbiſhop of Canterbury in the reign of Henry V. who had been only a poor ſcholar on Wickham's foundations at Winchester and Oxford, became ſo great a ſtickler for pontifical power, and ſo violent a perſecutor of the followers of Wickliff, that he built that part called the Lollard's Tower, which was ſo named from a room in it adapted for the impriſonment of the followers of that reformer, who were called Lollards. This is a ſmall room, twelve feet broad and nine long, planked with elm; and there ſtill remain eight rings and ſtaples, to which theſe unfortunate people were chained by order of that implacable prelate. Here the victims of his relentleſs fury were not only confined, but alſo denied the neceſſaries of life, in order to force them to acknowledge the papal authority. During the time of the civil wars, this palace was formed into a priſon for the royaliſts; and the keeper was Dr. Alexander Leighton, who had been condemned in the Star-chamber to have his ears cut off, and both his noſtrils ſlit, for writing a book, called Zion's Plea, or an Appeal to the Parliament. After the execution of the king, it was purchaſed by colonel Scott, one of the regicides, and Matthew Hardy, by whom the chapel was converted into a dancing-room, and the furniture and moveables ſold, except the wood and coals, which were reſerved for the uſe of the ſoldiers. The library was preſerved by an ingenious device of Selden, who ſuggeſted to the univerſity of Cambridge their right to it, under archbiſhop Bancroft's will; and, this claim being admitted by the parliament, the books were removed to Cambridge, where they remained until the time of archbiſhop Sheldon, who procured their reſtoration. During the ſhort time that cardinal Pole was archbiſhop of this ſee, he built the fine gate of the palace, with a gallery and ſeveral rooms adjoining to the eaſt end. The library was begun by Dr. Bancroft, in the reign of James I. and carried on by Dr. Juxon, archbiſhop at the reſtoration, who repaired great part of the houſe. Many books had been left to it by queen Elizabeth, and her favourite Dudley earl of Leiceſter; and it was afterwards augmented by archbiſhop Laud, who, notwithſtanding his bigotry, was a munificent patron of learning. Archbiſhop Sheldon diſpoſed the books in proper order, and, ſince his time, it has been greatly augmented by ſucceeding prelates; ſo that, at preſent, it conſiſts of upwards of twenty-five thouſand volumes. On the north-eaſt window is painted in glaſs the portrait of St. Auguſtine, with old Engliſh verſes beneath it; and near it is a figure of archbiſhop Chichele, with the motto of archbiſhop Stafford, put by the miſtake of a glazier. This library is adorned with a fine picture of Canterbury cathedral, and prints of all the archbiſhops from Warham to the preſent time. Here alſo archbiſhop Cornwallis placed ſome ſmall prints, framed, of the principal reformers from popery, and of the moſt eminent nonconformiſt miniſters of the laſt and preſent century. The ſhell of a tortoiſe is ſhown, to which a label is affixed, importing, that this tortoiſe was put in the garden by archbiſhop Laud in 1633, and killed in 1757 by the negligence of a gardener. This library ſtands over the cloiſters, and forms a narrow gallery, which occupies the four ſides of the quadrangle. Among the books, is a beautiful octavo edition of the Liturgy of the Church of England, tranſlated into the Mohawk language by the famous Indian chief, colonel Joſeph Brandt. The library of manuſcripts ſtands over part of the laſt, and contains about eleven thouſand manuſcripts, many of which are very curious. Archbiſhop Cornwallis gave a conſiderable ſum for fitting up a proper repoſitory for this collection.

The preſence-chamber has three windows adorned with painted glaſs, repreſenting St. Jerome and St. Gregory, with old Engliſh verſes beneath them. The middle window has a painted ſun-dial, with a view of the theatre at Oxford, and the arms of the ſee, and of archbiſhop Sheldon, at whoſe expence it was done. In the lobby is the portrait of Henry prince of Wales, ſon to James I. The long gallery, built by the mild and amiable cardinal Pole, is ninety feet by ſixteen. The wainſcot remains in its original ſtate, being all of mantled carving. In the windows are coats of arms of different prelates of this ſee. It is filled with portraits, chiefly of prelates, among which are archbiſhops Warham and Parker, by Holbein; another of the laſt prelate, by Lyne; and biſhop Hoadly, by

by his ſecond wife. Archbiſhop Cornwallis made a very handſome bay-window, in the modern taſte, from the ceiling to the floor. This affords a fine view of the lawn and plantations; and, in the latter, openings have been made, through which Weſtminſter-abbey, the bridge, the Patent Shot Manufactory, St. Paul's, and the Monument, are ſeen to great advantage, and produce a fine effect. The great dining-room has all the archbiſhops from Laud to Cornwallis. That of Laud is by Vandyck; Juxon, from a good original at Longleate; Teniſon, by Dubois; Herring, by Hogarth; Hutton, by Huſon; Secker, by Reynolds; and Cornwallis, by Dance. In theſe portraits may be obſerved the gradual change of the clerical dreſs, in the articles of bands and wigs. A large ruff anciently ſupplied the place of the former. Archbiſhop Tillotſon was the firſt prelate that wore a wig; which was then not unlike the natural hair, and worn without powder. The great hall, which was deſtroyed during the civil wars, was rebuilt by archbiſhop Juxon upon the old model. It is ninety-three feet in length, and thirty-eight in width, and has a Gothic roof of wood. The guard-room, which appears to have been built towards the beginning of the fifteenth century, has a ſimilar roof. It is fifty-ſix feet long, and twenty-ſeven and a half wide. When the chapel was converted into a dancing-room, the body of archbiſhop Parker was taken out of his tomb here, and buried in a dunghill. After the reſtoration, ſir William Dugdale acquainted archbiſhop Sancroft therewith, by whoſe care the body was diſcovered, and again depoſited in the ſpot whence it had been taken. Over it is a Latin inſcription, the Engliſh of which is: "The body of Matthew the archbiſhop here reſts at laſt." Another monument, recounting the demolition of his tomb, and the treatment of his body, was ſet up by the ſame prelate in the ſouth-weſt corner of this chapel. The archives of the ſee are kept in a room over the gateway, called the record-room. This gateway, and the adjoining tower, which are of brick, were built by archbiſhop Morton, about the year 1490.

The gardens and park, which contain near thirteen acres, are laid out with great taſte. They were enlarged and improved by archbiſhop Cornwallis, who made a new acceſs to the houſe, for carriages, through the park. In the garden are two remarkable fig-trees, which tradition ſays were planted by cardinal Pole. They cover a ſurface of fifty feet in height, and forty in breadth.

As the preſent edifice was begun and carried on at different periods, and as it may reaſonably be ſuppoſed that every perſon conſulted in his own taſte, uniformity in the building cannot be expected. The palace, though old, is in moſt parts ſtrong; the corners are faced with ruſtic, and the top ſurrounded with battlements; but the principal parts are well proportioned, and well enlightened. Some of the inner rooms are, indeed, too cloſe and confined; but there are many others open and pleaſant in themſelves, with the advantage of being convenient, and of affording very agreeable proſpects. The archbiſhops Sheldon, Sancroft, Tillotſon, Teniſon, Wake, Secker, and Cornwallis, ſpared no coſt to render this ancient ſtructure not only convenient and comfortable, but worthy of being the reſidence of the primates of all England. In 1776 it was determined to be extra-parochial, by a deciſion in the Court of Common Pleas.

In this palace, ſeveral of our ſovereigns have been entertained; particularly Henry VII. previous to his coronation; Catharine of Arragon, and her ladies, reſided here prior to her marriage with Henry prince of Wales, (afterwards Henry VIII.) queen Mary often viſited her couſin, cardinal-archbiſhop Pole, having, at her own expence, cauſed the palace to be furniſhed for his reception; and queen Elizabeth was frequently entertained here by archbiſhop Parker. On one of theſe occaſions, the following circumſtance occurred: the queen could never be reconciled to that part of the reformation which allowed the marriage of eccleſiaſtics; and unfortunately Parker had not only written a treatiſe on the lawfulneſs of marriage, but had abſolutely entered into that holy ſtate prior to the repeal of the ſtatute forbidding celibacy. The haughty Elizabeth, although elegantly entertained by the archbiſhop and his lady for ſeveral days, could not at her departure refrain from venting her reſentment, in the following rude manner: addreſſing herſelf to Mrs. Parker, by way of taking leave, ſhe ſaid, "*Madam* I may not call you; *Miſtreſs* I am aſhamed to call you; yet, as I know not what to call you, ſtill I thank you."

Contiguous to the archbiſhop's palace, ſtands the pariſh-church of St. Mary, Lambeth, which was originally a collegiate church, the foundation of which was occaſioned in the following manner: On the death of Richard archbiſhop of Canterbury, A.D. 1184, a conteſt aroſe between the ſuffragan biſhops of that province and the monks of Canterbury, concerning their ſeveral pretenſions to the right of electing their archbiſhop; on which occaſion, the monks appealing to Rome, great intereſt was made in behalf of each party, till at length a mandate was obtained of the pope, wherein the biſhops and monks were enjoined to unite in the election; purſuant to which, the time of chooſing was appointed: but, the refractory monks not appearing, the ſuffragans choſe Baldwin biſhop of Worceſter for their metropolitan; which the monks highly reſenting, ſtrenuouſly exerted themſelves to invalidate the election. But the king, who was a great favourer of Baldwin, being made acquainted with the demands and promiſes of the monks, prevailed upon him to renounce his election, and the electors to declare the ſame void. The monks, having obtained what they wanted, proceeded to a new election, and, according to their previous declaration, re-elected Baldwin. However, the king, willing to repreſs the inſolence of the monks, endeavoured, by the following ſtratagem, to wreſt from them the power of electing their archbiſhop. He commanded Baldwin, the archbiſhop, to build a college at Hackington, near Canterbury; for which he (the king) was to erect one prebend, and each of the ſuffragans of the province another, whereof, as founders, they were to have the perpetual patronage; which was done with a view to deprive the monks of the right of election, and to veſt the ſame in the canons of the intended college. And, the more eaſily to prevail upon the pope to come into this ſcheme, they propoſed to dedicate the ſaid college to Thomas Becket, the moſt celebrated ſaint of that time, and who was held in ſuch veneration by the pope, that it was not in the leaſt doubted but he would readily tranſfer the right of election from the monks of Canterbury to the canons of Hackington. The foundation being dug, and materials provided for the intended work, the part thereof allotted to the archbiſhop to erect was the church and a certain other part of the building. The monks, apprehenſive of the king's and the archbiſhop's deſign againſt them, applied to Rome for redreſs. In the mean time the work was carried on with ſuch expedition, that, the church being almoſt finiſhed, it was conſecrated, and divers ſecular prieſts inſtituted and inſtalled therein. But the monks, having ſucceeded in their application to Rome, obtained a mandate from the pope to diſſolve the new corporation, and raze the edifice; which neither the king nor archbiſhop daring to oppoſe, the arbitrary order was executed accordingly. Pope Urban, the great protector of the monks, dying ſoon after, was ſucceeded by Gregory VIII. a great favourer of Baldwin, who was thereby encouraged to renew his deſign, but in another place; for which end, having obtained of the biſhop and convent of Rocheſter a certain ſpot of ground at Lamhee, Lamhithe, or Lambeth, (where the archiepiſcopal palace is ſituate,) he began to erect a church, and manſions for the canons, about the year 1188, which he did not live to finiſh. This building was completed by his ſucceſſor, Hubert Walter; but the opponents of the meaſure were by no means ſatisfied with the change of ſite, and renewed their application to the court of Rome with ſuch ſucceſs, that, after the convent was built and inhabited, he was

compelled to diſmiſs the monks, and level it with the ground. The deſtruction of this convent took place in 1199. There was, however, a ſubſequent compromiſe between the monks of Canterbury and the archbiſhop, by which it was agreed, that he might build a church at Lambeth, any where except upon the foundation of that which had been deſtroyed by the pope's command; and that he might place a certain number of regular canons in it, and endow it with rents out of ſome of the churches belonging to the ſee of Canterbury; but it was ſtipulated that he ſhould not perform any of the archiepiſcopal functions therein. In conſequence of this agreement, the foundation of his new church was laid by the ſide of his palace.

This church ſtood till the year 1374, about which time it was rebuilt, there being commiſſions ſtill preſerved, dated in that year, and in 1377, for compelling the inhabitants of Lambeth to contribute to the rebuilding of their new church and tower. The tower, which is of free-ſtone, ſtill remains; the other parts of the ſtructure appear to have been built at different times. In its preſent form it conſiſts of a nave, two aiſles, and a chancel; the nave being ſeparated from the aiſles by octagonal pillars and pointed arches. The walls are built of flint, mixed with ſtone and brick; and both the tower and the body of the church are crowned with battlements. It is dedicated to the Virgin Mary, and is a rectory in the gift of the archbiſhop of Canterbury. In the ſouth-eaſt window of the middle aiſle is a painting of a man followed by a dog, which is ſaid to have been put up in compliance with the will of a pedlar, who left a ſmall piece of ground to the pariſh, on condition that a picture of him and his dog ſhould be put up and preſerved in its preſent ſituation. Whether this tradition be true or not, there is a piece of ground on the Surrey ſide of Weſtminſter-bridge, called Pedlar's Acre, which contains about an acre and nine poles, and belongs to Lambeth pariſh. Mr. Lyſons is of opinion, that this tradition originates in a rebus upon the name of the donor, and gives a ſimilar inſtance from the church of Swaffham, in Norfolk, in which there is a portrait of *John Chapman*, a great benefactor to the pariſh, and in different parts of the church the device of a pedlar and his pack. By whatever means Pedlar's Acre became the property of the pariſh, it muſt have happened prior to 1504, when it was let for two ſhillings and eightpence per annum. It is now eſtimated at two hundred and fifty pounds a-year.

In this church were interred the mild and amiable prelates, Tunſtal of Durham, and Thirleby of Ely, who, being deprived of their ſees for their conſcientious attachment to the catholic religion, lived the remainder of their days under the protection, rather than in the cuſtody, of archbiſhop Parker, who revered their virtues, and felt for their misfortunes. The body of Thirleby was found in digging a grave for archbiſhop Cornwallis. His long and venerable beard was in every part entire, and of a beautiful whiteneſs; a ſlouched hat was under his left arm, and his dreſs was that of a pilgrim, as he eſteemed himſelf to be upon earth. In the church-yard is the tomb of the Tradeſcants, founders of the Aſhmolean Muſeum at Oxford. It was ornamented on the ſides with emblematical devices, denoting the extent of their travels, and their attention to natural hiſtory; theſe are nearly defaced; but, in 1773, a new ſlab was placed upon the tomb, and the epitaph engraved upon it, which no naturaliſt ſhould neglect to read. It is as follows:

Know ſtranger, ere thou paſs, beneath this ſtone
Lye John Tradeſcant, grandſire, father, ſon:
The laſt dy'd in his ſpring; the other two
Liv'd till they'd travell'd Art and Nature through,
As by their choice collections may appear,
Of what is rare, in land, in ſea, in air;
Whilſt they (as Homer's Iliad in a nut)
A world of wonders in one cloſet ſhut.
Theſe famous antiquarians, that had been
Both gardeners to the Roſe-and-Lily queen,
Tranſplanted now themſelves, ſleep here; and when
Angels ſhall, with their trumpets, waken men,
And fire ſhall purge the world, theſe hence ſhall riſe,
And change this garden for a paradiſe.

Here are alſo interred Mr. Edward Moore, author of Fables for the Female Sex, the Gameſter, ſeveral comedies and poems; and Thomas Cooke, the tranſlator of Heſiod, Terence, &c. Under the ancient walls of this church, Mary of Eſte, queen of James II. flying with her infant ſon from the ruin impending over her family, took ſhelter from the rain of the inclement night of December 6, 1688; here ſhe waited for an hour, a melancholy ſpectacle of fallen majeſty, until a coach, procured from a neighbouring inn, arrived, and conveyed her to Graveſend, whence ſhe ſailed to France.

After the demolition of the convent in 1199, the ſite of it and the adjacent grounds were granted to the biſhop of Rocheſter, for the purpoſe of building a houſe there for himſelf and his ſucceſſors, who made it their occaſional reſidence until the ſixteenth century, when it came into the hands of Henry VIII. who granted it to the biſhop of Carliſle, and his ſucceſſors, by whom it was leaſed out. This manſion, like Lambeth-palace, was ſold by the regicides, and ſince that time its hiſtory exhibits ſome remarkable viciſſitudes. It was firſt a pottery, then a tavern and common brothel; and was afterwards inhabited by a dancing-maſter, who endeavoured, without ſucceſs, to get it opened as a public place. At preſent it is an academy, and retains the name of Carliſle-houſe. The premiſes are ſtill ſurrounded with part of the ancient walls.

At the angle where the road from Weſtminſter-bridge over St. George's-fields parts into two, one leading to Kennington, and the other to Newington, ſtands the Aſylum for Female Orphans. This charitable foundation was eſtabliſhed in order to preſerve poor friendleſs and deſerted girls, under twelve years of age, from the miſeries and dangers to which they would be expoſed, and from the guilt of proſtitution. Theſe and other conſiderations induced a number of noblemen and gentlemen, who had approved of a propoſal from John Fielding, eſq. one of the juſtices for the liberty of Weſtminſter, to hold a meeting on the tenth of May, 1758, for carrying into execution a plan of this Aſylum. Several other meetings were ſoon after held, in which the rules and orders for the reception and management of the children were eſtabliſhed, and the leaſe of a houſe, formerly the Hercules-inn, agreed for. This houſe was ſoon fitted up and furniſhed, and the firſt children were admitted on the fifth of July following. The objects received are orphans, the daughters of neceſſitous parents, reſiding in pariſhes where they have no relief, and deſerted girls within the bills of mortality, from eight to twelve years of age. They are regularly and alternately employed in reading, knitting, ſowing, and in the buſineſs of the kitchen, to which latter employment four are appointed weekly, to be with the cook, to aſſiſt her, and to receive from her the neceſſary inſtructions in plain cookery, and other employments of the kitchen. They likewiſe make the beds, clean the rooms, aſſiſt in waſhing and ironing the linen, and in other houſehold buſineſs, according to their reſpective ages and abilities, at the diſcretion of the matron.

Nearer to Weſtminſter-bridge, on the north ſide of the road, is a neat brick building, called the Weſtminſter Lying-in Hoſpital, eſtabliſhed in 1765, for the relief of ſuch poor women as are unable to ſupport the expence of procuring proper aſſiſtance at home. This inſtitution not only receives married women, but alſo thoſe who have been ſeduced, and then deſerted to poverty, guilt, and ſhame, leſt, as the founders obſerved, "they may be driven to deſpair by ſuch complicated miſery, and be tempted to deſtroy themſelves, or murder their infants:" but, to obviate all objection to its being an encouragement to vice, no unmarried woman is admitted a ſecond time. This hoſpital was erected, and is ſupported, by voluntary contributions.

In

In this parish are some hamlets and villages of note. That of Vauxhall is about three quarters of a mile north of the church. Tradition ascribes the name of this place to the miscreant Guy Fawkes, who is said to have resided in the manor-house, the site of which is now occupied by Marble Hall and the Cumberland tea-gardens. This tale, however, has no better foundation than the coincidence of names; this manor being mentioned in a record of the twentieth of Edward I. under the denomination of Fawkes-hall. After the manor-house was pulled down, the name appears to have been transferred to one which stood nearly opposite; for, in the survey taken by order of parliament, after the death of Charles I. the latter is called Vauxhall, alias Copped-hall. From this time it went by the name of Vauxhall-house, and was in the hands of various possessors. In 1675, sir Samuel Morland, a man of great eccentricity, and equal ingenuity, made many improvements in the house and gardens. Among his singularities may be noticed a fountain, which he had to play on the side-table of his dining-room, where each drinking-glass stood under a small stream of water; and in his coach was a moveable kitchen, with clock-work machinery, in which he (for he was his own cook when he travelled) could make soup, broil steaks, or roast a joint of meat. The site of these premises is now occupied as a distillery.

Here is an almshouse for seven poor women, founded in 1612, by sir Noel Carron, who was ambassador from Holland to this country. Over the gate is a Latin inscription, importing that it was founded in the thirty-second year of his embassy, "as an insignificant monument of what he owed to the glory of God, in gratitude to the nation, and in munificence to the poor." The present income of these houses is 28l. per annum, payable out of Caron Park, the villa of sir Charles Blicke, (exclusive of a legacy of 1100l. bequeathed to the almspeople, in 1773, by the dowager countess Gower.) These women must be parishioners of Lambeth, and upward of sixty years old. They are allowed to get an addition to their income by the exertions of industry. On the right-hand of the road to Wandsworth is a fine spring, called Vauxhall Well; which, in the hardest winter, is never known to freeze.

Vauxhall Gardens, the most celebrated public gardens in Europe, are situate near the Thames, in the parish of Lambeth. The time when this enchanting place was first opened for the entertainment of the public is not easy to be ascertained. In the reign of queen Anne it appears to have been a place of great public resort; for in the Spectator, No. 383, dated May 20, 1712, Mr. Addison has introduced his favourite character, sir Roger de Coverley, as accompanying him in a voyage from the Temple Stairs to Vauxhall. Long after, we find in the Connoisseur, No. 68, a very humorous description of the behaviour of an old citizen, who, notwithstanding his penurious disposition, had treated his family here with a handsome supper. Mr. Jonathan Tyers, having taken a lease of the premises in 1730, opened Vauxhall (then called Spring Gardens) with an advertisement of a *ridotto al fresco*. The novelty of this term attracted great numbers; and Mr. Tyers was so successful in occasional repetitions of the same entertainments as to be induced to open the gardens every evening during the summer. To this end, he was at a great expence in decorating the gardens with paintings, in which he was assisted by the humorous pencil of Hogarth. He likewise erected an orchestra, engaged a band of music, and placed a fine statue of Handel, by Roubiliac, in a conspicuous part of the gardens.

The season commences about the 4th of June (the king's birth-day), and continues to the end of August. But the gardens are open only three nights in a week, Mondays, Wednesdays, and Fridays. The admission is four shillings.

On entering the great gate, to which you are conducted by a short avenue from the road, the first scene that salutes the eye is a noble gravel-walk, nine hundred feet long, painted on each side with a row of stately elms, which form a fine vista, terminated by the representation of a temple, in which is a transparency, emblematic of gratitude to the public. Advancing a few steps, we behold, to the right, a quadrangle, called The Grove. In the centre is a magnificent Gothic orchestra, ornamented with carvings, niches, &c. The ornaments are plastic, a composition something like plaster of Paris. In fine weather the musical entertainments are performed here by a band of vocal and instrumental performers. At the upper extremity of this orchestra is a fine organ; and, at the foot of it, are the seats and desks for the musicians, placed in a semicircular form, leaving a vacancy at the front for the vocal performers. The concert is opened with instrumental music at eight o'clock, after which the company are entertained with a song; and in this manner other songs are performed, with concertos between each, till the close of the entertainment, which is at eleven.

In the front of a large timber building, which you approach from the middle of the great room, is a painted landscape, called The Day Scene. At the end of the first act this is drawn up, to exhibit an artificial cascade, with a very natural representation of a water-mill, and a bridge, with a mail-coach, a Greenwich long stage, &c. In ten minutes it is down again, and the company return to hear the remaining part of the concert. A glee and catch, in three or four parts, are performed in the middle and at the end of the musical bill of fare, which always consists of sixteen pieces.

In the grove, fronting the orchestra, tables and benches are placed for the company; and still further from the orchestra, is a pavilion built for the late prince of Wales. The ascent is by a double flight of steps. Behind it is a drawing-room; to which is an entrance, from the outside of the gardens, for the admittance of any of the royal family. It has lately been much improved, and ornamented with lustres of uncommon brilliancy. Several thousand variegated lamps have also been added to the colonnades, pavilions, &c. in other parts of the garden, all disposed with the utmost taste and elegance.

In cold or rainy weather the musical performance is in the rotunda, which is seventy feet in diameter, and nearly opposite the grand orchestra. Along the front, next the grove, is a colonnade, formed by a range of pillars, under which is the entrance from the grove. Within this room is the little orchestra. The roof is a dome, slated on the outside, and made to represent a magnificent Persian pavilion, the roof of which is of blue and yellow silk in alternate stripes; it seems to be supported by twenty pillars, representing Roman fasces gilt, and bound together by deep rose-coloured ribbons, with military trophies in the intervals. The sides of the tent being drawn up, and hanging in the form of festoons, the rotunda has the beautiful appearance of a flower-garden; the upper part being painted all round like a sky, and the lower part, above the seats, with shrubs, flowers, and other rural decorations. At the extremity of this rotunda, opposite the orchestra, is a saloon, the entrance of which is formed by columns of the Ionic order, painted in imitation of scagliola. In the roof, which is arched and elliptic, are two little cupolas in a peculiar state; and from the centre of each descends a large glass chandelier. Adjoining to the walls are ten three-quarter columns for the support of the roof; they are of the Ionic order, pointed in imitation of scagliola. Between these columns are four pictures, in magnificent gilt frames, by the masterly pencil of Mr. Hayman. The first represents the surrender of Montreal, in Canada, to general Amherst. On a stone, at one corner of the picture, is this inscription: "*Power exerted, Conquest obtained, Mercy shown!* 1760." The second represents Britannia, holding a medallion of his present majesty, and sitting on the right-hand of Neptune, in his chariot drawn by sea-horses. In the back-ground is the defeat of the French fleet by sir Edward Hawke, in 1759. Round the chariot of Neptune are attendant sea-nymphs, holding medallions of the most distinguished admirals in that glorious war. For that of lord

lord Hawke his lordſhip ſat to the painter. The third repreſents lord Clive receiving the homage of the nabob of Bengal. The fourth repreſents Britannia diſtributing laurels to the principal officers who ſerved in that war; as the marquis of Granby, the earl of Albemarle, general Townſhend, colonels Monckton, Coote, &c. The entrance into this ſaloon, from the gardens, is through a Gothic portal, on each ſide of which, on the inſide, are the pictures of their majeſties, in their coronation robes.

A few years ago, a new room, one hundred feet by forty, was added to the rotunda. It is now opened as a ſupper-room. In a receſs, at the end of it, is the beautiful marble ſtatue of Handel, formerly in the open gardens. He is repreſented, like Orpheus, playing on the lyre. This was the firſt diſplay of the wonderful abilities of Roubiliac. Although not ſo large as the life, it is very like the original, and the excellence of the ſculpture exhibits a model of perfection, both in the deſign and execution.

The grove is bounded by gravel-walks, and a number of pavilions, ornamented with paintings deſigned by Hayman and Hogarth; and each pavilion has a table that will hold ſix or eight perſons. To give a liſt of the paintings in theſe pavilions, we muſt begin with our entrance into the garden. The firſt is on the left hand, under a Gothic piazza and colonnade, formed by a range of pillars, which ſtretch along the front of the great room. It repreſents two Mahometans gazing in aſtoniſhment at the beauties of the place. 2. A ſhepherd playing on his pipe, and decoying a ſhepherdeſs into a wood. 3. New River Head, at Iſlington. 4. Quadrille, and the tea-equipage. 5. Muſic and ſinging. 6. Building houſes with cards. 7. A ſcene in the Mock Doctor. 8. An Archer. 9. Dances round the Maypole. 10. Thread my needle. 11. Flying the kite. 12. Pamela revealing to Mr. B.'s houſekeeper her wiſhes to return home. 13. A ſcene in the Devil to Pay. 14. Shuttlecock. 15. Hunting the whiſtle. 16. Pamela flying from Lady Davers. 17. A ſcene in the Merry Wives of Windſor. 18. A ſea-engagement between the Spaniards and Moors.

The pavilions continue in a ſweep which leads to a beautiful piazza and a colonnade five hundred feet in length, in the form of a ſemicircle, of Gothic architecture, embelliſhed with rays. In this ſemicircle of pavilions are three large ones, called temples; one in the middle, and the other at each end, adorned with a dome; but the two latter are now converted into portals, (one as an entrance into the great room, and the other as a paſſage to view the caſcade,) which are directly oppoſite to each other; the middle temple, however, is ſtill a place for the reception of company, and is painted, in the Chineſe taſte, by Riſquet, with the ſtory of Vulcan catching Mars and Venus in a net. On each ſide of this temple the adjoining pavilion is decorated with a painting; that on the right repreſents the entrance into Vauxhall; and that on the left, Friendſhip on the graſs drinking. The paintings in the other pavilions of this ſweep are landſcapes. Having traverſed this ſemicircle, we come to a ſweep of pavilions that lead into the great walk; the laſt of theſe is a painting of Black-eyed Suſan returning to ſhore.

Coming back to the grove, where we ſhall find the remainder of the boxes and paintings better than thoſe heretofore ſeen, and beginning at the eaſt end, which is behind the orcheſtra, and oppoſite the ſemicircle above-mentioned, the pavilions are decorated with the following pieces: 1. Difficult to pleaſe. 2. Sliding on the ice. 3. Bagpipes and hautboys. 4. A bonfire at Charing Croſs, the Saliſbury ſtage overturned, &c. 5. Blindman's buff. 6. Leap frog. 7. The Wapping landlady, and the Tars juſt come aſhore. 8. Skittles. Proceeding forward, we ſee another range of pavilions, in a different ſtyle, adorned with paintings, and forming another ſide of the quadrangle. Theſe are, 1. The taking of Porto Bello. 2. Mademoiſelle Catherine, the dwarf. 3. Ladies angling. 4. Bird-neſting. 5. The play at bob-cherry. 6. Falſtaff's cowardice detected. 7. The bad family. 8. The good family. 9. The taking of a Spaniſh regiſter-ſhip, in 1742. Near is a ſemicircle of pavilions, with a temple and dome at each end. The remainder of the paintings in this range are, 1. Bird-catching. 2. See-ſaw. 3. Fairies dancing by moonlight. 4. The milk-maid's garland. 5. The kiſs ſtolen. Here ends the boundary of the grove on this ſide; but, turning on the left, we come to a walk that runs along the bottom of the gardens; on each ſide of this walk are pavilions, and thoſe on the left hand are decorated with the following paintings: 1. A prince and princeſs in a traineau. 2. Hot cockles. 3. A gipſy telling fortunes by coffee-cups. 4. A Chriſtmas gambol. 5. Cricket.

On the oppoſite ſide is a row of pavilions; and at the extremity of this walk is another entrance into the gardens immediately from the great road. At the other end of the walk, adjoining to the prince's pavilion, is a ſemicircle of pavilions ornamented with three Gothic temples. From the upper end of this walk, where we concluded the liſt of the paintings, in a narrow viſta that runs to the top of the gardens; this is called the Druid's or Lover's Walk: on both ſides of it are rows of lofty trees, which, meeting at the top, and interchanging their boughs, form a fine verdant canopy. The anti-room runs acroſs one part of this walk.

Returning to the ſpot where once ſtood the ſtatue of Handel, we may, by looking up the garden, behold a noble viſta, which is called the grand ſouth walk, of the ſame ſize as that ſeen at our firſt entrance, and parallel with it. It is terminated by a Gothic temple, which exhibits four illuminated vertical columns in motion, and, in the centre, an artificial fountain; all which is effected by very ingenious machinery. In the centre of the croſs gravel-walk is a temple, the largeſt of the kind in England, built in 1786, by Mr. Smith of Knightſbridge, and brought here in three pieces only, though the diameter is 44 feet, and the dome is ſupported by eight lofty pillars. On the right this walk is terminated by a fine ſtatue of Apollo; and, at the extremity on the left, is a painting of a ſtone-quarry in the vicinity of Briſtol. From our ſituation to view this painting is another gravel-walk that leads up the gardens, formed on the right ſide by a wilderneſs, and on the left by rural downs, as they are termed, in the form of a long ſquare, fenced by a net, with little eminences in it after the manner of a Roman camp. There are likewiſe ſeveral buſhes, from under which, a few years ago, ſubterraneous muſical ſounds were heard, called by ſome the fairy muſic; which put many people in mind of the vocal foreſt, or that imaginary being called the genius of the wood; but, the damp of the earth being found prejudicial to the inſtruments, this romantic entertainment ceaſed. The downs are covered with turf, and interſperſed with cypreſs, fir, yew, cedar, and tulip-trees. On one of the eminences is a ſtatue of Milton, caſt in lead by Roubiliac, but painted of a ſtone-colour. He is ſeated on a rock, liſtening to the ſubterraneous harmony. Moſt of the walks form the boundaries of wilderneſſes, compoſed of trees which ſhoot to a great height, and are all incloſed by a rude but ſuitable fence, ſomewhat in the Chineſe taſte. A few years ago, a colonnade, which forms a ſquare, was erected in the walks round the orcheſtra. It coſt 2000l. the expence of which was defrayed by a ridotto al freſco. The roof, &c. are richly illuminated. It has lately been much widened.

In a dark night the illuminations are very beautiful, and cannot fail to pleaſe every ſuſceptible ſpectator; but in a moonlight night there is ſomething which ſo ſtrongly affects the imagination, that any one who has read the Arabian Nights' Entertainment can hardly fail to recollect the magic repreſentations in that book. When the concert is finiſhed in the orcheſtra, a grand diſplay of fireworks is exhibited. The company afterwards retire to ſupper in the pavilions; and, to induce them to ſit the longer, a party of pandean minſtrels, and the duke of York's band, contribute alternately, by their muſical performances, to enliven and harmonize the ſcene. More

than 11,000 perſons have been aſſembled in theſe gardens at once; and of theſe, not leſs than 7000 were accommodated with proviſions and refreſhments.

Beſides the covered walks, all paved with compoſition, almoſt all the pavilions have colonnades in front, ſeven feet broad, which effectually ſhelter them from rain; and there is a handſome waiting-room, thirty feet by twenty, near the coach-entrance into the gardens.

About the end of the ſeventeenth century, a manufacture of plate-glaſs was eſtabliſhed at Vauxhall, under the patronage of the duke of Buckingham; the principal artiſt was Roſſetti. It was carried on with great ſucceſs, and the glaſs was thought to excel that made at Venice. The importation of foreign timber, which for many years has formed a conſiderable and important branch of our commerce, has been a ſource of wealth to this pariſh, where are ſeveral wharfs for that trade, ſupplied with ſtores which are almoſt incredible. At Vauxhall are ſome very large diſtilleries, and ſeveral potteries; the manufacture of ſtone and earthenware pots is ſaid to have been firſt introduced here from Holland.

Cuper's Gardens were, in 1636, the gardens of the manſion of Thomas Howard, earl of Arundel. The premiſes were afterwards rented by one Cuper, who had been the earl's gardener, and from him they obtained their name. About the middle of the laſt century, they were much reſorted to as a place of public entertainment, where muſic, fireworks, &c. were exhibited. Here were ſeveral ſtatues, and other remains of Greek and Roman antiquities, part of the famous collection of the earl of Arundel, which, being mutilated and defaced, were not thought good enough to be preſented to the univerſity of Oxford, and put among the Marmora Arundeliana. Part of theſe were afterwards removed to Chiſwick-houſe, by the earl of Burlington. On the ſite of theſe gardens were erected Meſſrs. Beaufoy's extenſive vinegar-works. Mr. Pennant, who went over the premiſes, mentions a veſſel full of ſweet wine, containing 58,109 gallons, and another full of vinegar containing 56,799 gallons; beſides theſe enormous veſſels, there are ſeveral others which contain from 32,500 to 16,974 gallons each. At this place a bridge is building, which will terminate near Somerſet-houſe in the Strand: the firſt ſtone was laid Oct. 11, 1811.

In the year 1769, Mrs. Coade eſtabliſhed in this pariſh, near Weſtminſter-bridge, a manufacture of artificial ſtone, which is caſt in moulds and burnt. It is intended to anſwer the purpoſe of ſtone, for every ſpecies of ornamental architecture, at a much cheaper rate than carved ſtone. Where it has been placed in expoſed ſituations, it has been found to endure the froſt.

Meſſrs. Watts have lately eſtabliſhed a manufacture of patent-ſhot in this pariſh. The principle of making this ſhot is, to let it fall from a great height into the water, that it may cool and harden in its paſſage through the air, and thereby better retain its ſpherical ſhape. The height of the tower at this manufactory is about 140 feet; the ſhot falls 123 feet 6 inches. About the ſame time Meſſrs. Bolton, Morgans, and Co. eſtabliſhed a manufactory here under the title of the Woollen-yarn Company; every branch of the clothing-manufacture, from ſorting the wool to making the cloth, was carried on entirely by machinery; but the undertaking was ſoon given up.

About a century ago, there was a place of entertainment called Lambeth Wells, ſituated in what is now called Lambeth Walk. A riding-ſchool, for the exhibition of feats of horſemanſhip, was opened in this pariſh about the year 1768, by Mr. Philip Aſtley. At firſt it was an open area; in 1780 it was converted into a covered amphitheatre, and divided into boxes, pit, and gallery. It has been twice burnt down.

South Lambeth, between Vauxhall and Stockwell, is a pleaſant and populous village, extending three quarters of a mile ſouthward from Vauxhall turnpike into the Clapham road; and ſo long ago as the year 1600 was thought ſo agreeable a ſituation, by ſir Noel Caron, (who was for thirty-three years ambaſſador to this country from the United Provinces,) that he erected here a handſome manſion with two wings. On the front was written, *Omne ſolum forti patria.* What remains of it is an academy, called Caron Houſe; and on a ſpot, which was part of his park, is the handſome villa of ſir Charles Blicke. Oppoſite to this is a new chapel of eaſe, built by a ſubſcription of the inhabitants.

Stockwell is alſo a village in the pariſh of Lambeth. Here is a neat chapel of eaſe, to which archbiſhop Secker contributed five hundred pounds. On the ſite of the ancient manor-houſe, a handſome villa was erected by the late Bryant Barret, eſq. one of the proprietors of Vauxhall Gardens, and is now occupied by his widow. Part of the ancient offices are ſtill ſtanding; but Mr. Lyſons ſays, that the tradition of its having been the property of Thomas Cromwell, earl of Eſſex, is without foundation, as, in his time, it belonged to ſir John Leigh, the younger. The manor anciently bore the name of South Lambeth, when it probably comprehended Stockwell, South Lambeth, and Vauxhall. Between thirty and forty years ago, Stockwell was famous for a ſingular impoſition upon the human underſtanding, practiſed in the houſe of a Mrs. Golding, which was reported to be haunted. Multitudes of people of all ranks went to witneſs the tricks of "the ghoſt," who cauſed the furniture to dance about the room in a ſurpriſing manner. The author of this impoſture was never detected; but ſome years ago, after the death of Mrs. Golding and her daughter, there was an auction on the premiſes, when the dancing furniture was ſold at very extravagant prices.

In this pariſh is alſo the manor of KENNINGTON, which ſee, vol. xi. p. 669.

As a concluding remark upon Lambeth, it may be obſerved, that Cuper's Gardens, the Apollo Gardens, the Dog and Duck, the Temple of Flora, the Perpetual Oven, the Thatched Houſe, as well as the Bear-Gardens, and other places in this neighbourhood, formerly the reſort of the gay and the vicious, are now ſcarcely remembered; and the Philanthropic Reform, the Free-Maſon's Charity-School, the Magdalen, the School for the Indigent Blind, the Surrey Inſtitution, the intended Hoſpital for Lunatics, the Aſylum for Female Orphans, the School for the Deaf and Dumb, and the Widows' Alms-houſes, near Hangman's Acre, may now be reckoned among the more uſeful and recent erections. The alms-houſes have been, within theſe few weeks, opened for the uſe of twenty-four aged widows; and a diſcourſe delivered on the occaſion to near three thouſand perſons, by the Rev. Rowland Hill, in the open air. *Monthly Mag. Britiſh Directory. Ambulator. Lambert's Hiſt. of London.*

LAM'BIN (Dennis), an eminent critic, was born in 1516 at Montreuil-ſur-mer. He applied with great aſſiduity to the ſtudy of the belles-lettres, of which he became a profeſſor at Amiens. He reſided long in Italy with the cardinal de Tournon, and upon his return to Paris obtained the Greek profeſſorſhip in the royal college. This poſt he occupied till his death, in 1572, which was owing to the ſhock he received from the news of the murder of his friend Ramus in the maſſacre of St. Bartholomew. Lambin acquired a great name among the learned by his commentaries on Lucretius, Cicero, Plautus, and Horace; of which the latter have obtained moſt applauſe. Mr. Wakefield, in the preface to his edition of Lucretius, ſpeaks of Lambinus as having merited well of this author; but, at the ſame time, he affirms that he knows no critic who has with ſo much temerity vitiated the text of a writer by inſerting his own conjectural readings, in defiance of the authority of all the manuſcripts. A ſimilar character has been given of his corrections of Cicero. He was, however, a man of profound erudition, and great induſtry. He tranſlated from Greek into Latin the Ethics and Politics of Ariſtotle, and various orations of Demoſthenes and Æſchines. By his wife, of the family of the Urſini, he had a ſon, who was alſo a man of learning, and preceptor to Arnauld d'Andilly. *Moreri.*

LAM'BING, *ſ.* The act of bringing forth lambs.

LAMBI'TION, *ſ.* [*lambo*, Lat. to lick.] The act of licking. *Bailey.*

LAM'BITIVE. See LAMBATIVE.

LAM'BKIN, *ſ.* A little lamb:

Clean as young *lambkins*, or the gooſe's down,
And like the goldfinch in her Sunday gown. *Gay.*

LAM'BOURNE (Upper and Lower), a market-town in Berkſhire, near the borders of Wilts, fifty-ſeven miles from London. It has its name from its little river which runs into the Kennet, and is remarkable for being high in the ſummer and low in the winter. Its market is on Friday; and fairs May 1, Whit-Monday, September 21, and Nov. 23. On Oct. 16, 1782, a fire broke out here, which did 9000l. damage.

LAM'BOURNE, a village in Eſſex, between Waltham-abbey and Rumford. The manor is held by the ſervice of the ward-ſtaff, viz. to carry a load of ſtraw in a cart with ſix horſes, two ropes, and two men in harneſs, to watch the ſaid ward-ſtaff, when it is brought to the neighbouring hamlet of Abridge.

LAM'BRA, a town of European Turkey, in Livadia: fourteen miles ſouth-ſouth-eaſt of Athens.

LAM'BRES, a town of France, in the department of the Straits of Calais: one mile ſouth of Aire.

LAM'BRO, a river of Italy, which riſes about ſeven miles north-eaſt from Como, and runs into the Po about five miles above Piacenza.

LAM'BSDORFF, a town of Sileſia, in the principality of Neiſſe: nine miles north-eaſt of Neiſſe.

LAM'BSHEIM, a town of France, in the department of Mont Tonnerre: eight miles weſt of Manheim, and eleven ſouth of Worms.

LAM'CAE, a town of Pegu, on an iſland in the Ava: fifty-ſix miles north-eaſt of Perſaim.

LAME, *adj.* [laam, lama, Saxon; *lam*, Dutch.] Crippled; diſabled in the limbs.—A greyhound, of a mouſe-colour, *lame* of one leg, belongs to a lady. *Arbuthnot and Pope.*—Hobbling; not ſmooth: alluding to the feet of a verſe:

Whether in proſe, or verſe, 'tis all the ſame;
The proſe is fuſtian, and the numbers *lame.* *Dryden.*

Imperfect; unſatisfactory.—Shrubs are formed into ſundry ſhapes, by moulding them within, and cutting them without; but they are but *lame* things, being too ſmall to keep figure. *Bacon.*

Swift, who could neither fly nor hide,
Came ſneaking to the chariot ſide;
And offer'd many a *lame* excuſe:
He never meant the leaſt abuſe. *Swift.*

To LAME, *v. a.* To make lame; to cripple.—If you happen to let the child fall, and *lame* it, never confeſs. *Swift.*

The ſon and heir
Affronted once a cock of noble kind,
And either *lam'd* his legs, or ſtruck him blind. *Dryden.*

LAME, a river of Weſtphalia, which runs into the Innerſee ſeven miles ſouth-eaſt of Hildeſheim.

LA'MECH, the ſon of Methuſael, of the race of Cain, the fifth in deſcent from him, and the father of Jabel, Jubal, Tubalcain, and Naamah. He married two wives, Adah and Zillah, and is ſuppoſed to have introduced polygamy. To his wives he ſaid, *Hear my voice, ye wives of Lamech; for I have ſlain a man to my wounding, and a young man to my hurt: if Cain ſhall be avenged ſeven-fold, ſurely Lamech ſeventy and ſeven fold.* Gen. iv. 24, 25. Theſe words have perplexed biblical critics. Some interpretations have been given of this paſſage, which muſt be conſidered as founded on mere fables, and are not worthy of recital. Onkelos, who wrote the firſt Chaldee paraphraſe on the Pentateuch, reads the words with an interrogation: "Have I ſlain a man to my wounding, and a young man to my hurt?" and accordingly he paraphraſes it thus: "I have not killed a man, that I ſhould bear the ſin of it; nor have I deſtroyed a young man, that my offspring ſhould be cut off for it." Dr. Shuckford has improved this interpretation, by ſuppoſing that Lamech was endeavouring to reaſon his wives and family out of their fear of having the death of Abel revenged upon them, who were of the poſterity of Cain. As if he had ſaid, "What have we done, that we ſhould be afraid? We have not killed a man, nor offered any injury to our brethren of any other family; and, if God would not allow Cain to be killed, who had murdered his brother, but threatened to take ſeven-fold vengeance on any that ſhould kill him; doubtleſs they muſt expect much greater puniſhment who ſhould preſume to kill any of us. Therefore we may ſurely look upon ourſelves as ſafe under the protection of the law, and of the providence of God."

LA'MECH was alſo the ſon of Methuſelah, and father of Noah; at whoſe birth he was 182 years of age; and he lived after it 595 years, ſo that his whole life was 777 years, being born A. M. 874, and dying 1651.

LAMED, *ſ.* The name of the twelfth Hebrew letter: ל.

LAM'EGAL, a town of Portugal, in the province of Beira: nine miles north-weſt of Pinhel, and eighteen north of Guarda.

LAME'GO, a city of Portugal, in the province of Beira, the ſee of a biſhop, ſuffragan of Braga, ſituated in a plain near the Duero, ſurrounded with mountains. It contains two cathedral churches, an hoſpital, four convents, and about 4500 inhabitants. In this town the ſtates aſſembled to confirm the election of Alphonſo Henriques, firſt king of Portugal; and enacted the fundamental laws, now forgotten. The country about it produces excellent wine: thirty-ſix miles eaſt of Porto, and ſeventy-two north-north-eaſt of Coimbra. Lat. 41. 7. N. lon. 7. 27. W.

LAM'ELAN, an iſland in the Baltic, near the ſouth-eaſt coaſt of the iſland of Aland: eight miles long, and four wide. Lat. 60. 5. N. lon. 37. 45. E.

LAMEL'LA, *ſ.* [Latin.] A little thin plate.

LAM'ELLATED, *adj.* [*lamella*, Lat.] Covered with films or plates.—The *lamellated* antennæ of ſome inſects are ſurpriſingly beautiful when viewed through a microſcope. *Derham.*

LA'MELY, *adv.* [from *lame.*] Like a cripple; without natural force or activity.—Thoſe muſcles become callous, and, having yielded to the extenſion, the patient makes ſhift to go upon it, though *lamely. Wiſeman's Surgery.*—Imperfectly; without a full or complete exhibition of all the parts:

Look not ev'ry lineament to ſee:
Some will be caſt in ſhades, and ſome will be
So *lamely* drawn, you ſcarcely know 'tis ſhe. *Dryden.*

Weakly; unſteadily; poorly.

LA'MENESS, *ſ.* The ſtate of a cripple; loſs or inability of limbs.—*Lameneſs* kept me at home. *Digby to Pope.*

Let blindneſs, *lameneſs*, come; are legs and eyes
Of equal value to ſo great a prize? *Dryden.*

Imperfection; weakneſs.—If the ſtory move, or the actor help the *lameneſs* of it with his performance, either of theſe are ſufficient to effect a preſent liking. *Dryden.*

To LAMEN'T, *v. n.* [*lamentor*, Lat. *lamenter*, Fr.] To mourn; to wail; to grieve; to expreſs ſorrow.—Jeremiah *lamented* for Joſiah, and all the ſinging men and women ſpake of Joſiah in their lamentations. 2 *Chronicles.*

Far leſs I now *lament* for one whole world
Of wicked ſons deſtroy'd, than I rejoice.
For one man found ſo perfect and ſo juſt,
That God vouchſafes to raiſe another world
From him. *Milton.*

To LAMEN'T, *v. a.* To bewail; to mourn; to bemoan; to expreſs ſorrow for:

One pity'd, one contemn'd, the woful times,
One laugh'd at follies, one *lamented* crimes. *Dryden.*

LAMEN'T,

LAMEN'T, *f.* [*lamentum*, Lat.] Sorrow audibly expreſſed; lamentation; grief uttered in complaints or cries:

We, long ere our approaching, heard within
Noiſe, other than the ſound of dance, or ſong!
Torment, and loud *lament*, and furious rage. *Milton.*

Expreſſion of ſorrow:

To add to your *laments*,
Wherewith you now bedew king Henry's hearſe,
I muſt inform you of a diſmal fight. *Shakeſpeare.*

LAM'ENTABLE, *adj.* To be lamented; cauſing ſorrow:

The *lamentable* change is from the beſt;
The worſt returns to laughter. *Shakeſpeare.*

Mournful; ſorrowful; expreſſing ſorrow.—A *lamentable* tune is the ſweeteſt muſic to a woful mind. *Sidney.*

The victors to their veſſels bear the prize,
And hear behind loud groans, and *lamentable* cries. *Dryd.*

Miſerable, in a ludicrous or low ſenſe; pitiful; deſpicable.—This biſhop, to make out the diſparity between the heathens and them, flies to this *lamentable* refuge. *Stillingfleet.*

LAM'ENTABLENESS, *f.* The ſtate of being lamentable. *Scott.*

LAM'ENTABLY, *adv.* With expreſſions or tokens of ſorrow; mournfully.—The matter in itſelf lamentable, *lamentably* expreſſed by the old prince, greatly moved the two princes to compaſſion. *Sidney.*—So as to cauſe ſorrow:

Our fortune on the ſea is out of breath,
And ſinks moſt *lamentably*. *Shakeſpeare.*

Pitifully; deſpicably.

LAMENTA'TION, *f.* Expreſſion of ſorrow; audible grief.—His ſons buried him, and all Iſrael made great *lamentations* for him. 1 *Maccabees.*

Be't lawful that I invocate thy ghoſt,
To hear the *lamentations* of poor Anne. *Shakeſpeare.*

LAMENTA'TIONS, a canonical book of the Old Teſtament, written by the prophet Jeremiah, according to archbiſhop Uſher and ſome other learned men, (who follow the opinion of Joſephus and St. Jerome,) on occaſion of Joſiah's death. But this opinion does not ſeem to agree with the ſubject of the book, the lamentation compoſed by Jeremiah on *that* occaſion being probably loſt. The fifty-ſecond chapter of the book of Jeremiah was probably added by Ezra, as a preface or introduction to the Lamentations: the two firſt chapters are employed in deſcribing the calamities of the ſiege of Jeruſalem; in the third the author deplores the perſecutions he himſelf had ſuffered; the fourth treats of the deſolation of the city and temple, and the misfortunes of Zedekiah; the fifth chapter is a prayer for the Jews in their diſperſion and captivity; and at the cloſe of all he ſpeaks of the cruelty of the Edomites, who had inſulted Jeruſalem in her miſery. All the chapters of this book, except the laſt, are in metre, and digeſted in the order of the alphabet; with this difference, that, in the firſt, ſecond, and fourth, chapters, the firſt letter of every verſe follows the order of the alphabet; but in the third the ſame initial letter is continued for three verſes together. This order was probably adopted, that the book might be more eaſily learnt and retained. The ſubject of this book is of the moſt moving kind; and the ſtyle throughout lively, pathetic, and affecting.

LAMEN'TER, *f.* He who mourns or laments.—Such a complaint good company muſt pity, whether they think the *lamenter* ill or not. *Spectator.*

LAMENTIN', a town of the iſland of Martinico, on the weſt coaſt. Lat. 14. 36. N. lon. 60. 57. W.

LAMEN'TING, *f.* The act of expreſſing grief; a lamentation.

LAM'ENTUNG, a town of Thibet: twenty-five miles eaſt of Jhanſi Jeung.

LA'MER, a village in Hertfordſhire, on the north ſide of the river Lea, in the pariſh of Wheat-Hampſted. Its church, thought to be the oldeſt in the county, is built like a cathedral; and the rood ſeems to be left in it ſtill, which ſerves for the clerk's deſk.

LAM'ERTON, or LAM'BERTON, a village in Devonſhire, two miles from Taviſtock. In its church are the effigies of Nicholas and Andrew Tremaine, twins, who were not only ſo like as ſcarcely to be diſtinguiſhed, but ſuffered the ſame pain, and had the ſame appetites, though at a diſtance, at the ſame time; and were killed together at Newhaven in France, in 1663.

LA'MESLEY, a townſhip of England, in the county of Durham, with 1705 inhabitants: ten miles north of Durham.

LA'METUK, a town of the ſtate of New Jerſey: fifteen miles north-weſt of New Brunſwick.

LAMETOU'NAH, a town of Africa, in Sahara, about ſeven days' journey ſouth of Tripoli.

LAMGAR'BEN, a town of Pruſſia, in Bartenland: ſix miles north-north-weſt of Raſtenburg.

LAM'GI, a petty kingdom of Aſia, lying to the weſt of Nipal or Napaul.

LA'MI (John), a celebrated Italian philologer of the eighteenth century, occupied the chair of eccleſiaſtical hiſtory at Florence, and was keeper of the Ricardi library. He was a man of ſingularity in his tone of converſation and mode of life, well furniſhed with literary anecdote of all kinds, and capable of keen obſervations. It was he who, once ſhowing to ſome Swediſh gentlemen the old Medici palace, ſeparated only by the ſtreet from the Jeſuits' college, ſaid to them, "*This* was the cradle of letters, and *this* (turning to the college) is their grave." His treatiſe, *De recta Chriſtianorum circa Trinitatem ſententia*, brought upon him ſome attacks in point of orthodoxy from the Jeſuits. Theſe he repelled in a work *De eruditione Apoſtolorum*, 1758. He gave an edition of the Works of Meurſius, Flor. 1741, 12 vols. folio. He was for ſeveral years the publiſher of a literary journal at Florence; and died, at a very advanced age, about the year 1765.

LA'MIA, the moſt celebrated female flute-player in antiquity. Her beauty, wit, and abilities in her profeſſion, made her regarded as a prodigy. The honours ſhe received, which are recorded by ſeveral authors, particularly by Plutarch and Athenæus, are ſufficient teſtimonies of her great power over the paſſions of her hearers. Her claim to admiration from her perſonal allurements does not entirely depend, at preſent, upon the fidelity of hiſtorians; ſince an exquiſite engraving of her head, upon an amethyſt, with the veil and bandage of her profeſſion, is preſerved in the late king of France's collection, which, in ſome meaſure, authenticates the account of her beauty. As ſhe was a great traveller, her reputation ſoon became very extenſive. Her firſt journey from Athens, the place of her birth, was into Egypt, whither ſhe was drawn by the fame of the flute-players of that country. Her perſon and performance were not long unnoticed at the court of Alexandria; however, in the conflict between Ptolemy Soter and Demetrius, for the iſland of Cyprus, about 312 years B. C. Ptolemy being defeated in a ſea-engagement, his wives, domeſtics, and military ſtores, fell into the hands of Demetrius. Plutarch, in his life of this prince, tells us, that "the celebrated Lamia was among the female captives taken in this victory. She had been univerſally admired, at firſt, on account of her talents, for ſhe was a wonderful performer on the flute; but, afterwards, her fortune became more ſplendid by the charms of her perſon, which procured her many admirers of great rank." The prince whoſe captive ſhe became, and who, though a ſucceſsful warrior, was ſaid to have vanquiſhed as many hearts as cities, conceived ſo violent a paſſion for Lamia, that, from

from a ſovereign and a conqueror, he was inſtantly tranſformed into a ſlave; though her beauty was now on the decline, and Demetrius, the handſomeſt prince of his time, was much younger than herſelf. At her inſtigation, he conferred ſuch extraordinary benefits upon the Athenians, that they rendered him divine honours; and, as an acknowledgment of the influence, which ſhe had exerciſed in their favour, they dedicated a temple to her, under the name of *Venus Lamia*.

LA'MIA, in ancient geography, a town of the Phthiotis, a diſtrict of Theſſaly. Famous for giving name to the *Bellum Lamiacum*, waged by the Greeks on the Macedonians after Alexander's death. See the article GREECE, vol. viii. p. 949.

LA'MIÆ, a ſort of demons who had their exiſtence in the imaginations of the heathens, and were ſuppoſed to devour children. Their form was human, reſembling beautiful women. Horace makes mention of them in his Art of Poetry. The name, according to ſome, is derived from *lanio*, to tear; or, according to others, is a corruption of a Hebrew word ſignifying to devour. Dr. Bryant ſays, they were prieſts of Ham, called El Ham; hence *'Lamus* and *'Lamia*. Their chief city, perhaps Tauromenium, is mentioned by Homer (Od. K.) as the city of Lamus, and the inhabitants as of the giant race. They were Amonians, and came originally from Babylonia. The Lamiæ were to be found not only in Italy and Sicily, but in Greece, Pontus, and Libya. However widely they may have been ſeparated, they are ſtill repreſented in the ſame unfavourable light. Formiæ was one of their principal places in Italy; (Horace, lib. iii. Ode 17.) The chief temple of the Formians was upon the ſea-coaſt at Caiete; it ſtood near a cavern, ſacred to the god Ait, called Ate, and Atis, and Attis: and it was hence called Caieta, and Caiatta. There were in the rock ſome wonderful caves, which branched out into various apartments. Here the ancient Lamii, the prieſts of Ham, reſided. They undoubtedly ſacrificed children here: and probably the ſame cuſtom was common among the Lamii as among the Lacedæmonians, who uſed to whip their children round the altar of Diana Orthia. Fulgentius and others aſſure us, that the ancient Latines called the whipping of children caiatio. *Caiat* ſignified a kind of whip, or thong; probably ſuch was uſed at Caiate.

LAMIA'RES, a town of Portugal, in the province of Beira: ſix miles ſouth-ſouth-eaſt of Lamego.

LAM'INA, *ſ.* [Latin.] Thin plate; one coat laid over another.

LAM'INATED, *adj.* Plated: uſed of ſuch bodies whoſe contexture diſcovers ſuch a diſpoſition as that of plates lying over one another.—From the appoſition of different-coloured gravel ariſes, for the moſt part, the *laminated* appearance of a ſtone. *Sharp.*

LAMINA'TION, *ſ.* [from *lamina*.] The act of beating into thin plates; the ſtate of being laid as thin plates one over another. *Scott.*

LA'MING, *ſ.* The act of making lame.

LAMIN'IUM, in ancient geography, a town of the Carpatani in the Hither Spain; at the diſtance of ſeven miles from the head of the Anas or Guadiana: now *Montiel*, a citadel of New Caſtile; and the territory called *Ager Laminitanus*, is now *el Campo de Montiel*.

LAMI'RAS, a famous poet and muſician of Thrace, who, according to ſome authors, was the inventor of the Dorian mode. He lived before Homer, and is ſaid to have been the firſt muſician who united the voice to the ſound of the cithara.

LAMI'SA, a town of the principality of Georgia, in the province of Carduel: ſixty miles weſt of Teflis.

LAMIS'SA, *ſ.* A female who officiates as prieſt in Hindoſtan.

LAMIS'SA TUCEPA'MO, or the Great Regeneratreſs, in Hindoo mythology. Her ſeat is on an iſland in the lake Paltoo, by the natives called Jumdro, or Jangoo.

LA'MITZ (Kirch), a town of Germany, in the principality of Culmbach: eighteen miles north-north-eaſt of Bayreuth, and nine ſouth of Hof.

LA'MITZ (Martin), a town of Germany, in the principality of Culmbach: three miles north-north-eaſt of Kirch Lamitz.

LA'MIUM, *ſ.* [qu. *lamia larvata*, Linn. the flowers being ſhaped like a maſk; or from *lama*, a ſlough.] ARCHANGEL and DEAD NETTLE; in botany, a genus of the claſs didynamia, order gymnoſpermia, natural order of verticillatæ, (labiatæ, *Juſſ.*) The generic characters are—Calyx: perianthium one-leafed, tubular, wider above, five-toothed, awned, nearly equal, permanent. Corolla: one-petalled, ringent; tube cylindric, very ſhort; border gaping; throat inflated, compreſſed, gibbous, marked on each edge with a reflex toothlet. Upper lip arched, roundiſh, obtuſe, entire; lower lip ſhorter, obcordate, emarginate, reflex. Stamina: filaments four, awl-ſhaped, covered beneath the upper lip, two of them longer; antheræ oblong, hairy. Piſtillum: germ four-cleft; ſtyle filiform, length and ſituation of the ſtamens; ſtigma two-cleft, ſharp. Pericarpium: none; calyx open, and bearing in its boſom the ſeeds, which are flat at top. Seeds: four, ſhort, three-ſided, convex on one ſide, truncated on both ſides.—*Eſſential Character.* Corolla upper lip entire, vaulted; lower two lobed; throat with a reflex toothlet on each ſide.

Species. 1. Lamium orvala, or baum-leaved archangel: leaves cordate, unequally and ſharply ſerrate; corollas inflated at the throat; calyx coloured. Root perennial; ſtem from half a yard to almoſt a yard in height, hiſpid, branched, hollow, upright, frequently tinged with red towards the bottom. Leaves petioled, acuminate, veined, often red underneath, ſmooth and ſhining above. Whorls diſtant, from ſix to twelve or fourteen flowered. Corolla an inch long, of a deep red colour. The ſmell of the plant is very ſtrong and unpleaſant; but the ſize and brilliant colour of the flowers have ſecured it a place in the garden, which no other ſpecies of this genus has a claim to. Native of Italy, Sileſia, Hungary. Cultivated in 1629, according to Parkinſon, who names it Hungary dead-nettle, or dragon-flower.

β. Orvala garganica is a mere variety of this, owing its apparent difference to having grown in a moiſt ſhady place.

2. Lamium lævigatum, or ſmooth archangel: leaves cordate, wrinkled; ſtem even; calyxes ſmooth, the length of the tube of the corolla. Stems purple, a foot high and more, almoſt upright, brittle, little if at all hirſute, branched. Linnæus obſerves, that the calyx reſembles that of the preceding. Native of Italy, Sileſia, and Siberia.

3. Lamium rugoſum, or wrinkled archangel: leaves cordate, acute, wrinkled, hairy with the ſtem, whorls many-flowered; a ſingle briſtle-ſhaped tooth at the throat. This plant is about a foot high. The flowers are larger than thoſe of the common ſort, and of a deep roſe-colour. Sometimes in cold ſituations it produces curled leaves, round like thoſe of the lime-tree. Native of Italy.

4. Lamium garganicum, or woolly archangel: leaves cordate, pubeſcent; throat of the corolla inflated; tube ſtraight, a double tooth on each ſide. Flowers in whorls from the upper joints, large, of a pale purpliſh colour, continuing in ſucceſſion moſt part of the ſummer. Loureiro deſcribes the ſtem as perennial, upright, and three or four feet high; the leaves as unequally notched; the flowers as white-purple, in whorled ſpikes, with the upper lip entire, and the lower two-lobed. Native of Italy, Sileſia, China, Cochin-china, and Japan.

5. Lamium maculatum, or ſpotted archangel: leaves cordate, acuminate; whorls ten-flowered. This is very nearly allied to the next; but differs from it in having a purple corolla, the leaves marked with a longitudinal white area, which however diſappears in ſummer; the petioles not widened; flowers five on each ſide, not ten; two teeth on each ſide of the throat, the upper one briſtle-ſhaped. Villars remarks, that the leaves vary much in their ſize and manner of notching, and that they are not always acuminate, but even blunt; the calyx alſo varies,

being ſometimes ſmooth, ſometimes villoſe. He even doubts whether this, the orvala, and lævigatum, be diſtinct ſpecies. Native of Germany, Sileſia, Dauphiné, and Italy.

6. Lamium album, common white archangel, or dead nettle: leaves cordate, acuminate, ſerrate, petioled; whorls twenty-flowered. Root perennial, white, jointed, creeping. Stems numerous, a foot high, upright, unbranched, ſlender at bottom, hollow, ſlightly hairy; ſometimes almoſt ſmooth; in expoſed ſituations reddiſh purple; the young ſhoots weak and aſcending. Leaves reſembling thoſe of the great ſtinging-nettle, unequally ſerrate; the tips of the little teeth red, and turned inwards, ſomewhat hirſute on both ſides; the uppermoſt frequently coloured; thoſe about the root often ſmall, round, and crenated. Flowers in whorls, from ten to twenty together, yellowiſh white, ſometimes tinged with red. It is common in hedges, on banks, and by road-ſides, and in corn-fields; flowering in April and May, when it is much reſorted to by bees, for the honey ſecreted into the bottom of the tube by the gland that ſurrounds the baſe of the germ. Hence it is called in ſome counties *bee-nettle*, which is corrupted into *bean nettle*. It has alſo the name of *dea-nettle*, which is only a corruption of *dead-nettle*; and that, as alſo *blind-nettle*, means a nettle without ſtings. This plant has a diſagreeable ſmell when bruiſed. Linnæus ſays, the leaves are eaten in Sweden as a pot-herb in the ſpring. No cattle, however, ſeem to touch it; and, having a ſtrong creeping perennial root, it ſhould be extirpated, which is not difficult. The flowers have been celebrated in uterine fluors, and alſo in diſorders of the lungs. The bruiſed leaves have been recommended to diſcuſs tumours. But it is diſcarded from modern practice.

7. Lamium bifidum, or bifid archangel: leaves cordate, acuminate; upper lip of the corolla bifid; ſegments divaricated. Stems a foot or eighteen inches high, procumbent, tinged with red at bottom, and branched there; branches oppoſite, divaricating; middle ſtem higher than the reſt, about one-fourth of its height has a pair of leaves with two barren calyxes, at the top three or four whorls. Leaves petioled, crenate, the notches after the fourth or fifth more deeply cut, lengthened out at the end, but blunt, ſlightly hirſute on the ſurface. Flowers in the upper whorls two together, almoſt an inch long, reſembling thoſe of the preceding in every thing except in the upper lip, which is divided into two revolute divaricate ſegments; the colour is white. The root-leaves are cordate, blunt, and petioled. It flowers in February and March, is an annual plant, and a native of Italy near Naples, ſeveral places on the coaſt of Tuſcany, and in the iſland of Elba. It may perhaps be a hybridous plant produced from the preceding and ſucceeding ſpecies.

8. Lamium purpureum, or purple archangel: leaves cordate, blunt, petioled. Root annual, fibrous. Stems ſeveral, at bottom weak and branched, near the top almoſt naked, and frequently coloured, ſix inches or more in height, hollow, and ſomewhat rugged. Leaves veiny, ſlightly hairy or downy, but not rough; the lower roundiſh-heart-ſhaped, notched, ſmaller, on longer petioles; the upper ovate-heart-ſhaped, bluntly ſerrate, on ſhort petioles, growing cloſe together, bent back and lying over each other, often of a reddiſh colour, eſpecially at the ends. Flowers growing thickly together on the tops of the ſtalks in whorls, ſix together in a double row: corolla red, the lower border of the throat whitiſh with purple ſteaks; bright red in open ſituations, pale in the ſhade, and ſometimes white: edge of the throat on each ſide furniſhed with two teeth, the uppermoſt pointed like a thorn, the lowermoſt blunted with a ſpot on it; the upper lip ovate, concave, ſlightly villoſe, entire; the under two-lobed, ſpreading a little, and ſpotted. Seeds pale-brown, triangular, truncate, margined. This as well as the white dead-nettle is common in moſt parts of Europe, in the ſame ſituations, and is a common weed in gardens and other cultivated land; flowering a great part of the year, from April to September, and in mild ſeaſons both earlier and later. Bees reſort alſo to this for the honey-juice in the flowers; according to Linnæus, it is boiled in Upland, a province of Sweden, as a pot-herb. The leaves and flowers have formerly been uſed in medicine, but are not regarded in the preſent practice. The leaves vary much in form, ſize, and toothing. Hence ſeveral varieties, one or two of which are conſidered by ſome as diſtinct ſpecies.

9. Lamium diſſectum, or cut-leaved archangel: leaves deeply and irregularly cut; ſtem-leaves decurrent. The leaves of this are deeply cut, ſo as almoſt to be lobed, and taper down into the foot-ſtalks. Cultivated in a garden, it preſerves its difference; and it is found with the preceding. It is annual; and not unfrequent, according to Ray, in kitchen-gardens and fallow-fields. Mr. Curtis obſerved it on a bank between Pimlico and Chelſea; and Mr. Robſon about Darlington. Monſ. Villars ſeems to regard it as intermediate between *purpureum* and *amplexicaule*. Mr. Miller's ſpecimens are in the Bankſian Herbarium.

10. Lamium molle, or pellitory-leaved archangel: leaves petioled, ſlightly toothed, lower cordate, upper ovate. This is eaſily diſtinguiſhed by the leaves being almoſt entire, neither ſerrate nor crenate. The flowers are white. Its native place is not known. It is perennial, and flowers in April and May. Cultivated in 1683, by Mr. James Sutherland.

11. Lamium amplexicaule, or perfoliate archangel: floral leaves ſeſſile, embracing, blunt. Root annual, fibrous, whitiſh. Stems ſeveral, nine inches or a foot high, nearly upright, ſmooth, with a few oppoſite branches. Flowers in whorls, to fifteen, perfect and imperfect; the latter ſhort, a little longer than the calyx, the tips very red, hairy, and cloſed; the former four times the length of the calyx, bright purple, generally breaking out from the top of the ſtem. The imperfect corollas are very hairy, of a bright red colour, and have the mouth cloſed. The perfect flowers are like thoſe of L. purpureum, but much longer. The imperfect flowers appear in February and March; the perfect ones not till May or June: if the progreſs of the flowers be watched, it will be found that the corolla is gradually enlarged in different flowers, till, the weather being ſufficiently warm, they come forth fully formed. The imperfect flowers are neither rudiments of the long ones, nor are they barren, for they have both ſtamens and piſtil. Linnæus informs us, that this plant ſcarcely ever produces perfect flowers in Sweden. Here then we have a proceſs ſomewhat ſimilar to what is obſerved in the violet, and ſome other plants, in which perfect ſeed is produced, although the corolla be not perfectly formed; analogical to what happens in the animal kingdom, when, a caterpillar previous to its changing into the chryſalis ſtate has been deprived of its proper quantity of food, the fly comes forth perfect in all its parts except the wings, which are crumpled up and never expand. This plant is common in moſt parts of Europe, in cultivated ground, on light ſoils, and on walls. The old name of it is *great henbit*.

12. Lamium multifidum, or multifid archangel: leaves many-parted. Native of the Levant.

13. Lamium moſchatum, or muſky archangel: leaves cordate, blunt, ſmooth; floral leaves ſeſſile; calyxes deeply gaſhed. Annual. Leaves marked with white, ſomewhat like thoſe of the autumnal cyclamen; they are ſmooth, and in dry weather have a muſky ſcent, but in wet weather are fetid. Stems eight or nine inches high. Flowers white, appearing in April: the ſeeds ripen in June. From Mr. Miller's ſpecimens in the Bankſian Herbarium, it ſeems to be a variety of Lamium album. The leaves are leſs acuminate, and the indentures are fewer and blunter.

Propagation and Culture. Several of the ſpecies are conſidered as weeds rather than garden-plants. The white archangel propagates itſelf copiouſly by the roots, and the purple by the ſeeds. Several which are here given as ſpecies, (2, 3, 5, 7, 9, 10, 13,) are probably no more than va-

rieties, and will increaſe of themſelves in the ſame ways. Baum-leaved archangel rarely produces good ſeeds in England, nor do the roots propagate very faſt. The beſt time to part and remove theſe roots is October, but they muſt not be tranſplanted oftener than every third year, if they are required to flower ſtrongly. It is hardy, and thrives beſt in a ſoft loamy ſoil. According to Mr. Curtis, it grows readily; but, flowering about the end of April, it is then apt to be injured, if cold winds prevail, unleſs it be placed in a ſheltered part of the garden. The fourth ſort may be propagated by ſeeds; but, as the roots ſpread greatly, when it is once obtained it will ſpread faſt enough. See GALEOPSIS, MELITTIS, PRASIUM, SCROPHULARIA, SCUTELLARIA, and STACHYS.

LAM'JUNGH, a country of Aſia, dependent on Thibet, north of Gorkah.

LAM'LASH, a town or village of Scotland, on the eaſt coaſt of the iſland of Arran, ſituated in a bay to which it gives name, and which, Mr. Pennant ſays, forms the ſafeſt harbour in the univerſe, with depth of water for the largeſt ſhips. In the year 1558, the Engliſh fleet, under the earl of Suſſex, after ravaging the coaſt of Kintyre, at that time in poſſeſſion of James M'Connel, landed in this bay, and burned and deſtroyed all the neighbouring country. Lat. 55. 35. N. lon. 5. 59. W.

LAM'LASH, or HOLY ISLAND, an iſland ſituated before the bay of Lamlaſh, about two miles long, and half a mile wide: the whole is a vaſt mountain, in great part covered with heath, but has ſufficient paſture and arable land to feed a few milch-cows, ſheep, and goats, and to raiſe a little corn, and a few potatoes. Lat. 55. 34. N. lon. 4. 58. W.

LAM'LEM. See MELLI.

LAM'LEY, a village in Northumberland, near Featherſtonhaugh, on the South Tyne, conſiſting of a ſmall chapel, with a few ſcattered cottages; here was a nunnery deſpoiled by the Scots, of which no traces are viſible.

LAM'LEY, a village in Nottinghamſhire, near Sherwood-foreſt.

LAM'MAS, *ſ.* [ſaid to be derived from a cuſtom, by which the tenants of the archbiſhop of York were obliged, at the time of *maſs*, on the firſt of Auguſt, to bring a live *lamb* to the altar. In Scotland they are ſaid to wean lambs on this day. It may elſe be corrupted from *latter-math*. Others derive it from a Saxon word ſignifying "loaf-maſs," becauſe on that day our forefathers made an offering of bread made with new wheat.] The firſt of Auguſt. —In 1576 was that famous *lammas*-day, which buried the reputation of Don John of Auſtria. *Bacon.*—It is celebrated by the Romiſh church in memory of St. Peter's impriſonment. *Hutton.*

LAMMERMU'IR, a mountainous diſtrict of Scotland, which forms the north part of the county of Berwick, againſt Haddingtonſhire: about ſixteen miles long, and ſix broad.

LAM'MERSHAGEN, a town of the duchy of Holſtein: ſix miles ſouth-weſt of Lutkenborg.

LAM'NICK, a lake of Sileſia, in the principality of Oels: four miles eaſt of Trachenberg.

LAM'NICK, a town of the duchy of Stiria: ten miles north of Cilley.

LA'MO, a ſeaport of Africa, ſituated on a ſmall iſland, formed by a river, on the coaſt of Zanguebar, dependent on the Portugueſe. Lat. 1. 55. S. lon. 41. 27. E.

LAMOIGNO'N (William de), marquis of Baſville, deſcended from an ancient and honourable family of Nivernois, was born in 1617. He was admitted a counſellor in the parliament of Paris in 1635, and was made a maſter of requeſts in 1644. The capacity and integrity which he diſplayed in theſe poſts cauſed him, in 1658, to be raiſed to the office of firſt preſident of the parliament. Cardinal Mazarin ſaid to him, upon his nomination, "If the king had known a worthier and fitter man, he would not have appointed you;" words which have more than once been applied on ſimilar occaſions. The cardinal paid him a more ſubſtantial compliment by refuſing a large ſum offered by another for the place, with the obſervation, "Whatever occaſion his majeſty may have for the money, it would be better to expend it for a good preſident, than to receive it." Lamoignon juſtified every idea that had been formed of him, by his conduct in this important office, of which he fulfilled all the duties with equal zeal and prudence, ſupporting the dignity and privileges of the body over which he preſided, diſcouraging the chicane of the bar, raiſing his voice for the people, and devoting his health and life to the public ſervice. On the proſecution of the ſuperintendant Fouquet, he was placed at the head of the chamber of juſtice appointed to try him; and, being ſounded as to his opinion of the cauſe by Colbert, the moſt rancorous enemy of the culprit, he replied, "A judge gives his opinion but once, and that on the bench." Finding at laſt that he could not give a judgment in the caſe which would ſatisfy himſelf and the court, he quietly withdrew from the commiſſion, ſaying, "It is not I who quit the chamber, but the chamber that quits me." All his harangues, reſponſes, and decrees, were diſtinguiſhed by their clearneſs and ſolidity. In his manners he was ſimple, in his conduct auſtere; but to the widow, the orphan, and the friendleſs, the mildeſt of men. He relaxed from the toils of his office in the pleaſures of literature, and aſſembled round him ſuch men as Boileau, Racine, and Bourdaloue. He died in 1677, at the age of ſixty. His *Arretés*, on various important points of French law, were firſt publiſhed at Paris, in 1702, 4to. and were reprinted in 1781. *Moreri.*

LAMOIGNO'N (Chriſtian-Francis de), eldeſt ſon of the preceding, was born at Paris in 1644. Favoured by nature with a ſolid and brilliant underſtanding, a dignified preſence, a fine voice, and a natural eloquence, he obtained from his father's care every advantage of education which could contribute to form his heart and cultivate his mind. He was placed in the Jeſuits' college, under the particular tuition of the celebrated Rapin, whoſe favourite diſciple he was. After finiſhing his ſtudies, he viſited England and Holland, in both which countries he was much admired for his diſpoſition and attainments. He was brought early to practiſe as a pleader, and in 1666 was admitted a counſellor of parliament. He afterwards was made a maſter of requeſts, and in 1674 was appointed to the office of advocate-general. This he occupied during twenty-five years with the higheſt reputation, equally diſtinguiſhed by the weight and compaſs of his eloquence, and by his zeal for juſtice and the public good. In 1690 the king nominated him to the poſt of a preſident-à-mortier; but the love of employment kept him eight years longer at the bar; and he did not avail himſelf of the royal favour, till his ſtate of health, and the repreſentations of his family, urged him to an honourable repoſe. He then indulged his love of letters, and in 1704 was admitted into the Academy of Inſcriptions; of which, the year after, he was appointed preſident. In this ſtation he diſplayed as much facility in diſcuſſing a literary queſtion as he had formerly done a point of juriſprudence. He died of a lingering diſeaſe, in 1709. Many of his harangues on public occaſions were copied from his mouth, and diſperſed; but the only work of his pen which came to the preſs was a "Letter on the Death of Father Bourdaloue," inſerted in the third volume of the Careme of that great preacher.

LAMOIGNO'N DE MALESHER'BES (Chriſtian-William), grandſon of the preceding, and ſon of William de Lamoignon, chancellor of France, was born at Paris in 1721. He received his early education at the Jeſuits' college, and afterwards applied with great ſucceſs to the ſtudy of the law, to which he joined that of hiſtory and political economy. At the age of twenty-four, he was appointed a counſellor in the parliament of Paris; and in December 1750 he ſucceeded his father as preſident of the court of aids, an important juriſdiction, the office of which was to regulate the public taxes. At this period of the

reign of Louis XV. corruption and confuſion had introduced great diſorder into the finances, which the moſt deſpotic meaſures of the court were employed to remedy, at the expenſe of the ſuffering people. It was the painful taſk of Maleſherbes to make repeated remonſtrances to the throne againſt the ſucceſſive ſteps by which the national rights were encroached upon, and all the barriers againſt deſpotiſm were overthrown; and his language, both in theſe inſtruments, and in his official ſpeeches when princes of the blood were ſent to enforce the regiſtering of edicts and to intimidate oppoſition, has not been ſurpaſſed in freedom and energy by that of any repreſentative of a free people. The ſuperintendance of the preſs had been conferred upon Maleſherbes by his father at the ſame time that he received the preſidentſhip of the court of aids; and this function, which had uſually been exerciſed to the ſuppreſſion of all free inquiry, became in his hands the means of promoting it to a degree beyond all former example in that country. Having laid it down as a principle, that deſpotiſm alone could dread the liberty of the preſs when circumſcribed within reaſonable limits, he was deſirous of giving it every extenſion compatible with the ſtate of public opinion and ſound policy. He was himſelf a votary of letters and a friend of learned men; and his inquiries had taken a wide range. It was through his favour that the French Encyclopedia, the works of Rouſſeau, and ſeveral other writings of free ſpeculation, iſſued from the preſs, notwithſtanding the anathemas of the Sorbonne and the oppoſition of the hierarchy. But, when his father, the chancellor, was diſplaced in order to make room for that tool of deſpotiſm, Maupéou, the ſuperintendence of the preſs was taken from Maleſherbes, and the former rigorous inquiſition into literary productions was renewed.

Freed from other cares, he was only the more intent upon fulfilling the duties of his preſidentſhip, and oppoſing with augmented vigour and reſolution every ſtretch of arbitrary power. The ſhocking injuſtice practiſed againſt one Monnerat by the farmers of the revenue was proſecuted in the court of aids with ſo determined a ſpirit, that the king at length was induced by his miniſters abſolutely to prohibit its further proceedings. The undaunted preſident, however, took occaſion to preſent a remonſtrance to the king, which was a free proteſt againſt the enormous abuſe of lettres de cachet, then carried to its height, ſo as to render every man's liberty precarious; for, ſaid he, "no one is great enough to be ſecure from the hatred of a miniſter, nor little enough to eſcape that of a clerk." When, in 1771, the tyranny of the government had proceeded to the diſſolution of the whole legal conſtitution and the baniſhment of the parliaments, the court of aids participated in the general deſtruction, which, indeed, it provoked by its remonſtrances. Maleſherbes was baniſhed to his country-ſeat by a letter de cachet; and the duke de Richelieu, at the head of an armed force, aboliſhed the tribunal. It was then that the virtues of the private citizen ſcarcely leſs diſtinguiſhed him in retirement, than thoſe of the patriot and magiſtrate had done in his public life. As in this he had been characteriſed by ſimplicity in his appearance and mode of living, and the moſt humane attention to his inferiors; ſo in his rural retreat theſe qualities were peculiarly conſpicuous. His time was occupied with his family, his books, and the cultivation of his grounds. He committed to paper a great number of obſervations on the political and judicial ſtate of France, on agriculture and natural hiſtory, which all periſhed in the revolutionary wreck. Though economical in his table and domeſtic eſtabliſhment, his expenditure was large, for it compriſed not only private charities, but the employment of a great number of labourers in works for the improvement of his eſtate and the public benefit. He drained marſhes, cut canals, conſtructed roads, built bridges, planted walks with convenient ſeats, and even carried his attention to the comfort of the lower claſſes ſo far, as to raiſe ſheds on the ſide of the river for the ſhelter of the women at their domeſtic labours. The acceſſion of Louis XVI. recalled Maleſherbes to a public ſtation. It was the firſt object of that well diſpoſed prince to repair the evils of the preceding reign; and, in November 1774, Maleſherbes received an order to appear at the place where the court of aids had ſat, and reſume the preſidentſhip of the reſtored tribunal. He pronounced a very affecting and patriotic harangue on the occaſion, and afterwards addreſſed the king in an eloquent ſpeech of thanks. Thinking nothing ſo important as that truth ſhould reach the throne, he laid before his majeſty an ample memoir on the calamitous ſtate of the kingdom, with a free expoſure of the faults which had produced it. He particularly inveighed againſt that ſpirit of deſpotiſm which had abrogated law and juſtice, and aboliſhed every veſtige of conſtitutional liberty. Such principles were ſo much in uniſon with thoſe of the young and uncorrupted king, that they procured for Maleſherbes the appointment of miniſter of ſtate, in June 1775. This elevation was regarded by him only as an opportunity of extending the ſphere of his uſefulneſs. Diſdaining all the ſhow and parade of office, he preſerved the ſimplicity of appearance which had diſtinguiſhed him as a magiſtrate. One of his firſt concerns was to viſit the priſons, and reſtore to liberty the innocent victims of the former tyranny; and his praiſes, with thoſe of the new reign, were carried throughout France by perſons returning to the boſom of their families from the gloom of dungeons. It was greatly his wiſh to have entirely aboliſhed that arbitrary power of iſſuing lettres de cachet which had been the inſtrument of theſe evils; but, not able to introduce ſo important a change, he procured the appointment of a commiſſion compoſed of upright and enlightened magiſtrates, to which every application for ſuch letters ſhould be ſubmitted, and whoſe unanimous deciſion ſhould be requiſite for their validity. The encouragement of commerce and agriculture was alſo a leading object in his adminiſtration, in which he had the cooperation of the able and virtuous Turgot, then comptroller-general of the revenue, from which poſt he was, however, ſoon after diſmiſſed through the intrigues of the financiers. Maleſherbes himſelf did not long remain in office after his friend. The rejection of his propoſal to free the proteſtants from the diſabilities they lay under with reſpect to the ſolemnization of marriages and the legitimating of their children, convinced him that the period for governing upon liberal and equitable principles was not yet arrived; and he reſigned his poſt in May 1776.

After ſome time ſpent in the enjoyment of his rural retreat, he reſolved to indulge the deſire of travelling, which had long poſſeſſed him; and his object being to mix freely with different claſſes of ſociety, that he might obtain an accurate view of manners and modes of policy, he took the humble title of M. Guillaume, and commenced his journey in a ſuitable ſtyle of ſimplicity and frugality. He viſited the different provinces of France, Swiſſerland, and Holland, frequently travelling on foot, and lodging in villages, that he might take a nearer ſurvey of the ſtate of the country. He aſſiduouſly noted down every thing worthy of obſervation relative to the products of nature and the operations of induſtry; and, after an abſence of ſome years, returned to his beloved manſion, enriched with a ſtore of knowledge of the moſt uſeful kind, the value of which he was fully enabled from age and experience to appretiate. He found his native country ſo much advanced in philoſophical principles, that he was encouraged to draw up and preſent to the king two elaborate memoirs, one on the condition of the proteſtants, the other on civil liberty and toleration in general, replete with the enlarged views of an enlightened ſtateſman who was alſo a friend of mankind.

The difficulties which were now accumulating about the government, rendered it deſirable for miniſters to aſſociate to their body a man whoſe character both for wiſdom and virtue ſtood high with the whole nation; and in 1786 the king again called Maleſherbes to his councils, but

but without appointing him to any particular poſt in the adminiſtration. He ſoon found, however, that his opinions were by no means in uniſon with thoſe of the other miniſters, and that his plans for the reſtoration of proſperity were regarded as "a good man's dreams, too chimerical to be adopted." In this critical ſtate of things he made one effort for opening the king's eyes, and drew up two energetic memoirs "On the Calamities of France, and the Means of repairing them;" but ſuch was the unfortunate aſcendency which the queen's party had over the mind of the ill-fated monarch, that he was prevented from even reading them, nor could he be prevailed upon to grant the writer one private interview. Maleſherbes, therefore, took his final leave of the court.

Returning to his country abode, he conſulted the public good in a mode which was ſtill open to him; and in 1790 publiſhed "An Eſſay on the Means of accelerating the Progreſs of rural Economy in France," in which he offered a variety of ingenious remarks on the ſubject, and propoſed an eſtabliſhment to facilitate the national improvement in this important point. He was particularly led to make his propoſal at this period, from the hopes which he, with ſo many other excellent citizens, entertained, that the revolutionary changes, though ſo awful and tumultuary, would finally iſſue in a free and well-balanced conſtitution. The dreadful ſcenes which ſoon followed extinguiſhed his hopes, and left him to mourn in ſolitude over the miſeries of his country. He was at length roufed by an event, which, though in its conſequences it proved fatal to him, yet gave occaſion to his diſplaying a nobleneſs of mind which has few parallels. This was the decree of the national convention for the trial of Louis XVI. Although he might have entertained ſome diſpleaſure on account of the manner in which he had been baniſhed from his councils, yet he was ſo penetrated with the ſentiment of the king's goodneſs of heart and real concern for the welfare of his people, that he felt nothing but the deſire of ſerving him at this emergency. He inſtantly wrote to the preſident of the convention, requeſting to be permitted to act as one of the council of the illuſtrious culprit. Three had been already appointed; but, one of them declining the office, Louis, who wept at this proof of attachment from his old ſervant, immediately nominated Maleſherbes in his ſtead. Their interview was extremely affecting; and the depoſed monarch, during the ſhort interval before his death, ſhowed every mark of affection for, and confidence in, his generous advocate. Maleſherbes was the perſon who announced to him his cruel doom, and one of the laſt who took leave of him. After that cataſtrophe he again withdrew to his retreat, but with a deeply wounded heart. He refuſed to hear of any thing more that was acting on the bloody theatre of Paris; and it was long before he recovered ſerenity enough to reſume his former ſtudies and occupations. As he was one morning working in his garden, he obſerved four ill-looking men directing their courſe to his houſe; and, haſtening home, he found them to be revolutionary ſatellites come to arreſt his daughter, Mad. Lepelletier Roſambo, and her huſband, once preſident of the parliament of Paris. This fatal ſeparation ſeems to have affected him more than any other circumſtance of his life; and his own arreſt, with that of his grand-children, ſhortly after, was rather a relief to his feelings. The villagers crowded round to take leave of their ancient benefactor with tears and benedictions; and four of the municipality accompanied him to Paris, that he might not be eſcorted by ſoldiers like a criminal. He was ſhut up in priſon with one of his grand-children only, but upon his petition the whole unfortunate family was afterwards united. The guillotine ſoon ſeparated Lepelletier from his wife; and the accuſation of Maleſherbes, with his daughter and grand-daughter, "for a conſpiracy againſt the liberties of the French people," a moſt abſurd and unſupported charge! was followed, as a matter of courſe, by a ſentence of death. In fact, the convention never pardoned his defence of the king, an act in which he gloried. The condemnation of theſe females almoſt overcame his fortitude; his courage, however, returned at the priſon, and they prepared for death. His daughter had already ſhown the ſpirit by which ſhe was inſpired; for, upon taking leave of Mademoiſelle Sombreuil, who had ſaved her father's life on the 2d of September, ſhe ſaid to her, "You have had the happineſs to preſerve *your* father; I have the conſolation of dying with *mine*." On the fatal day, Maleſherbes left the priſon with a ſerene countenance; and, happening to ſtumble againſt a ſtone, he ſaid (with the pleaſantry of ſir Thomas More), "a Roman would have thought this an unlucky omen, and have walked back again." He converſed calmly with his children in the cart, took a tender farewel, and received the ſtroke, in April 1794, in the ſeventy-third year of his age. Thus died one of the moſt ſpotleſs and exemplary characters of the time! The government has ſince made ſome reparation for the injuſtice done him, by ordering his buſt to be placed among thoſe of the great men who have reflected honour upon the country. *Vie de Lamoignon Maleſherbes*, Paris, 1805.

LAMOIL'LE, a river which runs into Lake Champlain, twenty-eight miles north of Newhaven, in lat. 44. 37. N. lon. 73. 14. W.

LAMO'NA, or AMO'NA, a branch of the river Po, which runs into the Adriatic five miles north of Ravenna.

LAMO'NA, or AMO'NA, a department of the kingdom of Italy, compoſed of parts of the ci-devant Romagna. It contains 105,000 inhabitants, who elect twelve deputies. Faenza was fixed on as the capital.

LAMOR'RAN CREEK, a creek in the Engliſh channel, on the coaſt of Cornwall, at the mouth of a ſmall river which joins the Fale three miles ſouth of Truro.

LAMOT'HE LE VAYE'R (Francis de), a learned French writer, born at Paris in 1588, was deſcended from a family originally from Mons, and diſtinguiſhed in the profeſſion of the law. He was bred to the ſame profeſſion, and long occupied the poſt of ſubſtitute to the procureur-general in the parliament of Paris, which he inherited from his father. His attachment to letters, however, induced him to quit this occupation; and he became one of the moſt ſtudious and univerſal ſcholars in his time. The learned works which he publiſhed opened to him the doors of the French Academy in 1639; and few of his fellow-members equalled him in erudition, although many ſurpaſſed him in elegance of ſtyle. When a preceptor was to be choſen for Louis XIV. Lamothe was thought of for the office; but the queen-mother objected to him as being a married man. Probably, the freedom with which he philoſophiſed, and his known diſpoſition to ſcepticiſm, were the true reaſons for his excluſion. He was, however, appointed to the preceptorſhip of the king's brother, then duke of Anjou, and afterwards of Orleans; and he was likewiſe made hiſtoriographer of France, and titular counſellor of ſtate. In the court he lived like a philoſopher, immerſed in books, ſimple and regular in his manner, and void of ambition and avarice. Guy Patin ſpeaks of him as a ſtoic, who would neither praiſe nor be praiſed, and who followed his own fancies and caprices without regard to the world. He died in 1672, in the eighty-fifth year of his age. Lamothe le Vayer was a writer upon a great variety of topics, in which he diſplayed more erudition and judgment than taſte and invention. One of his works was, a Treatiſe on the Virtue of Pagans, which was anſwered by the zealous and orthodox Arnauld. It is ſaid, that, Lamothe's bookſeller complaining to him that his book did not ſell, "I know a ſecret (ſaid the author) to quicken the ſale:" and he immediately procured an order from government for its ſuppreſſion, which ſoon diſpoſed of the whole edition. His works were collected in two volumes folio, 1662, and were afterwards printed in fifteen volumes 12mo. 1684, and in fourteen volumes octavo, 1772. In this collection are not included his Dialogues after the Manner of the Ancients, under the name of Oraſius Tubero, in which he gave free ſcope to his ſcepticiſm;

ſcepticiſm; nor his Hexameron Ruſtique, a work containing ſome licentious thoughts and expreſſions.

His ſon, the abbé Le Vayer, was the friend of Boileau, who has inſcribed to him his fourth ſatire. He publiſhed a tranſlation of Florus, with a commentary.

LAMO'TIS, in ancient geography, a ſmall country of Aſia, in Cilicia, which took its name from the town of Lamus. *Ptolemy.*

LAMOT'TE (Antony Houdart de), an eminent and ingenious French writer, was born at Paris in 1672. His father, who was a rich hatter, ſent him for education to a Jeſuit ſeminary, and deſtined him for the profeſſion of the law. He purſued for ſome time the ſtudies proper for the bar, but ſoon deſerted them in diſguſt, and devoted himſelf to polite literature. At the age of twenty-one he compoſed a comedy, which was repreſented at the Italian theatre, but failed of ſucceſs; and this diſappointment ſo much affected his ſpirits, that he flew to the monaſtery of La Trappe, with the intention of aſſuming the habit of that rigorous order. The celebrated abbé de Rancé, however, finding him unable to ſupport theſe rigours, and probably doubting the reality of his vocation, diſmiſſed him, after an abode of two or three months. Returning to Paris, he renewed his viſits to the theatres, and compoſed an opera, entitled *L'Europe Galante*, which obtained great applauſe. It was ſucceeded by the paſtoral of *Iſſé*, which he wrote in conjunction with Deſtouches the muſician, and which was alſo ſucceſsful. He afterwards compoſed ſeveral other pieces of the opera-kind. He next attempted the higher ſpecies of poetry; and publiſhed, in 1707, a volume of Odes. Theſe obtained the character of being more philoſophical than poetical; and, though they were read with pleaſure, they added little to his reputation.

In 1710, Lamotte was admitted a member of the French Academy, in preference to Rouſſeau, a better poet, but much leſs amiable man. His diſcourſe on reception was reckoned a model of the kind; and he adverted in it with elegance and pathos to the misfortune of an almoſt total privation of ſight, under which, from this period of his life, he continued to labour. Ambitious of acquiring a name in the ſuperior walks of the drama, he next engaged in the compoſition of tragedy, and produced The Maccabees, which was acted at the Theatre François. He kept his name concealed till its ſucceſs was certain; and had the ſatisfaction of hearing it ſuppoſed a poſthumous work of Racine. Proceeding in the ſame career, he gave to the public Romulus, and Ines de Caſtro, both with ſucceſs: the latter proved one of the moſt intereſting pieces on the French ſtage, was acted a great number of times at its firſt appearance, and ſtill draws a full audience. His Œdipus, which followed, met with little applauſe; and the author terminated his tragic efforts with the publication of an eſſay to prove that proſe is better calculated than verſe for the vehicle of tragedy. To ſhow that no department of the drama was beyond his powers, he next compoſed ſeveral comedies, which were favourably received: *Le Magnifique*, in particular, has retained a place among the moſt popular of theſe performances. They are all written in proſe.

In 1714 he appeared before the public in a new character, that of a critic and tranſlator of a work, of the original language of which he was totally ignorant. He gave a tranſlation in verſe of Homer's Iliad, to which he prefixed a diſcourſe containing a free cenſure of the entire plan of that celebrated poem, written indeed with elegance and ingenuity, but betraying a great want of feeling of the ſublime beauties of poetry, as well as ignorance of the manners and character of antiquity. His verſion, which might rather be called an imitation, or an abridgment accommodated to the French taſte, was ſtill more injurious to Homer than his criticiſm, and both excited high indignation in the paſſionate admirers of that bard and of the ancients in general. Mad. Dacier took up the cauſe, and wrote an eſſay On the Cauſes of the Corruption of Taſte, in which ſhe handled Lamotte with great ſeverity, and diſplayed as much pedantry and coarſeneſs as erudition. It gave occaſion to a triumph on his part; for nothing could ſurpaſs in poliſhed wit and elegance his reply, under the title of *Reflections ſur la Critique*. Many other pieces were publiſhed on both ſides of the queſtion, till the topic had loſt the novelty which rendered it intereſting.

He gave additional proof of the variety and facility of his powers in 1719 by the publication of a volume of Fables. This ſpecies of compoſition, which had been rendered ſo popular, and had been elevated to a high poetical rank by La Fontaine, has never attained the ſame conſequence in the hands of his ſucceſſors and imitators. His charming natural ſimplicity was but faintly and affectedly copied by Lamotte, who, however, deſerved the praiſe of novelty and ingenuity in the contrivance of his fables, and of conſiderable moral merit in the application. Though much criticiſed, they were generally read, and ſeveral of their lines became proverbial. Some paſtoral eclogues, cantatas, pſalms and hymns, and copies of verſes compoſed on particular occaſions, complete the liſt of his remaining poetical works, in all of which the ſpirit of a true poet is wanting, nor is there any great excellence of verſification, though there are many neat and happy paſſages. As a proſe-writer, he attained a high degree of excellence. His academical diſcourſes were particularly applauded; and, beſides their intrinſic merit, they were indebted to the admirable manner in which he read, or rather recited, them, and which is deſcribed as having been uncommonly faſcinating. An eulogy which he pronounced on Louis XIV. though too much in the panegyrical ſtrain, is ſaid by d'Alembert to be the only funeral tribute, among the many paid to that monarch, which is not entirely forgotten. His pen was borrowed for purpoſes that were foreign from the general tenor of his writings, but which gave room for the diſplay of his extraordinary verſatility. Theſe were the charges and paſtoral addreſſes of biſhops, ſeveral of which he compoſed with ſucceſs for particular friends. Nor was it on thoſe occaſions alone that he aſſumed the theologian; he drew up a Plan of Evidences of Religion, which is ſaid to be a maſter-piece of the kind. Although the novelty of his literary opinions brought upon him a hoſt of opponents, many of whom treated him with great rudeneſs, he always preſerved perfect calmneſs and good temper in his replies, and frequently ſuffered attacks upon him to remain unnoticed. He thus treated a ſcurrilous poetaſter named Gacon, who at length threatened to publiſh a pamphlet with the title of "Anſwer to the Silence of M. de Lamotte." The ſame mildneſs of diſpoſition marked his conduct in all occurrences. Being once in a crowd, he chanced to tread on the foot of a young man, who immediately ſtruck him a blow on the face. "Sir, (ſaid Lamotte,) you will be very ſorry for what you have done: I am blind!" He bore with patience and reſignation the painful ſymptoms of a decline which brought his life to a cloſe in December 1731, at the age of fifty-nine. His works were publiſhed collectively at Paris, in 1754, in 11 vols. 8vo. *Moreri.*

LAMOT'TE (William Mauqueſt de), an eminent French ſurgeon and accoucheur. He ſtudied at Paris, and paſſed five years at the Hotel Dieu; after which he ſettled at Valogne, in Lower Normandy, where he became eminent in practice during a long period. He publiſhed, in 1715, the reſult of an experience of thirty years, in a work entitled, *Traités des Accouchements*, 4to. Of this ſeveral editions have been made, ſome of the later of which have improved upon the original arrangement, and have added annotations and figures. The work is a valuable record of practice in the art of midwifery, which it ſimplifies, and enriches with a great number of valuable obſervations. Another of his works on this topic is, "Diſſertation ſur la Generation, ſur la Superfetation, et Reponſe au livre intitulé, De l'Indecence aux Hommes d'accoucher les Femmes," 1718, 12mo. in the phyſiological part

part of this performance he attempts to refute the ovarian hypotheſis of generation. As a writer in ſurgery, he made himſelf known by his *Traité complet de Chirurgie*, 3 vols. 12mo. 1722, ſeveral times reprinted: the beſt edition is by Sabatier, 2 vols. 8vo. 1771. This work does not quite anſwer to its title, ſince ſeveral diſeaſes belonging to chirurgical practice are omitted; but it is a very uſeful collection of facts and obſervations in ſome of the moſt important caſes. *Eloy. Dict. Hiſt. de la Med.*

LAMP, *ſ.* [*lampe*, Fr. *lampas*, Lat.] A light made with oil and a wick.—In *lamp*-furnaces I uſe ſpirit of wine inſtead of oil; and the ſame flame has melted foliated gold. *Boyle.*

O thieviſh night,
Why ſhould'ſt thou, but for ſome felonious end,
In thy dark lanthorn thus cloſe up the ſtars
That nature hung in heaven, and fill'd their *lamps*
With everlaſting oil, to give due light
To the miſled and lonely traveller? *Milton.*

Any kind of light, in poetical language, real or metaphorical:

O may thy ſilver *lamp* from heaven's high bow'r
Direct my footſteps in the midnight hour. *Gay.*

Lamps were in general uſe amongſt the Jews, Greeks, and Romans. The candleſtick with ſeven branches, placed in the ſanctuary by Moſes, and thoſe which Solomon afterwards prepared for the temple, were cryſtal glaſſes filled with oil, and fixed upon the branches of the candleſtick. The lamps or candleſticks made uſe of by the Jews in their own houſes were generally put into a very high ſtand on the ground. The lamps ſuppoſed to be uſed by the fooliſh virgins, &c. in the goſpel, according to critics and antiquaries, were a ſort of torches, made of iron or potters' earth, wrapped about with old linen, and moiſtened from time to time with oil. *Matth.* xxv. 1, 2. The lamps of Gideon's ſoldiers were of the ſame kind. *Jud.* vii. 16. The uſe of wax was not unknown to the Romans, but they generally burnt oil; hence the proverb, *Tempus et oleum perdidi*, "I have loſt my labour." Lamps were ſometimes burnt in honour of the dead, both by Greeks and Romans.

The uſe of lighted lamps in churches, and places of devotion, is very ancient. In the city of Fez is a moſque, wherein are nine hundred brazen lamps burning every night. In Turkey, all the illuminations are made only with lamps. Polydore Virgil aſcribes the firſt invention of lamps to the Egyptians; and Herodotus deſcribes a feaſt of lamps held annually in Egypt.

Kircher ſhows the manner of preparing lamps, which ſhall diffuſe a light ſo diſpoſed, as to make the faces of thoſe preſent appear black, blue, red, or of any other colour.

There has been a great diſpute among the learned about the ſepulchral lamps of the ancients: ſome maintain, they had the ſecret of making lamps that were inextinguiſhable, alleging ſeveral that have been found burning, at the opening of tombs fifteen or ſixteen hundred years old. But others treat theſe relations as fables; and others think, that the lamps, which were before extinguiſhed, took light afreſh upon the admiſſion of freſh air. Dr. Plott, however, is of opinion, that ſuch perpetual lamps are things practicable, and has himſelf made ſome propoſals of this kind. The linum aſbeſtinum, he thinks, may do pretty well for the wick; and that the naptha, or liquid bitumen, conſtantly ſpringing into ſome of the coal-mines, would anſwer for the oil. If the aſbeſtos will not make a perpetual wick, he thinks there is no matter in the world that will; and argues, that the tradition of ſuch lamps muſt be fabulous, or elſe that they made them without wicks. Such a lamp he thinks it poſſible to make of the bitumen ſpringing into the coal-mines at Pitchford in Shropſhire; which, he ſays, like other liquid bitumen, will burn without a wick. Thoſe lamps that kindle on the immiſſion of freſh air, the ſame author thinks, might be imitated by incloſing ſome of the liquid phoſphorus in the recipient of an air-pump; which, under thoſe circumſtances, will not ſhine at all; but, on letting the air into the recipient, there will poſſibly, ſays he, appear as good a perpetual lamp as ſome that have been found in the ſepulchres of the ancients.

The moſt ſimple lamp conſiſts of a veſſel of almoſt any ſhape, containing oil or acohol, with a tube projecting a little above the ſurface of the liquid, and containing any fibrous ſubſtance capable of raiſing the liquid to the top of the tube, by capillary attraction. The oil, thus raiſed and diffuſed through the fibrous ſubſtance, is ſo detached from the main body of the liquid, as to admit of being heated to a temperature ſufficient to volatilize the oil, the vapour of which, in a ſtate of combuſtion, conſtitutes the flame of the lamp. In the management of the lamp of the moſt ſimple kind, ſo far as relates to the ſupply of oil, three things are neceſſary to be obſerved. 1. The wick muſt be of ſuch a ſubſtance as beſt to promote capillary attraction. 2. It ſhould not be twiſted too much, in which caſe its capacity for the oil is too little; nor ſhould it be ſo looſe as to diminiſh materially its capillary attractive power. This is frequently the caſe, when the wick has been too long immerſed in the oil. 3. With regard to the diſtance of the flame from the ſurface of the oil; if the flame be too near the ſurface, a ſmaller quantity of oil will acquire the intenſe heat neceſſary to raiſe it into vapour, ſince the heat communicates with the fluid. On the contrary, when the flame is too high above the oil, the capillary attraction, which decreaſes in ſome ratio of the diſtance, is inſufficient to ſupply the neceſſary quantity of oil. Experience has long ago eſtabliſhed, that cotton is the beſt medium for the tranſmiſſion of the oil, which is prepared in a particular way for the purpoſe.

During the ſlow combuſtion of oil, as obſerved in the common lamp, as well as that of tallow in candles, the fatty matter is decompoſed, producing a quantity of vapour which inflames in contact with oxygen; and a cloudy exhalation in the form of ſmoke, conſiſting of numerous ſmall particles of carbonaceous matter, which, if collected, conſtitute the article called lamp-black. Beſides the offenſive ſmell and appearance of this ſubſtance, there is an evident waſte of combuſtible matter, capable of producing both light and heat.

Cardan's Lamp, is a contrivance of an author of that name, which furniſhes itſelf with its own oil. It conſiſts of a little column of braſs, tin, or the like, well cloſed every where, excepting a ſmall aperture at bottom, in the middle of a little gullet or canal, where the wick is placed. Here the oil cannot get out, but in proportion as it waſtes, and ſo opens the paſſage of that little aperture. This kind of lamp was much in uſe ſome years ago; but it has ſeveral inconveniences; ſuch as that the air gets into it by ſtarts and gluts; and that, when the air in the cavity comes to be much rarefied by heat, it drives out too much oil, ſo as ſometimes to extinguiſh the lamp. Dr. Hook, and Mr. Boyle, have invented other lamps that have all the conveniences of Cardan's without the inconveniences.

The flame in a lamp never conſumes the wick, till the wick be expoſed to the air by the flame's falling downward; and from thence it may be inferred, that a way found out to keep the fuel, and conſequently the flame, at the ſame height upon the wick, would make it laſt a long time. Many means have been deviſed to arrive at this; but it ſeems only poſſible to be done, in any degree of perfection, by hydroſtatics. Thus, let a lamp be made two or three inches deep, with a pipe coming from the bottom almoſt as high as the top of the veſſel; let it be filled ſo high with water as to cover the hole of the pipe at the bottom, to the end that the oil may not get in at the pipe, and ſo be loſt. Then let the oil be poured in, ſo as to fill the veſſel almoſt brimful, which muſt have a cover, pierced with as many holes as there are wicks deſigned. When the veſſel is thus filled, and the wicks are lighted, if water falls in by drops at the pipes, it will always

ways keep the oil at the ſame height, or very near; the weight of the water being to that of the oil as 20 to 19, which in two or three inches makes no great difference. If the water runs faſter than the oil waſtes, it will only run over at the top of the pipe, and what does not run over will come under the oil, and keep at the ſame height. *Phil. Tranſ.* No. 245.

From experiments made in order to aſcertain the expenſe of burning chamber-oil in lamps, it appears, that a taper-lamp, with eight threads of cotton in the wick, conſumes in one hour ·3250z. of ſpermaceti oil, at 2s. 6d. per gallon; ſo that the expenſe of burning 12 hours is 4·57 farthings. This lamp gives as good a light as the candles of eight and ten in the pound; it ſeldom wants ſnuffing, and caſts a ſtrong and ſteady light. A taper, chamber, or watch, lamp, with four ordinary threads of cotton in the wick, conſumes 0·16640z. of ſpermaceti oil in one hour; the oil at 2s. 6d. per gallon, makes the expenſe of burning 12 hours only 2·34 farthings.

Argand's Lamp, 1784. This is a very ingenious contrivance, and the greateſt improvements that has yet been made. It is the invention of a citizen of Geneva; and the principle on which the ſuperiority of the lamp depends, is the admiſſion of a larger quantity of air to the flame than can be done in the common way. This is accompliſhed by making the wick of a circular form; by which means a current of air ruſhes through the cylinder on which it is placed with great force; and, along with that which has acceſs to the outſide, excites the flame to ſuch a degree that the ſmoke is entirely conſumed. Thus both the light and heat are prodigiouſly increaſed, at the ſame time that there is very conſiderable ſaving in the expenſe of oil, the combuſtion being exceedingly augmented by the quantity of air admitted to the flame; and that what in common lamps is diſſipated in ſmoke is here converted into a brilliant flame. See the article CHEMISTRY, vol. iv. p. 333.

This lamp is now very much in uſe; and is applied not only to the ordinary purpoſes of illumination, but alſo to that of a lamp-furnace for chemical operations. It conſiſts of two parts, viz. a reſervoir for the oil, and the lamp itſelf. The reſervoir is uſually in the form of a vaſe, and has the lamp proceeding from its ſide. The latter conſiſts of an upright metallic tube about one inch and ſix-tenths in diameter, three inches in length, and open at both ends. Within this is another tube about an inch in diameter, and nearly of an equal length; the ſpace betwixt the two being left clear for the paſſage of the air. The internal tube is cloſed at the bottom, and contains another ſimilar tube about half an inch in diameter, which is ſoldered to the bottom of the ſecond. It is perforated throughout, ſo as to admit a current of air to paſs through it; and the oil is contained in the ſpace betwixt the tube and that which ſurrounds it. A particular kind of cotton cloth is uſed for the wick, the longitudinal threads of which are much thicker than the others, and which nearly fills the ſpace into which the oil flows; and the mechaniſm of the lamp is ſuch, that the wick may be raiſed or depreſſed at pleaſure. When the lamp is lighted, the flame is in the form of a hollow cylinder; and, by reaſon of the ſtrong influx of air through the heated metallic tube, becomes extremely bright, the ſmoke being entirely conſumed for the reaſons already-mentioned. The heat and light are ſtill farther increaſed, by putting over the whole a glaſs cylinder nearly of the ſize of the exterior tube. By diminiſhing the central aperture, the heat and light are proportionably diminiſhed, and the lamp begins to ſmoke. The acceſs of air both to the external and internal ſurfaces of the flame is indeed ſo very neceſſary, that a ſenſible difference is perceived when the hand is held even at the diſtance of an inch below the lower aperture of the cylinder; and there is alſo a certain length of wick at which the effect of the lamp is ſtrongeſt. If the wick be very ſhort, the flame, though white and brilliant, emits a diſagreeable pale kind of light; and, if very long, the upper part becomes brown, and ſmoke is emitted.

The ſaving of expenſe in the uſe of this inſtrument for common purpoſes is very conſiderable. By ſome experiments it appears that the lamp will continue to burn three hours for the value of one penny; and the following was the reſult of the compariſon between the light emitted by it and that of a candle. The latter, having been ſuffered to burn ſo long without ſnuffing, that large lumps of coally matter were formed upon the wick, gave a light at 24 inches diſtance equal to the lamp at 129 inches; whence it appeared that the light of the lamp was equal to 28 candles in this ſtate. On ſnuffing the candle, however, its light was ſo much augmented, that it became neceſſary to remove it to the diſtance of 67 inches before its light became equal to that of the lamp at 129 inches; whence it was concluded that the light of the lamp was ſomewhat leſs than that of four candles freſh ſnuffed. At another trial, in which the lamp was placed at the diſtance of 131½ inches, and a candle at the diſtance of 55 inches, the lights were equal. In theſe experiments the candles made uſe of were 10¾ inches long, and $2\frac{6}{10}$ inches in diameter. When the candle was newly ſnuffed, it appeared to have the advantage; but the lamp ſoon got the ſuperiority; and on the whole it was concluded, that the lamp is at leaſt equivalent to half a dozen of tallow candles of ſix in the pound; the expenſe of the one being only twopence halfpenny, and the other eightpence, in ſeven hours.

The beſt method of comparing the two lights together ſeems to be the following: Place the greater light at a conſiderable diſtance from a white paper, the ſmaller one being brought nearer or removed farther off as occaſion requires. If an angular body be held before the paper, it will project two ſhadows: theſe two ſhadows can coincide only in part; and their angular extremities will, in all poſitions but one, be at ſome diſtance from each other; and, being made to coincide in a certain part of their bulk, they will be bordered by a lighter ſhadow, occaſioned by the excluſion of the light from each of the two luminous bodies reſpectively. Theſe lighter ſhadows, in fact, are ſpaces of the white paper illuminated by the different luminous bodies, and may eaſily be compared together, becauſe at a certain point they actually touch one another. If the ſpace illuminated by the ſmaller light appear brighteſt, the light muſt be removed farther off, but the contrary if it appear more obſcure.

On cutting open one of Argand's wicks longitudinally, and thus reducing the circular flame to a ſtraight-lined one, the lights appeared quite equal in power; but the circular one had by far the greateſt effect in dazzling the eyes; though, when the long flame was made to ſhine on the paper, not by the broadſide, but in the direction of its length, it appeared more dazzling than the other. On placing this long flame at right angles to the ray of Argand's lamp, it projected no ſhadow; but, when its length was placed in the direction of the ray, it gave a ſhadow bordered with two broad, well-defined, and bright, lines.

The broad-wicked lamp ſeems to have the advantage of the other, as requiring leſs apparatus; and indeed by this contrivance we may at the moſt trifling expenſe have a lamp capable of giving any degree of light we pleaſe. The only diſadvantage attending either the one or the other is, that they cannot eaſily be carried from one place to another; and in this reſpect it does not ſeem poſſible to bring lamps (in general) to an equality with candles. We ſhall however in the courſe of our article ſpeak of a lamp that may be moved.

The moſt economical method of lighting up large apartments by means of different lamps and candles, as it is of great importance, has occupied the attention of many ingenious men, particularly of count Rumford and M. Haſſenfratz. The following is the ſimple and accurate method propoſed by the count, for meaſuring the relative quantities of light emitted by lamps differently conſtruct-

ed. Let the two lamps, or other burning bodies to be compared, be denominated A and B; and let them be placed at equal heights upon two light tables, or moveable ſtands, in a darkened room; let a ſheet of clean white paper be equally ſpread out, and faſtened upon the wainſcot, or ſide of the room, at the ſame height from the floor as the lights; and let the lights be placed oppoſite to this ſheet of paper, at the diſtance of ſix and eight feet from it, and the ſame from each other, in ſuch a manner, that a line drawn from the centre of the paper, perpendicular to its ſurface, ſhall biſect the angle formed by lines drawn from the lights to that centre; in which caſe, conſidering the paper as a plane ſpeculum, the one light will be preciſely in the line of reflection of the other. If the one light be weaker than the other, and the weaker being placed at the diſtance of four feet from the centre of the paper, it ſhould be found neceſſary, in order that the ſhadows may be of the ſame denſity, to remove the ſtronger light to the diſtance of eight feet from that centre; in that caſe, the real intenſity of the ſtronger light will be to that of the weaker as 8^2 to 4^2, or as 4 to 1. When the ſhadows are of equal denſity at any given point, the intenſity of the rays at that point are alſo equal. The greateſt care muſt be taken in every caſe that the lights compared be properly trimmed, elſe the reſults of the experiments will be inconcluſive.

Count Rumford found, from a variety of experiments conducted with his uſual caution, that, if oil be burnt in the lamp called Argand's lamp inſtead of one of the common conſtruction, the conſumer has a clear ſaving of 15 per cent. an object of attention ſurely to thoſe whoſe finances are circumſcribed. The principal difference between theſe two lamps is, that in the common lamp much of the oil is volatilized, without undergoing that proceſs of combuſtion from which originates the diſagreeable ſmell produced by it; whereas in Argand's lamp the heat is ſo intenſe at the top of the wick, that the oil is decompoſed in its paſſage through it, the wick being ſo diſpoſed as to admit free acceſs to the air, for the purpoſe of aiding combuſtion.

The count, having made experiments with different inflammable ſubſtances, in order to aſcertain which is the cheapeſt or moſt economical, obtained the following reſults.

	Equal parts in weight.
Bees-wax.—A good wax candle, kept well ſnuffed, and burning with a clear bright flame, - - -	100
Tallow.—A good tallow candle, kept well ſnuffed, and burning with a bright flame, - - - - -	101
The ſame burning dim for want of ſnuffing, - -	229
Olive-oil—Burnt in an Argand's lamp, with a clear bright flame without ſmoke, - - - - - -	129
Rape-oil—Burnt in the ſame manner, - - - -	125
Linſeed-oil—Likewiſe burnt in the ſame manner, -	120

This table, together with the current prices of the articles mentioned in it, will enable any perſon to aſcertain the relative prices of light produced by theſe materials. It is worthy of obſervation, that 100 of Argand's lamps burning with fiſh-oil, are equal to 218 common lamps, 285 ſpermaceti candles, 333 tallow ditto, or 546 wax candles; from which it evidently appears, that an Argand's lamp is vaſtly ſuperior, in point of economy, to any other burning body commonly made uſe of by families or in ſhops.

Many improvements have been made, from time to time, upon this excellent invention; among which we may notice that of Meſſrs. White and Smethurſt, in 1800, the object of which is to cauſe a more free and plentiful ſupply of oil to the ignited part of the wick, by which means it may burn better, require ſnuffing leſs frequently, will burn with oil of an inferior quality, and the burner may be more eaſily cleaned. Theſe advantages are obtained ſimply by leaving more ſpace between the two tubes within which the wick is confined than is uſually done. It is neceſſary however to reduce to the uſual ſize the ſpace at the top of the wick, in order that the burnt cruſt may be more conveniently bruſhed off. This may be done by putting on a ring conically ſhaped, ſo as to bring the ſpace at top to the requiſite dimenſion. The principle of improvement here is to take away the cloſe adheſion between the ſides of the unburnt wick and the tubes between which it is confined; for, as this part of the wick is conſtantly ſoaked in oil, it thereby adheres cloſely to the ſides of the tubes, and the capillary attraction by which the oil is drawn up into the burning circle of the wick, is thus much leſs than it would be if the wick were ſimply hanging down looſely to the oil reſervoir. At the ſame time all the important advantage gained by the Argand conſtruction is preſerved equally well merely by the ring at the top of the wick-tube. The patentees ſuggeſt other methods of conſtructing the ſupporters of the wick, as for inſtance, by ſupporting a ring upon pillars or bars, or by making ſlits or openings in the ſides of the tubes, and the like, all of which will enſure the ſame advantages. One of the moſt important benefits which the patentees aſſert will be derived from their improved lamp, is to enable the wick to burn common whale or ſeed-oils, which are ſold nearly at half the price of the beſt ſpermaceti-oil; and it is probable that, if the lamp burns well, little, if any, of the offenſive ſmell occaſioned by theſe oils, when burnt in the common way, will be perceived.

Smethurſt's Lamp, 1791. "The end and deſign of this lamp is, to produce a ſtrong light, and ſo to manage that light, that it may be thrown in any required direction. But this is not the only advantage and peculiarity in its conſtruction; for, while this lamp diffuſes a ſtrong light to a great diſtance, it does not create or leave any unpleaſant ſhade or darkneſs; light is communicated all round from the fore part, the back part, the ſides, and the bottom, of the lamp. It conſiſts of a lamp for one, two, three, or four, beveled or ſloped lenſes; the lenſes may be plane-convex, double-convex, concave-convex, or of unequal convexities. The bevel to the lenſes may be ſtraight, oblique, concave, or convex, in any direction or curve, or of any figure or ſhape, with many or few angles. One, two, three, or more, ſides of the lenſes, may be beveled, or any portion of its curvation, circumference, and ſides. The beveled lenſes may be fixed ſo as to be immovable, or ſo as to be moved in any required direction. The lamp and lenſes are made to hang on the frame; or the frame or lamp, or the part containing the oil and cotton, may be affixed to the lenſes. The lamp may be taken out independent of, or with, the lenſes. The lamp, or part containing the oil and cotton, may be made of any ſhape, form, or pattern; the burners, or piece carrying the cotton or wick, may be alſo made of any ſhape or form; it may be fixed or moveable, ſliding backwards or forwards, or remaining in any given poſition, to throw or ſpread the light in any direction or poſition; it may be made to hold either a flat, or round, or irregular-ſhaped, cotton or wick. The burner and lamp may be taken in and out with great eaſe; they may be taken out and the lenſes left behind, or they may be taken out together with the lenſes, or uſed without any lenſes at all, if required. The beveled lenſes may be uſed or applied to advantage to lamps for ſtreets, ſquares, houſes, halls, ſtaircaſes, paſſages, lanes, alleys, or for reading, writing, and for all other purpoſes where a ſtrong and diffuſed light is required. Fig. 1, of the annexed Plate, repreſents a lamp or burner, with three beveled lenſes, *a, b, c.* The bottom, and two of the ſides, of each of theſe lenſes, are beveled. The lamp, *d e*, is of the fountain kind, and is connected by a tube with the part *f g*, which carries the cotton; the burner, or tube, cannot be ſeen in the drawing, being hid by the lens *b*. *h, i, k*, is the frame to which the lamp and lenſes are affixed. Fig. 2 repreſents a circular lamp, or burner, with two beveled lenſes. This drawing ſhows the manner in which the lenſes may be fixed, ſo as to be moveable in various directions. *a, b, c, d*, the circular part of the burner or lamp. *e f*, the neck, trough, or receiver, which carries the wick and oil; this is here repreſented as moveable in a groove, or may be ſet in different poſitions

by

LAMP.

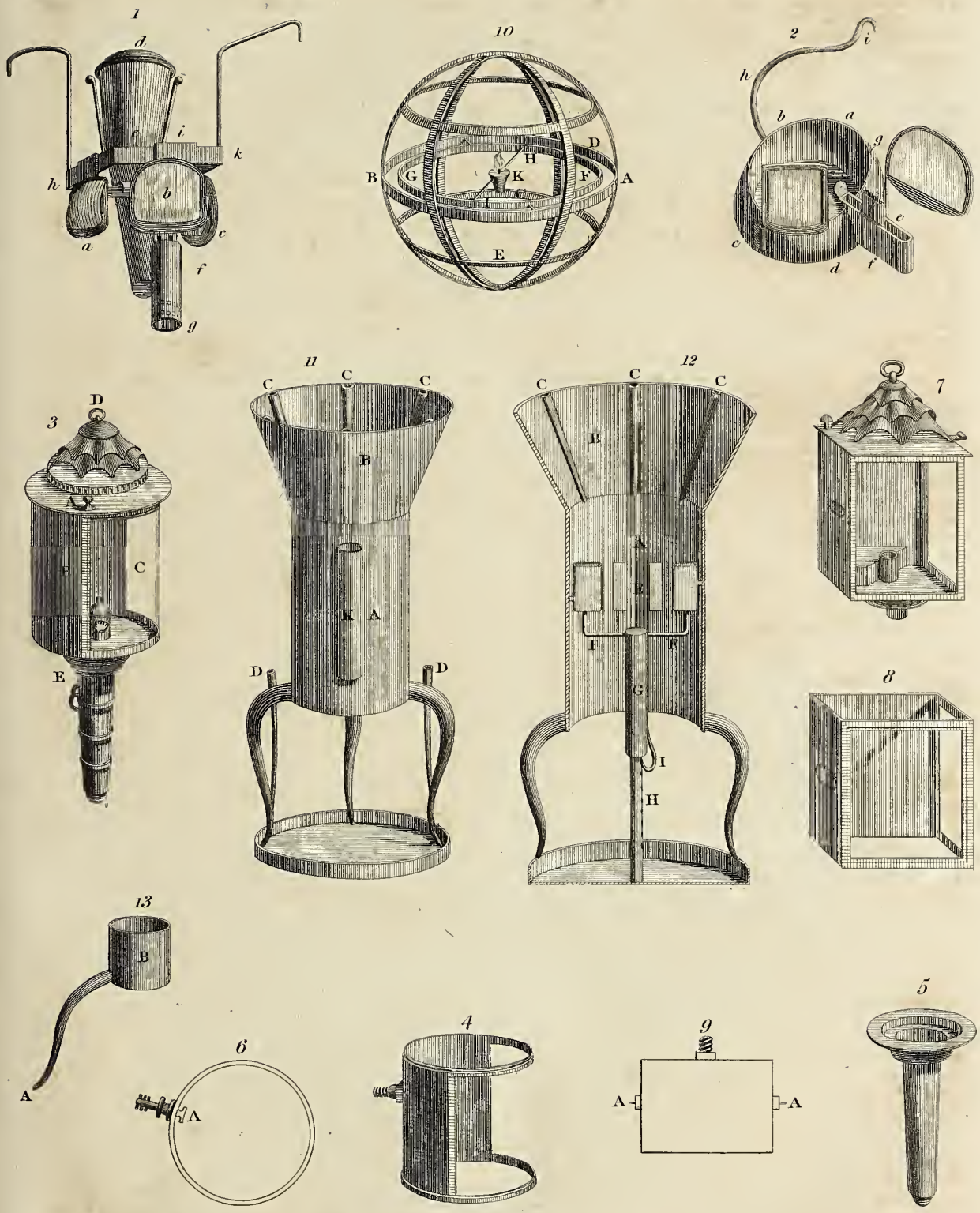

Fig. 1, 2. Smethurst's Lamp. 3 to 9. Travelling Lamps. 10. Rolling Lamp. 11, 12, 13. Chamber Lamp Furnace for Chemical Experiments.

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by the piece *g*. *h i* is the wire by which the lamp or burner is ſuſpended.

Barton's Lamp, 1810. Mr. John Barton, of Argyle-ſtreet, Weſtminſter, has taken out a patent for a lamp conſtructed upon the natural unerring principle of the difference of gravity between two fluids; which produces a conſtant ſupply of oil, or other combuſtible fluid, to feed the wick thereof, founting in a perpendicular direction from a reſervoir beneath the flame, having the quality of burning or conſuming the whole oil, or other combuſtible fluid. The method of raiſing the oil, &c. conſiſts in applying to the bottom of the column of oil, or other combuſtible fluid, contained in the lamp, the hydroſtatic preſſure of a fluid of greater ſpecific gravity contained in an exterior reſervoir, in which the lamp itſelf, with its contents and appendages, is made to float; and which fluid of greater ſpecific gravity communicates with the interior of the lamp itſelf, and is at liberty to flow into it, ſubject to the counteracting hydroſtatic preſſure of the column of oil, or other combuſtible fluid, contained in the lamp, by means of an aperture in the bottom of it; and the patentee adds, "I am induced to believe, that, by making the point at which the wick is placed, moveable; by the continual ſubſidence of the lamp on the exterior reſervoir, during the combuſtion of the oil, &c. and by the other improvements in the conſtruction; I render it unneceſſary, in the majority of inſtances, to employ for the heavier fluid any one of greater ſpecific gravity than common water, and in other reſpects accompliſh the end propoſed with greater advantage or convenience than the ſame has hitherto been done with." The lower part of a hall or ſtaircaſe lamp, is a cylindrical veſſel of thin braſs or copper, the bottom of which is fitted on its lower extremity, either by a ſcrew, joint, or otherwiſe. From the top of this veſſel there iſſues a tube, communicating with it, to the ſuperior extremity of which the burner, or burners, are adapted. There is a air-veſſel or float, nearly, but not quite, ſufficiently buoyant to ſupport the whole of the lamp (that is, the veſſel with the tube, and the burners attached to its ſuperior extremity) in water, or ſuch other fluid as it may be thought proper to uſe, for the purpoſe of ſupporting the neceſſary column of oil by its hydroſtatic preſſure, when the cylindric veſſel is filled with either oil, &c. There is alſo an additional float fitted on the tube towards its ſuperior extremity, which is ſo adjuſted as to be capable, together with an inferior float, of ſupporting the whole of the lamp. The floats may be made of any buoyant ſubſtance, capable of being adapted to a like purpoſe; ſuch, for example, as the lighter kinds of wood varniſhed, or cork; or they may conſiſt of tin-plate, thin braſs, or any other thin metallic plates, ſoldered up, ſo as to form a hollow air-tight veſſel. The exterior part of the lamp ſerves to contain the fluid, by the hydroſtatic preſſure of which the neceſſary column of oil for the ſupply of the burners at the ſuperior extremity of the tube is to be ſupported; and in which the lamp itſelf, with its tube, the burners, and the floats, are intended to float when the veſſel and tube are filled, either with the oil originally introduced into it, or with ſuch reſidue of it as may from time to time remain unconſumed; together with ſuch portion of the water, or other fluid heavier than oil, by the hydroſtatic preſſure of which the column of oil is intended to be ſupported. It muſt be obſerved that, whatever be the ſpecific gravity of the heavier fluid, the relative heights of the whole of the veſſel, with the tube, muſt be in a ſomewhat greater proportion than the inverſe proportion of the ſpecific gravities of thoſe two fluids, to enable the cotton to produce, by its capillary action, a ſufficiently-copious ſupply of the oil, &c. The patentee next gives a method for conveniently filling the veſſel; and he adds, that the burner conſiſts of a tube tapering upwards, to the upper part of which, and not more than about one-half its diameter below its ſuperior extremity, there is attached a ſmall plate or ledge, concave upwards, and projecting on every ſide from the exterior of the tube itſelf to a diſtance equal to about one-half of the diameter of ſuch tube. The intention and effect of this projecting plate or ledge, are, to catch the ſmall quantity of oil which generally exudes from the wick of a lamp that is ſufficiently ſupplied, and by that means not only prevent the unpleaſant effect which reſults from the flowing of the oil down the ſides of the burner, but apply the oil, which would otherwiſe be waſted by this means, to the purpoſe of more copiouſly ſupplying the combuſtion of the wick. In order, however, both that no part of the oil which exudes from the wick during its combuſtion may be waſted, and that the diſagreeable effects which would reſult from its flowing down the ſides may be ſtill more effectually prevented, Mr. B. attaches to the tube which conſtitutes the burner, at a convenient diſtance below the plate or ledge, a ſecond plate or ledge, of the ſame figure, but of larger dimenſions than the one already deſcribed. The tube which conſtitutes the burner, is perforated between the two plates with two or more horizontal circular rows of ſmall apertures, ſurrounding ſuch tube; by this contrivance, any ſuch oil as eſcapes over the edge of the upper of the ſaid plates, may be caught by the lower one, and by that means again brought into contact with the wick through the apertures; and alſo, the external air which is admitted through the apertures, and a certain quantity of which will, of courſe, riſe through the interſtices of the cotton to the lighted portion of the wick, will aſſiſt in promoting combuſtion.

Travelling Lamps. Dawſon's carriage-lamps can be made to any ſhape or pattern. A deſcription of a four-ſided one will convey to the reader a proper idea of the invention. Two ſides are of courſe dark, with reflectors, the other two of glaſs. According to the old conſtruction, there were ſliders before the glaſs, which were the occaſion of ſeveral inconveniencies. Mr. Dawſon, to prevent the neceſſity of theſe, makes his lamp to conſiſt of two parts, namely, the lamp itſelf, and a caſe; the latter is fixed to the carriage, and the former is eaſily taken in and out, and, being made exactly ſquare, in the day-time the dark ſides are outwards, which prevents any damage happening to the glaſs: and at night the glaſs is inſtantly turned outwards, and candles or oil may be uſed at diſcretion; another advantage is, that, in caſe of any accident to the carriage by night, or of any thing loſt, &c. the lamps may be taken very readily from the caſes, when they make admirable hand-lanterns.

We ſhall give a few figures to explain the conſtruction. Fig. 3 repreſents a circular lamp or lantern, made to fit into, and turn half round in, figs. 4 and 5; and, when united or joined by ſolder or otherwiſe, forming a caſe, blind, or ſhade, for fig. 3, for ſhading or darkening the light when required. A is a ſmall bolt or pin, made to pull up and puſh down, and to bolt into tube B, for the purpoſe of faſtening door C when ſhut. D is a ring, knob, &c. by which the lamp or lantern is turned when put or placed in the blind or ſhade, figs. 4 and 5, for the purpoſe of ſhading the light and preſerving the glaſs. Fig. 3, when put or placed in figs. 4 and 5, is united or made faſt thereto by a haſp, or other proper faſtening, fixed or attached in the uſual way to the top of the caſe. E is a ſmall tube or hole to receive the catch or contrivance A, in fig. 6, for the purpoſe of faſtening or uniting fig. 3 to fig. 4. In this caſe a common barrel is uſed therewith, for the convenience of turning the lamp or lantern round by the barrel in the caſe, ſhade, or blind. Fig. 4 repreſents part of a caſe, ſhade, or blind, which may be either united to fig. 5, or to a common barrel, as before deſcribed. Fig. 4 may alſo be made to turn round on the outſide of the circular lamp or lantern if required; in that caſe the lamp or lantern may be attached or fixed to the carriage in the uſual way, and an aperture or opening made in a caſe, blind, or ſhade, of ſufficient length and width to admit the faſtening of the lamp or lantern, ſo that the caſe may freely turn round backwards and forwards when the lamp or lantern is wanted to be darkened

ened. Fig. 6 repreſents the bottom of fig. 4, with the addition of A, a catch or contrivance for uniting the ſame to fig. 3, as before deſcribed. Fig. 7. repreſents a ſquare lamp, made nearly in the uſual way; the door may be either made to open or ſhut as fig. 3, or let down by a hinge placed or fixed at the bottom thereof, and faſtened at the top by a bolt or pin to a tube adjoining to the door. Fig. 8 repreſents a ſquare caſe, ſhade, or blind, made to receive fig. 7. When fig. 7, placed in fig. 8, is wanted to be ſhaded or darkened, it muſt be taken out and reverſed with the glaſs next the back part of the caſe, ſhade, or blind; and *vice verſâ*, when light is again wanted. Fig. 9 repreſents the rim or top of fig. 8. A, A, are haſps, or other faſtenings, for uniting or faſtening the lamp or lantern to fig. 8.

The invention of Mr. Miles of Birmingham may be uſed either as a travelling or a ſtationary lamp. The ſpecification of his patent is as follows: "I, John Miles, do hereby declare, that my ſaid invention of making lamps in different forms, and of any kind of metal, to be uſed without inconvenience on horſes, carriages, breaſts of men, or any body under motion, ſo as to give perfect light, though ever ſo much agitated; or to be uſed in halls, on ſtaircaſes, tables, deſks, or for other purpoſes, where motion is not required; is performed in the following manner; that is to ſay, I take of any kind of metal, or mixture of metals, or metallic ſubſtances, that can be caſt, rolled, drawn, or preſſed, into the form I wiſh, and the purpoſe requires; but, as the moſt ſimple form is the moſt eaſily underſtood, I will ſuppoſe the form of the lamp to be round, and the material of which it is to be made, rolled tinned plate. If to bear agitation, I take the ſaid rolled tinned plate, and cut out two round pieces, ſuppoſe three inches diameter, or thereabouts, and a flat piece of a regular width, ſuppoſe one inch long enough, when the ends are ſoldered together, to form a round of ſuch ſize as will fit and ſolder to the two round pieces before deſcribed; thoſe I fit and ſolder together, ſo as to be air-tight, to hold the oil or ſpirits, which are to ſupply the burner or burners, and this I call the *reſervoir*; and, if for a ſolid burner or burners, through which no air-tube paſſes, I make a round hole in one of the round parts, ſufficient to contain the top which I mean to place therein, ſuppoſe one inch and a quarter diameter, or thereabouts, and three eighths of an inch deep in the rim; to make which I cut two pieces, of nearly an equal length or width, ſo that, when the two ends of each are ſoldered together, and made round, they will ſcrew or ſqueeze into each other, air-tight; one of which round rims I ſolder, air-tight, in the round hole of the reſervoir, and with the other I form the top; to do which I cut a round piece of tinned plate, of ſuch diameter as will fit and ſolder, air-tight, to the ſaid top rim; in the circle of which I make a hole, wherein to fix the burner tube or tubes, which I make of tinned plate, of any ſize or any ſhape I think proper, and then I ſolder the ſame, air-tight, in the hole or holes made in the top for that purpoſe; part thereof to lead into the reſervoir, and part to ſtand above; at the bottom of which external part or parts I make one or more ſmall hole or holes, through which the oil or ſpirits that fall down the tube or tubes, from the burner or burners, may return again to the wick or wicks. And, as ſuch oil or ſpirits, with which the lamp is charged, are liable to run about and waſte by agitation, I preſerve the ſame by fixing a rim round the ſaid burner or burners, which will prevent the oil or ſpirits eſcaping; and this part I call the *preſerver*. When all this is done, and I have filled the reſervoir with oil or ſpirits, and properly trimmed the burner tube or tubes with wick or wicks, and fixed the top to the reſervoir, ſo as to be every way air-tight, except through the burner tube or tubes, I then light the wick or wicks; and, as they continue to burn, the oil or ſpirits, when they get warm, will naturally ſwell; and, as the reſervoir is every way air-tight, and the oil or ſpirits have no other way for expanſion, the liquid will flow ſuperabundantly up the burner tube or tubes, ſo as to overcharge the preſerver; and afterwards, as the oil or ſpirits diminiſh by burning, the air will preſs into the reſervoir, the ſame way, to ſupply the vacancy occaſioned by the diminution of the oil or ſpirits, and ſo retard the oil or ſpirits in riſing to ſupply the burners; to prevent both which inconveniences, I make a ſmall hole through the top, into the reſervoir, that the air may paſs and repaſs, as the ſwelling or ſinking of the oil or ſpirits requires; which hole is ſo ſmall that no more oil or ſpirits can eſcape than the preſerver will ſecure. And, as the oil or ſpirits are liable to leak, as well through the wick or wicks as the ſmall hole in the preſerver, if by accident it ſhould be laid on one ſide or turned upſide down, it is neceſſary to guard againſt it; to do which I fix a ſmall rim in the top of the preſerver, leading part down the ſame, leaving a ſpace round ſuch ſmall rim, within the preſerver, to contain the oil or ſpirits that may chance to come therein; to which ſmall rim I make another, that will ſcrew or ſqueeze, air-tight, into ſuch ſmall rim, and of ſuch width, that, when one edge is ſcrewed or ſqueezed air-tight into ſuch ſmall rim, the other will riſe higher than the top of the burner or burners, ſo that it may be put on and taken off without diſturbing the wick or wicks. I then ſolder a round bit of tin plate thereon, air-tight, and it will then not only ſerve for an extinguiſher occaſionally, but will ſecure any oil or ſpirits which may chance to come into the preſerver by ſuch accident.

"For making an air-burner or burners, I make the top or other parts of the lamp upon the foregoing principle, with the following difference: I make a hole in the bottom of the reſervoir, ſuppoſe one quarter of an inch diameter, or more, as the burner or burners require, into which I ſolder, air-tight, a round air-tube, the upper part of which is to ſtand in the centre of the top. I then make another tube, that will ſcrew or ſqueeze withoutſide of the air-tube, ſo as to render it air-tight, which outſide tube I fix in the centre of the top (as before deſcribed) to as to ſcrew or ſqueeze, air-tight, round the air-tube, juſt as the top and reſervoir rims are; round or by the ſide of which outſide tube, (which is beſt in a conical form,) I fix one or more burner tube or tubes, in what form or ſhape I think proper, and ſolder the whole within the top, air-tight, as before deſcribed, taking care to keep the top of the burner tube or tubes at ſuch a diſtance from the conical tube, that the oil or ſpirits which fall from the burner or burners cannot go therein, but be returned to the wick or wicks, through the hole or holes at the bottom of the external part of the burner tube or tubes, within-ſide the preſerver, as before deſcribed; when a ſtopper or ſtopple, being put into the top of the conical tube, ſo as to be air-tight, will, with the extinguiſher before deſcribed, perfectly ſecure any oil or ſpirits that may chance to come therein.

"In order that all lamps made upon this principle may continue to burn in all ſorts of weather, I place or fix them in a lantern, made for that purpoſe, in any form or ſhape I think proper. I can make lamps in any form I think proper upon the ſame principle; but it muſt be obſerved, that the thinner the wick, and the nearer the air is conveyed to the burner or burners, the more brilliant the light will be; but the burner or burners will then want trimming the oftener; but, when motion is not required, that part of the principle of being air-tight is unneceſſary. To make a lamp that will continue to burn without trimming for a long ſpace of time, I make the reſervoir (as I think beſt) of a much ſmaller diameter than depth; which by means of a ſtopple, or ſtopper, fixed in a hole at the top thereof, (for admitting the oil or ſpirits therein,) is to be made air-tight; or elſe I do not make any hole at the top, but one at the bottom, or lower part of the ſide, of the reſervoir, whereby the ſame may be filled, by laying the reſervoir on one ſide, or upſide down; to which hole I fix a tube, and, at the end of it from the reſervoir, a ſmall baſon, proportioned to the ſize of the

burner I mean to place therein, into which the oil or ſpirits can only paſs upon the ſame principle as a bird-cage water-fountain. When I have filled the reſervoir, and ſet it perpendicular, and the oil and ſpirits have found their juſt medium in the ſmall fountain-baſon, I take a quantity of fine wire, in proportion to the ſize I intend the burner to be, twiſt it together, and turn it into ſuch form that it will ſtand of itſelf in the middle of the fountain-baſon, which I take care to place at ſuch a diſtance from the reſervoir, that the heat of the burner may rarify the oil or ſpirits within the reſervoir, in proportion to its conſumption; I then make the burner hot till the oil or ſpirits take fire, and it will then continue to burn (if defended from any ſudden impulſe of air) ſo long as it is properly ſupplied." *Patent*, Feb. 12, 1787.

Automaton Lamp. This is the invention of Mr. John Porter, of Lemonville, near Tandragee, in the county of Armagh, in Ireland. His patent is dated May 30, 1804. The diſtinguiſhing character of this lamp is, that it is ſuſpended on an axis, on which it moves while burning. On the ſide of this axis, which is oppoſite to the burner or burners, the lamp contains the greateſt part of the oil or ſpirits; and on the ſame ſide of the axis with the burner or burners is placed ſo much metal, or other ſubſtance, as makes the lamp hang level, or nearly ſo, when full, and gives it a dip on the ſide of the burner or burners, forming an angle of forty-five degrees when empty, more or leſs; the axis alſo is ſo adjuſted, with reſpect to the depth of the lamp, that it may feed itſelf evenly by the gradual deſcending of the burners; or, as the oil diminiſhes by burning, the weight behind the centre is leſſened, whilſt that of the wick continues without alteration. This occaſions the lamp to librate, ſo that the oil is always kept very near the wick, by which means it will burn oil which is too impure for the capillary action of a common lamp. The nicety of its performance depends upon the figure of the veſſel, and the place of the centre correſponding with the weight of the tubes. This the makers have by experience determined to the greateſt accuracy. The automaton lamp is in very general uſe in the north of England in cotton-mills, and other manufactories where the gas-lights are not introduced.

Rolling Lamp. This lamp, AB, fig. 10, has within it the two moveable circles, DE, FG, whoſe common centre of motion is at K, where their axes of motion croſs one another, in which point alſo is their common centre of gravity. If to the inward circle you join within-ſide the lamp KC made pretty heavy, and moveable about its axis HI, whoſe centre of gravity is at C, the common centre of gravity of the whole machine will fall between K and C; and, by reaſon of the pivots A, B, D, E, H, I, will be always at liberty to deſcend; and, therefore, let the whole lamp be rolled along the ground, or moved in any manner, the flame will always be uppermoſt, and the oil cannot be ſpilt. In this manner the compaſs is hung at ſea; and thus ſhould all the moon-lanthorns be made that are carried upon a pole before coaches or carriages which travel in the night.

By 17 Geo. II. c. 29. a convenient number of glaſs lamps ſhall be put in ſuch places of the city of London, as the mayor, aldermen, and commonalty, ſhall think fit; to be kept lighted and burning from ſun-ſet to ſun-riſing throughout the year; and rates ſhall be made not exceeding 6d. in the pound, nor above 50s. a-year on any one perſon, for defraying the charges of them. Every alderman, with conſent of his deputy and common council, may contract yearly for the ſetting up lamps, and their lighting, trimming, &c. and perſons maliciouſly breaking down or extinguiſhing the lamp, ſhall forfeit 40s. for the firſt offence, 50s. for the ſecond, and 3l. for the third, leviable by juſtices, or to be ſent to the houſe of correction. By ſtat. 11 Geo. III. c. 29. for paving and lighting London, the wilfully breaking or extinguiſhing of any lamp incurs the penalty of 20s. for each lamp or light deſtroyed or extinguiſhed. None but Britiſh oil is to be uſed for lamps in private houſes, under the penalty of 40s. 8 *Ann. c.* 9.

The lighting of ſtreets, while it greatly contributes to ornament our principal cities, adds conſiderably alſo to the convenience and ſecurity of the inhabitants. It is generally conſidered as a modern invention. St. Evremond ſays, "The invention of lighting the ſtreets of Paris, during the night, by a multitude of lamps, deſerves that the moſt diſtant nations ſhould go to ſee what neither the Greeks nor the Romans ever thought of for the police of their republics." This opinion appears to be well founded; for the Romans would not have conſidered the uſe of flambeaux and lanterns ſo neceſſary, on their return from their nocturnal viſits, as they ſeem to have done, had their ſtreets been lighted. Whoever walked the ſtreets of Rome, at night, without a lantern, was under the neceſſity of creeping home in perfect darkneſs, and in great danger, like Alexis in Athenæus. That Naples was not lighted, appears from the return of Gito in the night-time, mentioned by Petronius. Some circumſtances, however, related by ancient authors make it probable that Antioch and a few other cities had public lanterns, if not in all the ſtreets, at leaſt in thoſe which were moſt frequented. Libanius, who lived in the beginning of the fourth century, ſays in his Panegyric, where he praiſes his native city Antioch, "the light of the ſun is ſucceeded by other lights, which are far ſuperior to the lamps lighted by the Egyptians on the feſtival of Minerva of Sais. The night with us differs from the day only in the appearance of light; with regard to labour and employment, every thing goes on well. Some work continually; but others laugh and amuſe themſelves with ſinging." Now we cannot imagine that the ſophiſt here conſiders it as a ſubject of praiſe to his native city, that the inhabitants, after ſun-ſet, did not ſit in darkneſs, but uſed lights to work by. It appears, therefore, that he muſt allude to the lighting of the ſtreets. In another paſſage, in the oration to Ellebichus, the ſame author tells us, that the ropes from which the lamps that ornamented the city were ſuſpended, had been cut by ſome riotous ſoldiers not far from a bath. This indicates, at any rate, that there were lamps ſuſpended from ropes near the baths and places of greateſt reſort. The following paſſage of Jerome, however, ſeems to make it probable, or rather certain, that the ſtreets of Antioch were lighted. In the altercation between a Luciferan and an Orthodox, he relates, that an adherent of the ſchiſmatic Lucifer diſputed, in the ſtreet, with a true believer, till the ſtreets were lighted; when the liſtening crowd departed; and that they then ſpat in each other's face, and retired. In the elegant edition of the works of that father, by Dominicus Vallarſius, we have a ſhort diſſertation on the time when this unmannerly diſpute took place; and the editor ſhows that it happened, at Antioch, in the year 378.

With regard to the public lighting of whole cities on feſtivals, and particularly on joyful occaſions, which we call illuminations, that practice ſeems to be of great antiquity. Of this kind was a particular feſtival of the Egyptians, during which lamps were placed before all the houſes throughout the country, and kept burning the whole night. During that feſtival of the Jews, called the feaſt of the dedication, which, according to common opinion, was celebrated in December, and continued eight days, a number of lamps were lighted before each of their houſes. A paſſage in Æſchylus ſhows that ſuch illuminations were uſed alſo in Greece. At Rome, the forum was lighted when games were exhibited in the night-time; and Caligula, on a like occaſion, cauſed the whole city to be lighted. As Cicero was returning home late at night, after Catiline's conſpiracy had been defeated, lamps and torches were lighted in all the ſtreets, in honour of that great orator. The emperor Conſtantine cauſed the whole city of Conſtantinople to be illuminated with lamps and wax candles on Eaſter-eve. The fathers of the firſt century frequently inveigh againſt the Chriſtians, becauſe, to pleaſe the heathens, they often illuminated their houſes, on idolatrous

latrous feſtivals, in a more elegant manner than they. This they conſidered as a ſpecies of idolatry. That the houſes of the ancients were illuminated on birth-days, by ſuſpending lamps from chains, is too well known to require any proof.

Of modern cities, Paris ſeems to have been the firſt that followed the example of the ancients by lighting its ſtreets. As this city, in the beginning of the ſixteenth century, was much infeſted with ſtreet-robbers and incendiaries, the inhabitants were, from time to time, ordered to keep lights burning, after nine in the evening, before the windows of all the houſes which fronted the ſtreet. This order was iſſued in the year 1524, and renewed in 1526 and 1553; but, in the month of October 1558, *falots* were erected at the corners of the ſtreets, or, when the ſtreet was ſo long that it could not be lighted by one, three were erected in three different parts of it. The Grand Vocabulaire François, 1770, explains, *falot* as a large vaſe filled with pitch, roſin, and other combuſtibles, employed in the king's palace and houſes of princes to light the courts. At that period there were in Paris 912 ſtreets; ſo that the number of lights then uſed muſt have been leſs than 2736. In the month of November, the ſame year, theſe lights were changed for lamps encloſed in lanterns. The lighting of the ſtreets of Paris continued, however, for a long time to be very imperfect, ſince the abbé Laudati, an Italian of the Caraffa family, conceived the idea of letting out torches and lanterns for hire. In the month of March 1662, he obtained an excluſive privilege to this eſtabliſhment for twenty years; and he undertook to erect, at certain places, not only in Paris, but alſo in other cities of the kingdom, booths or poſts where any perſon might hire a link or lantern, or, on paying a certain ſum, might be attended through the ſtreets by a man bearing a light. He was authoriſed to receive from every one who hired a lantern to a coach, five ſous for a quarter of an hour; and from every foot-paſſenger three ſous. To prevent all diſputes in regard to time, it was ordered that a regulated hour-glaſs ſhould be carried along with each lantern. In 1667, however, the lighting of the city of Paris was put on the footing on which it is at preſent. On 23d of May, 1671, an order was made that the lanterns every year ſhould be lighted from the 20th of October till the end of March in the year following. Before this period the ſtreets were lighted only during the four winter-months; and, on account of the number of atrocities committed in the night-time when there were no lights, the Pariſians offered to contribute as much money as ſhould be ſufficient to defray the expenſe of keeping the lamps lighted throughout the whole winter. The lamps employed at this time were, on account of their likeneſs to a bucket, called *lanternes à ſeau*, and ſucceeded thoſe invented by one Herault, called *lanternes à cul-de-lampe*. When Sartine held the office of lieutenant de police, a premium was offered to whoever ſhould diſcover the moſt advantageous means of improving the lighting of the ſtreets; and the Academy of Sciences were to decide on the different plans that might be propoſed. In conſequence of this offer, a journeyman glazier, named Goujon, received a premium of 200 livres; and Meſſrs. Bailly, le Roy, and Bourgeois de Chateaublanc, 2000 livres. To the laſt-mentioned gentleman is aſcribed the invention of the preſent reverberating lamps, which were introduced in 1766. The ſuperiority of theſe lamps cannot be denied; but, beſides their expenſe, they are attended with this diſadvantage, when they hang in the middle of the ſtreet, that they throw a ſhade over it, ſo that one cannot be known by thoſe who paſs. In cities alſo, where people walk principally in the middle of the ſtreets, or where the ſtreets are broad, they are not very convenient, and they occaſion a ſtoppage when it is neceſſary to clean them. In the year 1721, the lamps in Paris are ſaid to have amounted to 5772; but in the Tableau de Paris, printed in 1760, the number is reckoned to be only 5694; and in the Curioſités de Paris, 1771, they are ſtated to be 6232. In 1777 the road between Paris and Verſailles, which is about nine miles in length, was lighted at the yearly expenſe of 15,000 livres by the ſame contractors who lighted Paris. The city of Nantes was lighted the ſame year; and in 1780 had 500 lamps. Straſburgh began to be lighted in 1779.

It appears that the ſtreets of Amſterdam were lighted by lanterns ſo early as 1669; for, in the month of February that year, the magiſtrates, who in 1665 had forbidden the uſe of torches, iſſued an order againſt deſtroying the lamp-poſts, to which it was cuſtomary to faſten horſes. The lanterns were not of glaſs, but of horn; for the lamplighters were ordered, in their inſtructions, to wipe off every day the ſmoke of the train-oil which adhered to the horn of the lanterns. At the Hague an order was iſſued, in the month of October 1553, that the inhabitants ſhould place lights before their doors during dark nights; and afterwards ſmall ſtone houſes were erected at the corners of the principal ſtreets, in which lights were kept burning; but in the year 1678 lamps were fixed up in all the ſtreets. The ſtreets of Copenhagen were firſt lighted by lamps in 1681. The ſtreets of Rome are not yet lighted. Sixtus V. was deſirous to introduce this improvement in the police, but he met with inſurmountable obſtacles. In order however that the benefit of lighting might be enjoyed in ſome meaſure, he ordered the number of the lights placed before the images of ſaints to be augmented. Madrid, which till lately was the dirtieſt of all the capital cities of Europe, is at preſent as well lighted as London. Valencia, in Spain was ſome years ago indebted for this improvement to Joachim Manuel Fos, then inſpector of the manufactories. Barcelona is lighted alſo. Liſbon however has no lights.

In the year 1672, the council of Hamburgh made a propoſal to the citizens for lighting the ſtreets. The year following this propoſal was accepted, but the lamps were not fixed up till two years after, that is to ſay in 1675. In the year 1679, Berlin had advanced ſo far towards this improvement, that the inhabitants were obliged in turns to hang out a lantern with a light at every third houſe. In 1682, the elector Frederic William cauſed lamp-poſts with lamps to be erected, notwithſtanding the oppoſition made by the inhabitants on account of the expenſe. In a petition which they preſented in 1680, they ſtated, that the lamps coſt five thouſand dollars, and that three thouſand were required yearly to keep them lighted. At preſent Berlin has 2354 lamps, which are kept lighted from September till May, and at the king's expenſe. Potſdam has 590. Vienna began to be lighted in the year 1687. The lights were hung out in the evening on a ſignal given by the fire-bell. In 1704, lamps were introduced; but at firſt the light which they afforded was very imperfect, as the lamps burned badly, and becauſe, to ſave the expenſe of lamp-lighters, every houſekeeper was obliged daily to remove the empty lamps, to carry them to the lamp-office to be filled, and to light them again on a ſignal given with a bell. In 1776, the lamps, which before amounted to two thouſand, were increaſed to three thouſand, and a contract was entered into for lighting them at the rate of 30,000 florins. Theſe lamps in the year 1779 amounted to 3445. They are made of white glaſs, in a globular form, and have a covering of tin plate, painted red on the outſide and poliſhed within. They are ſupported by lamp-irons, fixed in the houſes at the height of fifteen feet from the ground. Each lantern is only ſixteen paces diſtant from the other, ſo that the ſtreets are completely illuminated. They are kept lighted both ſummer and winter; and this is more neceſſary at Vienna than any where elſe, on account of the height of the houſes and the narrowneſs and crookedneſs of the ſtreets. The lamplighters wear an uniform, and are under military diſcipline. In 1783, the yearly expenſe of the lamps was eſtimated at only 17,000 florins. Leipzig was lighted in 1702, and Dreſden in 1705. In 1766, the number of lamps at the

the latter amounted only to 728, for the lighting of which oil of rape-ſeed was employed. In Caſſel, the ſtreets began to be lighted, under the landgrave Charles, in 1721; but, as regulations were not made ſufficient to ſupport this improvement, it was dropped. It was however revived in 1748; and in 1778 the number of the lamps was increaſed to 1013, beſides thoſe at the landgrave's palace. Hanover was lighted in 1696, Halle in 1728, and Gottingen in 1735. Brunſwick, ſince 1765, has had 1565 lamps. Zurich has been lighted ſince 1778, but the lamps are very few in number.

Though we mention London the laſt, it was next to Paris (ſome ſay before it) in adopting this uſeful invention. In the year 1668, when ſeveral regulations were made for improving the ſtreets, the Londoners were reminded that they ſhould hang out lanterns duly *at the accuſtomed time*. In the year 1690 this order was renewed, and every houſekeeper was required to hang out a light, or lamp, every night, as ſoon as it was dark, between Michaelmas and Lady-day; and to keep it burning till the hour of twelve at night. In the year 1716 it was ordered by an act of common council, that all houſekeepers, whoſe houſes fronted any ſtreet, lane, or public paſſage, ſhould, in every dark night, that is, every night between the ſecond night after every full moon and the ſeventh night after every new moon, ſet or hang out one or more lights, with ſufficient cotton wicks, that ſhould continue to burn from ſix o'clock at night till eleven o'clock of the ſame night, under the penalty of one ſhilling. All theſe regulations, however, ſeem to have been ineffectual, owing to bad management. The city was lighted by contract, and the contractors for liberty to light it were obliged to pay annually to the city the ſum of ſix hundred pounds. Beſides, the contractors received only ſix ſhillings per annum from every houſekeeper whoſe rent exceeded ten pounds; and all perſons who hung out a lantern and candle before their houſes were exempted from paying towards the public lamps. The ſtreets were lighted no more than a hundred and ſeventeen nights, and then for only five hours each night; and, as this left great opportunity to thieves and robbers to commit depredations, the lord-mayor and common-council judged it proper, in the year 1736, to apply to parliament for power to enable them to light the ſtreets of the city in a better manner; and an act was accordingly paſſed, by which they were empowered to erect a ſufficient number of ſuch ſort of glaſs-lamps as they ſhould judge proper, and to keep them burning from the ſetting to the riſing of the ſun throughout the year. Inſtead, therefore, of a thouſand lamps, the number was now increaſed to 4679; but, as even theſe were not ſufficient, ſeveral of the wards made a conſiderable augmentation, ſo that the whole could amount to no leſs than 5000. This, however, was not the amount of all the lamps in London, but of thoſe in what is properly called the city and liberties. As this diviſion forms only a fifth part of London, Maitland reckons the whole number of public and private lamps to have been, even at that period, upwards of 15,000. In the year 1744, owing to the great number of robberies committed in the ſtreets during the night, it was found neceſſary to apply for another act of parliament to regulate ſtill farther the lighting of the city; and at that period this eſtabliſhment was placed upon that footing on which it now ſtands. The lamps of London, at preſent, are all of cryſtal glaſs; each is furniſhed with three wicks; and they are affixed to irons placed againſt the houſes at the diſtance of a certain number of paces from each other. They are lighted every day in the year at ſun-ſet; and Oxford-ſtreet alone is ſaid to contain more lamps than all Paris. *Beckman's Hiſt. of Inventions*, vol. iii. *Repertory of Arts*, vol. iii. xiv. xviii. xxi.

LAMP-BLACK, *ſ.* A pigment of which there are two ſorts; one of which is the light ſoot obtained from burning pine and other reſinous wood; the other, which is the heavy black, is obtained by calcining bones in cloſe veſſels. For the preparation, ſee the article PIGMENT. Subſtances painted with lamp-black and oil are found to reſiſt the effects of electricity to a ſurpriſing degree; ſo that in many caſes even lightning itſelf ſeems to have been repelled by them.

LAMP-FUR'NACE, *ſ.* A furnace, in which the heat is produced and maintained by the flame of a lamp introduced within it. This furnace has no occaſion for an aſh-hole, a grate, or a fire-place. It has only one opening below, through which the lamp is introduced, and a kind of ſmall chimney in its upper and lateral part, for circulation of air, to keep up the flame of the lamp, and to give vent to the ſmoke. The following account of a lamp-furnace, invented by Robert Perceval, M.D. M.R.I.A. is extracted from the Tranſactions of the Royal Iriſh Academy. It conſiſts of a cylindrical body, A, fig. 11 and 12, $4\frac{1}{8}$ inches diameter, and $9\frac{1}{2}$ high, ſurmounted by a laboratory, (or ſpace for containing veſſels,) which is a hollow truncated cone, B, $6\frac{1}{2}$ inches wide at top, and $4\frac{1}{8}$ at bottom. Its conical ſhape adapts it to veſſels of different ſizes. To the inſide of the laboratory are riveted ſix tubes, C C C, $\frac{3}{8}$ths of an inch diameter, on which the veſſel reſts, ſo that ſpace ſufficient for the paſſage of heated air is interpoſed between it and the inſide of the laboratory. Into three of theſe tubes, iron ſpikes (previouſly fitted to them) are occaſionally introduced; two of them are ſeen in fig. 11, marked D D: their coverging extremities form a ſupport for veſſels the bottoms of which are leſs than $4\frac{1}{8}$ inches in diameter. In one of theſe tubes, whilſt the lamp is burning, is placed the ſmall pipe ſhown ſeparately at A, fig. 13; which, communicating with the reſervoir B, ſupplies oil gradually to the lamp, through an aperture contrived for that purpoſe. The lamp, which is contained in the body of the furnace, is made according to Argand's conſtruction, with an oil-ciſtern, which is a hollow cylinder. The diameter of the wick-holder, in the clear, is 1 inch $\frac{5}{8}$; the diameter of the circular air aperture within E, fig. 12, is 1 inch $\frac{3}{8}$. The lamp is ſupported by two croſs-ſtays F F, which are fixed to the top of the tube G. This tube riſes and falls on the ſtem H, and is fixed at different heights by means of the ſpring-catch I, which is faſtened to the tube, and fits into holes made in the ſtem. The tube, in riſing and falling, carries with it the lamp, which, by this means, may be ſupported at different diſtances from the veſſels, in the laboratory. The furnace itſelf anſwers the purpoſe of a chimney to the lamp. In the body of the furnace is an opening K, fig. 11, for trimming the lamp; this may be cloſed by a ſlide. When it is cloſed, the heat of the lamp is conſiderably increaſed, for reaſons too obvious to be inſiſted upon. The bottom of the lamp, to make it more ſteady, is loaded with lead.

"I was employed in making ſome experiments with this lamp, aſſiſted by my ingenious friend Mr. Healy, when he ſuggeſted that the heat produced would probably be greater, if the internal air-aperture of the wick-holder were diminiſhed. This conjecture I thought probable, as, in the ſtate of the lamp which I have deſcribed, the central air was ſo far removed from the flame as not to be heated conſiderably by it; and this, we imagined, might counterbalance any advantage which might reſult from the more liberal ſupply of air to the flame. To determine whether this was really the caſe, we cauſed a ſtopper to be made, half an inch in diameter, which, fitting into the central aperture with a ſpring, left a circular opening of only $\frac{3}{8}$ of an inch wide, inſtead of $1\frac{1}{4}$ inch, for the paſſage of air." This was attended with advantage in the ſucceeding experiments, and the aperture was afterwards reduced to $\frac{3}{16}$th, of an inch, and ſtill with increaſed action; "thus it appears (concludes Dr. P.) that, in lamps made on this conſtruction, the internal aperture for air may be conſiderably diminiſhed with advantage. What is the moſt advantageous opening, I have not had leiſure preciſely to determine; but it is probable that it would not bear to be diminiſhed much more than in the experiment laſt recited."

LAM'PA, a town of Chili, on a lake: twenty miles north of Valparaiſo.

LAM'PA, a town of Peru, and capital of a juriſdiction of the ſame name, in the biſhopric of Cuſco, ſituated to the ſouth of Cuſco. The ſoil is very unequal; ſome parts very fertile, others unproductive. The ſilver-mines are abundant; ninety miles ſouth of Cuſco, and eighty-ſix north of Arequipa. Lat. 14. 55. S. lon. 81. 44. W.

LAMPACAN', a ſmall iſland in the Eaſtern Indian Sea, a little to the ſouth of Junkſeilon.

LAMPADAPHO'RIA, *ſ.* [from the Gr. λαμπας, a lamp, and φερω, to bear.] A proceſſion with lighted torches.

LAMPADA'RIUS (Emanuel), an author who has written on the muſic of the Greek church: "De Pſallendi Arte, et ipſius et aliorum Poemata Eccleſiaſtica, ad Notas Muſicas accommodata." The abbate Martini of Venice, found this book, and made extracts from it, in Greece; and Dr. Burney met with it in the royal library at Turin. The title of the Greek treatiſe, by Lampadarius, is Τεχνολωγεια της μϑσικης τεκνης. And among the memoranda made in the king of Sardinia's library at Turin, in 1770, is an account of a Greek manuſcript of the 15th century, in which Lampadarius is often mentioned as author of the muſic to the hymns and prayers it contains. Fabricius, likewiſe, ſpeaks of a manuſcript in the Selden Collection at Oxford, and another in the Jeſuits' library at Louvain, in which there are explanations of the notes uſed by the modern Greeks, and muſical compoſitions by ſeveral authors, particularly Lampadarius.

LAM'PADARY, *ſ.* An officer in the ancient church of Conſtantinople, ſo called from his employment, which was to take care of the lamps, and to carry a taper before the emperor or patriarch when they went to church or in proceſſion.

LAMPA'DIUS, a chantor of the church at Luneberg, publiſhed a ſmall work in Latin, entitled Compendium Muſicæ, 12mo. 1537. This ſhort tract, which is in dialogue, and a kind of muſical catechiſm deſigned for beginners, has, at the end, a few ſhort rules for compoſition, with examples.

LAMPÆ'DIAS, *ſ.* A kind of bearded comet, reſembling a burning lamp, being of ſeveral ſhapes; for ſometimes its flame or blaze runs tapering upwards like a ſword, and ſometimes it is double or treble pointed. *Hutton.*

LAM'PAS, or LAMPASS, *ſ.* [French.] A lump of fleſh, about the bigneſs of a nut, in the roof of a horſe's mouth, which riſes above the teeth.—His horſe poſſeſt with the glanders, troubled with the *lampaſs*, infected with the faſhions. *Shakeſpeare.*—See the article FARRIERY, vol. vii. p. 349.

LAMPAS'KE, a town of Pruſſia, in Natangen: twenty miles ſouth-ſouth-eaſt of Kouigſberg.

LAMPASSE', *adj.* [in heraldry.] Languid; having the tongue out of the mouth, and marked with a different tincture.

LAMPE (Frederic Adolphus), a learned German proteſtant divine and profeſſor, was born at Dethmold, in Weſtphalia, in the year 1683. He was inſtructed in the rudiments of learning at Bremen; and afterwards ſtudied ſucceſſively in the univerſities of Franeker and Utrecht. When he had finiſhed his courſe of divinity, he was firſt ſettled with the church of Weſel, in the territory of Cleves; whence he afterwards removed to Teuteburg, and from that place to Bremen. In the year 1720, he accepted of an invitation to Utrecht, to fill the chair of profeſſor of divinity; and, in addition to that poſt, in the year 1726, he was appointed profeſſor of eccleſiaſtical hiſtory. In the following year, however, he was again induced to ſettle at Bremen; where he had the appointment of profeſſor of divinity in ordinary, the honour of being perpetual rector of the univerſity, and was alſo choſen paſtor of a church. Theſe advantages and honours he enjoyed but a very ſhort time, being carried off by a violent hæmorrhage in 1729, when only forty-ſix years of age. But, though ſo young, and conſtantly engaged in public employments, he found time to compoſe ſeveral works, which reflect credit on his induſtry and learning. Among theſe are, 1. De Cymbalis Veterum, lib. iii. 12mo. 1703. 2. Exercitat. Sacr. in Pſal. xlv. enriched with a variety of remarks on ſacred antiquities, 4to. 1715. 3. Synopſis Hiſt. Sacr. et Eccleſiaſticæ, ab origine Mundi ad præſentia Tempora, 4to. 1721. 4. Synopſis Theologiæ naturalis, 8vo. 1723. 5. Comment. in Evang. S. Johannis, 3 vols. 4to. 1724 and 1725. 6. Hiſtory of the reformed Church in Hungary and Tranſylvania, 4to. 1728, in Latin. 7. Rudimenta Theologiæ Elenchticæ, 8vo. 1729. 8. De Urim et Thummin, 1727, &c. *Moreri.*

LAMPE (John-Frederic), a Saxon, who arrived in England about the year 1726, began firſt to be noticed as a compoſer about the year 1732. On the 25th of February of that year, the following paragraph was inſerted in the Daily Poſt: "We hear that there is a ſubſcription for a new Engliſh opera, called Amelia, which will ſhortly be performed at the new theatre in the Haymarket, by a ſet of performers who never yet appeared in public." This opera, written by Harry Carey, and ſet to muſic by Lampe, was firſt performed March 15, 1732; in the principal character of which, Miſs Arne, afterwards ſo celebrated as a tragic actreſs, by the name of Mrs. Cibber, firſt appeared on the ſtage as a ſinger. The muſic, which, according to the advertiſement, was ſet in the Italian manner, having been much applauded, was ſoon avowed by Lampe; and Miſs Arne's performance intereſted every hearer. The year 1737 was rendered memorable at Covent-Garden theatre by the ſucceſs of the burleſque opera of the Dragon of Wantley, written by Carey, and ſet by Lampe "after the Italian manner." This excellent piece of humour had run twenty-two nights, when it was ſtopped, with all other public amuſements, by the death of her majeſty queen Caroline, November the 20th; but was reſumed on the opening of the theatres in January following, and ſupported as many repreſentations as the Beggar's Opera had done ten years before. And, if Gay's original intention in writing his muſical drama was to ridicule the opera, the execution of his plan was not ſo happy as that of Carey; in which the mock heroic, tuneful monſter, recitative, ſplendid habits, and ſtyle of muſic, all conſpired to remind the audience of what they had ſeen and heard at the lyric theatre, more effectually than vulgar ſtreet-tunes could do; and much more innocently than the tricks and tranſactions of thieves and proſtitutes. Lampe's muſic to this farcical drama was not only excellent fifty years ago, but is ſtill modern and in good taſte. Lampe compoſed ſeveral other burlettas, which had good ſucceſs; and publiſhed a tract, entitled The Art of Muſic, in 1740. But in 1737 he had publiſhed a treatiſe, under the title of A plain and compendious Method of teaching Thorough-Baſs, &c. 4to. a work of a great merit, and the firſt in our language by which a ſtudent can profit much without a maſter, as the chords, engraved on copper-plates, are all placed over the figured baſe, and the examples tranſpoſed into different keys. Lampe was a truly ingenious man, well verſed in the theory of the art, with a moſt happy turn for humour, without buffoonery, in his comic operas; and, moreover, a man of probity, with great ſimplicity of manners, and poſſeſſed of a kind and benevolent heart. This excellent muſician and worthy man, quitting London, with his family, in 1748, reſided two years in Dublin; and in 1750 went to Edinburgh, where he was ſettled very much to the ſatisfaction of the patrons of muſic in that city, and of himſelf; but, in July 1751, he was ſeized with a fever, which put an end to his exiſtence at the age of fifty-nine.

LAM'PE, a town of Sweden, in the government of Waſa: twenty-eight miles eaſt of Gamla Karleby.

LAM'PEDO, a woman of Lacedæmon, who was daughter, wife, ſiſter, and mother, of a king. She lived in the age of Alcibiades. Agrippina, the mother of Claudius, could boaſt the ſame honours. *Tacitus.*

LAMPEDO'SA, an iſland in the Mediterranean, not inhabited,

inhabited, but pleaſant and fertile. On it is a building, divided into a church and a moſque, which the Catholics viſit as well as the Mahometans. Near the church is a magazine, well provided, where veſſels may find neceſſaries, for which they depoſit the value, if money, in a cheſt; if goods, in the church. On certain days, ſome Sicilian monks come to collect the depoſits, and bring other ſtores. The profits are applied to the hoſpital at Trapani. The iſland is about twelve miles in circumference, with a good port, well ſupplied with freſh water, and an excellent fiſhery on the coaſt: ſixty-three miles weſt of Malta. Lat. 35. 40. N. lon. 12. 24. E.

LAM'PERN, or PRIDE, *ſ.* A ſpecies of lamprey. See PETROMIZON.

LAMPE'TER, a townſhip in Lancaſter county, Penſylvania.

LAMPE'TIA, in ancient geography, a town of Italy, in Magna Græcia, in the country of the Brutii.

LAMPE'TIA, in fabulous hiſtory, a daughter of Apollo and Neæra. She with her ſiſter Phætuſa guarded her father's flocks in Sicily when Ulyſſes arrived on the coaſts of that iſland. Theſe flocks were fourteen in number, ſeven herds of oxen and ſeven flocks of ſheep, conſiſting each of fifty. They fed by night as well as by day, and it was deemed unlawful and ſacrilegious to touch them. The companions of Ulyſſes, impelled by hunger, paid no regard to their ſanctity, or to the threats and intreaties of their chief; but carried away and killed ſome of the oxen. The keepers complained to their father; and Jupiter, at the requeſt of Apollo, puniſhed the offence of the Greeks. The hides of the oxen appeared to walk, the fleſh which was roaſting by the fire began to bellow, and nothing was heard but dreadful noiſes and loud lowings. The companions of Ulyſſes embarked on-board their ſhips; but here the reſentment of Jupiter followed them. A ſtorm aroſe, and they all periſhed except Ulyſſes, who ſaved himſelf on the broken piece of a maſt. *Homer.*—LAMPETIA is alſo the name of one of the Heliades, who was changed into a poplar-tree at the death of her brother Phaeton. *Ovid.*

LAMPE'TIANS, *ſ.* A ſect of ancient heretics, in the ſeventh century, who condemned all kinds of vows, particularly that of obedience, as inconſiſtent with the liberty of the ſons of God.

LAMPE'TO, or LAMPEDO, a queen of the Amazons, who boaſted herſelf to be the daughter of Mars. She gained many conqueſts in Aſia, where ſhe founded ſeveral cities. She was ſurpriſed afterwards by a band of barbarians, and deſtroyed with her female attendants. *Juſtin.*

LAMPE'US, or LAM'PIA, a mountain of Arcadia.

LAM'PI, a diſtrict or country of Guinea, governed by a king, ſubject to Aquambo.

LAMPICHE'LEON, a town of Hindooſtan, in the circar of Adoni: ten miles eaſt of Condanore.

LAM'PING, *adj.* Shining; ſparkling. *Not uſed:*

Happy lines, on which with ſtarry light
Thoſe *lamping* eyes will deign ſometimes to look. *Spenſer.*

LAM'PIS, a town of Sweden, in Tavaſtland: twenty-five miles eaſt of Tavaſthus.

LAM'PO, a town on the weſt coaſt of Celebes. Lat. 3. 55. S. lon 120. 4. E.

LAMPOCARY'A, *ſ.* [ſo denominated by Mr. Robert Brown, from the Gr. λαμπω, to ſhine, and καρυον, a nut, or any fruit with a hard ſhell; alluding to the hard and poliſhed ſeeds.] In botany, a genus of the claſs tetrandria, order monogynia, natural order calamariæ, *Linn.* (cyperoideæ, *Juſſ.*) *Eſſential generic characters*—Spikelets imbricated on all ſides, ſingle-flowered, the outer ſcales being empty; ſtamens four; ſometimes three or ſix; with permanent elongated filaments. Style awl-ſhaped, three cleft; ſtigmas undivided. Nut bony, ſhining, pointed with the permanent baſe of the ſtyle, its ſhell thickened upwards; the kernel ſmooth.

Species. 1. Lampocarya aſpera: ſtamens four; ſpike compound, leafy; the partial one ſcarcely divided; ſpikelets cluſtered; inner ſcales obtuſe, ſmooth. Gathered by Mr. Brown near Port Jackſon, as well as in the tropical part of the New Holland. The four ſtamens are a very unuſual number in this family.

2. Lampocarya hexandra: ſtamens ſix; panicle cloſe; branches ſlightly divided; ſpikelets collected into round heads; ſcales all ſharp-pointed. Gathered by La Billardiere in Van Diemen's Land. The ſtems are two feet high, round, leafy, ſmooth; leaves ſheathing, awl-ſhaped, long, and ſlender; panicle ſlender, erect, compoſed of ſeveral ſtalked heads of flowers, with two or three lanceolate bracteas at the baſe of each. Mr. Brown doubts whether this ſecond ſpecies be properly referred to the genus in queſtion. It might perhaps be adviſable to reduce both of them to GAHNIA, which ſee.

LAM'POL, a town of Poland, in the palatinate of Braclaw, near the Dnieſter: fifty-ſix miles ſouth-ſouth-weſt of Braclaw.

LAM'PON, a town on the ſouth coaſt of Sumatra, ſituated in the bay of the Straits of Sunda. It is the capital of a diſtrict which belongs to the king of Bantam. The Dutch have a reſident here. Lat. 5. 40. S. lon. 105. 15. E.

LAM'PON BA'Y, a bay on the eaſt coaſt of the iſland of Luçon. Lat. 14. 46. N. lon. 122. 14. E.

LAMPOO'N, *ſ.* [*Bailey* derives it from *lampons*, a drunken ſong. It imports *let us drink*, from the old French *lamper*, and was repeated at the end of each couplet at carouſals. *Trev.*] A perſonal ſatire; abuſe; cenſure written not to reform but to vex.—They ſay my talent is ſatire; if ſo, it is a fruitful age; they have ſown the dragon's teeth themſelves, and it is but juſt they ſhould reap each other in *lampoons*. *Dryden.*

To LAMPOO'N, *v. a.* To abuſe with perſonal ſatire.

LAMPOO'NER, *ſ.* A ſcribbler of perſonal ſatire.—We are naturally diſpleaſed with an unknown critic, as the ladies are with a *lampooner*, becauſe we are bitten in the dark. *Dryden.*

LAM'PREY, *ſ.* [*lamproye*, Fr. *lampreye*, Dut.] A fiſh. See PETROMYZON.—Many fiſh much like the eel frequent both the ſea and freſh rivers; as, the lamprel, *lamprey*, and lamperne. *Walton.*

LAM'PREY RIV'ER, a water of Great Bay, in New-Hampſhire.

LAM'PRON, *ſ.* A kind of ſea-fiſh.—Theſe rocks are frequented by *lamprons*, and greater fiſhes, that devour the bodies of the drowned. *Broom on the Odyſſey.*

LAMPRID'IO (Benedict), a modern Latin poet, was born about the cloſe of the fifteenth century at Cremona. He went to Rome in his youth, and was firſt domeſticated with Paul Corteſi. He then taught in the Greek college inſtituted in the pontificate of Leo X. by John Laſcaris. Removing to Padua, he paſſed many years in that city, employed as a private teacher of the learned languages, and much eſteemed by perſons of eminence. His reputation attracted the notice of Frederic Gonzaga, duke of Mantua, who engaged him at a liberal ſtipend to live at his court, and undertake the education of his only ſon. He died at Mantua, according to the common opinion, in 1540; but Tiraboſchi mentions a letter written to him by Aonius Palearius, which refers to an incident of the year 1542. Lampridio is known as an author by his Greek and Latin poems, conſiſting of epigrams and odes. There are, likewiſe, extant three Italian letters written by him to cardinal Bembo, and one Latin letter to cardinal Pole. An edition of his Latin poems, together with thoſe of J. Bapt. Amaltheus, was printed at Venice, in 8vo. 1550. *Tiraboſchi.*

LAMPRID'IUS (Ælius), a Roman hiſtorian, lived in the fourth century, under Dioclefian and Conſtantine. There are remaining in his name the lives of Commodus, Antoninus, Diadumenus, Heliogabalus, and Alexander Severus. It is, however, doubted whether the latter life belongs to Lampridius, as ſome manuſcripts aſcribe it to Spartianus. It has indeed been ſuggeſted, that theſe are

the ſame perſons, and that Spartianus is the third name of Lampridius. Neither the ſtyle nor arrangement of this writer will allow him a place among the ſuperior claſs of hiſtorians; but he is valuable for his facts. His lives make a part of the Hiſtoriæ Auguſtæ Scriptores. *Voſſii Hiſt. Lat.*

LAMPROPH'ORUS, *ſ.* [from λαμπρος, ſhining, and φερω, I bear.] An appellation anciently given to the neophytes, during the ſeven days that ſucceeded their baptiſm. In the ceremony of baptiſm, the new Chriſtian was clothed with a white robe, which he wore for the week following; and was thence called *lamprophorus*, which ſignifies "a perſon wearing a ſhining garment." The Greeks alſo gave this name to the day of the reſurrection, becauſe their houſes were adorned and illuminated on that day with a great number of torches, as a ſymbol of the light which that myſtery diffuſed in the world.

LAMP'SACHUS, in ancient geography, now *Lamſaki*, a town of Aſia Minor on the borders of the Propontis at the north of Abydos. Priapus was the chief deity of the place, of which he was reckoned by ſome the founder. His temple there was the aſylum of lewdneſs and debauchery, and exhibited ſcenes of the moſt unnatural luſt; and hence the epithet *Lampſacius* is uſed to expreſs immodeſty and wantonneſs. Alexander reſolved to deſtroy the city on account of the vices of its inhabitants, or more probably for its firm adherence to the intereſt of Perſia. It was, however, ſaved from ruin by the artifice of Anaximenes. (See vol. i. p. 672.) It was formerly called *Pityuſa*, and received the name of Lampſacus, from Lampſaces, a daughter of Mandron, a king of Phrygia, who gave information to ſome Phoceans who dwelt there, that the reſt of the inhabitants had conſpired againſt their life. This timely information ſaved them from deſtruction; and the city afterwards bore the name of their preſerver.

LAMPSAMAN'DUS, in ancient geography, a ſmall iſland of Aſia, on the coaſt of Caria, in the Ceramic gulf. *Pliny.*

LAMP'SANA, *ſ.* in botany. See CREPIS, HYOSERIS, and LAPSANO.

LAMPTE'RIA, *ſ.* A feſtival at Pellene in Achaia, in honour of Bacchus, who was ſurnamed Lampter from λαμπειν, to ſhine, becauſe during this ſolemnity, which was obſerved in the night, the worſhippers went to the temple of Bacchus with lighted torches in their hands.

LAMPU'JUM, *ſ.* in botany. See AMOMUM zerumbet.

LAMPY'RIS, *ſ.* in entomology, the FIRE-FLY and GLOW-WORM; a genus of coleopterous inſects, remarkable for emitting light. The generic characters are—Antennæ filiform; feelers four; wing-ſheaths flexile; thorax flat, ſemiorbicular, ſurrounding and concealing the head; ſegments of the abdomen terminating in folded papillæ; female (uſually) wingleſs.

The ſpecies of this genus are rather numerous; the greater part are natives of Africa and America; a few only inhabit Europe, and of theſe but three kinds are found in Britain, two of which are rare. The females of the ſpecies moſt commonly known are deſtitute of wings; all theſe ſhine during the obſcurity of the evening, or at night, and ſome of the males poſſeſs the ſame ability. The males throughout all the ſpecies are furniſhed with wings; the females, on the contrary, are always apterous. The luminous property reſides in the two or three poſterior rings of the abdomen, and is only viſible on the under ſurface. In the day-time the luminous ſpace appears paler, and more inclining to yellow, than the reſt of the inſect; the light, when emitted, partakes of various hues, being either a clear brilliant white, or white tinged with greeniſh or bluiſh; and this it can vary or heighten in brilliancy at pleaſure, as it does not depend on any external cauſe; it is an inherent ability, governed only by the will or caprice of its poſſeſſor; and, according to the general perſuaſion of naturaliſts, is an ordinance of nature, by means of which the males, in their excurſions through the air, can readily diſcover their apterous crawling mates among the graſs and herbage beneath them.

The lampyrides of our country are found moſt commonly about the months of June and July, appearing among the buſhes, the graſs and herbage on the ſkirts of lanes leading through meadows, and woody ſituations. The males of ſome kinds, as before intimated, are luminous; and theſe, when on the wing during the night time, exhibit a moſt lively and ſplendid aſpect, like ſo many ſparks of fire darting through the air. The females nearly reſemble the larvæ, being of a lengthened form, divided into a number of diſtinct ſegments, the head ſcaly, and the anterior part of the body furniſhed with ſix ſcaly feet. The larvæ feed on leaves. The eggs, which are numerous, are uſually depoſited near the roots of graſs.

Among the ancients, the names *lampyris*, *noctiluca*, *cicindela*, &c. were beſtowed, without diſcrimination, on almoſt every creature of the inſect tribe poſſeſſing the luminous property of the glow-worm. Geoffroy endeavoured to unite the lampyrides together, but with theſe he confounded ſome other genera. Linnæus alſo blended them with the lycus and pyrochroa; and Schæffer followed Geoffroy. Fabricius adopted the Lampyris genus, with ſome material deviations from either; and his authority is, in this reſpect, rather generally approved. Linnæus, ſo lately as the 10th edition of the Syſt. Nat. confounds the Lampyrides under the genus Cantharis; it is in a ſubſequent edition they appear under the name of Lampyris, with characters which include the genera Omalyſſus of Geoffroy, Coſſyphus of Olivier, Pyrochroa of Geoffroy and Fabricius, and the Lycus of Olivier and ſome other modern authors; as will appear from the following diviſions.

I. *Feelers ſubclavate.* Lampyris.

1. Lampyris noctiluca, the common glow-worm. Specific character, body oblong, brown; ſhield cinereous; lip horny, entire. This curious animal (we mean the female) meaſures about three quarters of an inch in length, and is of a dull earthy brown colour on the upper parts, and beneath more or leſs tinged with roſe-colour, with the two or three laſt joints of the body of a pale or whitiſh ſulphur-colour. It is from theſe parts that the light proceeds, which is of a yellow colour, with a very ſlight caſt of green. The body, excluſive of the thorax, conſiſts of ten joints or diviſions. The larva, pupa, and complete female inſect, ſcarcely differ perceptibly from each other in general appearance; but the phoſphoric light is ſtrongeſt in the complete animal.

The glow-worm is a ſlow-moving inſect, and in its manner of walking frequently ſeems to drag itſelf on by ſtarts or ſlight efforts as it were. The male is ſmaller than the female, and is provided both with wings and wing-ſheaths: it is but rarely ſeen, and it ſeems, even at preſent, not very clearly determined whether it be luminous or not. The female depoſits her eggs, which are ſmall and yelloviſh, on the leaves of graſs, &c.

The luminous appearance of the glow-worm has at various periods excited conſiderable curioſity in the minds of ſpeculative men. Forſter firſt announced that this extraordinary property was ſo ſtrong and retentive, that he could diſtinctly read by the light emitted from glow-worms plunged into oxygen gas. The ſame experiment was verified by Beckerhiem, who proved beſides that they live a long time in other kinds of gas, and continued to ſhed their light vigorouſly, as in the oxygen gas. With the acid, the nitrous, muriatic, and ſulphureous, gaſes, he did not however ſucceed ſo well; when placed in either of theſe, the inſects died in a few minutes. A variety of other experiments have been made on the lampyrides by Spallanzani, Carradori, and others; the reſult of which proves, among other curious circumſtances, that this luminous property is inherent. Theſe inſects were obſerved to poſſeſs the power of moving various portions of the viſcera, independently of the others; and it was likewiſe aſcertained that a portion of the luminous rings of the abdo-

men,

men, when cut out of the insect, retained its brilliant appearance for some seconds afterwards.

The glow-worms of this country are only luminous in the season of procreation, which lasts during the summer months; when the females are impregnated, and have deposited their eggs, they shine no longer. This circumstance has authorised the common opinion, that the exhibition of light is made for the purpose of guiding or inviting the male insect. The glow-worms most frequently assemble in numbers upon dry banks, or under hedges on the sides of unfrequented roads; they are rarely seen on public roads or in fields. They do not display their light upon all nights alike; scarcely one of them will be seen for several nights together, and then, as it were by common consent, they appear with great splendour for a few nights, after which they again retire. Their disappearance probably depends upon their meeting with the male insect, for we have not observed that the state of the weather has any influence upon them. They commonly begin to shine before it is quite dark, and extinguish their light some time before the approach of day. It is remarkable with what regularity their instinct guides them in this particular; we have kept them the whole day in darkness, without their showing any desire to move or expose their light; yet in the evening, although purposely placed near burning candles, they crawled about and shone with brilliancy. The light of the glow-worm is always most vivid when the creature is in motion; it may also be excited or increased by turning the insect on its back, or otherwise teazing it. But the luminous appearance is interrupted at all times by short and irregular periods of either diminished light or total darkness; usually, however, there are two small spots on the last ring of the abdomen, which retain their light whilst the other luminous rings cease to shine.

Of the organs for the production of light, we have the following accurate description by Mr. Macartney in the Phil. Trans. for 1810.

"The light of the glow-worm is known to proceed from some of the last rings of the abdomen, which, when not illuminated, are of a pale yellow colour. Upon the internal surface of these rings, there is spread a layer of a peculiar soft yellow substance, which has been compared to paste; but, by examination with a lens, I found it to be organized like the common interstitial substance of the insect's body, except that it is of a closer texture, and a paler yellow colour. This substance does not entirely cover the inner surface of the rings, being more or less deficient along their edges, where it presents an irregular waving outline. I have observed in the glow-worm, that it is absorbed, and its place supplied by common interstitial substance, after the season for giving light is past. The segments of the abdomen, behind which this peculiar substance is situated, are thin and transparent, in order to expose the internal illumination. The number of luminous rings varies in different species of lampyris; and, as it would seem, at different periods in the same individual.

"Besides the luminous substance above described, I have discovered, in the common glow-worm, on the inner side of the last abdominal ring, two bodies, which to the naked eye appear more minute than the head of the smallest pin. They are lodged in two slight depressions, formed in the shell of the ring, which is at these points particularly transparent. On examining these bodies under the microscope, I found that they were sacs containing a soft yellow substance, of a more close and homogeneous texture than that which lines the inner surface of the rings. The membrane forming the sacs appeared to be of two layers, each of which is composed of a transparent silvery fibre, in the same manner as the internal membrane of the respiratory tubes of insects, except that, in this case, the fibre passes in a spiral instead of a circular direction. This membrane, although so delicately constructed, is so elastic as to preserve its form after the sac is ruptured, and the contents discharged. The light that proceeds from these sacs is less under the controul of the insect than that of the luminous substance spread on the rings: it is rarely ever entirely extinguished in the season that the glow-worm gives light, even during the day; and, when all the other rings are dark, these sacs often shine brightly. As far as my observation has extended, the small sacs of luminous substances are not found in any species of Lampyris except the glow-worm of this country.

"It is worthy of remark, that in all the dissections I have made of luminous insects, I did not find that the organs of light were better, or differently supplied with either nerves or air-tubes, than the other parts of the body. The power of emitting light likewise exists in many creatures which want nerves; a circumstance strongly marking a difference between animal light and animal electricity."

The phenomenon of animal light has been attempted to be explained in different ways. By many persons it was formerly ascribed to a putrefactive process; but, since the modern theories of combustion became known, it has been generally believed to depend upon an actual inflammation of the luminous substance, similar to the slow combustion of phosphorus. Others have accounted for the luminous effect, by supposing the matter of light to be accumulated, and rendered latent under particular circumstances, and afterwards evolved in a sensible form.

The opinion of the light of living animals being the consequence of putrefaction, is evidently absurd, and contradictory to all observation on the subject. It has been proved by the experiments of Dr. Hulme and others, that even the luminous appearances of dead animals are exhibited only during the first stages of the dissolution of the body, and that no light is emitted after putrefaction has really commenced. Spallanzani, who was the most strenuous advocate for the phosphorescent nature of animal light, stated that glow-worms shone more brilliantly when put into oxygen gas; that their light gradually disappeared in hydrogen or in azotic gas, and was instantly extinguished in fixed air; that it was also lost by cold, and revived by the application of a warm temperature. He conjectured that the luminous matter of these insects was composed of hydrogen and carbonated hydrogen gas.

Carradori has made some experiments which led him to deny its phosphorescence. He found that the luminous portion of the belly of the insect shone in vacuum, in oil, in water, and different liquids, and under different circumstances, where it was excluded from all communication with oxygen gas. He accounts for the result of Forster's experiment, by supposing, that the worm shone more vividly, because it was more animated in oxygen gas than in common air. *Ann. di Chimica*, 1797.

The following experiments, which were lately made upon this subject by Mr. Macartney, would lead to different conclusions than those of the preceding authors.

Experiment 1. A glow-worm was put into a glass of water, in which it lived nearly two hours, and continued to emit light as usual, until it died, when the luminous appearance entirely ceased.

Exp. 2. The luminous substance was extracted from the before-mentioned glow-worm, and from others killed in different ways; but it afforded no light.

Exp. 3. The sacs containing the luminous matter were cut from the bellies of *living glow-worms*, and shone uninterruptedly for several hours in the atmosphere; and, after their light became extinct, it was revived by being moistened with water: some of these were put into water in the first instance, in which they continued to shine unremittingly for forty-eight hours.

Exp. 4. The luminous substance of a glow-worm was exposed to a degree of heat which would have been sufficient to inflame phosphorus, without increasing the brilliancy of its light; and farther, it could not be made to burn by being applied to a red-hot iron, or to the flame of a candle.

Exp. 5. A delicate thermometer was introduced amongſt ſome living glow-worms, during the time they gave out much light: the temperature of the room being 69°, the inſtrument roſe to 75°, 76°, and 77°, according to circumſtances, as the warmth was reflected from the hand, or diſſipated by the worm crawling over cold ſubſtances. The luminous portion of the tail, when very brilliant, appeared to raiſe the thermometer more quickly than the other parts of the body; but it was not invariably the caſe. When ſhining ſtrongly, the luminous rings appeared to communicate the ſenſation of warmth to the hand; but this was probably a deception, as the actual degree of heat was not ſufficient for ſuch an effect. It ſhould however be mentioned, that, in Templar's obſervations on the glow-worm, he ſaid his feelings deceived him, if he did not experience ſome heat from the ſhining of the inſect. *Phil. Tranſ.* No. 72.

Exp. 6. To aſcertain how far the evolution of heat, during the ſhining of glow-worms, depended upon the life of the animals, the luminous portion of the tail was cut off from ſeveral living worms: if the thermometer was applied to them immediately, it was raiſed by them one or two degrees; but after theſe parts were dead, although they continued to emit light, they produced no effect whatever upon the inſtrument.

It ſeems proved by the foregoing experiments, that, ſo far from the luminous ſubſtance being of a phoſphoreſcent nature, it ſometimes ſhows the ſtrongeſt and moſt conſtant light when excluded from oxygen gas; that in no circumſtances does it undergo any proceſs like combuſtion, but is actually incapable of being inflamed; that the increaſe of heat, during the ſhining of glow-worms, is an accompaniment, and not an effect, of the phenomenon, and depends upon the excited ſtate of the inſect; and, laſtly, that heat and electricity increaſe the exhibition of light, merely by operating like other ſtimuli upon the vital properties of the animal. *Phil. Tranſ.* 1810, part ii.

In addition to theſe opinions, we may mention that Dr. Davy has found that the light of the glow-worm is not rendered more brilliant in oxygen, or in oxygenated muriatic gas, than in common air; and that it is not ſenſibly diminiſhed in oxygen gas. On the Engraving at p. 83, the whole glow-worm is ſhown at fig. 2. the female at fig. 3.

2. Lampyris ſplendidula, the ſplendid glow-worm: oblong, brown; ſhield hyaline at the tip. This is ſaid to be peculiarly reſplendent in ſhowery weather. Inhabits woods of Europe.

3. Lampyris corruſca, the flaſhing glow-worm: dull black; ſhield with a roſy creſcent each ſide. Inhabits North America.

4. Lampyris obſcura, the dark glow-worm: black; ſhield with a rufous ſpot each ſide. Inhabits Terra del Fuego.

5. Lampyris laticornis, the flat-horned glow-worm: ovate, black; margin of the ſhield rufous; antennæ compreſſed. Shield rounded; ſhells ſubſtriate; abdomen with two or three white pellucid dots on the laſt ſegment. Inhabits Senegal.

6. Lampyris pyralis, the American fire-fly: ſhield rufous, black in the middle; ſhells black, the edges and abdomen white. Inhabits South America.

7. Lampyris cincta, the banded glow-worm: brown; thorax, edge of the ſhells, and tip of the abdomen, fulvous. Head brown; abdomen black, the laſt ſegment but one white, the laſt fulvous; legs black; thighs fulvous.

8. Lampyris marginata, the marginated glow-worm: oblong, black; edge round the thorax and ſhells, ſcutel, and hind-part of the abdomen, yellow. Antennæ brown, yellow at the baſe; legs variegated. Inhabits America.

9. Lampyris pectinata, the feathered glow-worm: black; outer baſe of the ſides of the ſhield and tips of the abdomen and ſhells white; antennæ pectinate, nearly as long as the body. Inhabits America.

10. Lampyris flabellicornis, the fan-horned glow-worm: black; ſhield before the margin, marginal line at the baſe of the ſhells and tip of the abdomen white. Antennæ very large, fan-ſhaped. Inhabits Braſil. This large elegant ſpecies is repreſented on the Plate at fig. 4.

11. Lampyris heſpera, the yellow glow-worm: ovate; ſhells brown, with a triangular marginal yellow ſpot. Shield yellow, with a brown ſpot on the fore-part. Inhabits America.

12. Lampyris ignita, the fiery glow-worm: ovate; ſhells brown, with an ovate marginal yellow ſpot. Shield with two brown ſpots on the fore part; abdomen yellow. Inhabits South America.

13. Lampyris lucida, the bright glow-worm: oblong; ſhells brown, the outer margin pale yellow; abdomen yellow. Inhabits South America.

14. Lampyris nitidula, the twinkling glow-worm: oblong, brown; thorax yellowiſh, with a black ſpot in the middle; tip of the abdomen with two yellow ſpots; head black. Inhabits Africa.

15. Lampyris phoſphorea, the phoſphoric glow-worm: oblong, ſubteſtaceous; abdomen black, rich yellow behind; antennæ black. Inhabits America.

16. Lampyris Japonica, the Japan fire-fly: yellow; laſt ſegment but two of the abdomen black. Inhabits Japan, where it flies about in the evening during the months of May and June, and ſcatters a phoſphoric vapour from two veſicles at the end of the tail.

17. Lampyris atra, the black glow-worm: black; margin of the thorax rufous; antennæ ſerrate. Inhabits North America.

18. Lampyris Capenſis, the Cape glow-worm: livid; thorax yellowiſh; abdomen rich yellow behind. Antennæ brown; ſcutel yellowiſh; ſhells with a brown ſpot at the baſe, and yellowiſh at the edge; wings black; legs livid, brown at the ends. Inhabits the Cape of Good Hope.

19. Lampyris Auſtralis, the Auſtralaſian glow-worm: yellowiſh; head and ſhells brown; tip of the abdomen clear white. Thorax and ſcutel ferruginous; ends of the legs black. Inhabits New Holland; very much reſembles the next.

20. Lampyris Italica, the Italian fire-fly: black; thorax tranſverſe, and with the legs rufous; abdomen clear white at the tip. In this ſpecies it is ſaid that the male as well as the female is luminous. It ſeems to be a native of our iſland alſo, though leſs common here than in the warmer parts of Europe. Aldrovandus deſcribes the *winged glow-worm* as having its wing-ſhells of a duſky colour, and at the end of the body two brilliant fiery ſpots like the flame of ſulphur. And in the Philoſophical Tranſactions for the year 1684 we find a paper by a Mr. Waller, deſcribing the *Engliſh flying glow worm* as of a dark colour with the tail part very luminous; he maintains that both male and female of this ſpecies are winged, and that the female is larger than the male. The light of this inſect was very vivid, ſo as to be plainly perceived even when a candle was in the room. Mr. Waller obſerved this ſpecies at Northaw in Hertfordſhire. From the figure given by this writer, it appears to be about half an inch in length, which is much ſmaller than the common female glow-worm. In Italy this flying glow-worm is extremely plentiful; and we are informed by Dr. Smith, and other travellers, that it is a very common practice for the ladies to ſtick them by way of ornament in different parts of their head-dreſs during the evening-hours. This ſpecies is ſhown of the natural ſize at fig. 5. the ſame magnified, and laid on its back, at fig. 6.

21. Lampyris vittata, the ſtriped glow-worm: rufous; ſhells black, with a yellow margin all round, and an abbreviated fillet in the middle. Antennæ black, the joints rufous at the baſe; thorax orbicular; legs ferruginous, the joints black. Inhabits Guadaloupe.

22. Lampyris Mauritanica, the African glow-worm: ſhells livid; body yellow. Inhabits Africa.

23. Lampyris hemiptera, the ſhort-winged fire-fly: black; ſhells very ſhort, ovate. Antennæ compreſſed; ſhield

ſhield rounded; abdomen flat. A ſmall ſpecies. Inhabits France.

24. Lampyris Chinenſis, the Chineſe glow-worm: ſhells teſtaceous tipped with black. Inhabits Aſia.

25. Lampyris minor, the leaſt glow-worm: oblong-oval, teſtaceous; abdomen and wings blackiſh. Hardly larger than a louſe. Inhabits Europe.

26. Lampyris piloſa, the hairy glow-worm: oblong, black; thorax ſanguineous, with two black lines; three laſt joints of the antennæ pectinate. Inhabits America.

27. Lampyris futuralis, the grooved glow-worm: ſhells ſtriate punctured, rufous, with a broad black future; lip membranous. Inhabits France. This is the Omalyſſus of Olivier.

II. *Fore-feelers hatchet-ſhaped.* Coſſyphus.

28. Lampyris depreſſa, the flatted glow-worm: brown; margin of the ſhield and ſhells dilated flat. This curious and rare little inſect, which is repreſented on the Engraving at fig. 7, is of an oval ſhape, and as thin as a leaf. The total length is about half an inch; the elytræ have two raiſed ſtriæ on each ſide; and the body reaches no farther than theſe; the corſelet therefore extends ſome way over the head; the joints of the antennæ increaſe in ſize to the end. The whole inſect is of a light brown colour.

III. *Feelers ſubfiliform.* Pyrochroa.

29. Lampyris coccinea, the red glow-worm; head, thorax, and ſhells, ſanguineous; body black. Antennæ pectinate; body beneath and legs black. Inhabits Europe. See fig. 8.

30. Lampyris flabellata, the ſcarlet glow-worm: ſcarlet; antennæ and ſhells black. Antennæ ſerrate, the firſt joint rufous; ſhells ſmooth. Inhabits America.

31. Lampyris pectinicornis, the feather-headed glow-worm: black; thorax and ſhells ſcarlet; antennæ pectinate. Antennæ deeply feathered, or rather fan-ſhaped; thorax with a black ſpot in the middle; ſhells glabrous. Inhabits Germany.

32. Lampyris 10-maculata, the ten-ſpotted glow-worm: rufous; ſhells ſtriate black, with five red ſpots; thorax with three tubercles on each ſide. Antennæ fan-ſhaped; thorax punctured, with a raiſed line down the middle; ſhells punctured, with three raiſed lines. Inhabits Cayenne.

33. Lampyris aurora, the morning glow-worm: black; thorax red cancellate; ſhells tawny with four raiſed lines, the interſtices dotted in rows. Inhabits Pomerania.

34. Lampyris nitens, the ſhining glow-worm: oblong; ſhells browniſh with an oblong brown marginal ſpot; abdomen rufous beneath, yellow behind, one of the ſegments black. Inhabits Surinam.

35. Lampyris maculata, the ſpotted glow-worm: ovate, teſtaceous; thorax with a black band; ſhells with a black ſpot.

36. Lampyris Penſylvanica, the Penſylvanian glow-worm: oblong; ſhells pale grey-teſtaceous; thorax black within the margin, with two rufous ſpots. Inhabits America.

IV. *Firſt joint of the feelers thicker and truncate.* Lycus.

37. Lampyris latiſſima, the broad glow-worm: yellow; ſhells with a black marginal ſpot and black behind, the lateral margin very much dilated. Mouth cylindrical, prominent; body narrower before, and wider behind; antennæ ſerrate. Inhabits Sierra Leone.

38. Lampyris palliata, the cloked glow-worm: ſhells coriaceous, very broad; teſtaceous, tipt with black. Body black; thorax with a teſtaceous ſpot each ſide; ſhells ſtriate; wings tipt with brown. Inhabits the Cape of Good Hope.

39. Lampyris roſtrata, the beaked glow-worm: black; ſides of the thorax and dilated ſhells yellow; ſhells black behind. Inhabits Africa.

40. Lampyris proboſcidea, the ſnouted glow-worm: black; ſides of the thorax and ſhells yellow; ſhells black behind. Inhabits Africa.

41. Lampyris ſerraticornis, the ſerrated glow-worm: black; thorax and ſhells reddiſh; ſhells tipt with black. Inhabits New Holland; ſmall antennæ compreſſed ſerrate; thorax ſlightly reflected at the edges; ſhells grooved; thighs teſtaceous at the baſe.

42. Lampyris atrata, the black-and-red glow-worm: black; thorax orbicular, and with the ſhells red; an impreſſed black ſpot on the back. Inhabits Europe.

43. Lampyris præuſta, the burning glow-worm: ferruginous; ſhells and antennæ tipt with black. A ſmall ſpecies. Inhabits Tranquebar.

44. Lampyris faſciata, the black-and-white glow-worm: black; thorax yellowiſh at the edge; ſhells with a broad white band. Inhabits Cayenne.

45. Lampyris reticulata, the netted glow-worm: black: thorax edged with yellow; ſhells yellow with a black band and tip. Antennæ ſerrate compreſſed; ſhield rounded; ſhells broader behind, reticulate with four raiſed lines and many tranſverſe ſtreaks; ſternum yellow. Inhabits North America.

46. Lampyris bicolor, the red-and-blue glow-worm: ſanguineous; ſhells violet behind. Inhabits Africa.

47. Lampyris ſanguinea, the bloody glow-worm: black; ſides of the thorax and glabrous ſhells ſanguineous. Inhabits Europe.

48. Lampyris Germanica, the German glow-worm: black; ſides of the thorax and croſs-ſtreaked ſhells rufous. Inhabits Germany.

49. Lampyris nigripes, the black-footed glow-worm: ſanguineous; antennæ and legs black. Inhabits Siam.

50. Lampyris minuta, the minute glow-worm: black; antennæ at the tip and ſhells ſanguineous. Inhabits Norway.

51. Lampyris flabellicornis minor, the ſmaller fan-horned glow-worm; black; margin of the thorax teſtaceous; antennæ ſerrate. Shells ſtriate, the ſtriæ punctured, with a ſmall yellowiſh ſpot at the baſe. This is introduced by Dr. Turton: we have added *minor* to his ſpecific name, having already a *flabellicornis*, the 10th ſpecies. Inhabits Cayenne; ſmall.

52. Lampyris ruficollis, the red-necked glow-worm: black; thorax rufous. Antennæ ſimple; thorax elevated at the edge; ſhells ſtriate, the ſtriæ punctured. A ſmall ſpecies. Inhabits the Cape of Good Hope.

LAM'SPRINGE, a town of Weſtphalia, in the biſhopric of Hildeſheim, at the ſource of a ſmall river called *Lame*, which ſoon after runs into the Innerſee: fourteen miles ſouth of Hildeſheim.

LA'MUS, a king of the Læſtrygones, who is ſuppoſed by ſome to have founded Formiæ in Italy. The family of the Lamiæ at Rome was, according to the opinion of ſome, deſcended from him.

LAMU'ZA, a river of Aſiatic Turkey, which runs into the Mediterranean thirty miles weſt of Tarſus.

LAMU'ZO, a town of Aſiatic Turkey, in Aladulia, on a river of the ſame name: twenty-four miles weſt of Tarſus.

LA'MY (Francis), a French benedictine monk of the congregation of St. Maur, whoſe writings are held in much eſteem, was deſcended from a noble family, and born at Montereau, in the dioceſe of Chartres, in the year 1636. He commenced his career in life by following the military profeſſion; but he ſoon exchanged it for the eccleſiaſtical, which he embraced in the order already mentioned, when he was about twenty-three years of age. He died in 1711, about the age of ſeventy-five; and is highly praiſed for his benevolence and goodneſs of heart, his candour, the amiableneſs and purity of his manners, and his extraordinary piety. He was the author of, 1. A treatiſe on Self-knowledge, 6 vols. 12mo. which paſſed through ſeveral editions, the moſt complete one being that of 1700. 2. On the evident Truth of the Chriſtian Religion, 12mo. 1694. 3. The new Atheiſm overthrown, 12mo. 1696; in anſwer to the writings of Spinoza. 4. Pious Sentiments, adapted to the religious Profeſſion, 12mo. 1697. 5. The Groans of the Soul under the Tyranny of the Body, 12mo.

1700. 6. Leſſons of Wiſdom, 12mo. 1703. 7. Elements, introductory to ſolid Knowledge, with an Eſſay on Logic, 12mo. 1706, in the dialogue form. 8. A Collection of Letters, theological and moral, 12mo. 1708. 9. Philoſophical Letters on ſeveral Subjects, 12mo. 10. The Unbeliever conducted to Religion by Reaſon; or, Dialogues on the Agreement of Reaſon and Faith, 12mo. 1710. 11. Phyſical Conjectures on the Effects of Thunder, and on other Subjects in natural Philoſophy, 12mo. 1609. 12. On the Knowledge and Love of God, 12mo. printed in 1712, after the author's death. 13. A Refutation of M. Nicole's Syſtem of Univerſal Grace; and other controverſial pieces.

LA'MY (Bernard,) a learned French prieſt and various writer, was of noble deſcent, and born at Mans in the year 1640. Having laid a good foundation of grammar-learning in his native place, when he was eighteen years of age he entered among the religious of the congregation of the oratory, in a houſe belonging to their order at Paris, where he ſpent what was called the year of inſtitution, and was then ſent to ſtudy philoſophy for two ycars at the college of Saumur. From the year 1661 to 1667, he was employed in teaching the claſſics and the belles lettres in different ſeminaries; and, in the year laſt mentioned, was ordained prieſt. Soon afterwards his ſuperiors appointed him to the ſame office in the college attached to the monaſtery at Saumur; and though, at the expiration of two years, he was permitted to reſign that employment in order to apply more cloſely to the ſtudy of divinity, they appointed him at the ſame time to teach philoſophy; which he did at Saumur, and afterwards at Angers, till the year 1676, with very great reputation. At the commencement of that year he was directed by his ſuperiors to go to Grenoble, over which dioceſe cardinal le Camus at that time preſided, who was eminently diſtinguiſhed among the prelates of France, for his learning and piety. This good biſhop honoured Lamy with his patronage and warm friendſhip, and appointed him his coadjutor in viſiting his dioceſe, in preaching, and inſtructing his flock. He alſo eſtabliſhed a ſeminary at Grenoble for the education of eccleſiaſtics, in which Lamy was appointed profeſſor of divinity. The duties of this poſt he diſcharged with unwearied diligence, and, to facilitate the ſtudy of the ſacred ſcriptures, publiſhed an uſeful introduction to them, under the title of "Apparatus ad Biblia ſacra, in quo de Hebræorum Gente, Legibus, Ritibus, variiſque ad Bibliorum Intelligentiam ſpectantibus, Tabulis xx. diſpoſitus, &c." 1678, folio. This work, which was very favourably received, he afterwards greatly enlarged, and gave it a new form, in which it has been introduced all over Europe, and deſervedly valued by biblical ſtudents. In the year 1688, he publiſhed "A Demonſtration, or clear Proofs of the Truth and Holineſs of Chriſtian Morality," in two vols. 12mo. in the form of dialogues; which was afterwards extended, by the addition of new matter, to the nnmber of five volumes, and has undergone repeated impreſſions. In 1689, he ſent into the world his "Harmonia ſeu Concordia Quatuor Evangeliſtarum, in qua vera Series Actuum ac Sermonum Domini Noſtri Jeſu Chriſti, &c." in two vols. 4to. in which he advanced ſome notions that proved the means of involving him in controverſies with many learned men, which laſted more than ten years. But Lamy's principal work, which had engaged his attention for thirty years, and is replete with uſeful information, as well as learned and curious diſcuſſion, is his "De Tabernaculo Fœderis de ſancta Civitate Jeruſalem, et de Templo ejus, Lib. ſeptem," folio, illuſtrated with numerous plates. The author, however, did not live to ſee its publication, which did not take place before the year 1720. His health had for ſome time been greatly impaired, in conſequence of his cloſe application to his ſtudies, his laborious profeſſional exertions, and the ſevere rules of mortification which he obſerved; whence his friends perceived, to their great regret, that his change was approaching. The burſting of a blood-veſſel haſtened that event in 1715, when he was in the ſeventy-fifth year of his age. Father Lamy was as much eſteemed for his modeſty and amiable manners as he was reſpected for his piety and extenſive erudition. Beſides the articles already mentioned, he was the author of, 5. The Art of Speaking, 12mo. 1675. 6. New Reflections on the Art of Poetry, 12mo. 1678. 7. A mechanical Treatiſe on the Equilibrium of Solids and Fluids, 12mo. 1679. 8. A Treatiſe on Magnitude in general, comprehending Arithmetic, Algebra, and Analyſis, 12mo. 1680. 9. Dialogues on the Sciences, and the beſt Manner of ſtudying them, 12mo. 1684. 10. Elements of Geometry, 8vo. 1685. 11. A Treatiſe on Perſpective, 8vo. 1701. Moſt of the preceding were republiſhed, and ſome of them ſeveral times during the author's life, with conſiderable augmentations. *Life prefixed to the Treatiſe de Tabernaculo, &c.*

LAN, a town of Pruſſia, in Oberland: fourteen miles north-north-eaſt of Soldau.

LAN, a city of China, of the ſecond rank, in Pe-tche-li, on the river Lan: 113 miles eaſt of Pekin. Lat. 39.48. N. lon. 118.24. E.

LAN, a city of China, of the ſecond rank, in Chen-ſi, on the Hoang. This town is not very large, though the capital of the weſtern part of the province, and the reſidence of the governor. The chief trade is in hides brought from Tartary, woollen ſtuffs, and coarſe ſtuffs made of cow's hair. It is 655 miles weſt-ſouth-weſt of Pekin. Lat. 36. 6. N. lon. 103. 29. E.

LAN, a town of China, of the third rank, in Chan-ſi: twenty-five miles ſouth of Kolan.

LAN, a river of China, in Pe-tche-li, which runs into the gulf of Leao-tong in lat. 39. 18. N. lon. 118. 36. E.

LAN-CHAN', a town of China, of the third rank, in Hou-quang: twenty-five miles ſouth-ſouth-eaſt of Kouéyang.

LAN-HU'ING, a town of China, of the third rank, in Yunnan: eleven miles north-weſt of Teng-chouen.

LAN-JAN', or LAN-JANG, a city of Laos, and capital of the kingdom, or at leaſt the ſouthern diviſion, to which it gives name, and is the uſual reſidence of the king; on the weſt ſide of the river Mecon; and on the land-ſide defended by ditches and high walls. The king's palace is ſaid to be of vaſt extent, and appear like a city, from its ſize and the number of people who inhabit it. The houſes of the grandees, and perſons of condition, are very high and elegant, well contrived and ornamented; but thoſe of the inferior people are no better than huts. The prieſts alone have the privilege of building their houſes and convents of brick or ſtone. Lat. 18. 30. N. lon. 101. 38. E.

LAN-KI', a town of China, of the third rank, in Tche-kiang: twelve miles north-weſt of Kin-hoa.

LAN-TI'EN, a town of China, of the third rank, in Chen-ſi: twenty-two miles eaſt-ſouth-eaſt of Si-ngan.

LAN-TSAN', a river of Africa, which riſes in the north part of the Chineſe province of Yun-nan, on the borders of Thibet; croſſes the province from north to ſouth, where it changes its name to Kou-long; enters the kingdom of Laos, where it takes the name of Mecon; and afterwards runs into the Eaſtern Indian Sea. See MECON.

LAN-YAN', a town of China, of the third rank, in Ho-nan: twenty-two miles eaſt of Kai-fong.

LANA'GLA, a town of the iſland of Forteventura, ſituated on the eaſt coaſt.

LANA'RIA, *ſ.* [Lat. woolly, or wool-bearing.] In botany, a genus of the claſs hexandria, order monogynia, natural order of enſatæ, (irides, *Juſſ.*) The generic characters are—Calyx: none. Corolla: one-petalled, ſubcampanulated, outwardly wool-haired; tube ſhort; border ſix-parted; diviſions linear-lanceolate, ſomewhat ſpreading. Stamina: filaments ſix, filiform, ſhorter than the corolla, inſerted into the baſe of the diviſions; antheræ ovate, ſomewhat incumbent. Piſtillum: germ inferior, top-ſhaped, outwardly woolly; ſtyle filiform, upright,

length of the ſtamens; ſtigmas three-cleft. Pericarpium; capſule ovate, three-celled. Seeds few.—*Eſſential Character.* Corolla ſuperior, woolly, longer than the filaments; border ſix-parted, ſomewhat ſpreading; capſule three-celled.

Lanaria plumoſa, or woolly lanaria: a ſingle ſpecies. Root fibrous; ſtem woolly, upright; ſtem-leaves ſeſſile, nerved, ſmooth; flowers terminating in a cloſe panicle. Spathes ſimple. It has the habit of Wachendorfia; and is a native of the Cape of Good Hope.

LANA'RIOUS, *adj.* [from the Lat. *lana*, wool.] Belonging to wool, producing wool.

LANA'RIUS, in ancient geography, a river of Sicily, placed by Antonine in his Itinerary on the route between Agrigentum and Lilybæa, between Adaquas and Mazara.

LANAR'K. See LANERK.

LANAR'TH, a ſmall town in Cardiganſhire, 195 miles from London; has a market on Tueſday, and an annual fair on September 22.

LANAS'SA, a daughter of Cleodæus, who married Pyrrhus, the ſon of Achilles, by whom ſhe had eight children.—A daughter of Agathocles, who married Pyrrhus, whom ſhe ſoon after forſook for Demetrius. *Plutarch.*

LANAWAN', one of the ſmaller Sooloo iſlands, in the Eaſtern Indian Sea. Lat. 6. 15. N. lon. 122. 3. E.

LAN'CANT, a hamlet in the pariſh of Tiddenham, Glouceſterſhire. Here is a ſmall chapel, where divine ſervice is performed once a-month.

LANCAR'VAN, a village in Glamorganſhire, ſix miles ſouth-eaſt of Cowbridge. Here lived Craddock, the famous Welch bard, and author of a Hiſtory of Wales. The place is farther noted for a mineral water which has been very long famous in the place for the cure of the king's evil. The body of water riſes near the village; it is about an ell broad, and runs between two hills covered with wood. About twelve yards from this ſpring the rill falls from a rock of about eight or nine feet high, with a conſiderable noiſe. The ſpring is very clear, and riſes out of a pure white marle. The cures that have been performed here are proofs of a real power in the water; but there is ſome queſtion, whether the water, or its motion and coldneſs, does the good; for the people, who come for relief, always drink of the ſpring, and bathe the part afterwards in the fall below. It is generally ſuppoſed that the lime-ſtone rocks communicate a virtue to it, by which it cures internally; but it has been often found, that the holding a limb diſordered with the evil, in the ſtrong current of a mill-tail, has cured it; and there is the ſame advantage in the fall of this water. *Phil. Tranſ.* No. 232.

LAN'CASHIRE, a county palatine in the northern part of England, ſurrounded by Cumberland and Weſtmoreland to the north, by Yorkſhire to the eaſt, Cheſhire to the ſouth, and the Iriſh ſea to the weſt. Its area compriſes about 1,130,000 acres of land, of which above 350,000 are in a ſtate of tillage, 450,000 in paſturage, and about 400,000 in wood-lands, moors, &c. According to Mr. Yates, who has publiſhed an Agricultural Survey of Lancaſhire, the greateſt length, from north to ſouth, is 74 miles, by about 44 in breadth; the circumference is 342 miles, and ſurface 1765 ſquare miles. It is divided into the ſix hundreds of Amounderneſs, Blackburn, Leyland, Lonſdale, Salford, and Weſt-Derby; and contains ſix boroughs, viz. Clithero, Lancaſter, Liverpool, Newton, Preſton, and Wigan; 21 market towns, viz. Blackburn, Bolton, Burnley, Bury, Cartmel, Chorley, Colne, Dalton, Eccleſton, Garſtang, Haſlingdon, Hawkſhead, Hornby, Kirkham, Manchester, Ormſkirk, Poulton, Preſcot, Rochdale, Ulverſton, Warrington; and 62 other pariſhes. The whole contains, according to the return to parliament in the year 1800, 117,664 houſes, and 672,731 inhabitants, of whom 269,259 were ſtated to be employed in various trades and manufactures, and 52,018 in agriculture.

The ſoil and ſurface of this county are various. The eaſtern parts are rocky, and in the northern diſtricts we ſee many ſingle mountains remarkably high, ſuch as Ingleborough-hill, Cloughbo-hill, Pendle-hill, and Langridge-hill. Nor is there any want of wood in this county, either for timber or fuel; witneſs Wierſdale-foreſt and Bowland-foreſt to the northward, and Simon's-wood in the ſouthern part of Lancaſhire. This county is well watered with rivers and lakes. Among the lakes or meres of Lancaſhire, we reckon the Winander-mere, and the Kingſton-mere, which, though neither ſo large nor ſo well ſtored with fiſh, yet affords plenty of excellent char. There was on the ſouth-ſide of the Ribble another lake called *Marton*, ſeveral miles in circumference, which is now drained, and coverted into paſture-ground. In this operation, the workmen found a great quantity of fiſh, together with eight canoes, reſembling thoſe of America, ſuppoſed to have been uſed by the ancient Britiſh fiſhermen. Beſides theſe meres or lakes, this county abounds with moraſſes and moſſes, from which the inhabitants dig excellent peat or turf for fuel, as well as marl for manuring the ground, and trunks of old fir-trees, ſuppoſed to have lain there ſince the general deluge. Some of theſe are ſo impregnated with turpentine, that, when divided into ſplinters, they burn like candles, and are uſed for that purpoſe by the common people. There is a great variety of mineral waters in this county, ſome periodical ſprings, and one inſtance of a violent eruption of water at Kirky in Fourneſs. The moſt remarkable chalybeate ſpas are thoſe of Latham, Wigan, Stockport, Burnley, Bolton, Plumpton, Middleton, Strangeways, Lancaſter, Larbrick, and Chorley. At Ancliff, in the neighbourhood of Wigan, is a fountain called the *Burning-Well*, from whence a bituminous vapour exhales, which being ſet on fire by a candle burns like brandy, ſo as to produce a heat that will boil eggs to a hard conſiſtence, while the water itſelf retains its original coldneſs. There is at Barton a fountain of ſalt water, ſo ſtrongly impregnated with the mineral, as to yield ſix times as much as can be extracted from the ſame quantity of ſea-water. At Rogham, in Fourneſs, there is a purging ſaline fountain; and in the neighbourhood of Raſſal, where the ground is frequently overflowed by the ſea, a ſtream deſcends from Hagbur-hills, which in the ſpace of ſeven years is ſaid to convert the marl into a hard freeſtone fit for building. The ſoil is various in different parts of the county, poor and rocky on the hills, fat and fertile in the valleys and champaign country. The colour of the peat is white, grey, or black, according to the nature of the compoſition and the degree of putrefaction which the ingredients have undergone. There is a bituminous earth about Ormſkirk, that ſmells like the oil of amber, and indeed yields an oil of the ſame nature, both in its ſcent and medicinal effects, which moreover reduces raw fleſh to the conſiſtence of mummy; this earth burns like a torch, and is uſed as ſuch by the country people. The metals and minerals of this county conſiſt of lead, iron, copper, antimony, black-lead, lapis calaminaris, ſpar, green vitriol, alum, ſulphur, pyrites, freeſtone, and pit and cannel coal.

The level country produces plenty of wheat and barley, and the ſkirts of the hills yield good harveſts of excellent oats; very good hemp is raiſed in divers parts of the province; and the paſture which grows in the valleys is ſo peculiarly rich, that the cattle which feed upon it are much larger and fatter than in any other part of England. There is not any part of the world better ſupplied than Lancaſhire with proviſions of all kinds at a very reaſonable rate; ſuch as beef, veal, mutton, lamb, pork, poultry, and game of all ſorts, caught upon the moors, heaths, and commons, in the hilly part of the ſhire. The firſt potatoes ſaid to be cultivated in England were grown in this county. They were originally introduced into Ireland from North America about the year 1565; and, in conſequence of an Iriſh veſſel being caſt away on the weſtern coaſt, near North Meols, in Lancaſhire, ſome of thoſe roots were planted in that part of the county; but it was not till many years after that they were adopted as an ar-

ticle of food in London. They are now grown in amazing quantities in this county; and many are annually exported hence to Ireland. They are produced both from cuttings, and from the apple, or ſeed. The ox-noble and cluſter potatoe are chiefly grown for the cattle; and the pink-eye, with various kinds of the kidney, are uſed for the table. The produce of a crop of potatoes in this county is generally from two to three hundred buſhels per acre. This county boaſts a peculiar breed of horned cattle, which forms a variety with thoſe of Lincolnſhire. The cows are rather ſmaller than thoſe of the latter county, and are known by their wide-ſpreading horns and ſtraight backs. Beſides the ſea-fowl common to the ſhores of England, ſuch as duck, eaſterling, teal, and plover, many uncommon birds are obſerved on the coaſt of Lancaſhire: the ſea-crow, variegated with blue and black, the puffin, the cormorant, the curlew, the razor-bill, the copped wren, the red-ſhanks, the ſwan, the tropic bird, the king's fiſher, &c.

The mineralogical hiſtory of this county has never been publicly developed; and, though the internal contents are ſingularly rich, the varied peculiarities and characteriſtics of theſe riches have not been made known. With ſingular advantages of natural and artificial navigation, the *coals*, which conſtitute its moſt prolific and uſeful production, are cheaply conveyed to the various manufactories of Mancheſter, Bolton, &c. and alſo to the coaſt. Coal is found in immenſe beds, both on the ſouthern part and towards the middle of the county, but chiefly in the hundreds of Weſt-Derby and Salford, and in part of Blackburn. It is not obtained much farther north than Chorley and Colne; but great abundance of this uſeful foſſil is again procured at Whitehaven, and about Newcaſtle-upon-Tyne. At Haigh, near Wigan, a ſpecies of coal is produced, ſimilar in appearance to black marble, and of a very bituminous quality. It is called *cannel-coal*, and burns with a peculiar clearneſs of flame, conſumes very rapidly, and is apt to fly in pieces in the fire; but, if previouſly immerſed in water, it is ſaid to loſe this property. It is of a dull black colour, breaks eaſily in all directions; and, if broken tranſverſely, preſents a ſmooth conchoidal ſurface. Towards the north and north-eaſtern parts of the county, lime-ſtone is very abundant. It is found at Halewood, near Liverpool, at various depths, but inconſiderable in quantity. In the vicinity of Leigh, and alſo at Ardwick, near Mancheſter, is lime-ſtone of ſuch peculiar quality, as to reſiſt the power of water; it is therefore applied to the conſtruction of ciſterns, and to making mortar for building under water. Stone of various denominations is produced in this county. Upon the common, near Lancaſter, is a large quarry of excellent free-ſtone, which bears a fine poliſh, and of which that town, equalled by few in the kingdom for neatneſs, is wholly built. Flags and grey ſlates are found at Holland, near Wigan. The mountains, called Coniſtone and Telberthwaite fells, near Hawkſhead, afford a large quantity of blue ſlates, of which there is a conſiderable export; they are divided into three claſſes, called London, Country, and Tom, ſlate, of which the firſt is eſteemed the beſt. Sithe-ſtones are obtained at Rainford, and are well wrought on the ſpot. Iron-ore is found in abundance between Ulverſtone and Dalton, in Low Furneſs. In the north, ſome copper-mines have been worked; but they have not been productive. At Angleſack, near Chorley, is a lead-mine belonging to ſir Frank Standiſh, bart. it conſiſts of ſeveral veins, which interſect the ſtrata of the diſtrict almoſt perpendicularly, and run in various directions. The matrix of theſe veins is formed of carbonat and ſulphuret of barytes. The former, which is a very rare mineral, is found in the greateſt abundance near the ſurface; and, as it deſcends, it becomes progreſſively contaminated by the ſulphuret, which, in the loweſt ſtrata, ſeems completely to uſurp its place. The exiſtence of carbonat of barytes, as a product of nature, was firſt diſtinctly aſcertained by Dr. Withering; but he ſeems to have been miſtaken as to the place where his ſpecimens were obtained. To James Watt, jun. eſq. the public are indebted for a deſcription of the external character of this ſubſtance, and its effects on the animal body, when taken internally. See the *Mancheſter Memoirs*, vol. iii.

The chief manufactures of this county are woollen and cotton cloths of various kinds, tickings, and cotton velvets, for which Mancheſter is particularly famous. The principal rivers are the Merſey, which parts Cheſhire and this county; and the Ribble, which riſes in Yorkſhire, and enters this county at Clithero, running ſouth-weſt by Preſton into the Iriſh Sea. Beſides theſe there are many ſmaller ſtreams. The navigation made by his grace the duke of Bridgewater in this county is highly worthy of notice. This was begun ſo lately as about twenty years ago; it bears veſſels of ſixty tons burden, and is carried over two rivers, the Merſey and the Irwell. The ſough or adit, which was neceſſary to be made, in order to drain the water from the coal-mines, is rendered navigable for boats of ſix or ſeven tons burden, and forms a kind of ſubterraneous river, which runs about a mile and a half under ground, and communicates with the canal. This river leads to the head of the mines, is arched over with brick, and is juſt wide enough for the paſſage of the boats; at the mouth of it are two folding doors, which are cloſed as ſoon as you enter, and you then proceed by candle light, which caſts a livid gloom, ſerving only to make darkneſs viſible. But this diſmal gloom is rendered ſtill more awful by the ſolemn echo of this ſubterraneous water, which returns various and diſcordant ſounds. One while you are ſtruck with the grating noiſe of engines, which by a curious contrivance let down the coals into the boats; then again you hear the ſhock of an exploſion, occaſioned by the blowing up the hard rock, which will not yield to any other force than that of gunpowder; the next minute your ears are ſaluted by the ſongs of merriment from either ſex, who thus beguile their labours in the mine. You have no ſooner reached the head of the works, than a new ſcene opens to your view. There you behold men and women almoſt in the primitive ſtate of nature, toiling in different capacities, by the glimmering of a dim taper, ſome digging coal out of the bowels of the earth; ſome again loading it in little waggons made for the purpoſe; others drawing thoſe waggons to the boats. To perfect this canal, without impeding the public roads, bridges are built over it; and, where the earth has been raiſed to preſerve the level, arches are formed under it; but what principally ſtrikes every beholder, is a work raiſed near Barton bridge, to convey the canal over the river Merſey. This is done by means of three ſtone arches, ſo ſpacious and lofty as to admit veſſels ſailing through them; and indeed nothing can be more ſingular and pleaſing, than to obſerve large veſſels in full ſail under the aqueduct, at the ſame time the duke of Bridgewater's veſſels ſailing over all, near fifty feet above the navigable river. By this inland navigation communication has been made, with the rivers Merſey, Dee, Ribble, Ouſe, Trent, Darwent, Severn, Humber, Thame, Avon, &c. which navigation, including its windings, extends above five hundred miles in the counties of Lincoln, Nottingham, York, Lancaſter, Weſtmoreland, Cheſter, Stafford, Warwick, Leiceſter, Oxford, Worceſter, &c.

The landed property, which the king poſſeſſes in this county, as *duke of Lancaſter*, is of great extent; but the revenues ariſing therefrom are but ſmall. The principal part of this property conſiſts in what are generally ſtyled the foreſts of Myerſcough, Fulwood, Bleaſdale, Wyerſdale, and Quern, all ſituated in the moſt northern parts of the county. In theſe his majeſty is intitled to the eſtrays and the game, and the right of holding courts, &c. and muſt be conſidered as lord of the manor of all the foreſts. The townſhip of Quernmore is ſituated in the hundred of Lonſdale; and contains above 3000 acres of incloſed and waſte land. Wyerſdale, which is ſimilar in ſituation, contains more than 20,000 acres; the greater part is mountainous.

tainous land, not worth incloſing, but producing abundance of game. Blearſdale is in the hundred of Amounderneſs, and contains nearly 4000 acres of incloſed land, and about the ſame quantity not incloſed. Myerſcough is ſituated about eight miles from Preſton; and conſiſts of nearly 2200 acres, all incloſed; of which about 1600, belonging to the king, is called Myerſcough Park, and is held under a leaſe by Mr. Heatly. The ancient foreſt of Fulwood compriſed a large quantity of land which is now incloſed; the unincloſed parts are about 908 acres. Preſton race-ground is a portion of the foreſt. Previous to, and under the Norman dynaſty, this county was diſtinguiſhed as an *honour*, and was of the ſuperior claſs of ſeigniories, on which inferior lordſhips and manors depended, by the performance of certain cuſtoms and ſervices to the lords who held them. Landed honours originally belonged to kings excluſively, but were afterwards granted in fee to noblemen. Theſe kept their honour-courts "every year at leaſt, or oftener if need be; at which court all the freeholders of all the manors that ſtand united to the ſaid honour ſhall make their appearance, which ſuitors ſhall not ſit, but ſtand bareheaded." That the honour of Lancaſter exiſted before the conqueſt, is demonſtrated by an agreement, ſtill preſerved, between king Stephen and Henry duke of Normandy. From this period till the reign of Henry III. the honour was held by ſeveral great perſons. That monarch conferred it on his ſecond ſon Edmond, when it became an earldom. The title of *duke of Lancaſter* was created by Edward III. in favour of Henry Plantagenet, whoſe daughter and heireſs, Blanche, married John of Gaunt, fourth ſon of Edward III. for whom the privileges and revenues were conſiderably increaſed; he, being created duke of Lancaſter on the death of his father-in-law, obtained a patent for advancing this county to the dignity of the palatinate. The court belonging to this duchy has the power of deciding every cauſe relating to it: the officers are, a chancellor, attorney-general, king's ſerjeant, king's counſel, receiver-general, clerk of the council and regiſter, ſurveyor of lands, attorney in the exchequer, attorney in chancery, four counſellors, &c. The offices of the duchy-court are at Somerſet place, London. There is a ſeal for the county palatine and another for the duchy; i. e. ſuch lands as lie out of the county palatine, and yet are part of the duchy; for ſuch there are, and the dukes of Lancaſter hold them, but not as counties palatine, for they had not *jura regalia* over thoſe lands. See CHANCELLOR of the DUCHY, vol. iv. p. 87. and COUNTY, vol. v. p. 289.

Lancaſhire ſends fourteen members to parliament; two for the county, and two for each of the boroughs of Lancaſter, Liverpool, Preſton, Newton, Wigan, and Clithero. The county is included in the northern circuit, and the aſſizes are held at Lancaſter, as are alſo the quarter-ſeſſions. Lancaſhire contains 490 public bridges; of which nine are repaired by the county, and the others by the different hundreds.

A recent propoſition in parliament, to open branches of the bank of England throughout our principal towns, renders it proper to notice the manner in which banking buſineſs is tranſacted in Lancaſhire. There are in Lancaſhire, we underſtand, no banks of circulation; nor are the notes of the adjoining counties currently received. When a ſale of goods takes place, payment is made by bills on London at two or three months' date; and, when theſe bills are diſcounted by a Lancaſhire banker, the nett amount is paid over in bank-of-England notes; and a ſingle Mancheſter bank is in the habit of receiving weekly from London upwards of 20,000l. in bank-of-England notes for that purpoſe; and the eſtabliſhed commiſſion on banking tranſactions in Lancaſhire is ¼ per cent. which ſtands in lieu of the advantage derived by other provincial banks on the circulation of their notes. Such is the general practice throughout a county which ranks as firſt in extent of manufacture, and next to Middleſex in point of trade. *Siordet's Letter to Sir J. Sinclair.*

LAN'CASTER, a ſea-port, and the county town of Lancaſhire, is ſituated on the banks of the river Loyne, or Lune, 239 miles diſtant from London. Few of the county-towns in England have been more neglected by the hiſtorian, or more inaccurately deſcribed by the topographer, than this of Lancaſter. That it was a Roman ſtation is evinced by the Saxon termination *caſter*, or *caſtre*; and the ſame is confirmed by the various remains of the domeſtic economy of the Romans that are continually diſcovered in the town and its vicinity. Dr. Leigh, in his Natural Hiſtory of Lancaſhire, &c. deſcribes and refers to various coins, pieces of pottery, burnt bones, &c. that have been found in this town. In 1772, an altar-ſtone, with an inſcription, was dug up here. In the Archæologia, vol. v. is a diſſertation, by the Rev. Mr. Leigh, on certain Roman veſtigia belonging to Lancaſter. Indeed, whenever cellars, or ſimilar excavations, have been made, in certain parts of Lancaſter, a variety of Roman antiquities have been invariably diſcovered; and particularly in the upper part of Church-ſtreet, Lancaſter. In October 1809, upon carrying a drain through this ſtreet, to meet one from the caſtle, the foundation of a wall, compoſed of large hewn ſtones, laid in regular courſes, was brought to light; alſo many fragments of a beautiful red ſpecies of pottery, with figures emboſſed in relief. On one, there is Apollo playing on a lyre; on another, a horſe in full ſpeed. It would appear that it has been the cuſtom to ſtamp the maker's name on the bottom of theſe veſſels, as letters, forming part of ſuch names, are yet freſh on ſeveral of the fragments alluded to. On one of them is QVINTILIANI. M. as diſtinct as if juſt turned out of the maker's hands. Several coins have alſo been found; ſome ſo much defaced, as to be incapable of being made out. One, however, of ſilver, is in tolerable preſervation; ANTONINVS is plainly legible round the head; and on the reverſe is a figure of Juſtice ſitting. One of copper is in more perfect preſervation; the inſcription round the head is FAVSTINA AVGVSTA; and on the reverſe is a figure ſtanding, with this legend, IVNONI REGINAE S. C.

Lancaſter, however important it may have been as a military ſtation, owes its chief celebrity to Edward III. who, upon the completion of the fiftieth year of his reign, ſolemnly, and in full parliament, created his third ſon, John of Gaunt, duke of Lancaſter. By the charter granted at this period, the duchy of Lancaſter was conſtituted a ſort of petty kingdom, and all the privileges of royalty conferred upon the duke within the county. During the civil wars between the houſes of York and Lancaſter, this town ſuffered ſo much by its adherence to the Lancaſtrian line, that it was nearly depopulated, and even in the time of Camden was only the reſidence of a few huſbandmen. Charles II. having confirmed its ancient charter with additional privileges, it began again to revive, and has ever ſince been increaſing in trade, extent, and population.

The caſtle, which has ſucceſſively been the ſafeguard, terror, and glory, of the town, is now fitted up as the county-gaol, with its neceſſary appendages of a gaoler's houſe, priſoners' rooms, cells, work-ſhops, courts of juſtice, &c. From the appearance of its preſent remains, and the commanding ſituation on which it ſtands, it muſt, doubtleſs, have been a grand and magnificent object in former times. Much as it has ſuffered from the changes it has more recently undergone, its architectural features are ſtill entitled to general admiration. The encircling walls embrace an area of 380 feet from eaſt to weſt, by 350 from north to ſouth. Within this ſpace is a large court-yard, with ſeveral of ſmaller dimenſions, and a number of towers of various ſhapes. The chief entrance is towards the eaſt, and communicates with the town. It is a ſtrongly-fortified tower-gateway, conſiſting of two ſemi-octangular projections, which are perforated, near the bottom, with apertures for the diſcharge of arrows; and on the ſummit are ſeveral bold machicolations, with embraſures, &c. Within this entrance is the large court-yard already-mentioned, ſurrounded with towers and fortified

tified walls; and on the oppoſite ſide is a large ſquare keep, the walls of which are of amazing thickneſs, and its apartments of grand dimenſions. One of the rooms is nearly ſixty feet long, by about thirty in width. The floors are arched, and covered with compoſition, forming flat ſurfaces. From the ſummit of this tower, the views are very grand and impreſſive. To the north of the keep are the ſhire-hall and county-courts, with ſeveral apartments and offices connected with them. The grand-jury room here, and ſhire-hall, are peculiarly elegant and novel; the firſt being of circular form, and the ſecond being ſemi-circular; but both finiſhed with cluſtered columns, panelling, tracery, &c. partly in imitation of the elegant eccleſiaſtical architecture of the fifteenth century. Over the judges' ſeats are two full-length portraits of the county members, by Mr. Allen; and a full-length of George III. on horſeback, by Northcote. This grand and ſpacious pile of buildings, whether viewed as an ancient baronial fortreſs, as a picturesque object, or as a ſuite of public ſtructures for the gaol and courts of the county, muſt demand our admiration. On an eminence near it is the pariſh-church, a ſpacious building, with a lofty tower, which ſerves as a land-mark for veſſels coming up the river. At the eaſt end of the church is a wooden ſcreen moſt elegantly carved. Among the monuments, is one by Roubiliac, for William Stratford, LL. D. In the church-yard is the ſhaft of a ſtone croſs, with carving, and an inſcription in Runic letters.

The other public edifices of this town, are a town-hall, a chapel of eaſe to the pariſh-church, a theatre, an aſſembly-room, a range of ſhambles, a Quakers' meeting-houſe, and chapels for Preſbyterians, Independents, and Methodiſts. An ancient bridge, now in ruins, connected the oppoſite ſhores of the Lune, near St. George's Quay; but the increaſing opulence and population of the town rendered a new and more commodious one neceſſary. This was erected from the extremity of Cable-ſtreet to Skerton, at an expenſe of nearly 12,000l. paid by the county. The length of this ſuperb ſtructure is 549 feet; the arches, five in number, are equal and elliptical. Among other benevolent inſtitutions in this town are ſeveral alms-houſes for men and women, a free-ſchool for the education of ſixty boys, and two charity-ſchools for fifty boys and forty girls. The manufactories of the town are inconſiderable, and chiefly conſiſt of cabinet-making, ſpinning of twine, cotton-printing, and weaving of ſail-cloth. Ship-building has been greatly encouraged, and many large veſſels conſtructed, particularly by Mr. Brookbank, who has ſent ſhips, launched at his dock-yard, to London, of 450 tons burthen. Lancaſter trades to America with hard-ware and woollen manufactures; and a conſiderable quantity of candles is exported to the Weſt Indies; forty or fifty ſhips trade alſo to Norway. It appears, from the Cuſtom-houſe entries, that in the year 1799 fifty-two veſſels cleared out for the Weſt Indies, with cargoes to the value of two millions and half pounds ſterling. The Cuſtom-houſe is a ſmall neat building, with a portico ſupported by four Ionic columns, fifteen feet in height, each a ſingle ſtone. The Town-hall is a large commodious edifice; in the council room is a full-length portrait of lord Nelſon, painted by Mr. Lonſdale, an artiſt of talents, who is a native of this town. He preſented it to the corporation, who have alſo a ſimilar portrait of Mr. Pitt.

In the return to parliament in the year 1801, Lancaſter is ſtated to contain 1611 houſes, and 9030 inhabitants. Markets are held on Wedneſday and Saturday; and here are three annual fairs.

The borough of Lancaſter originated from a grant, made in the 4th of Richard I. and members were firſt ſent to parliament 23 Edward I. Returns were alſo made at various periods in the two ſucceeding reigns; after which there were none till the reign of Edward VI. when the privilege was reſtored. The corporation is compoſed of a mayor, recorder, twelve aldermen, two bailiffs, twelve capital burgeſſes, twelve common burgeſſes, a town-clerk, and two ſerjeants. By the charter, freemen only have a vote; but the moſt glaring corruption lies in making thoſe freemen. A freeman's ſon, or a freeman's apprentice, within the borough, is entitled to take up his freedom whenever he pleaſes, on paying into the hands of the mayor or bailiff 1l. 7s. 6d. This ſum is moſt generally paid by the oppoſing candidate, and the greateſt number of freemen, thus made, turns the ſcale of the election. Hence, as ſhip-building and the cabinet-buſineſs are the only manufactories there, he who has moſt ſhips to build or repair, or he who will lay out a few hundreds in mahogany furniture, is moſt likely to carry his election. The journeymen are at the command of their maſters; they get intoxicated during the canvas; and, having ten ſhillings to eat and drink on the day of election, they give a ſhout, and go quietly to work again.

By means of inland navigation, Lancaſter has communication with the rivers Merſey, Dee, Ribble, Ouſe, Trent, Darwent, Severn, Humber, Thames, Avon, &c. although ſuch extenſive communication, when it was firſt ſuggeſted, was conſidered by many to be altogether impracticable. About one mile north-eaſt of the town is a grand aqueduct-bridge, which conveys the Lancaſter canal over the river Lune. This ſtupendous fabric was deſigned and ſucceſsfully executed by Mr. John Rennie, civil engineer, who has hereby diſplayed much ſkill and ſcience in this and ſeveral other ſimilar works. The bridge conſiſts of five circular arches, each of ſeventy feet ſpan, riſing thirty-nine feet above the ſurface of the river. The peculiar difficulties which the architect had to encounter, in the bed of the river, made it neceſſary to have a foundation, a flooring of timber, which alone coſt 15,000l. The ſuperſtructure came to double that ſum.

Near Lancaſter is Halton-hall the ſeat of W. B. Bradſhaw, eſq. and Halton-park, of Thomas Bateman, eſq. The demeſnes belonging to the manor conſiſt of 130 acres tythe-free. It has a water corn-mill and a ſalmon-fiſhery in the river Loyne; and a good common in the neighbourhood.

At the three mile-ſtone, on the road to HORNBY, (ſee vol. x.) there is a noble view of the vale of Lonſdale. To ſee the view in perfection, you muſt go into a field on the left; here Ingleborough, behind a variety of ſmaller mountains, makes the back-ground of the proſpect. On each hand of the middle diſtance riſe two ſloping hills; the left clothed with thick woods, and the right with variegated rocks and herbage. Between them, in the richeſt valleys, the Lune ſerpentines for many miles, and comes forth ample and clear through a well-wooded and richly-paſtured fore-ground; every feature which conſtitutes a perfect landſcape of the extenſive ſort is here, not only boldly marked, but alſo in its beſt poſition.

From Lancaſter to Heſt-bank is three miles. Set out with the Ulverſtone carriers at the ſtated hour, or take a guide for the ſands that ſucceed, called Lancaſter Sands, and which are nine miles over. On a fine day there is not a more pleaſant ſea-ſide journey in the kingdom. On the right a bold ſhore, deeply indented in ſome places, and opening into bays in others; valleys that ſtretch far into the country, bounded on each ſide by hanging grounds cut into incloſures; interſperſed with groves and woods; adorned with ſequeſtered cots, farms, villages, churches, and caſtles; mountains behind mountains, and others again juſt ſeen over them, cloſe the fore-ſcene. Peel Caſtle, the ancient bulwark of the bay, rears its venerable head above the tide; in front appears a fine ſweep of country ſloping to the ſouth; to the right Water-cragg preſents itſelf in a bold ſtyle. On its arched ſummit are the veſtiges of a ſquare encampment, and the ruins of a beacon. Theſe grounds, bearing from the eye for many miles, variegated in a very pleaſing form by woods and rocks, are terminated by cloud-topped Ingleborough. A little farther on the ſame hand, another vale opens to the ſands, and ſhows a broken ridge of rocks, and beyond them groups of mountains towering to the ſky. Caſtle-

ſteads,

ſteads, a pyramidal hill that riſes above the ſtation at Kendal, is now in ſight; at the bottom of the bay ſtands Arnſide Tower, once a manſion of the Stanleys. The Cartmel coaſt now, as you advance, becomes more pleaſing; between that and Silverdale-nab, (a mountain of naked grey rocks,) is a great break in the coaſt, and through the opening the river Kennet rolls its waters to join the tide. In the mouth of the æſtuary are two beautiful conical iſles, clothed with wood and verdure; as you advance towards them, they ſeem to change their poſition, and hence often vary their appearance. At the ſame time a grand view opens of the Weſtmoreland mountains, tumbled about in a moſt ſurpriſing manner. At the head of the æſtuary, under a beautiful green hill, Hoverſham village and church appear in fine perſpective. To the north, Whitbarrow-ſcar, a huge arched and bended cliff of an immenſe height, ſhows its ſtorm-beaten front; the intermediate ſpace is a mixture of rocks, woods, and cultivated patches, that form a romantic view. At the ſide of the Eau, or River of the Sands, a guide on horſeback, called the Carter, is in waiting to conduct paſſengers over the ford; the priory of Cartmel was charged with this important office, and had tynodals and Peter-pence allowed towards its maintenance. Since the diſſolution of the priory, it is held by patent of the duchy of Lancaſter, and the ſalaries, twenty pounds per annum, are paid by the receiver-general.

Being provided with proper guides, croſſing of the ſands in ſummer is thought a journey of little more danger than any other; but thoſe who wiſh to avoid them may eaſily go in one day round Ulverſtone, by the head of the æſtuary. The roads are in general very good, the ride about thirty-ſeven miles, and not wanting in the natural variety peculiar to the country. The route will be thus: from Lancaſter to Bolton four miles; from the Thwaites, a little beyond the town, you have a fine view of Lancaſter ſands and the northern mountains; from thence to Burton, ſeven miles. The old venerable building on the right-hand ſide of the road, about two miles ſhort of Burton, is Borwick-hall, formerly the reſidence of ſir Robert Bindlaſs, but now only a farm-houſe. From thence go to Millthrop, four miles; there you ſee Dallum Tower; alſo a bold water-fall of the river at Beetham-mill. From Millthrop you come to Levans, an ancient ſeat of the earl of Suffolk, where a curious ſpecimen of the old ſtyle of gardening may be ſeen, as laid out by the gardener of king James II. Two miles from thence you arrive at the nearer end of Long-cauſeway, at Beathwaite-green. One mile from thence you come to the Black-bull in Witherſlack. From Witherſlack you come to Newton, over the hill Tawtop, four miles. Next you arrive at Newby-bridge, three miles, which is ſituated at the lower end of Windermere-water. From thence you come to Bouth, on the common turnpike road, three miles; but it might be worth while to go a little out of the way, through a valley on the left hand, by Back-barrow and Low-wood furnaces and iron-works, which are very romantically ſituated. From Bouth you come to Penny-bridge, two miles; which brings you into the track of the tour by Ulverſtone, now only four miles diſtant. If, on account of getting poſt-chaiſes, &c. it be thought more convenient to go through Kendal to Ulverſtone, the journey will be about ſeven miles more, all good turnpike-road. From Burton, where the two roads part to Kendal, is eleven miles; and from Kendal to the above-named Newby-bridge, where they meet again, is about thirteen miles. This latter ſtage, though mountainous and uneven, nevertheleſs in many reſpects affords an agreeable ride.

What moſt attracts the notice of the traveller are not the objects of the ſurrounding country, though they are fine, but the ſands themſelves; for, when the traveller has got a few miles from the ſhore, the nature of the plain on which he treads cannot but ſuggeſt a ſeries of ideas of a more ſublime kind than thoſe of rural elegance, and which will therefore gain a ſuperior attention. The plain is then ſeemingly immenſe in extent, continued on in a dead level, and uniform in appearance. As he purſues his often-trackleſs way, he will recollect, that probably but a few hours before the whole expanſe was covered with ſome fathoms of water, and that in a few more it will as certainly be covered again; at the ſame time he may alſo perceive, on his left hand, the retreated ocean ready to obey the myſterious laws of its irreſiſtible movement, without any viſible barrier to ſtay it a moment where it is. Theſe laſt conſiderations, though they may not be ſufficient to alarm, muſt yet be able to rouſe the mind to a ſtate of more than ordinary attention; which, co-operating with the other ſingular ideas of the proſpect, muſt affect it in a very ſublime and unuſual manner: this the bare appearance of the ſands will do; but, when the traveller reaches the ſide of the Eau, theſe affections will be greatly increaſed; he there drops down a gentle deſcent to the edge of a broad and ſeemingly-impaſſable river, where the only remains he can perceive of the ſurrounding lands are the tops of diſtant mountains; and where a ſolitary being on horſeback, like ſome ancient genius of the deep, is deſcribed hovering on its brinks, or encountering its ſtream with gentle ſteps in order to conduct him through it. When fairly entered into the water, if a ſtranger to this ſcene, and he do not feel himſelf touched with ſome of the moſt pleaſing emotions, we ſhould think him deſtitute of common ſenſibility; for, in the midſt of apparently-great danger, he will ſoon find that there is really none at all; and the complacency which muſt naturally reſult from this conſideration will be heightened to an unuſual degree, by obſerving, during his paſſage, the anxious and faithful inſtinct of his beaſt, and the friendly behaviour and aſpect of his guide. All the fervour of grateful thankfulneſs will then be raiſed; and if, with the uſual perquiſite to his venerable conductor, he can forget to convey his bleſſing, who would not conclude him to want one eſſential requiſite for properly enjoying the tour of the lakes?

There is a cavern, about five miles from Lancaſter, near the road to Kirkby-Lonſdale, called Dunald Mill-hole, a curioſity inferior to none of the kind in Derbyſhire. It is on the middle of a large common, and we were led to it by a brook nearly as broad as the New River; which, after turning a corn-mill juſt at the entrance of the cave, runs in at its mouth by ſeveral beautiful caſcades, continuing its courſe two miles under a large mountain, and at laſt makes its appearance again near Carnford, a village in the road to Kendal. The entrance of this ſubterraneous channel has ſomething moſt pleaſingly horrible in it; from the mill at the top you deſcend for about ten yards perpendicular, by means of chinks in the rocks, and ſhrubs or trees; the road is then almoſt parallel to the horizon, leading to the right, a little winding, till you have ſome hundreds of yards thick of rocks and minerals above you. In this manner we proceeded, ſometimes through vaults ſo capacious, that we could not ſee either roof or ſides; and ſometimes on all-fours, from its narrowneſs, ſtill following the brook, which entertained us with a ſort of harmony well ſuiting the place; for the different heights of its falls were as ſo many keys of muſic, which, all being conveyed to us by the amazing echo, greatly added to the majeſtic horror which ſurrounded us. In our return we were more particular in our obſervations. The lakes (formed by the brook in the hollow parts of the caverns) realize the fabulous Styx; and the murmuring falls from one rock to another broke the rays of our candles, ſo as to form the moſt romantic vibrations and appearance upon the variegated roof. The ſides too are not leſs remarkable for fine colouring; the damps, the creeping vegetables, and the ſeams in the marble and limeſtone parts of the rocks, make as many tints as are ſeen in the rainbow, and are covered with a perpetual varniſh from the faſt-weeping ſprings that trickle from the roof. The curious in grottos, caſcades, &c. might here obtain a juſt taſte of nature. When we arrived at the mouth,

and once more hailed all-cheering day-light, we could not but admire the uncouth manner in which nature has thrown together thoſe huge rocks which compoſe the arch over the entrance; but, as if conſcious of its rudeneſs, ſhe has clothed it with trees and ſhrubs of the moſt various and beautiful verdure, which bend downwards, and with their leaves cover all the rugged parts of the rock.

At the foot of a high hill called Warton-cragg, mentioned before, ſtands an agreeable little obſcure town named Warton, upon the ſide of a lake, where is a good grammar-ſchool, with accommodations, and a library for the benefit of the maſters; which, together with an hoſpital for ſix poor men, was founded and endowed by Dr. Hutton, then biſhop of Durham, in 1549, who was afterwards tranſlated to York; which certainly muſt have been then a ſee of very great value, to have induced him to quit Durham for it, notwithſtanding its being an archbiſhopric, and the title of grace annexed to its prelate. Here is alſo a very neat-built church. *Guide to the Lakes. Britiſh Directory. Monthly Mag. Account of the Town of Lancaſter*, 1807.

LAN'CASTER, a populous and wealthy county of the American States, in the interior part of Pennſylvania, extending ſouth to the Maryland line. It is about forty-two miles ſquare, is divided into 25 townſhips, and contains 566,240 acres of land, and 36,147 inhabitants, including 348 ſlaves. The lands in this county are rich and well cultivated. The hills in the northern parts abound with iron ore; for the manufacturing which, two furnaces and eight forges have been erected. The furnaces manufacture about 1200 tons of pigs and nearly that number of bar-iron annually. Copper and lead have alſo been found here. Chief town, *Lancaſter*.

LAN'CASTER, a county of Virginia, bounded eaſt by Cheſapeak Bay, and ſouth-weſt by Rappahannock river. It is about forty miles long, and fifteen broad, and contains 5638 inhabitants, of whom 3336 are ſlaves.

LAN'CASTER, a county of Camden diſtrict, ſouth Carolina, lying on Lynche's Creek and Wateree River. It contains 6302 inhabitants, of whom 4684 are whites, and 1370 ſlaves.

LAN'CASTER, a town of United America, in the ſtate of Pennſylvania, containing upwards of 900 houſes, a court-houſe, ſeveral churches, and about 5000 ſouls; the trade is conſiderable: fifty-three miles weſt of Philadelphia. Lat. 40. 4. N. lon. 76. 20. W.

LAN'CASTER, a very pleaſant poſt-town in Worceſter county, Maſſachuſetts, the oldeſt in the county, having been ſettled in 1645, and incorporated in 1653. It is ſituated on a branch of Naſhua River, which empties into the Merrimack. It is thirty-five miles weſt-north-weſt of Boſton, four miles weſt of Bolton, and fourteen north-by-eaſt of Worceſter. The lands of the townſhip of Lancaſter, and thoſe of Sterling on the ſouth-weſt, are part of the tract called *Naſhawogg* by the Indians. In the north-eaſterly part of Lancaſter there is a valuable, and perhaps inexhauſtible, ſlate-pit, furniſhing ſlates for houſes, and excellent ſtones for tombs and graves. No ſlates equal to theſe have yet been diſcovered in the United States: they are ſent to Boſton, and exported to New York, Virginia, &c. Two principal branches of Naſhua river, over which are nine large bridges, water this town, and have on the banks excellent intervale-land. Cumbery-pond in this town is obſerved to riſe as much as two feet juſt before a ſtorm; and Sandy-pond riſes in a dry ſeaſon.

LAN'CASTER, a townſhip in Grafton county, New Hampſhire, on the eaſt bank of Connecticut river, about forty-one miles above Hanover. It was incorporated in 1763.

LAN'CASTER, a poſt-town of South Carolina, thirty-ſix miles from Camden, and forty-ſeven from Charlotte, North Carolina.

LAN'CASTER, a bay or ſound on the weſtern coaſt of Sir Thomas Smith's Bay, in North America. The ſouthernmoſt part lies in lat. 74. 20. N. The moſt northerly is called Alderman Jonas's Sound, and lies in lat. 76. N.

LAN'CAT, a river on the north-eaſt coaſt of Sumatra, which runs into the Eaſtern Indian Sea in lat. 4. 5. N. lon. 98. 2. E.

LANCA'VY, Lancahu'y, or Pu'lo La'da, an iſland in the Eaſtern Indian Sea, near the coaſt of Queda; about ſixteen miles long, and from three to eight broad. Lat. 6. 19. N. lon. 99. 40. E.

LANCAYAN', a ſmall iſland in the Eaſtern Indian Sea, near the north coaſt of Borneo. Lat. 6. 25. N. lon. 118. 9. E.

LANCE, *ſ.* [Fr. from *lancea*, Lat.] A long ſpear, which, in the heroic ages, ſeems to have been generally thrown from the hand, as by the Indians at this day. In later times the combatants thruſt them againſt each other on horſeback. Spear; javelin.—He carried his *lances*, which were ſtrong, to give a lancely blow. *Sidney.*

Hector beholds his jav'lin fall in vain,
Nor other *lance* nor other hope remain;
He calls Deiphobus, demands a ſpear;
In vain, for no Deiphobus was there. *Pope.*

The lance, or pike, is among the oldeſt weapons recorded in hiſtory. It probably originated in a pole or ſtake, ſharpened at one or both ends, afterwards armed with a head of flint, and in proceſs of time, on the diſcovery and uſe of metals, with copper, braſs, or iron. Flint-heads, for both ſpears and arrows, are frequently found in England, Scotland, and Ireland; and ſo are alſo ſpear, javelin, and arrow, heads, of a metal nearly reſembling braſs. Long ſpears and lances were uſed by the Saxons and Normans, both horſe and foot, but particularly by the cavalry of the latter, who, in charging, reſted the butt end of the lance againſt the arçon, or bow of their ſaddle; the mail-armour not admitting of the fixture of lance-reſts, as was afterwards practiſed on the cuiraſs. A *lance-reſt* was a kind of moveable iron bracket, fixed to the right ſide of the cuiraſs, for the purpoſe of ſupporting the lance. It does not appear that there was any eſtabliſhed ſtandard for the length or thickneſs of the ancient lances, or the ſize or form of their heads; but it rather ſeems, that every military man had his lance, as well as his other arms, conſtructed of the dimenſions that beſt accorded with his ſtrength and ſtature. It is certain, however, that the heads of lances and ſpears were always made of the beſt tempered ſteel, and their ſtaves of the ſoundeſt aſh, whence the writers of Latin verſe uſed the word *fraxinus* (Latin for aſh) to expreſs a lance or ſpear. Although lances and ſpears were chiefly the weapons of horſemen, they were alſo uſed by the infantry and diſmounted knights, to keep off the cavalry; for this purpoſe they fixed the butts in the ground, their points ſloping towards the breaſts of the enemy's horſes. In tournaments, the knights ſometimes fought on foot with their lances; in which caſe it was cuſtomary to ſhorten them, by cutting off part of the ſtaff. Tilting-lances differed from thoſe uſed in war, both in their heads and ſtaves; the heads of tilting-lances being blunt, or occaſionally fitted with a contrivance to prevent penetration, called coronel, or cronel, from its reſemblance to a crown. The ſtaves were thick at the butt-end, tapering off gradually to the point, and generally fluted; near the butt-end they had a cavity for the reception of the hand: the front of it was defended by an iron plate, called a *vam-plat*, that is, an avant-plate, and behind it was a broad iron ring, called a *burr*. Theſe handles were not confined to the tilting-lance, but were made alſo on thoſe deſigned for war. Fauchet ſays, that lances of this kind were not in uſe before the year 1300. *Groſe on Ancient Armour.*

To LANCE, *v. a.* To pierce; to cut.—In their cruel worſhip they *lance* themſelves with knives. *Glanville.*

With his prepared ſword he charges home
My unprovided body, *lanc'd* my arm. *Shakeſpeare.*

To open chirurgically; to cut in order to a cure.—That differs as far from our uſual ſeverities, as the *lancings* of a phyſician do from the wounds of an adverſary. *Decay of Piety.*

Fell ſorrow's tooth doth never rankle more
Than when it bites, but *lanceth* not the ſore. *Shakeſpeare.*

LANCE BA'Y, a bay on the north-weſt coaſt of Jamaica. Lat. 18. 27. N. lon. 78. 14. W.

LAN'CE-BEARERS' I'SLAND, or ISLE DES LANCIERS, a ſmall iſland in the South Pacific Ocean, ſo named by Monſieur Bougainville in 1768. Lat. 18. 23. S. lon. 138. 10. W.

LAN'CE LA GRA'CE, a town of Louiſiana: ſeventy-five miles ſouth-ſouth-weſt of New Madrid. Lat. 35. 25. N. lon. 90. 27. W.

LANCELLOT'TI (John-Paul), an eminent juriſt, was born at Perugia about the year 1510. He kept a ſchool of law at his native place, and was engaged by pope Paul IV. to draw up an inſtitute of canon law, in imitation of Juſtinian's Inſtitutes of civil law. This was firſt publiſhed in 1563; it ſoon went through ſeveral editions, and obtained honourable teſtimonies of approbation from ſeveral men of eminence in the profeſſion. It was annexed to the body of canon law, and ſtill retains its place in the recent editions of that compilation. He alſo wrote other treatiſes on legal ſubjects, and a life of Bartolus. He died at Perugia in 1591. *Moreri.*

LAN'CELOT, or LAU'NCELOT, a Chriſtian and ſurname of men.

LAN'CELOT (Claude), author of ſeveral uſeful works in grammar and the preliminary parts of learning, was born at Paris in 1615. The abbé de St. Cyran perſuaded him to join the devout ſolitaries of the Port-Royal, by whom he was employed in teaching mathematics and the languages in their ſchools, till they were ſuppreſſed by the government. He was afterwards entruſted with the education of the young princes of Conti. The death of their mother deprived him of this office; upon which he took the habit of St. Benedict in the abbey of St. Cyran. Some diſſenſions which aroſe in this monaſtery in 1680 produced his exile to Quimperlé in Lower Britany, where he continued the ſame auſtere and aſcetic way of life which he had followed in the ſeminary. He died in 1695, with a high reputation for ſanctity as well as learning. The principal writings of this author are, 1. Nouvelle Méthode pour apprendre la Langue Latine, 8vo. 1664: this is the firſt work of the kind in which the abſurd practice of teaching the rules of the Latin grammar in the Latin language is exchanged for the uſe of the vernacular tongue. It alſo contains many curious and uſeful particulars of information, as to the Roman names, coins, &c. 2. Nouvelle Méthode pour apprendre la Langue Grecque, 1656, 8vo. This and the preceding have been often reprinted with improvements, as likewiſe abridgments of them. 3. Le Jardin des Racines Grecques, 8vo. 1657. 4. An Italian and Spaniſh Grammar. 5. Grammaire générale et raiſonnée, 12mo. an excellent work, formed on the ideas of Dr. Arnauld: it has been tranſlated into ſeveral modern languages. 6. Delectus Epigrammatum, 2 vols. 12mo. 1659, with a preface by Nicole. 7. Mémoires pour ſervir à la Vie de St. Cyran. *Moreri.*

LAN'CELY, *adj.* Suitable to a lance. *Not in uſe.*—He carried his lances, which were ſtrong, to give a *lancely* blow. *Sidney.*

LAN'CEOLATE, *adj.* Oblong, and gradually tapering to an end, like the head of a lance.

LANCEPESA'DE, *ſ.* [from *lancia ſpezzata*, Ital. a broken or ſpent lance.] Originally a man at arms, or trooper, who, having broken his lance on the enemy, and loſt his horſe in fight, was entertained as a volunteer aſſiſtant to a captain of foot, receiving pay as a trooper, until he could remount himſelf. But at length, from being companion to the captain, he was degraded to be an aſſiſtant to the corporal; at preſent does the duty of that officer, on the pay of a private ſoldier, or very little more; and is now vulgarly called *lance-corporal.* *Turner's Pallas Armata.*

LANCEROT'TA, one of the Canary Iſlands, about thirty miles in length, and eight in breadth where wideſt. It is parted by a ridge of mountains which afford nothing but paſture for cattle, though the valleys are fruitful, but ſandy, and thin in the ſoil. It abounds in grain, fruits, horned cattle, hares, camels, and aſſes. One great branch of the trade of Lancerotta conſiſts in dried goats' fleſh, which the inhabitants ſell in great quantities to the neighbouring iſlands, under the name of *tuſſineta.* In the year 1730, a volcano broke out in this iſland. Cayas, called alſo Rubicon, and Lancerotta, the principal town, contains about 200 houſes. It has ſeveral havens and roads; but there is one at the north-eaſt end, where ſhips may come in from the northward, and lie land-locked from all winds in 10, 15, and 20, fathoms. The eaſt point of the iſland is in lat. 29. 8. N. lon. 13. 26. W.

LAN'CET, *ſ.* [*lancette*, Fr.] A ſmall pointed chirurgical inſtrument.—Hippocrates ſaith, blood-letting ſhould be done with broad *lancets* or ſwords, in order to make a large orifice: the manner of opening a vein then was by ſtabbing or pertuſion, as in horſes. *Arbuthnot.*

LANCE'TI, *ſ.* A name given by the ancient laws of England to a kind of vaſſals, who were obliged to work for the lord one day in a week, from Michaelmas to autumn, either with fork, ſpade, or flail, at the option of the lord.

To LANCH, *v. a.* [*lancer*, Fr. This word is too often written *launch*: it is only a vocal corruption of *lance.*] To dart; to caſt as a lance; to throw; to let fly. See *To* LAUNCH.

Me, only me, the hand of fortune bore,
Unbleſt to tread that interdicted ſhore;
When Jove tremendous in the ſable deeps
Lanch'd his red lightning at our ſcatter'd ſhips. *Pope.*

LAN'CHE, a town of Anterior Pomerania: eleven miles ſouth-eaſt of Bergen.

LAN'CHING, *ſ.* The act of darting any thing from the hand; of putting off into the water; of taking ſcope on any ſubject.

LAN'CHESTER, a village ſeven miles north-weſt of Durham, in the Watling-ſtreet road, on the top of one hill over-looked by another, and was, no doubt, formerly a Roman ſtation. It alſo appears by the ruins to have been much larger once than it is now, and to have been walled round. Here is a handſome church, which before the Reformation was endowed with a deanery and prebends.

LANCIA'NO, a town of Naples, in Abruzzo Citra, of which it is the capital. It is the ſee of an archbiſhop, erected about the middle of the 16th century: eighty-five miles eaſt-north-eaſt of Rome, and eighty-four north of Naples. Lat. 42. 12. N. lon. 14. 20. E.

LANCIE'GO, a town of Spain, in the province of Alava: eighteen miles ſouth-ſouth-eaſt of Vittoria.

LANCIE'R, *ſ.* A ſoldier armed with a lance. *Phillips.*

LANCIF'EROUS, *adj.* [from *lance*, and *fero*, Lat. to bear.] Bearing a lance; carrying a ſpear.

To LAN'CINATE, *v. a.* [from *lancino*, Lat.] To tear; to rend; to lacerate.

LANCINA'TION, *ſ.* Tearing; laceration.

LANC'ING, *ſ.* The act of opening with a lancet; the wound made by a lancet.

LAN'CING, a village in Suſſex, one mile from Shoreham.

LANCI'SI (John-Maria), an eminent Italian phyſician, was born of a family in trade at Rome, in 1654. His education was firſt directed, under the ſociety of Jeſuits, to the profeſſion of theology; but, his inclination being turned towards medicine, he applied with great ardour to all the ſtudies connected with it, and in 1672 received the degree of doctor of philoſophy and phyſic. In 1684 he was appointed to the chair of anatomy in the college of la Sapienza: he afterwards occupied the chairs of theoretical and practical medicine in the ſame college. He did not neglect the purſuits of polite literature; and the celebrated Academy of the Arcadi, at Rome, aggregated him to their ſociety. He was alſo a member of the Imperial Academy Naturæ Curioſorum, of the Inſtitute of Bologna, of the Royal Society of London, and of other learned

learned bodies. A great ſobriety of regimen preſerved him in health and vigour till the illneſs which brought his life to a cloſe, in January 1720, in his ſixty-ſixth year. This phyſician was of a lively and cheerful diſpoſition, humane, and prompt to perform kind offices; able and prudent in the management of buſineſs; polite, affable, and pleaſing in converſation; eloquent and zealous in promoting the intereſts of ſcience. He collected a great library, which, during his life-time, he preſented to the Hoſpital of the Holy Ghoſt, for the public uſe, and eſpecially for that of the young phyſicians and ſurgeons attending the houſe. Lanciſi was the author of a variety of works, ſeveral of them valuable. The moſt important are, 1. De ſubitaneis Mortibus, lib. ii. 1707, 4to. written on occaſion of the frequent ſudden deaths which had for ſome time before taken place at Rome. 2. De nativis deque adventitiis Romani cœli qualitatibus, cui accedit Hiſtoria Epidemiæ Rheumaticæ, 1711, 4to. 3. De noxiis Paludum effluviis eorumque remediis, 2 vols. 4to. 1717; a work containing many uſeful obſervations on the inſalubrity of marſhy ſituations, and the means of rendering them more healthy. 4. Quinque Epidemiæ pernicioſarum et caſtrenſium Febrium, printed with the preceding. He alſo attended to the epidemics affecting domeſtic animals, and wrote two pieces in Italian concerning a diſeaſe prevalent among cows and horſes. In anatomy he wrote ſeveral detached diſſertations, and performed a very uſeful ſervice to the ſcience in general, by diſcovering the loſt copper-plates of Euſtachius, and cauſing a ſet of tables from them to be publiſhed at Rome, 1714, folio. After his death appeared his large and valuable work, De Motu Cordis et Aneuriſmatibus, Rom. 1728, fol. and 1745, 4to. A collection of the works of Lanciſi, hitherto publiſhed, was printed at Rome, in 4 vols. 4to. 1745, and his Conſilia XLIX Poſthuma, were printed at Venice in 1747, 4to. *Fabroni. Vit. Italor.*

LANCIS'IA, *ſ.* in botany, a genus of plants inſtituted by Pontedra, and ſo named in honour of the ſubject of the preceding article. See COTULA ſtricta, vol. v. p. 270.

LANCKAW', a town of Pruſſia, in the palatinate of Culm: ten miles eaſt-north-eaſt of Thorn.

LAN'CKE, a town of Pruſſia, in Pomerelia, on the borders of Pomerania: thirty-two miles north-north-weſt of Fredeland.

LANCK'HEIM, a town of the duchy of Wurzburg: five miles north-eaſt of Kitzingen.

LANCK'OWITZ, a town of the duchy of Stiria: ſeven miles weſt-north-weſt of Voitzberg.

LANCPOU', a lake of Thibet, about thirty miles long and nine wide. Lat. 32. 36. N. lon. 84. 32. E.

LANCPOU', a mountain of Thibet. Lat. 32. 55. N. lon. 84. 34. E.

LANCTAN', a mountain of Thibet. Lat. 31. 52. N. lon. 85. 54. E.

LAND, *ſ.* [Gothic, Saxon, &c.] A country; a region diſtinct from other countries.—The chief men of the *land* had great authority; though the government was monarchical, it was not deſpotic. *Broome's Notes on the Odyſſey.*

Thy ambition,
Thou ſcarlet ſin, robb'd this bewailing *land*
Of noble Buckingham. *Shakeſpeare.*

Earth, diſtinct from water.—By *land* they found that huge and mighty country. *Abbot.*

They turn their heads to ſea, their ſterns to *land*,
And greet with greedy joy th' Italian ſtrand. *Dryden.*

It is often uſed in compoſition, as oppoſed to *ſea*.—The princes delighting their conceits with confirming their knowledge, ſeeing wherein the ſea-diſcipline differed from the *land-ſervice*, they had pleaſing entertainment. *Sidney.*—Neceſſity makes men ingenious and hardy; and, if they have but *land-room* or ſea-room, they find ſupplies for their hunger. *Hale's Origin of Mankind.*—Ground; ſurface of the place. *Unuſual:*

Beneath his ſteely caſque he felt the blow,
And roll'd, with limbs relax'd, along the *land*. *Pope.*

An eſtate real and immoveable.—He kept himſelf within the bounds of loyalty, and enjoyed certain *lands* and towns in the borders of Polonia. *Knolles.*

This man is freed from ſervile hands,
Of hope to riſe or fear to fall:
Lord of himſelf, though not of *lands*;
And, having nothing, yet hath all. *Wotton.*

Nation; people; the inhabitants of the land:

Theſe anſwers, in the ſilent night receiv'd,
The king himſelf divulg'd, the *land* believ'd. *Dryden.*

Urine; [hlonð, Sax.]—Probably *land-damn* was a coarſe expreſſion in the cant ſtrain, formerly in common uſe, but ſince laid aſide and forgotten, which meant the taking away of a man's life. For *land* or *lant* is an old word for urine; and to ſtop the common paſſages and functions of nature is to kill. *Hanmer.*

You are abus'd, and by ſome putter-on
That will be damn'd for't. Would I knew the villain;
I would *land-damn* him. *Shakeſpeare.*

LAND, in law, ſignifies generally not only arable ground, meadow, paſture, woods, moors, waters, &c. but alſo meſſuages and houſes; for, in conveying the land, the buildings paſs with it. *Co. Lit.* 4, 19. In a more reſtrained ſenſe it is arable ground; and the land of every man is ſaid in the law to be incloſed from that of others, though it lie in the open field; ſo that, for any treſpaſs therein, he ſhall have the writ *quare clauſum fregit, &c.* In a grant, land may extend to meadow, or paſture, &c. but, in writs and pleadings, it ſignifies arable only. 1 *Vent.* 260. Land, or earth, hath in law a great extent upwards; for, *cujus eſt ſolum, ejus eſt uſque ad cœlum. Co.* 9 *Rep.*

To LAND, *v. a.* To ſet on ſhore:

He who rules the raging wind,
To thee, O ſacred ſhip, be kind,
Thy committed pledge reſtore,
And *land* him ſafely on the ſhore. *Dryden.*

To LAND, *v. n.* To come to ſhore.—*Land* ye not, none of you; and provide to be gone from this coaſt within ſixteen days. *Bacon.*

I *land*, with luckleſs omens: then adore
Their gods. *Dryden's Æneid.*

LAND'-BOC, *ſ.* [Saxon.] The deed or charter by which lands were held. *Obſolete.*

LAND'-BRED, *adj.* Born in a certain country, bred in a certain country. *Spenſer.*

LAND'-CAPE, *ſ.* A promontory, a headland.

LAND'-CHEAP, *ſ.* A fine paid in ſome places on the alienation of lands.

LAND'-CRAB, *ſ.* A kind of crab common in the iſland of Barbadoes. See CANCER ruricola, vol. iii. p. 706.

To LAND'-DAM, *v. a.* [from lanð, Sax. urine, and *dam.*] To ſtop the courſe of the urine; to kill. *Shakeſpeare.*

LAND's EN'D, the weſtern extremity of England and the county of Cornwall, called by Ptolemy *Bolerium*, and by Diodorus *Belerium*; perhaps, ſays Camden, from the Britiſh word *pell*, which ſignifies "moſt remote." The Britiſh bards called it *Penrighuaed*, or the Promontory of Blood; and their hiſtorians *Penwith*, or Promontory to the Left. By the Saxons it was named *Penwithſteort*; and by the inhabitants *Pen von Las*, or the Land's End. There is a tradition that this point ran farther out into the ſea, and that the ground now covered by the water was called Lioneſs. On the outermoſt rocks at low water are to be ſeen veins of lead and copper; and the neighbouring inhabitants ſay a light-houſe ſtood on it formerly: ten miles ſouth-weſt of Penzance. Lat. 50. 4. N. lon. 5. 42. W.

LAND's EN'D, a cape of England, on the north-eaſt coaſt of the iſland of Sheppey: four miles north of Sheerneſs.

LAND'-FALL,

LAND'-FALL, *ſ.* A ſudden tranſlation of property in land by the death of a rich man. A conjecture of being within ſight of land; the act of falling in with the land.

LAND'-FLOOD, *ſ.* Inundation.—Apprehenſions of the affections of Kent, and all other places, looked like a *land-flood*, that might roll they knew not how far. *Clarendon.*

LAND-FOR'CES, *ſ.* Warlike powers not naval; ſoldiers that ſerve on land.—We behold in France the greateſt *land-forces* that have ever been known under any chriſtian prince. *Temple.*

LAND'-GABEL, *ſ.* A tax or rent iſſuing out of land. Spelman ſays it was originally a penny for every houſe. This land-gabel, or land-gavel, in the regiſter of Domeſday, was a quit-rent for the ſite of a houſe, or the land whereon it ſtood, the ſame with what we now call ground-rent.

LAND'-GUARD, *ſ.* A ſort of fence or embarkment conſtructed of ſtones, wood, or other materials, on the borders of rivers and brooks, in order to prevent their overflowing and carrying away the land. The caſes in which they become more particularly neceſſary, are where they are confined in the parts where they are required to bend, by rocks or other means, to an unaltered channel; it often takes place in hilly ſituations, and where deep pools occur in ſuch parts at low water, ſo as to render it difficult or impoſſible to provide a good foundation for a pier.

LAND'-HERD, *ſ.* Cattle grazing on land:

Theſe ſame, the ſhepherd told me, were the fields
In which Dame Cynthia her *land-herds* fed. *Spenſer.*

LAND'-HOLDER, *ſ.* One who holds lands.—Money, as neceſſary to trade, may be conſidered as in his hands that pays the labourer and *land-holder*; and, if this man wants money, the manufacture is not made, and ſo the trade is loſt. *Locke.*

LAND'-JOBBER, *ſ.* One who buys and ſells land for other men.—If your maſter be a miniſter of ſtate, let him be at home to none but *land-jobbers*, or inventors of new funds. *Swift.*

LAND'-LAYED, *adj.* [a ſea term.] Having the land juſt out of ſight.

LAND'-LOCKED, *adj.* Shut in or encloſed with land.—There are few natural parts better *land-locked*, and cloſed on all ſides, than this ſeems to have been. *Addiſon on Italy.*

LAND'-LOPER, *ſ.* [*land*, and *lopen*, Dut.] A landman; a term of reproach uſed by ſeamen of thoſe who paſs their lives on ſhore. Corrupted into *land-lubber.*

LAND'-MARK, *ſ.* Any thing ſet up to preſerve the boundaries of land.—The *land-marks* by which places in the church had been known were removed. *Clarendon.*

Then *land-marks* limited to each his right;
For all before was common as the light. *Dryden.*

LAND-MARK, *at ſea*, is any mountain, rock, ſteeple, windmill, tree, or the like, near the ſea-ſide, which ſerve to direct ſhips paſſing by how to ſteer, ſo as to avoid certain dangers, be they rocks, ſhoals, whirlpools, &c.

LAND'-REEVE, *ſ.* A perſon whoſe buſineſs it is to overlook certain parts of a farm or eſtate; to attend, not only to the woods and hedge-timber, but alſo to the ſtate of the fences, gates, buildings, private roads, drift-ways, and water-courſes: and likewiſe to the ſtocking of commons, and encroachments of every kind; as well as to prevent or detect waſte and ſpoil in general, whether by the tenants of the eſtate, or others; and to report the ſame to the manager or land-ſteward. Active intelligent tenants, of known integrity, are generally the moſt ſuitable perſons for having the management of this ſort of truſt confided in them.

LAND'-SPRINGS, *ſ.* Such as riſe, or are produced in lands, at ſome conſiderable depth, from the water being obſtructed in its deſcent by ſome ſort of impenetrable material, as clay, &c. and thus forced up to the ſurface, where it breaks or oozes out, having different appearances, according to the nature of the ſoil and ſituation in which it occurs.

LAND'-STEWARD, *ſ.* The common name of a perſon who overlooks or has the management of a farm or eſtate. The number, deſcription, and qualities, of land-ſtewards muſt be regulated according to the nature and extent of the property, and the particular circumſtances of the proprietor. With an ample ſhare of agricultural knowledge, they ought to have a thorough inſight into the nature of every improvement of which eſtates may be capable, whether upon or beneath the ſurface; or from its local ſituation, whether inland or upon the ſea-coaſt. They ſhould be well verſed in, and qualified to ſuperintend, the culture of waſte lands, the diſpoſal of timber, the eradication or planting of woods, irrigation and warping, drainage, embankment, and the recovery of land from the ſea, the cutting of canals, the laying out and repairing of roads, the conſtruction of bridges, mills, and engines; and be poſſeſſed of a conſiderable ſkill in rural architecture of every kind. Nor is it leſs neceſſary that they thoroughly comprehend the nature of all the various methods in which money-buſineſs is tranſacted; together with the advantage of bargaining in the purchaſe or ſales of eſtates. Their intelligence ought alſo to extend to the valuable inventions and improvements of other countries, as well as thoſe of their own; which, whether in the mechanical or agricultural relation, they ſhould uſe their beſt means to introduce, and fairly experiment upon the eſtates under their care, with the honourable and patriotic views both of private and national benefit. In ſhort, with *ſufficient honeſty*, a mind amply repleniſhed, a cool, deliberate, and calculating, head, and a quick diſcernment, they ſhould lay hold of every occaſion, as it ſprings, to enhance the worth, the reputation, and the embelliſhment, of the property committed to their charge.

It is remarked, by the writer of a work on Landed Property, that on a large eſtate a reſident manager is generally found, "a land-ſteward, a man who has ſome knowledge of what is termed country-buſineſs, and who acts under the controul of his employer, or of a confidential friend who is more converſant in rural concerns, or perhaps of a law-agent who knows leſs of them:" and that ſuch reſiding ſteward, eſpecially of a detached eſtate, which lies at ſome diſtance from the reſidence of its proprietor, acts without controul. In this caſe, if he is a man of judgment and integrity, he becomes, at leaſt in the eyes of the tenantry, a ſuperior being; frequently, in their minds, a more exalted character than their landlord,—than the proprietor himſelf, who, perhaps, never deſigned to glance his eye upon them or their lands." But that, "on the contrary, if ſuch poſſeſſory manager wants thoſe requiſite qualifications, the conſequence becomes miſchievous to the lands, their occupiers, their proprietor, and the community. If this unprincipled agent has an intereſt in the derangement of the eſtate, and the ruin which will follow, and is ſuffered to make uſe of it, the crime of neglect, on the part of the proprietor, might well be cognizable as a crime againſt the public."

LAND-SURVEY'OR, *ſ.* One whoſe buſineſs is the planning and ſurveying of lands or eſtates.

LAND'-TAX, *ſ.* Tax laid upon land and houſes.—If mortgages were regiſtered, *land-taxes* might reach the lender to pay his proportion. *Locke.*

The land-tax, in its modern ſhape, has ſuperſeded all the former methods of rating either property or perſons in reſpect of their property, whether by tenths or fifteenths, ſubſidies on land, hydages, ſcutages, or talliages; a ſhort explication of which will, however, greatly aſſiſt us in underſtanding our ancient laws and hiſtory.

Tenths and fifteenths were temporary aids iſſuing out of perſonal property, and granted to the king by parliament. They were formerly the real tenth or fifteenth part of all the moveables belonging to the ſubject; when ſuch moveables, or perſonal eſtates, were a very different and

a much leſs conſiderable thing than what they uſually are at this day. Tenths are ſaid to have been firſt granted under Henry II. who took advantage of the faſhionable zeal for croiſades to introduce this new taxation, in order to defray the expenſe of a pious expedition to Paleſtine, which he really or ſeemingly had projected againſt Saladin emperor of the Saracens, whence it was originally denominated the *Saladin-tenth*. But afterwards fifteenths were more uſually granted than tenths. Originally the amount of theſe taxes was uncertain, being levied by aſſeſſments new made at every freſh grant of the commons, a commiſſion for which is preſerved by Matthew Paris; but it was at length reduced to a certainty in the eighth year of Edward III. when, by virtue of the king's commiſſion, new taxations were made of every townſhip, borough, and city, in the kingdom, and recorded in the exchequer; which rate was, at that time, the fifteenth part of the value of every townſhip, the whole amounting to about 29,000l. and therefore it ſtill kept up the name of a *fifteenth*, when, by the alteration of the value of money and the increaſe of perſonal property, things came to be in a very different ſituation. So that when, of later years, the commons granted the king a fifteenth, every pariſh in England immediately knew their proportion of it; that is, the ſame identical ſum that was aſſeſſed by the ſame aid in the eighth of Edward III. and then raiſed it by a rate among themſelves, and returned it into the royal exchequer.

The other ancient levies were in the nature of a modern land-tax; for we may trace up the origin of that charge as high as to the introduction of our military tenures; when every tenant of a knight's fee was bound, if called upon, to attend the king in his army for forty days in every year. But, this perſonal attendance growing troubleſome in many reſpects, the tenants found means of compounding for it, firſt by ſending others in their ſtead, and in proceſs of time by making a pecuniary ſatisfaction to the crown in lieu of it. This pecuniary ſatisfaction at laſt came to be levied by aſſeſſments, at ſo much for every knight's fee, under the name of *ſcutages*; which appear to have been levied for the firſt time in the fifth year of Henry II. on account of his expedition to Toulouſe, and were then (ſir William Blackſtone apprehends) mere arbitrary compoſitions, as the king and the ſubject could agree. But this precedent being afterwards abuſed into a means of oppreſſion, (by levying ſcutages on the landholders by the king's authority only, whenever our kings went to war, in order to hire mercenary troops and pay their contingent expenſes,) it became thereupon a matter of national complaint; and king John was obliged to promiſe, in his Magna Charta, that no ſcutage ſhould be impoſed without the conſent of the common council of the realm.

Of the ſame nature with ſcutages upon knight's fees were the aſſeſſments of *hydage* upon all other lands, and of *talliage* upon cities and boroughs. But they all gradually fell into diſuſe, upon the introduction of *ſubſidies*, about the time of king Richard II. and king Henry IV. Theſe were a tax, not immediately impoſed upon property, but upon perſons in reſpect of their reputed eſtates, after the nominal rate of 4s. in the pound for lands, and 2s. 6d. for goods; and for thoſe of aliens in a double proportion. But this aſſeſſment was alſo made according to an ancient valuation, wherein the computation was ſo very moderate, and the rental of the kingdom was ſuppoſed to be ſo exceeding low, that one ſubſidy of this ſort did not, according to ſir Edward Coke, amount to more than 70,000l. whereas a moderate land-tax at the ſame rate produces two millions. It was anciently the rule never to grant more than one ſubſidy and two fifteenths at a time; but this rule was broken through for the firſt time on a very preſſing occaſion, the Spaniſh invaſion in 1588; when the parliament gave queen Elizabeth two ſubſidies and four-fifteenths. Afterwards, as money ſunk in value, more ſubſidies were given; and we have an inſtance, in the firſt parliament of 1640, of the king's deſiring twelve ſubſidies of the commons, to be levied in three years; which was looked upon as a ſtartling propoſal; though lord Clarendon tells us, that the ſpeaker, ſerjeant Glanville, made it manifeſt to the houſe, how very inconſiderable a ſum twelve ſubſidies amounted to, by telling them he had computed what he was to pay for them; and, when he named the ſum, he being known to be poſſeſſed of a great eſtate, it ſeemed not worth any farther deliberation. And, indeed, upon calculation, we ſhall find, that the total amount of theſe twelve ſubſidies, to be raiſed in three years, is leſs than what is now raiſed in one year by a land-tax of 2s. in the pound.

The grant of ſcutages, talliages, or ſubſidies, by the commons, did not extend to ſpiritual preferments; thoſe being uſually taxed at the ſame time by the clergy themſelves in convocation; which grants of the clergy were confirmed in parliament; otherwiſe they were illegal, and not binding; as the ſame noble writer obſerves of the ſubſidies granted by the convocation, which continued ſitting after the diſſolution of the firſt parliament in 1640. A ſubſidy granted by the clergy was after the rate of 4s. in the pound, according to the valuation of their livings in the king's books; and amounted, ſir Edward Coke tells us, to about 20,000l. While this cuſtom continued, convocations were wont to ſit as frequently as parliaments; but the laſt ſubſidies, thus given by the clergy, were thoſe confirmed by ſtatute 15 Car. II. c. 10. ſince which another method of taxation has generally prevailed, which takes in the clergy as well as the laity; in recompenſe for which, the beneficed clergy have from that period been allowed to vote at the election the knights of the ſhire; and thenceforward alſo the practice of giving eccleſiaſtical ſubſidies hath fallen into total diſuſe.

The lay-ſubſidy was uſually raiſed by commiſſioners appointed by the crown, or the great officers of ſtate; and therefore, in the beginning of the civil wars between Charles I. and his parliament, the latter, having no other ſufficient revenue to ſupport themſelves and their meaſures, introduced the practice of laying weekly and monthly aſſeſſments of a ſpecific ſum upon the ſeveral counties of the kingdom; to be levied by a pound-rate on lands and perſonal eſtates; which were occaſionally continued during the whole uſurpation, ſometimes at the rate of 120,000l. a-month, ſometimes at inferior rates. Theſe periodical aſſeſſments, the ſubſidies which preceded them, and the more ancient ſcutage, hydage, and talliage, were to all intents and purpoſes a land-tax; and the aſſeſſments were ſometimes expreſsly called ſo. Yet a popular opinion has prevailed, that the land-tax was firſt introduced in the reign of king William III. becauſe in the year 1692 a new aſſeſſment or valuation of eſtates was made throughout the kingdom; which, though by no means a perfect one, had this effect, that a ſupply of 500,000l. was equal to 1s. in the pound of the value of eſtates given in. And, according to this enhanced valuation, from the year 1693 to the preſent, a period of near a century, the land-tax has continued an annual charge upon the ſubject; about half the time at 4s. in the pound, ſometimes at 3s. ſometimes at 2s. twice at 1s. but without any total intermiſſion. The medium has been 3s. 3d. in the pound; being equivalent to twenty-three ancient ſubſidies, and amounting annually to more than a million and a half of money. The method of raiſing it is by charging a particular ſum upon each county, according to the valuation given in A. D. 1692; and this ſum is aſſeſſed and raiſed upon individuals (their perſonal eſtate, as well as real, being liable thereto) by commiſſioners appointed in the act, being the principal landholders in the county and their officers.

Redemption of the Land-tax.—The ſum fixed by 38 Geo. III. c. 5. to be paid for the land-tax in Great Britain is 2,037,627l. 9s. 0¾d. which is now made perpetual. To this time the land-tax acts had been annual; but, by 38 Geo. III. c. 60, after reciting that it may materially conduce to ſtrengthen public credit, that the duty now pay-

able for one year on land ſhould be made perpetual, ſubject to *redemption* by purchaſe on conditions herein ſet forth; it was enacted, that the ſeveral ſums charged by virtue of an act 38 Geo. III. c. 5, granting an aid for the ſervice of the year 1798, on the reſpective counties, &c. in reſpect of the manors, meſſuages, &c. to be raiſed and paid within one year, from the 25th of March, 1798, ſhall, after the expiration of the ſaid term, (allowing for certain ſpecified exceptions,) continue, and be raiſed and paid after the 25th of March in every year for ever. And all powers and proviſions contained in the ſaid act ſhall be in full force, and be duly executed; ſubject to the regulations and conditions of redemption or purchaſe mentioned in it. Provided always, that none of the proviſions herein contained ſhall extend to any ſums charged by the ſaid act upon perſonal eſtates, and perquiſites of office; which ſums ſhall, after the 25th of March, 1799, be aſcertained, raiſed, collected, and paid, according to the directions of an act to be paſſed for that purpoſe. (39 Geo. III. c. 3.) It is alſo enacted, that the land-tax not purchaſed by proprietors ſhall be ſold to other perſons, ſubject to redemption by the perſon in poſſeſſion, or having any beneficial or future intereſt in the lands; provided that, in ſuch caſes, all ſuch lands whereon the land-tax ſo purchaſed ſhall be charged, ſhall, until ſuch redemption take place, be ſubject to a new aſſeſſment of the ſaid land-tax from year to year, by an equal rate, according to the value thereof, in common with each other, without any power in ſuch purchaſer to exonerate the ſame from ſuch land-tax, or to fix the rate of land-tax to be charged thereon. Alſo, where the whole tax in any place ſhall not be ſold, ſuch lands as are not exonerated by this act from ſuch land-tax ſhall continue ſubject to a new aſſeſſment yearly, and from year to year, by an equal rate, according to the value thereof, not exceeding in any year 4s. in the pound on ſuch annual value. It is alſo enacted, that, in caſe perſons entering into any contract for the redemption or purchaſe of any land-tax, ſhall neglect to complete their contract, ſuch contract ſhall be void, and the tax be revived, and again aſſeſſed and collected; and the perſons thus making default ſhall forfeit not exceeding one-ſixteenth part of the conſideration. Where land-tax, remaining unſold, ſhall exceed 4s. in the pound on the annual value, the ſame ſhall be ſubject to an abatement in the manner directed by the ſaid act. (38 Geo. III. c. 60. § 103. 42 Geo. III. c. 116. § 181.) By this laſt act, the proviſions of the ſeveral acts for the redemption of the land-tax are repealed from the 24th of June, 1802, from which date all contracts are to be entered into and made according to that act, and the 43 Geo. III. c. 51, to render the ſame more effectual. For the proviſions reſpecting the redemption of the land-tax, we muſt refer the reader to the act itſelf, which is very voluminous, and in which every particular is minutely detailed.

But, as the land-tax not purchaſed will remain to be collected as before, it may not be improper or unuſeful to detail the following particulars relating to it. By 38 Geo. III. c. 5, the general qualification of commiſſioners in counties, with ſome few exceptions, is 100l. a-year of landed property; theſe commiſſioners, before they can act, are required to take the oaths of allegiance, ſupremacy, and abjuration, under a penalty of 200l. to the king; and by 28 Geo. III. c. 2. § 49, an oath, if required, ſpecifying in writing the pariſh, ſituation, quantity of land, whether freehold or copyhold, of the premiſes which entitle them to act as commiſſioners. When they firſt meet, they direct the return and appointment of proper aſſeſſors; and, by 20 Geo. III. c. 17, they ſhall cauſe to be delivered to each aſſeſſor a printed form of aſſeſſment, according to which they ſhall make their aſſeſſments. At their ſecond meeting they direct the aſſeſſors how to proceed in ſettling the ſeveral rates and charges. By 39 Geo. III. c. 3, the ſeveral ſums charged upon eſtates in ready money, debts, goods, wares, merchandiſe, chattels, or other perſonal eſtate, by the act of 38 Geo. III. c. 5, and which were not authorized to be ſold by the ſaid act of 38 Geo. III. c. 60; and alſo the ſeveral ſums hereby charged in reſpect of any public office or employment, or any annuity, penſion, ſtipend, or other annual payment, ſhall be aſſeſſed and paid in the following manner. That is to ſay, the ſeveral ſums charged by virtue of the ſaid act on perſonal eſtates as aforeſaid, ſhall be, and are hereby, ſet and impoſed on the reſpective pariſhes, conſtablewicks, diviſions, allotments, and places, wherein the ſame have been, or ſhall be, ſo charged by virtue of the ſaid act, and towards raiſing the ſeveral ſums hereby charged on the ſame reſpectively, all perſons, bodies politic and corporate, guilds and fraternities, within ſuch places reſpectively, having any eſtate in ready money, or in debts owing to them, or having any eſtate in goods, wares, merchandiſe, chattels, or other perſonal eſtate, belonging to, or in truſt for, them, (except ſuch ſums as they may *bonâ fide* owe, and ſuch debts owing to them as ſhall be by the commiſſioners adjudged deſperate, and alſo except ſtock upon lands, and ſuch goods as are uſed for houſehold-ſtuff; and alſo except ſuch loans and debts as are owing from his majeſty,) ſhall be charged with as much equality and indifference as is poſſible by a pound-rate, viz. for every 100l. of ſuch ready money and debts, and for every 100l. worth of ſuch goods, wares, and merchandiſe, or other perſonal eſtate, and ſo in proportion for more or leſs, towards the ſaid reſpective ſums by this act impoſed upon every ſuch pariſh or place charged therewith as aforeſaid, ſo that by the ſaid rates ſo to be aſſeſſed as aforeſaid, upon ſuch perſonal eſtates as aforeſaid, the full ſum hereby ſet upon the ſame ſhall be completely aſſeſſed, collected, and paid. § 2.

And, towards raiſing the ſums charged on perſons in reſpect of public offices, or employments of profit, all perſons, having, uſing, or exerciſing, the ſame, which are aſſeſſed by virtue of the ſaid act of 38 Geo. III. c. 5; and all clerks, agents, ſecondaries, ſubſtitutes, and other inferior miniſters whatſoever, (ſuch military officers as are muſtered by the muſter-maſter general of the army, or in pay of the army or navy, in reſpect of ſuch offices only excepted;) ſhall pay any ſum not exceeding what ſuch office or employment ſhall be aſſeſſed in the year commencing 25th March, 1798, by virtue of the ſaid act of 38 Geo. III. c. 5. And all perſons, guilds, fraternities, bodies politic and corporate, having any annuity, penſion, or other yearly payment, either out of the exchequer, or any branch of the revenue, or payable, or ſecured to be paid by any perſon whatſoever, (not iſſuing out of any lands, tenements, or hereditaments, or charged upon the ſame, nor included in any aſſeſſment made thereon by the ſaid act of 38 Geo. III. c. 5. and not being annuities or yearly payments which by any act of parliament ſhall be exempted from the payment of taxes,) ſhall pay 4s. for every 20s. by the year for the ſame, to be levied and collected in like manner, and by the ſame perſons, as the land-tax. § 3, 4.

It is provided that nothing in this act ſhall extend to the queen or royal family; nor to charge the penſions of ſuperannuated ſea-officers or their widows, poor knights of Windſor, or poor clergy of the Iſle of Man, or tolls on turnpike roads. By 38 Geo. III. c. 5, the charge upon *real* eſtates ſhall be as follows: That the entire ſum may be raiſed, all manors, meſſuages, lands, and tenements; all quarries, mines of coal, tin and lead, copper, mundic, iron, and other mines, iron-mills, furnaces, and other iron-works; ſalt-ſprings, and ſalt-works; all alum mines and works; all parks, chaſes, warrens, woods, underwoods, coppices; all fiſhings, tithes, tolls, annuities, and all other yearly profits; and all hereditaments whatſoever; ſhall be charged with as much equality and indifference as poſſible, by a *pound-rate*, to make up the ſeveral ſums charged by the act on each county or place.

A parſon who lets to each pariſhioner his own tithes is properly the occupier, and ought to be rated. 16 *Viner*, 427. But, if a parſon makes a leaſe of his tithes to one perſon, and that perſon afterwards lets to each pariſhioner his

his own tithes, in that caſe the *leſſee* is the occupier, and ought to be rated. 8 *Mod.* 61. Colleges and hoſpitals are exempted, together with the buildings that are within the walls or limits of the ſame. The act 38 Geo. III. c. 5. § 25. alſo exempts any maſter, fellow, or ſcholar, or exhibitioner, of any ſuch college or hall; or any reader, officer, or maſter, of the ſaid univerſities, colleges, or halls; or any maſters or uſhers of any ſchools; for or in reſpect of any ſtipends, wages, rents, profits, or exhibitions whatſoever, ariſing or growing due to them in reſpect to the ſaid ſeveral places or employments; or any of the lands which, before March 25, 1693, did belong to the ſites of any college or hall, or to Chriſt's Hoſpital, St. Bartholomew, Bridewell, St. Thomas, and Bethlehem, hoſpitals, in London and Southwark; or any other hoſpitals or alms-houſes, in reſpect of any rents, or revenues, which, before March 25, 1693, were payable to them, being to be received and diſburſed for the immediate uſe and relief of the poor of the ſaid hoſpitals and alms-houſes only. But this ſhall not diſcharge any tenants of any houſes or lands belonging to the ſaid colleges, halls or hoſpitals, alms-houſes, or ſchools, who, by their leaſes, or other contracts, are obliged to pay and diſcharge all rates, taxes, and impoſitions. § 26.

All ſuch lands, revenues, or rents, belonging to any hoſpital or alms-houſe, or ſettled to any charitable or pious uſe, as were aſſeſſed in 4 W. & M. ſhall be liable; and no other lands, revenues, or rents, then belonging to any hoſpital, or alms-houſe, or ſettled to any charitable or pious uſe, ſhall be charged or aſſeſſed; but lands given to charities ſince the 4 W. & M. ſhall not be exempted. No poor perſon ſhall be charged, whoſe lands, &c. are not of the full yearly value of 20s. in the whole. The aſſeſſors themſelves are aſſeſſed by the commiſſioners. The land-tax ſhall be paid by the tenant, who ſhall deduct it out of his rent. Papiſts and reputed papiſts, being eighteen years of age, who ſhall not have taken the oaths of allegiance and ſupremacy, ſhall pay double land-tax. By 10 Geo. III. c. 6. § 113. eſtates doubly taxed, coming to proteſtants, are to be diſcharged. At the third meeting of the commiſſioners, the aſſeſſors ſhall deliver duplicates of the aſſeſſment in writing, ſigned by them, to the commiſſioners, with the names of proper collectors, for whom the pariſh or place ſhall be anſwerable. One of the duplicates, ſigned by three or more commiſſioners, ſhall be delivered to the collectors, with warrant for collecting; and the time and place of appeals ſhall then be appointed. The fourth meeting is that of appeal, notice of which ſhall be given in the church; and every perſon intending to appeal ſhall give a written notice to one or more aſſeſſors, that they may attend to juſtify the aſſeſſment. The commiſſioners are empowered to give relief in caſe of overcharge, and cauſe the ſum abated to be re-aſſeſſed; and, when the appeal is determined, it is abſolutely final. If any perſon refuſe or neglect to pay to the collector on demand, he may levy the ſum aſſeſſed by diſtreſs and ſale of the goods of the perſon neglecting or refuſing to pay; and for want of diſtreſs he may be committed, by warrant of two commiſſioners, to the common gaol, until payment of the money aſſeſſed, and of the charges. The collector is required to pay the money received to the receiver-general, or his deputy, quarterly, on or before June 24, Sept. 29, Dec. 25, and March 25; who ſhall give a receipt gratis; the collectors are allowed 3d. in the pound, which they may detain out of the laſt payment; but, if any collector detains the money longer than the time appointed, or pays it otherwiſe than directed, he ſhall forfeit not exceeding 40l. nor leſs than 5l. to be levied by diſtreſs; and, if he refuſe to pay it, two commiſſioners may impriſon him, ſeize his eſtates real and perſonal, and ſell them for payment. The receiver-general is appointed by the king, or in purſuance of his directions, and has a ſalary allowed him by the lords of the treaſury, not exceeding 2d. a-pound: notice of his appointment is to be given to the commiſſioners, before the time of the firſt quarterly payment. The receiver, within twenty days after the receipt, ſhall pay the money into the exchequer, or forfeit 500l. to him who ſhall ſue. The clerks of the commiſſioners are allowed three halfpence in the pound for writing the aſſeſſments, duplicates, &c. to be paid by the receiver-general, according to the warrant of two commiſſioners. Aſſeſſors, collectors, &c. not doing their duty, may be fined by three or more commiſſioners, in any ſum not exceeding 40l. *Blackſt. Com.* vol. i. *Burn's Juſtice*, vol. iii.

LAND'-WAITER, *ſ.* An officer of the cuſtom-houſe, whoſe duty is, upon landing any merchandiſe, to examine, taſte, weigh, meaſure, them, &c. and to take an account thereof. In ſome ports they alſo execute the office of a coaſt-waiter. They are likewiſe occaſionally ſtyled *ſearchers*, and are to attend and join with the patent ſearcher in the execution of all cockets for the ſhipping of goods to be exported to foreign parts; and, in caſes where drawbacks on bounties are to be paid to the merchant on the exportation of any goods, they, as well as the patent ſearchers, are to certify the ſhipping thereof on the debentures.—Give a guinea to a knaviſh *land-waiter*, and he ſhall connive at the merchant for cheating the queen of a hundred. *Swift.*

LAN'DA, *ſ.* in old records, an open field; a field cleared from wood.

LAN'DA, a kingdom of the iſland of Borneo.

LANDAFF'. See LLANDAFF.

LANDAU', a town of France, in the department of the Upper Rhine, ſituated on the river Queich, which runs into the Rhine; containing four churches, and about 4000 inhabitants. It was formerly imperial; and in the year 1291 endowed with the ſame privileges as Haguenau, by Rodolphus I. and confirmed to France in the year 1680; after which, it was fortified by Louis XIV. As it is commanded almoſt on every ſide by eminences, M. Vauban exerted all his ſkill in rendering it ſtrong. In the year 1702 it was taken by the Auſtrians; and in 1703 recovered again by the French. In 1704 the Imperialiſts made themſelves maſters of it a ſecond time; and in 1713 it was again taken from them. In 1714, by the treaty of Baden, this town, together with the three villages, and fortifications belonging to them, was ceded to France. In the 1793, it was attacked by the Auſtrians and Pruſſians, without ſucceſs. It is thirteen poſts north of Straſburg, and 64¼ eaſt of Paris. Lat. 49. 13. N. lon. 8. 10. E.

LANDAU', a town of the county of Waldeck: twelve miles north of Waldeck, and thirty-four ſouth-ſouth-eaſt of Paderborn. Lat. 51. 12. N. lon. 9. 5. E.

LANDAU', a town of Bavaria, ſituated on the Iſer: eight miles eaſt of Dingelfingen, and thirty-two weſt of Paſſau. Lat. 48. 36. N. lon. 12. 37. E.

LANDAU', *ſ.* [from the above town.] A coach whoſe top may be occaſionally opened.

LANDAU'L, a town of France, in the department of the Morbihan: ſix miles north-weſt of Plumet.

LAND'DOC, a village in Carmarthenſhire, South Wales; with a fair on the 21ſt of June.

LAN'DE, a town of Norway: thirty-ſix miles north of Chriſtiania.

LAN'DE (la), a town of France, in the department of the Channel: nine miles north of Avranches.

LAN'DECK, a town of the duchy of Warſaw: forty-eight miles north of Gneſna.

LAN'DECK, or LANDEG, a town of the county of Tyrol, on the Inn: twenty miles north of Glurentz, and thirty-nine weſt-ſouth-weſt of Inſpruck.

LAN'DECK, a town of Pruſſian Pomerelia: ſixty-four miles ſouth-weſt of Dantzic.

LAN'DECK, a town of Sileſia, in the county of Glatz, on the Biela: eight miles ſouth-eaſt of Glatz, and twenty-ſeven ſouth-weſt of Neiſſe. Lat. 50. 15. N. lon. 16. 40. E.

LAN'DED, *adj.* Having a fortune, not in money but in land; having a real eſtate.—Cromwell's officers, who were for levelling lands while they had none, when they grew *landed* fell to crying up Magna Charta. *Temple.*—A houſe of commons muſt conſiſt, for the moſt part, of *landed* men. *Addiſon's Freeholder.*

LAN'DEGODE,

LAN'DEGODE, a ſmall iſland in the North Sea, near the coaſt of Norway. Lat. 67. 25. N.

LAN'DEHEN, a town of France, in the department of the North Coaſts: two miles ſouth of Lamballe, and five north-north-eaſt of Moncontour.

LANDEL'LE, a town of France, in the department of the Calvados: five miles north-weſt of Vire, and twenty-eight ſouth-weſt of Caen.

LAN'DEN (John), an eminent Engliſh mathematician, was born at Peakirk, near Peterborough, in Northamptonſhire, in the year 1719. That he became an early proficient in the mathematics, appears from his being a reſpectable contributor to the Lady's Diary in 1744; and he was ſoon among the foremoſt of thoſe who then ſupported that ſmall but valuable publication, in which almoſt every Engliſh mathematician who arrived at any degree of eminence during a conſiderable part of the laſt century, contended for fame. Mr. Landen communicated his contributions to it under different ſignatures, till within a few years of his death. What further information we have been able to collect relating to this mathematician is chiefly confined to a hiſtory of his writings. In the 48th volume of the Philoſophical Tranſactions, he gave "An Inveſtigation of ſome Theorems which ſuggeſt ſeveral very remarkable Properties of the Circle, and are, at the ſame Time, of conſiderable Uſe in reſolving Fractions, the Denominators of which are certain Multinomials, into more ſimple ones, and by that Means facilitating the Computation of Fluents." This ingenious paper was communicated to the Royal Society by that eminent mathematician, the late Thomas Simpſon, of Woolwich; which circumſtance will convey, to thoſe who are not themſelves judges of it, ſome idea of its merit. In the year 1755, Mr. Landen publiſhed a volume, called Mathematical Lucubrations; the title of which was choſen as a means of informing the world, that the ſtudy of the mathematics was at that time rather the purſuit of his leiſure hours than his principal employment. This, indeed, continued to be the caſe during the greateſt part of his life; for, about the year 1762, he was appointed agent to earl Fitzwilliam, and retained that employment till within two years of his death. Theſe Lucubrations contain a variety of tracts relative to the rectification of curve lines, the ſummation of ſeries, the finding of fluents, and many other points in the higher parts of mathematics. About the latter end of the year 1757, or the beginning of 1758, he publiſhed propoſals for printing by ſubſcription, The Reſidual Analyſis, a new branch of the algebraic art; and in the year laſt-mentioned, he publiſhed a Diſcourſe on the Reſidual Analyſis, 4to. in which he reſolved a variety of problems, to which the method of fluxions had uſually been applied, by a mode of reaſoning entirely new. He alſo compared theſe ſolutions with others derived from the fluxionary method; and ſhowed, that the ſolutions by his new method were, in general, more natural and elegant than the fluxionary ones. In the 51ſt volume of the Philoſophical Tranſactions, he gave A new Method of computing the Sums of a great number of Infinite Series. The firſt book of The Reſidual Analyſis made its appearance in 1764. In this treatiſe, beſides explaining the principles on which his new analyſis was founded, he applied it, in a variety of problems, to the drawing of tangents, and finding the properties of curve lines; to deſcribing their involutes and evolutes, finding the radius of curvature, their greateſt and leaſt ordinates, and points of contrary flexure; to the determination of their cuſps, and the drawing of aſymptotes; and he propoſed, in a ſecond book, to extend the application of this new analyſis to a great variety of mechanical and phyſical ſubjects. The papers, which were to have formed this book, lay long by him; but he never found leiſure to put them in order for the preſs.

In the year 1766, Mr. Landen had the honour of being elected a fellow of the Royal Society. Two years afterwards he contributed to the 58th volume of their Tranſactions, A Specimen of a new Method of comparing Curvilinear Areas; by means of which many areas are compared that did not appear to be comparable by any other method: a circumſtance of no ſmall importance in that part of natural philoſophy which relates to the doctrine of motion. In the 60th volume of the ſame work, he gave "Some New Theorems for computing the whole Areas of Curve Lines, where the Ordinates are expreſſed by Fractions of a certain form," in a more conciſe and elegant manner than had been done by Cotes, De Moivre, and others who had conſidered the ſubject before him. In the 61ſt volume of the Tranſactions, he has inveſtigated ſeveral new and uſeful theorems for computing "Certain Fluents which are aſſignable by Arcs of the Conic Sections." This ſubject had been conſidered before, both by Maclaurin and d'Alembert; but ſome of the theorems which were given by theſe celebrated mathematicians, being in part expreſſed by the difference between an hyperbolic arc and its tangent, and that difference being not directly attainable when the arc and its tangent both become infinite, as they will do when the whole fluent is wanted, although ſuch fluent be finite; theſe theorems, therefore, fail in thoſe caſes, and the computation becomes impracticable without farther help. This defect Mr. Landen has removed, by aſſigning the *limit* of the difference between the hyperbolic arc and its tangent, while the point of contact is ſuppoſed to be removed to an infinite diſtance from the vertex of the curve: and he concludes the paper with a curious and remarkable property relating to pendulous bodies, which is deducible from thoſe theorems. In the year 1774, he publiſhed "Animadverſions on Dr. Stewart's Computation of the Sun's Diſtance from the Earth;" in which he not only pointed out the doctor's errors, but ſhowed that a true ſolution of the problem was not to be expected, either from his method of reaſoning, or from the data on which he had founded it. Mr. Landen's next contribution to the Philoſophical Tranſactions is to be found in the 65th volume, and conſiſts of the inveſtigation of a general theorem, which he had promiſed in 1771, "for finding the length of any arc of a conic hyperbola by means of two elliptic arcs, with ſome other new and uſeful theorems deduced therefrom;" and it concludes with obſerving, that theſe theorems, properly applied, will evince, that both the elaſtic curve, and the curve of equable receſs from a given point, with many others, may be conſtructed, by the rectification of the ellipſis only, in thoſe caſes in which Maclaurin's elegant method is defective. In the 67th volume of the ſame work, he gave "A New Theory of the Rotatory Motion of Bodies affected by Forces diſturbing ſuch Motion." At that time he did not know that the ſubject had been handled by any perſon before him, and he conſidered only the motion of a ſphere, ſpheroid, and cylinder. After the publication of his paper, however, he was informed, that the doctrine of rotatory motion had been conſidered by d'Alembert; and, upon procuring that author's Opuſcules Mathematiques, he there learned that d'Alembert was not the only perſon who had preceded him in this inveſtigation; for he found him ſpeaking of ſome mathematician, though he does not mention his name, who, after reading what had been written on the ſubject, doubted whether there be any ſolid whatever, beſides the ſphere, in which any line, paſſing through the centre of gravity, will be a permanent axis of rotation. In conſequence of this, Mr. Landen took up the ſubject again; and, though he did not then give a ſolution to the general problem, namely, "to determine the motions of a body of any form whatever, revolving without reſtraint about any axis paſſing through its centre of gravity;" he fully removed any doubt of the kind which had been advanced by the perſon to whom d'Alembert had alluded, and pointed out ſeveral bodies which, under certain dimenſions, have that remarkable property. This paper may be ſeen, among many others equally curious, in a volume of Memoirs, which our author publiſhed in the year 1780. That volume is alſo enriched with

with a very valuable Appendix, containing Theorems for the Calculation of Fluents; which are more complete and extenſive than thoſe which are to be found in any author before him.

In the years 1781, 1782, and 1783, Mr. Landen publiſhed three ſmall tracts On the Summation of Converging Series; in which he explained and ſhowed the extent of ſome theorems which had been given for that purpoſe by De Moivre, Stirling, and his old friend Thomas Simpſon, in anſwer to what he conceived to be written to the diſparagement of thoſe excellent mathematicians. It was the opinion of ſome, that Mr. Landen did not ſhow leſs mathematical ſkill in explaining and illuſtrating theſe theorems than he had done in his writings on original ſubjects; and that the authors of them were as little aware of the extent of their own theorems as the reſt of the world were, before Mr. Landen's ingenuity made it obvious to all.

About the beginning of the year 1782, Mr. Landen had made ſuch improvements in his theory of rotatory motion, as enabled him, he thought, to give a ſolution of the general problem mentioned above; but, finding the reſult of it to differ very materially from the reſult of the ſolution of it given by d'Alembert, and not being able to ſee clearly where that gentleman, in his opinion, had erred, he did not venture to make his own ſolution public at that time. During the courſe of that year, having procured the Memoirs of the Berlin Academy for 1757, which contain M. Euler's ſolution of the problem, he found that it gave the ſame reſult which had been deduced by d'Alembert; but the perſpicuity of Euler's manner of writing enabled him to diſcover where he had differed from himſelf, which the obſcurity of the other prevented him from doing. The agreement, however, of two writers of ſuch eſtabliſhed reputation as Euler and d'Alembert, made him long dubious about the truth of his own ſolution, and induced him to reviſe the proceſs again and again, with the utmoſt circumſpection; and, being every time more firmly convinced that his own ſolution was right, and their's wrong, he gave it to the public in the 75th volume of the Philoſophical Tranſactions. Owing to the extreme difficulty of the ſubject, together with the conciſe manner in which Mr. Landen had been obliged to give his ſolution, that he might confine it within proper limits for the Tranſactions, it was too hard, or at leaſt too laborious, a taſk for moſt mathematicians to read it; and this circumſtance, joined to the eſtabliſhed reputation of Euler and d'Alembert, induced many to think that their ſolution was right, and Mr. Landen's wrong. Among the attempts made to prove it, was a long and ingenious paper by the learned Mr. Wildbore, a gentleman of very diſtinguiſhed talents and experience in ſuch kind of calculations; which is given in the 80th volume of the Philoſophical Tranſactions, and is decidedly in favour of the foreign mathematicians. Upon this Mr. Landen determined to reviſe and extend his ſolution, in order to make it more generally underſtood. About this time, alſo, he accidentally met with the late P. Friſi's Coſmographiæ Phyſicæ et Mathematicæ; in the ſecond part of which there is a ſolution of this problem, agreeing in the reſult with thoſe of Euler and d'Alembert. Notwithſtanding the agreement of the great mathematicians above-mentioned againſt him, our author was ſtill perſuaded of the truth of his own ſolution, and proceeded to defend and explain it more at large. He was the more anxious to do this without loſs of time, on account of the declining ſtate of his health. For ſeveral years he had been ſeverely afflicted with the ſtone in his bladder, and about this time frequently ſuffered from it to ſuch a degree, as to be confined to his bed for more than a month together. Yet even this dreadful diſorder did not extinguiſh his ardour for mathematical ſtudies; for the ſecond volume of his Memoirs was written and reviſed during the intervals of his complaint. This volume contains his laſt labours on the ſolution of the general problem concerning rotatory motion. It alſo compriſes a reſolution of the problem relating to the motion of a top; together with an inveſtigation of the motion of the equinoxes, in which Mr. Landen has, firſt of any one, pointed out the cauſe of ſir Iſaac Newton's miſtake in his ſolution of this celebrated problem; and ſome other papers of conſiderable importance. He juſt lived to ſee this work finiſhed, and received a copy of it on the day before his death, which took place on January the 15th, 1790, at Milton, near Peterborough, in the ſeventy-firſt year of his age. Mr. Landen was not only diſtinguiſhed by his eminent talents as a mathematician, but by the excellence of his moral character. The ſtrict integrity of his conduct, his great humanity, and his readineſs to ſerve every perſon to the utmoſt of his abilities, juſtly procured him the reſpect and eſteem of all who knew him, and filled them with deep regret for his loſs. *Gent. Mag. March* 1790.

LAN'DEN, a town of France, in the department of the Dyle, ſituated on the river Becke, where a bloody battle was fought on the 29th of July, 1693, between the army of the allies, under the command of William III. king of England and the elector of Bavaria, and the French under the duke of Luxemburg. The French army amounted to 80,000 men, and the allies to little more than half that number. The French were repulſed two or three times, and loſt a great many officers and men; but, returning to the charge, they gained a victory, which, however, coſt them dear, having 15,000 men killed, and between 9 and 10,000 wounded. The confederates loſt ſixty pieces of cannon, nine mortars, a great number of ſtandards and colours, with about 8000 men killed and wounded. It is ſixteen miles ſouth-eaſt of Louvain, and ſeventeen weſt-ſouth-weſt of Liege.

LAN'DENDORFF, a town of Auſtria: nine miles ſouth of Laab.

LANDERNEAU', a town of France, and principal place of a diſtrict, in the department of the Finiſterre: two and a half poſts north-eaſt of Breſt, and ſixty-ſeven and a quarter weſt of Paris. Lat. 48. 27. N. lon. 4. 10. W.

LANDERO'N, a town of Swiſſerland, in Neufchâtel, ſituated at the ſouth-weſt extremity of the lake of Bienne, built in the year 1324, by Rodolph V. count of Neufchâtel. The inhabitants are papiſts. In the year 1707, this town refuſed to acknowledge the king of Pruſſia for ſovereign, and was reduced by force of arms. It is ſeven miles north-eaſt of Neufchâtel, and nine ſouth-weſt of Bienne.

LAN'DES, a department of France, bounded on the north by the department of the Gironde, on the eaſt by the departments of the Lot and Garonne, and Gers, on the ſouth by the Lower Pyrennées, and on the weſt by the ſea; about ſixty miles from north to ſouth, and nearly as much from eaſt to weſt. It is in general a ſandy unfruitful country, covered with heaths, and thinly cultivated, except towards the ſouth-eaſt, where it contains ſome good land, and ſeveral towns. The principal rivers are the Douze and Adour. Mont de Marſan is the capital.

LAN'DESHUT, a town of Sileſia, in the principality of Schweidnitz, on the Bober. In this town is a Roman-catholic church, with a Lutheran *gnadenkirche*, or permiſſive church, and a Latin ſchool. This toleration of the Lutheran church and ſchool was purchaſed by a loan of 80,000 florins to the emperor, beſides a preſent of 12,000. The town itſelf was founded in 1292. In 1638, the greateſt part of it was deſtroyed by fire; and in the following year it was pillaged and demoliſhed with ſo much barbarity, that only two perſons remained there. It enjoys now, however, a flouriſhing linen-trade. It is eighteen miles weſt-ſouth-weſt of Schweidnitz, and eight ſouth-ſouth-weſt of Jauer. Lat. 50. 30. E. lon. 15. 55. E.

LANDEVAN', a town of France, in the department of the Morbihan: eight miles north-weſt of Auray, and eight ſouth-eaſt of Hennebon.

LANDEVIL'LE, a town of France, in the department of the Vendée: eight miles north of Sables d'Olonne, and fifteen weſt of Roche ſur Yon.

LAN'DGRABEN,

LAN'DGRABEN, a river of Silesia, which runs into the Weistritz a little above its junction with the Oder.

LAND'GRAVE, *s.* [from the German *land*, earth, and *graff* or *grave*, judge or count.] A name formerly given to those who executed justice in behalf of the emperors, with regard to the internal policy of the country. The title does not seem to have been used before the eleventh century. These judges were first appointed within a certain district of Germany: in process of time the title became hereditary, and their judges assumed the sovereignty of the several districts or counties over which they presided. Landgrave is now applied by way of eminence to those sovereign princes of the empire who possess by inheritance certain estates called *landgravates*, and of which they receive the investiture of the emperor. There are four princes who have this title, viz. those of Thuringia, Hessia, Alsace, and Leuchtemberg. There are also other landgraves, who are not princes, but counts of the empire.

LANDGRA'VIATE, or LAND'GRAVATE, *s.* The office, authority, jurisdiction, or territory, of a landgrave.

LAND'GUARD FO'RT, a fort of England, situated on a point of land, at the south-east extremity of the county of Suffolk, at the mouth of the rivers Orwell and Stour, opposite Harwich; and furnished with a garrison under the command of a governor, and a platform of guns to defend the coast. It is placed on a point of land so surrounded with the sea at high-water, that it looks like a little island at least one mile from the shore. The making its foundation solid enough for so good a fortification cost many years' labour, and a prodigious expense. It was built in the reign of king James I. when it was a much more considerable fortification than now, having four bastions mounted with sixty very large guns, particularly those on the royal bastion, which would throw a twenty-eight pound ball over Harwich. A number of alterations were made a few years ago at Landguard Fort. The magazines and store-houses were taken down, and the stores removed to the depot at Harwich. The ditch has been deepened, the embrasures closed up, the walls raised, and the cannon new mounted upon a different construction. Two mortars are mounted on the Downs between the fort and the sea, the largest of which weighs 82¾ cwt. and its bed, which is of cast-iron, upwards of 94 cwt. Here the young officers belonging to the royal marine artillery are daily exercised in throwing shells.

LAN'DI (Hortensio), an ingenious but whimsical writer, was born at Milan near the beginning of the sixteenth century. He was brought up to letters, and studied at his native city, and at Bologna, but in very necessitous circumstances; and it appears that he practised physic for his support, though he has left no proof of his proficiency in this science. While yet at Milan, he published two dialogues, entitled *Cicero relegatus*, and *Cicero revocatus*, which he feigns to have been held by a company of learned men in 1533. These are elegant and ingenious compositions, but not without a turn to paradox. A journey which he then took gave occasion to a work entitled *Forcianæ Quæstiones*; in which, under the feigned name of Philalethes, he treats in an entertaining manner on the manners and customs, dress, diversions, ladies, &c. of the different cities of Italy. It was published at Naples in 1536. He travelled into France about this time, and at Lyons contracted a close intimacy with Stephen Dolet, who was afterwards burnt as an atheist. It appears however, that, upon his return into Italy, he entered successively into the service of the bishops of Trent and Catania. Passing in 1540 through Basil, he published a dialogue against Erasmus, who died four years before, which was answered in a severe invective against the author. He was at the court of Francis I. in 1543, and in that year published his two books of Paradoxes. As these, from their extravagance and undue freedom, excited considerable attention, he thought proper to answer them himself, anonymously; and in his reply he spares himself as little as any real antagonist would have done. In 1544 he travelled through Germany; and, returning to Italy, undertook that journey through its several provinces, which he has described in his *Comentario delli piu notabili & mostruose Cose d'Italia & altri Luoghi*, 1548. This is a mixture of fact and fable, written in a ludicrous and whimsical style. He settled at Venice in 1548, and there published his *Lettere di Molte valorose Donne*, which, as well as his collection of Consolatory Letters, and the Letters of Donna Lucretia Gonzaga, were all of his own composition;—a species of literary imposture certainly not to be commended. His *Sferza de Scrittori antichi & moderni, di M. Anonymio d'Utopia*, 1550, is a severe invective against the most celebrated authors, and against the sciences themselves, to which he gave a sort of antidote in *Una Esortatione allo Studio delle Lettere*. It is unnecessary to go through all the catalogue of the works of this capricious writer, one of which was a dialogue concerning the utility of reading the holy scriptures, a kind of study in which he seems to have been little conversant. Another, which treated of Medicine for the Passions of the Mind, mixed with, a subject which might have been seriously professional, his jocular and fanciful imaginations. The dates of his later works run between 1550 and 1560, and it is supposed that he did not live much longer. With all his oddity of character, he lived in friendship with many of the learned men of that age, by whom he has been praised. He was particularly intimate with Peter Aretine, whom he somewhat resembled in his writings, but with more decency and real learning. *Tiraboschi.*

LAN'DIN, a town of Portugal, in the province of Entre Duero e Minho: twelve miles east of Villa de Conde, and six west of Guimaraens.

LAN'DING, *s.* The act of putting on shore; the act of getting on shore.

LAN'DING, or LAN'DING-PLACE, *s.* The top of stairs.—There is a stair-case that strangers are generally carried to see, where the easiness of the ascent, the disposition of the lights, and the convenient *landing*, are admirably well contrived. *Addison on Italy.*—What the Romans called vestibulum was no part of the house, but the court and *landing-place* between it and the street. *Arbuthnot on Coins.*

LANDI'NO (Christopher), an early Italian scholar, was born at Florence in 1434. He studied first at Volterra, under Angiolo da Todi; to whom he was so dear, that he not only maintained him a long time at his own expense, but at his death bound his heirs to maintain him three years longer. His father then obliged him to embrace the profession of law; but the munificence of Cosmo and Peter de Medici recalled him to his beloved studies, of which that of the Platonic philosophy was his particular favourite. He was one of the principal ornaments of the Platonic academy at Florence, and lived in great friendship with Poliziano, Ficino, and others of its members. In 1457 he opened a public school of polite literature at Florence, which greatly contributed to the progress of learning at that period. At an advanced age he obtained the office of secretary to the seigniory, and was presented with a palace in the Casentino. He finally retired to Prato-Vecchio, where he died in 1504. He wrote "Latin Poems," which, though not perfectly correct, may stand in competition with most of the compositions of that age. He drew up Commentaries upon Virgil, Horace, and Dante, which were several times printed; and he translated into Italian Pliny's Natural History, and the Sforziade of John Simonetta. These versions and commentaries are, indeed, little esteemed. He showed his attachment to moral philosophy by his Dialogues on the Nobility of the Mind, his four books of Camaldolese Questions, and other works. He composed "Latin and Italian Orations" on various occasions, which have been printed; but many of his writings remain in manuscript in the Laurentian library. *Tiraboschi.*

LANDIVISIAU', a town of France, in the department of the Finiſterre: ſeven miles north-eaſt of Landerneau, and ten weſt-ſouth-weſt of Morlaix.

LANDIV'Y, a town of France, in the department of the Mayenne: eleven miles north of Ernée, and eighteen north-weſt of Mayenne.

LAND'LADY, *ſ.* A woman who has tenants holding from her. The miſtreſs of an inn.—If a ſoldier drinks his pint, and offers payment in Wood's halfpence, the *landlady* may be under ſome difficulty. *Swift.*

LAND'LESS, *adj.* Without property; without fortune. —A *landleſs* knight hath made a landed ſquire. *Shakeſpeare.*

Young Fortinbras
Hath in the ſkirts of Norway, here and there,
Shark'd up a liſt of *landleſs* reſolutes. *Shakeſpeare's Hamlet.*

LAND'LORD, *ſ.* One who owns lands or houſes, and has tenants under him.—In London, if a tenant commit felony, &c. whereby his goods and chattels become forfeit; the *landlord* ſhall be paid his rent for two years, before all other debts except to the king, out of the goods found in the houſe. *Jacob's Law Dict.*—The maſter of an inn.—Upon our arrival at the inn, my companion fetched out the jolly *landlord*, who knew him by his whiſtle. *Addiſon.*

LANDLORD *and* TENANT. For the law chiefly relating to them, ſee the articles DISTRESS, EJECTMENT, LEASE, &c.

LAN'DO (Pope), was a Sabine by birth, and ſucceeded to the pontifical throne on the death of Anaſtaſius III. in the year 913. He was moſt probably indebted for his elevation to the noted Theodora; who, with her daughters Morazia and Theodora, all of them no leſs famous for their beauty, wit, and addreſs, than infamous for the ſcandalous lives which they led, ſupported by Adelbert marquis of Tuſcany, and his party, governed Rome with abſolute ſway, and diſpoſed of the holy ſee to whom they pleaſed. That Lando was an inſtrument devoted to the will of Theodora, may he concluded from his unworthy conduct in ordaining her favourite John, afterwards pope John X. archbiſhop of Ravenna; as we have ſeen in the life of that pontiff, vol. xi. p. 211. Lando died after he had held the papal ſee not much longer than ſix months.

LANDONNEAU', a river of France, which runs into the ſea near Breſt.

LANDRE'CY, a town of France, in the department of the North, ſituated on the Sambre. In the year 1543, this town was beſieged by the emperor Charles V. without ſucceſs; the year following it was ceded to the emperor, by the peace of Creſſy. In the year 1637, it was taken by the French, and retaken ſoon after by the Spaniards, who held it till the year 1655, when it was attacked by the marſhals Turenne and Ferte, who became maſters of it, ten days after the trenches were opened, in ſight of the Spaniſh army, under the prince of Condé, of 35,000 men. The French, who remained in poſſeſſion by the peace of the Pyrenées, enlarged the fortifications, and made it one of the ſtrongeſt places in the country. It has two gates, one towards the eaſt, called the Gate of France, and the other towards the weſt, called the Gate of Queſnoy. Prince Eugene inveſted this place on the 17th of July, 1712, giving the conduct of the enterpriſe to the prince of Anhalt Deſſau; but, the French carrying the poſts of Denain, Marchiennes, and St. Amand, the ſiege was raiſed on the 31ſt of the ſame month. See the article FRANCE, vol. vii. p. 736. In the year 1794, the town was beſieged by the allies under the hereditary prince of Orange. The whole of the ſiege, after opening of the trenches, laſted ſcarcely ten days; yet the bombardment was ſo ſevere, that not more than three houſes were left ſtanding; 200 of the inhabitants, and 1200 of the garriſon, loſt their lives. The remainder of the garriſon, which ſurrendered priſoners of war, conſiſted of 4400 men. The ſurrender took place on the 30th of April: but, on the 15th of Auguſt following, the garriſon, which conſiſted of 20,000 men, ſurrendered at diſcretion to the French general Scherer. See the articles FRANCE and ENGLAND. Landrecy is 3½ poſts ſouth-eaſt of Valenciennes, 23½ north-north-eaſt of Paris. Lat. 50. 7. N. lon. 3. 45. E.

LANDRIS'SE, a town of France, in the department of the Doubs: fifteen miles north-eaſt of Ornans, and ſix ſouth-eaſt of Baume les Dames.

LANDRIA'NO, a town of Italy: eleven miles ſouth-ſouth-eaſt of Milan.

LANDRO'AL, a town of Portugal, in Alentejo: thirteen miles north of Mourao, and twelve weſt of Xerumenha. Lat. 38. 35. N. lon. 7. 12. E.

LANDRO'VA, a ſmall river of Spain, which runs into the Atlantic nine miles north-eaſt of Vivero in Galicia.

LAND'SBERG, a town of Pruſſia, in the province of Natangen: twenty-ſix miles ſouth of Konigſberg. Lat. 54. 14. N. lon. 20. 30. E.

LAND'SBERG, a town of the duchy of Stiria: twenty-four miles ſouth-weſt of Gratz, and ninety-four ſouth-ſouth-weſt of Vienna.

LAND'SBERG, a town of Germany, in the county of Hoya, on the Weſer: ſix miles ſouth-ſouth-weſt of Nienburg.

LAND'SBERG, a town and ruined caſtle of France, in the department of Mont Tonnerre: one mile eaſt of Ober Moſchel.

LAND'SBERG, or GORZOW, a town of Sileſia, in Oppeln, on the borders of Poland: thirty-ſeven miles eaſt of Brieg, and thirty north-eaſt of Oppeln. Lat. 51. 3. N. lon. 18. 29. E.

LAND'SBERG, a town of Bavaria, on the Lech: eighteen miles ſouth of Augſburg, and thirty-two weſt of Munich. Lat. 48. 0. N. lon. 10. 51. E.

LAND'SBERG, a town of Saxony, anciently a margravate: fourteen miles north-weſt of Leipzig. Lat. 51. 34. N. lon. 12. 11. E.

LAND'SBERG, a town of Brandenburg, in the New Mark, on the Warta. It contains three churches, a royal magazine, and ſeveral manufactories of ſtuff and cloth, with a conſiderable trade in wool: twenty miles eaſt-north-eaſt of Cuſtrin, and ſixty-four eaſt of Berlin. Lat. 52. 48. E. lon. 15. 20. E.

LAND'SBERG (Alt), a town of Bradenburg, in the Middle Mark: twenty-one miles ſouth-eaſt of Oranienburg, fourteen miles eaſt-north-eaſt of Berlin. Lat. 52. 35. N. lon. 13. 48. E.

LAN'DSCAPE, *ſ.* [*landſchape*, Dut.] A region; the proſpect of a country.—We are like men entertained with the view of a ſpacious *landſcape*, where the eye paſſes over one pleaſing proſpect into another. *Addiſon.*

Straight mine eye hath caught new pleaſures,
Whilſt the *landſcape* round it meaſures,
Ruſſet lawns and fallows grey,
Where the nibbling flocks do ſtray. *Milton.*

A picture, repreſenting an extent of ſpace, with the various objects in it.—As good a poet as you are, you cannot make finer *landſcapes* than thoſe about the king's houſe. *Addiſon.*

Oft in her glaſs the muſing ſhepherd ſpies
The wat'ry *landſcape* of the pendant woods,
And abſent trees, that tremble in the floods. *Pope.*

LANDSCRO'N, a fortreſs of Poland, in the palatinate of Cracow, which fell into the poſſeſſion of the confederates during the late troubles, from whence they made excurſions; and, by a detachment of troops from this fortreſs, the city of Cracow was taken from the Ruſſians. In 1771, a battle was fought here between the Poliſh confederates under Dumourier and the Ruſſians commanded by Suwarrow, in which the latter were victorious: twenty miles ſouth of Cracow. Lat. 49. 50. N. lon. 19. 40. E.

LANDSCRO'N, a town of Bohemia, in Chrudim: twelve miles eaſt of Leutmiſchl, and twenty-ſeven eaſt of Chrudim. Lat. 49. 50. N. lon. 16. 21. E.

LANDSCRO'N,

LANDSCRO'N, a fortreſs of France, in the department of the Upper Rhine, purchaſed of the marquis of Baden-Dourlach by Louis XIV. It is eight miles ſouth of Huningue, and five ſouth-weſt of Bâle.

LANDSCRO'N, a fortreſs of Upper Carinthia: three miles north-eaſt of Villach.

LANDSCRO'N, a town of Pruſſia, in the province of Natangen: eighteen miles north-eaſt of Heilſperg.

LANDSCRO'NA, a ſeaport town of Sweden, ſituated on the weſt coaſt of the province of Skone, on an iſland near the Sound. It is a ſtaple town, with a good harbour. In the year 1676, it was taken by the Danes. New fortifications are erecting here, the object of which is to command the whole coaſt of Skonen, along the Sound. The old fortifications are furniſhed with a garriſon of 300 men, and 74 pieces of cannon. The harbour lies between the continent and a ſmall iſland, and is twenty feet deep. It is twenty-one miles north-weſt of Lund, and twelve ſouth of Helſingborg. Lat. 55. 52. N. lon. 12. 36. E.

LANDSCRO'NE, a mountain of Luſatia, near Gorlitz.

LANDSE'LE, a ſmall iſland in the Eaſtern Indian Sea, near the north coaſt of the Greater Andaman. Lat. 13. 38. N. lon. 93. 7. E.

LAND'SER, a town of France, in the department of the Upper Rhine: ten miles north-weſt of Bâle, and twenty-two ſouth of Colmar.

LAND'SHAAG, a town of Auſtria, on the Danube: nineteen miles ſouth-weſt of Freuſtadt.

LAND'SHUT, a town of Bavaria, on the river Iſer. It is an open well-built town, and the capital of a government. It contains two palaces, and a college with a church in it, the ſteeple of which is reckoned the higheſt in Germany; a pariſh-church, and ſix convents. Landſhut was built, either by duke Louis of Bavaria, or his father duke Otto of Mittleſbach. In 1634, it ſuffered from the Swedes. The Auſtrians took poſſeſſion of this town, and over-ran the territories, in the beginning of April, 1809; but all was recovered with equal rapidity by Bonaparte, who entered Landſhut on the 21ſt of the ſame month, where he found 30 pieces of cannon, 9000 priſoners, 600 ammunition waggons, and the hoſpitals and magazines which the Auſtrians had begun to form. Landſhut is thirty-ſix miles ſouth-eaſt of Ingolſtadt, and thirty-two north-eaſt of Munich. Lat. 48. 29. N. lon. 12. 5. E.

LAND'SHUT, a town of Auſtrian Poland, in Galicia: ſeventy-two miles weſt of Lemberg.

LAND'SHUT, a town of Sileſia. See LANDESHUT.

LAND'SHUT, or LANDZNIT, a town of Moravia, in Brunn: ſixteen miles ſouth-eaſt of Auſpitz.

LAND'SORT, a ſmall iſland in the Baltic, near the coaſt of Sweden. Lat. 58. 52. N. lon. 17. 10. E.

LAND'SPERG. See LANDSBERG.

LAND'STRASS, LAND'STROST, or KOSTAINAVIZ'ZA, a town of Carniola, ſituated on an iſland in the river Gurck, with a cathedral: eighteen miles ſouth of Cilley, and fifty-ſeven eaſt of Trieſte.

LAND'STHUL, a town of France, in the department of Mont Tonnerre, and chief place of a canton, in the diſtrict of Deux Ponts. The place contains 705, and the canton 7910, inhabitants, in 32 communes.

LAN'DUN, a town of France, in the department of the Gard: twenty-one miles north-north-eaſt of Niſmes, and ſeven ſouth of Pont St. Eſprit.

LAND'VELLER, a town of Sweden, in Weſt Gothland: nine miles eaſt of Gothenborg.

LAND'WARD, *adv.* Toward the land.—They are invincible by reaſon of the overpouring mountains that back the one, and ſlender fortification of the other to *landward*. *Sandys's Journey*.

LAND'WERNHAGEN, a village in the principality of Heſſe; near which, in the year 1758, the allies were defeated by the French, with the loſs of 1500 men: ſix miles north-eaſt of Caſſel.

LANDWU'ST, a town of Saxony, in the Vogtland.

LANE, *ſ.* [*laen*, Dut. *lana*, Saxon.] A narrow way between hedges.—A pack-horſe is driven conſtantly in a narrow *lane* and dirty road. *Locke*.

I know each *lane*, and every alley green,
Dingle or buſhy dell, of this wild wood,
And every boſky burn. *Milton*.

A narrow ſtreet; an alley.—There is no ſtreet, not many *lanes*, where there does not live one that has relation to the church. *Spratt's Sermons*.—A paſſage between men ſtanding on each ſide.—The earl's ſervants ſtood ranged on both ſides, and made the king a *lane*. *Bacon's Henry* VII.

LANE, an iſland in the Atlantic, near the coaſt of America, a little to the eaſt of Scuttock Point. Lat. 44. 18. N. lon. 67. 56. W.

LANE, a river of Ireland, in the county of Kerry, which runs from Lough Lane into Caſtlemain Bay.

LANE-END, a town of England, in the county of Stafford, celebrated for its potteries, with a weekly market on Saturday: 151 miles north-weſt of London.

LA'NEL, a town of Africa, and capital of the kingdom of Galam, ſituated on the ſouth ſide of the Senegal.

LANEMEZA'N, a town of France, in the department of the Higher Pyrenées: twelve miles eaſt-north-eaſt of Bagnères en Bigorre, and fifteen ſouth-eaſt of Tarbe.

LA'NEOUS, *adj.* [from *lana*, Lat. wool.] Woolly; made of wool. *Scott*.

LA'NEPAX, a town of France, in the department of the Gers: ten miles ſouth-ſouth-weſt of Condom, and eighteen north-weſt of Auch.

LAN'ERCROFT, a village of England, in the county of Cumberland. Here is an ancient fortification called Burd Oſwald, anciently Amboglana: two miles north-eaſt of Brampton.

LAN'ERET, *ſ.* A little hawk. See FALCO.

LANER'K, or LANARK, a town of Scotland, and a royal burgh, in the county to which it gives name, ſeated on the ſide of a riſing round near the Clyde. It received its charter from Alexander I. which was finally ratified by Charles I. It is governed by a provoſt, two bailies, a dean of guild, &c. Near it are ſome celebrated falls or cataracts in that river, which, eſpecially in rainy ſeaſons, form a tremendous appearance. Here the brave Wallace firſt meditated to revenge the wrongs of his country, and ſlew the governor, who was a man of high rank.

In the neighbourhood of Lanerk are ſome of the greateſt cotton-manufactures of Scotland. A number of houſes have been erected, with the name of New Lanerk, for the accommodation of the workmen in the employ of Mr. Dale. Five hundred children are entirely fed, clothed, and inſtructed, at the expenſe of this venerable philanthropiſt. The reſt of the children live with their parents in comfortable and neat habitations in the town, and receive weekly wages for their labour. The health and happineſs depicted in the countenances of theſe children, ſhow that the proprietor of the Lanerk mills has remembered mercy in the midſt of his gain; the regulations adopted here for the preſervation of the health, both of body and of mind, are ſuch as do honour to the goodneſs and the diſcernment of Mr. Dale; and preſent a ſtriking contraſt to the generality of large manufactories in this kingdom, which are the ſchools of vice and of profligacy, the very hotbeds of diſeaſe and of contagion. Pure and freſh air, without which life cannot exiſt, is adminiſtered in abundance to this manufactory, by frequently opening the windows, and by air-holes, under every other window, which are left open during the ſummer-months. The children are all waſhed before they go to work, and after they have finiſhed their daily labour, previous to their appearance in the ſchools. The floors and the machinery of the mills are waſhed once a-week with hot water; and the walls and ceilings are white-waſhed twice a-year with unſlaked lime. The children are lodged in large airy rooms. The boys and girls are kept ſeparate from each other during reſt, meal-times, and working-hours. They are fed plentifully with plain and wholeſome

food, which conſiſts chiefly of freſh beef, and barley broth, cheeſe, potatoes, and barley bread, with now and then ſome freſh herrings as a variety. Their breakfaſt and ſupper is, principally, oatmeal porridge, with milk in the ſummer, and, in winter, a ſauce made of beer and melaſſes. At ſeven o'clock the children ſup; after this there is *no night-work*, a pernicious and infamous practice in uſe at moſt other manufactories. After ſupper the ſchools open, and continue ſo till nine o'clock. The ſmall children, that are not old enough to work, are inſtructed in the day-time; the elder children learn in the evening, when the daily labour is concluded. The boys learn to read, write, and caſt accounts; the girls, in addition to theſe acquiſitions, are taught to work at the needle. Some of the children are taught church-muſic; and on Sunday they all, under the immediate guidance of the maſters, attend a place of divine worſhip, and the reſt of the day is occupied, chiefly, in receiving moral and religious inſtruction from theſe maſters. Some few years ſince a veſſel, carrying emigrants from the Highlands to America, was driven by foul weather into Greenock, and in conſequence more than two hundred poor creatures were put on-ſhore in a moſt helpleſs and wretched ſtate. Mr. Dale, as ſoon as he knew it, offered them *all* employment, and moſt of them entered immediately into his ſervice. He alſo, ſoon after, invited other people from the Highlands, and undertook to provide habitations for two hundred families. The invitation was joyfully accepted, and numbers of Highlanders came, and have taken up their abode in the territory of their benevolent employer. Many families alſo, that were lately driven from Ireland by want and by famine, have found protection, ſupport, and employment, for them and their little ones, from this indefatigable philanthropiſt. *Briſted's Tour.*

Lanerk unites with Peebles, Linlithgow, and Selkirk, to ſend one member to parliament. In 1801, the number of inhabitants was 4692, of whom 1611 were employed in trade and manufacture: twenty-four miles ſouth-eaſt of Glaſgow, and thirty-two weſt-ſouth-weſt of Edinburgh. Lat. 55. 43. N. lon. 3. 56. W.

LANER'KSHIRE, a county of Scotland, bounded on the north by Dumbartonſhire; on the north-eaſt by Selkirkſhire, Linlithgowſhire, and Edinburghſhire; on the eaſt by Peeblesſhire; on the ſouth by Dumfrieſſhire; on the ſouth-weſt by Ayrſhire; and on the weſt, toward the north, by the Clyde; forty miles long, and about twenty-two in its mean breadth. Its form has been fancifully compared to that of a vine-leaf; the mouth of the Clyde ſuppoſed to repreſent the ſtem, the courſe of that river the middle vein, and the ſmaller ſtreams its collateral branches. The river Clyde, deſcending from the ſouthern part of this county, divides it into two equal parts; the one called the Shire of Lanerk, and the other the Barony of Glaſgow; the one hilly, healthy, and fit for paſture; and the other level, and proper for corn. The principal rivers, all of which riſe on the ſame hill, are the Clyde and the Annan, both of which run into the Iriſh Sea; alſo, the Tweed, which falls into the German Ocean; beſides which, the Frith of Clyde is joined to the Frith of Forth by a canal, for the benefit of navigation and trade. It abounds with coal and limeſtone; has ſome lead-mines; and abundance of lapis lazuli is dug here. The chief towns are Glaſgow, Hamilton, and Lanerk. In 1801, the population was 146,699; of which 38,036 were employed in trade and manufactures, and 15,704 in agriculture.

Proceeding up the Clyde from Glaſgow, the country is rich and well cultivated. Bothwell-caſtle, now in ruins, ſtands on an eminence which overlooks the Clyde. Some of its walls are ſtill remaining, which meaſure fifteen feet in thickneſs and ſixty feet in height. Between this caſtle and the Priory of Blantyre on the oppoſite ſide of the Clyde, there is ſaid to have been in ancient times a ſubterraneous paſſage under the river. A little above ſtands Bothwell-bridge, noted for the defeat of the Covenanters by the duke of Monmouth in 1679. Eaſt from Bothwell caſtle, in an elevated ſituation, ſtands the Kirk of Shotts, amid a wild and barren country. This dreary waſte is covered with heath; and, though a high ſituation, is flat, and very marſhy in many places. It is chiefly employed as ſheep-walks; and, notwithſtanding the vicinity of coal and lime, ſeems ſcarcely capable of cultivation. This want is, however, compenſated by the abundance of iron-ſtone and coal, which are here brought together by the hand of nature. Nor is this advantage confined to the barren tract in the north-eaſt corner of the ſhire. The whole county abounds with theſe valuable minerals; and two iron-works are erected on the banks of the Clyde, one a little above Glaſgow, and another at Cleland near Hamilton. But the moſt conſiderable work of this kind in the county is that of Cleugh, a few miles ſouth-eaſt from the Kirk of Shotts. A village is here built for the accommodation of the workmen: it is called *Wilſon-town* from the name of the proprietors. There are, beſides theſe, two other-iron works in this county, one on the banks of the Calder near Airdrie, and the other at Shotts.

LANES, a town of Sweden, in the province of Angermannland: thirty miles north of Hernoſand.

LA'NESBOROUGH, a village ſix miles from York. Here is an almſhouſe for twelve aged perſons, being decayed farmers.

LA'NESBOROUGH, a town of Ireland, in the county of Longford, on the river Shannon. Before the union it ſent two members to the Iriſh Parliament: ſeven miles ſouth-weſt of Longford, and fifteen north of Athlone. Lat. 53. 38. N. lon. 7. 55. W.

LA'NESBOROUGH, a townſhip of North America, in Berkſhire county, Maſſachuſetts, north-by-eaſt of Hancock: twelve miles north-by-weſt of Lenox, and 144 weſt-by-north of Boſton. It affords a quarry of good marble.

LAN'FRANC, a celebrated archbiſhop of Canterbury in the eleventh century, was a native of Italy, and born at Pavia, where his father was keeper of the public archives. He went through his courſe of academical ſtudies at Bologna; and, having paid particular attention for ſome years to the ſtudy of rhetoric and the civil law, returned to his native city, where he commenced an advocate in the courts. Thinking this, however, too narrow a ſphere, he removed into France, and taught publicly for ſome time at Avranches, where his ſchool was ſoon crowded with ſtudents of high rank. On a journey from that place to Rouen, he fell into the hands of highwaymen, who robbed him, and, after binding him, left him in a foreſt near the abbey of Bec; on the following day he was releaſed; upon which he went to the abbey of Bec, then newly founded, and took the monk's habit. This was in the year 1041. His genius, learning, and virtue, ſoon procured him the reſpect of the fraternity, by whom he was choſen prior in 1044. Here he opened a ſchool, which in a little time became very famous, and was frequented by ſtudents from all parts of Europe. While he reſided in this abbey, his literary fame and his excellent character recommended him to the eſteem of William I. duke of Normandy, who made him one of his counſellors of ſtate. Under the pontificate of Leo IX. he went to Rome, where he vindicated himſelf from the charge which had been preferred againſt him, of having adopted the doctrine of Berenger. Not long afterwards he aſſiſted at the council of Verceil, where he expreſsly and formally oppoſed that doctrine. In the year 1059, he went to Rome a ſecond time, and aſſiſted at the council held at the Lateran, before which Berenger abjured his opinions. His principal object, however, in this journey, was to ſolicit a diſpenſation for the marriage of duke William with the daughter of the earl of Flanders, his couſin; which was granted, upon the condition that the duke and his lady ſhould build a monaſtery. They accordingly gave directions for the building of the monaſtery of St. Stephen, at Caen, of which Lanfranc was appointed abbot in the year 1063. Here he eſtabliſhed a new academy, which became no leſs famous than his former one at Bec.

Soon

Soon after William was ſeated on the throne of England, he ſent Lanfranc to Rome, to negociate with Alexander II. about the miſſion of legates to England, to crown him, and to regulate the affairs of the church. William ſeems now to have formed the deſign of depriving the moſt eminent of the Engliſh clergy of their dignities, in order to beſtow them on his countrymen, or ſuch on whoſe attachment he could depend. After his coronation had taken place, the papal legates held a great council of the Engliſh clergy, in the preſence of the king, at Wincheſter; in which, among other dignified clergy and prelates who were depoſed, on various pretences, was Stigand archbiſhop of Canterbury. To this ſee Lanfrac was elected, and would have declined the honour, but was obliged to accept it by the expreſs order of pope Alexander II. Even after his conſecration, he earneſtly, but ineffectually, entreated his holineſs to permit him to reſign his archbiſhopric, and to retire into a monaſtery. Lanfranc was conſecrated archbiſhop of Canterbury in 1070; and in the following year he went to Rome, together with the new archbiſhop of York, that they might receive their palls. On this occaſion he was received with peculiar reſpect by pope Alexander, who had ſtudied under him at Bec; and he defended before his holineſs the claims of his ſee to ſuperiority over that of York. Alexander, however, unwilling to offend either of the prelates, or to diſoblige the king of England, declined to give any judgment in that matter, and declared that it ought to be determined by an Engliſh ſynod. Accordingly, two great councils were held, in the year 1072, in which this queſtion was debated with great warmth, in the preſence of the king, queen, and all the court, and at length determined in favour of Canterbury. After this, Lanfranc preſided in different councils of the clergy of both provinces, in which ſeveral eccleſiaſtical canons were made, by which a change was produced in the condition of the clergy, as well as in the creed of the church of England. By one of thoſe canons, the ſecular clergy who had wives were allowed to keep them; which is a ſufficient proof that they formed a very powerful party; but thoſe who had not wives were forbidden to marry; and biſhops were prohibited for the future to ordain any man who had a wife. By others the doctrine of tranſubſtantiation was promulgated, which was little known, and leſs regarded, in this iſland before this period. Indeed, Lanfranc was one of the moſt zealous champions for that doctrine of the age in which he lived, and employed the weapons of dialectics with great ingenuity and addreſs in defence of it, both before and after his elevation to the ſee of Canterbury. After preſiding over the church of Canterbury nineteen years, Lanfranc died in 1089. He is celebrated by our ancient hiſtorians for his wiſdom, learning, munificence, and other virtues. He is particularly praiſed for his charity, which is ſaid to have been ſo great, that he beſtowed in that way no leſs than five hundred pounds a-year; a prodigious ſum in thoſe times, and equal in value to at leaſt ſeven thouſand five hundred pounds at preſent. He alſo acquired a high reputation by his writings, which, conſidering the age in which he lived, diſcover an uncommon meaſure of ſagacity and erudition, and are entitled to commendation for the purity of their Latinity. They conſiſt of, 1. Commentaries upon the Epiſtles of St. Paul. 2. A Commentary upon the Pſalms. 3. A Treatiſe concerning Confeſſion. 4. A Diſſertation concerning the Body and Blood of Chriſt in the Euchariſt, in oppoſition to Berenger. 5. A collection of ſhort, but intereſting, Letters to Pope Alexander II. to Hildebrand, while archdeacon of Rome, and to ſeveral biſhops in England and Normandy. They were collected together, and publiſhed, for the firſt time, in 1648, in a folio volume, and illuſtrated with valuable notes, by Luke d'Achery, a Benedictine of the congregation of St. Maur. *Moſheim.*

LAN'FRANC, a phyſician and ſurgeon of Milan in the thirteenth century. He left his native country, in conſequence of ſome perſecutions that he had ſuffered during the troubles of the times, and went to France; and in the year 1295, having already obtained conſiderable reputation, was invited to Paris by many members of the faculty. His dexterity as an operator, his candour, and the energy with which he communicated his knowledge to others in his lectures, gained him the reſpect and eſteem of his profeſſional brethren; and he certainly contributed to the advancement of ſurgery, which was at that time at a very low ebb in France. Nevertheleſs he held ſome opinions adverſe to the progreſs of the art; he condemned the uſe of the trepan, and abſolutely forbade the operation of lithotomy, alleging that the extraction of a calculus rendered the patient impotent. He pointed out in ſtrong terms the impropriety and danger of tents, which were generally employed at that time; the practice, however, continued to be reſorted to long after his animadverſions were made. He left two works in manuſcript, which were depoſited in the king's library at Paris; the one entitled Chirurgia parva, the other Ars completa totius Chirurgiæ, five Practica major. They were printed at Venice in 1490, with the title of *Chirurgia magna et parva*, in folio; have undergone ſeveral ſubſequent editions, and have been tranſlated into the French and German languages. *Eloy Dict. Hiſt.*

LANFRAN'CO (Giovanni Maria da Terentio), an Italian compoſer, who, in 1538, publiſhed *Scintille di Muſica*, or Sparks of Muſic; a work often quoted with great praiſe. It is now ſo ſcarce, that it would be difficult to find a copy of it throughout Italy.

LANFRAN'CO (Giovanni), a painter of hiſtory, whoſe principal merit was the freedom and eaſe with which he managed large compoſitions in their colour and execution, but to the great loſs of character and expreſſion. He was born at Parma in 1581, and was at firſt a diſciple of Agoſtino Caracci, but afterwards ſtudied under Annibale; and, having obtained a great proficiency of handling, was employed by that maſter in his great work in the Farneſe palace at Rome, part of which he executed ſo well, that the difference between his painting and that done by Annibale himſelf is ſcarcely to be diſcerned. Endowed by nature with a lively imagination, and having, after he left the Caracci, paid great attention to the artificial ſtyle of Corregio, particularly in the Duomo at Parma, and in the cupola there, he obtained a fondneſs for fore-ſhortening, loſing ſight of the ſimplicity of nature, and indulging his fancy in ideal forms and groups, which, while they exhibit his ſkill, deprive him of a reputation for judgment or true taſte. He was, as M. Fuſeli has obſerved, "a machiniſt in art of the firſt order, and taught his ſucceſſors the means of filling the eye at a great diſtance, by partly painting and partly leaving it to the air to paint." His colour was powerful and rich, but not pure. He moſt frequently employed very dark ſhadows, which give his pictures a heavy and ſombrous appearance; and, not being well verſed in chiaroſcuro, the lights in them are not unfrequently ill connected, or rather lack connection, and are too much in detached ſpots. With thoſe who prefer ſpirit and daſh to more ſtudied perfections, Lanfranco will, notwithſtanding his deficiencies, be always a favourite. He was engaged by Urban VIII. to paint the miracle of St. Peter walking on the water, for the grand cathedral dedicated to that ſaint in Rome; and he afforded his patron ſo much pleaſure by his labour, that his holineſs conferred the honour of knighthood upon him. His pencil being exceedingly rapid, and his life prolonged to the age of ſixty-ſix, his works are by no means ſcarce, but are to be met with in moſt collections. He died in 1647.

LANG, a narrow iſland of Denmark, little more than two miles in length, ſituated in the Baltic, near the ſouth coaſt of Laaland. Lat. 54. 42. N. lon. 11. 20. E.

LANG (John Michael), a German proteſtant divine and able orientaliſt, was born at Ezelwangen, in the duchy of Sultzbach, in the year 1664. After he had received a claſſical education, he was ſent to the univerſity of Altdorf, in 1682, and there applied himſelf to the ſtudy of botany,

botany, anatomy, the vulgar Greek, and particularly the oriental languages, under the celebrated Wagenſeil. In 1687 he was admitted to the degree of M. A. and then went to perfect himſelf in Arabic at the univerſity of Jena, where he delivered public lectures on ethics and natural theology. For ſome years he officiated as paſtor to a country church in the Palatinate; but, becoming diſſatisfied with ſuch a retired life, he removed to Altdorf, where he was created doctor, and admitted into the academical ſenate in 1697. In this univerſity he was appointed profeſſor of divinity; with which was afterwards connected the office of paſtor of one of the churches. It was not long, however, before he became involved in religious diſputes, which raiſed againſt him many enemies, and expoſed him to the cenſures of the univerſities of Roſtock and Tubingen. Not chuſing to ſubmit to their deciſion, he demanded and obtained a diſmiſſion from his public employments, and removed to Prentzlow in 1710; where he had the appointment of ſuperintendant, and died in 1731, about the age of ſixty-ſeven. He was the author of various works, of which the following are held in eſtimation: 1. Diſſertationes Botanico-Theologicæ, 4to. 1705. 2. Philologia Barbaro-Græca, 4to. 1708. 3. A Treatiſe De Fabulis Mohammedicis, 4to. 1697; and ſome other pieces relating to the Alcoran. *Moreri.*

LAN'GA, a river of Sweden, which riſes in the province of Jamtland, and runs into the Ragunda near Lit.

LANGANAU', a town of Auſtria: four miles eaſt of Droſendorf.

LANGANI'CO, or SUN'RI, anciently *Olympia*, a town of the Morea, ſituated on a ſmall river called Carbon, the ancient *Alpheus*, once a city of great note, near which were celebrated the Olympian games, firſt inſtituted by Pelops, in honour of Jupiter, and afterwards revived by Atreus and Hercules. They were held every fifth year with great ſolemnity, amidſt an infinite number of ſpectators, and laſted for five days. From theſe ſpectacles the computation of time in Greece, by Olympiads, took its riſe. In this city, alſo, was a very fine temple of Jupiter Olympius, with a celebrated image of that god, fifty ells high, which was reckoned one of the ſeven wonders of the world. Near it was alſo a famous grove, dedicated to the ſame god. It is at preſent an inconſiderable place: thirty-two miles ſouth-ſouth-eaſt of Chiarenza, and ſixty ſouth-weſt of Corinth.

LAN'GAR, a village in Nottinghamſhire, on the Trent, weſt of Belvoir-Caſtle, near St. Aubrey and Barneſton, to which manors it has been always united. King John lodged here when he marched againſt the barons.

LANGAROO'D, a town of Perſia, in the province of Ghilan, near the ſouth coaſt of the Caſpian Sea, which gives name to a road for ſhips. Here is a cove with ten feet water, but the entrance is narrow. The ſilk manufacture here is much eſteemed. It is twenty miles ſouth-eaſt of Reſhd. Lat. 27. N. lon. 50. 15. E.

LANGASCHAN'TZ, a town of Sweden, in the province of Harjedalen: 110 miles ſouth-weſt of Sundſwall.

LAN'GAST, a town of France, in the department of the North Coaſts: fifteen miles ſouth of St. Brieuc.

LANGA'YA, *ſ.* in zoology, a genus of the claſs amphibia, order ſerpentes. The generic characters are—Plates under the neck and belly, called *abdominal ſcuta*, as in the genus Coluber; inſtead of the ſcales under the whole length of the tail, thoſe on the anterior part are extended into rings, called *caudal annuli*; while thoſe on the poſterior part lie underneath only, as in the vipers, and are called *terminal ſquamæ*. We need ſay no more introductory to a genus of which we have only a ſingle ſpecies.

Langaya Madagaſcarienſis, the Madagaſcar langaha. The ſpecific character, as given by Dr. Shaw, is, "the upper jaw produced in form of a ſnout." But, till other ſpecies are diſcovered, we cannot tell but this may be a generic character. Abdominal ſcuta 184, caudal annuli 42.

This ſerpent appears to have been firſt deſcribed by Monſ. Bruguiere, of the Royal Society of Montpellier, whoſe account of it is inſerted in the Journal de Phyſique for the year 1784. The length of the individual deſcribed was about two feet eight inches, and its greateſt diameter about ſeven lines. The head is covered with large ſcales, but the ſnout, which is extremely long and ſharp, projecting to a conſiderable diſtance beyond the lower jaw, is covered with very ſmall ones; the teeth, in ſhape and diſpoſition, reſemble thoſe of a poiſonous viper. The ſcales on the upper parts of the body are rhomboidal, of a reddiſh colour, and each marked at the baſe by a ſmall grey circle, with a yellow ſpot in the middle. The under parts are pale or whitiſh. The number of abdominal ſcuta, as well as of circles on the tail, is obſerved to vary, as alſo the colour, which in one individual is violet, with darker-coloured ſpecks on the back. The natives of Madagaſcar are ſaid to hold the langaya in great dread, conſidering it as a highly poiſonous ſerpent. We have given a repreſentation of it on the Plate at p. 83, fig. 9.

LANG'BAINE (Gerard), a learned Engliſh writer, was born about 1608 at Barton-kirk in Weſtmoreland. He was admitted a ſervitor of Queen's college, Oxford, in 1626, of which he afterwards became a ſcholar upon the foundation, and a fellow. He obtained the degree of M.A. in 1633, and of D.D. in 1646. An edition of Longinus, in Greek and Latin, with notes, printed at Oxford, in 1636, 8vo. made him known as a ſcholar. It was followed by various publications of an hiſtorical and critical kind, diſplaying at once his learning and his attachment to the conſtitution in church and ſtate. Biſhop Nicholſon ſpeaks of him as a perſon admirably well ſkilled in the antiquities and laws of England, and refers to his "Notable Diſcourſe touching the State of the Times in the Reign of Edward VI." prefixed to an edition of ſir John Cheke's, True Subject to the Rebel, Oxf. 1641. He alſo wrote An Examination of the Scotch Covenant; and an Engliſh tranſlation of Chemnitz's Examination of the Council of Trent. He was in correſpondence with ſeveral learned men, among whom were Uſher and Selden. The univerſity appointed him keeper of its archives in 1644, and he was made provoſt of his college in 1645: he held both his offices till his death in 1658.

LANG'BAINE (Gerard), an eminent writer, the ſon of the former, was born in 1656. He was put apprentice to Mr. Symonds, bookſeller in St. Paul's churchyard; but was ſoon after called from thence by his mother upon the death of his eldeſt brother, and by her entered a gentleman-commoner of Univerſity-college, Oxford, in 1672. Here he ran out a good part of his eſtate; but afterwards corrected his manner of living, and for ſome years lived in retirement near Oxford. During this time he improved his taſte for dramatic poetry; and at firſt wrote ſome ſmall pieces without his name, but afterwards publiſhed ſeveral works which he publicly owned. In 1690 he was elected inferior beadle of arts in the univerſity of Oxford; and, in January following, was choſen ſuperior beadle of law, but died ſoon after in 1692. He wrote, 1. The Hunter, a diſcourſe on horſemanſhip. 2. A New Catalogue of Engliſh Plays, with their beſt editions, and divers remarks on the originals of moſt plays, and on the plagiaries of ſeveral authors. 3. An Account of the Engliſh Dramatic Poets. 4. An Appendix to a Catalogue of Oxford Graduates.

LANG'BEAR, Devon, in the pariſh of High-Haynton; though not a market-town by our maps, is ſaid by Mr. Riſdon to have a market on Friday, and fairs on Bartholomew's and Simon and Jude's days.

LANG'DALE, Great and Little, villages in Weſtmoreland, weſt of Ambleſide, by copper-mines; with a chapel in the former. In this chapelry are two high hills called Hardknot and Wreynoſe, upon the latter of which mountains are the ſhire-ſtones of Weſtmoreland, Cumberland, and Lancaſhire.

Between Langdale and Sunbiggin, on a rivulet called Raiſebeck, near where it falls into the Lune, ſtands Raiſgill-hall; near which is a tumulus, or Britiſh ſepulchre, 100 yards in circuit, and three yards high, compoſed of looſe

looſe ſtones, which, on being lately opened, diſcovered one very large ſtone, ſupported by two others, one on each ſide, and underneath it an human ſkeleton, with the bones of ſeveral others round about.

LANG'DON, a townſhip of North America, in Cheſhire county, New Hampſhire; incorporated in 1787.

LANG'DON, a river of England, in the county of Durham, which runs into the Tees twelve miles above Barnard Caſtle.

LANG'DON-HIL'LS, hills of England, in the county of Eſſex, about three miles ſouth of Billericay; the fine proſpect from which is thus deſcribed by Mr. Arthur Young, in his Six-Weeks' Tour through the Southern Counties of England and Wales: "Near Horndon, on the ſummit of a vaſt hill, one of the moſt aſtoniſhing proſpects to be beheld breaks out, almoſt at once, upon one of the dark lanes. Such a prodigious valley, every where painted with the fineſt verdure, and interſected with numberleſs hedges and woods, appears beneath you, that it is paſt deſcription; the Thames winding through it, full of ſhips, and bounded by the hills of Kent."

LAN'GE (John), a learned phyſician, was born at Loewenburg in Sileſia in the year 1485. He ſtudied at Leipſic, Bologna, and Piſa; at the laſt of which he received the degree of M.D. He then ſettled at Heidelberg, where he roſe to great fame, and was ſucceſſively phyſician to four electors-palatine. One of theſe he accompanied in his travels through great part of Europe. He died at Heidelberg, in 1565. Of the works of this phyſician, the moſt valuable is his *Medicinalium Epiſtolarum Miſcellanea*, printed in two parts, but united in the Frankfort edition of 1689, which compriſes one hundred and forty-four epiſtles, with the addition of a book on Secret Remedies. Theſe epiſtles contain much curious and learned matter, both with reſpect to medicine and natural hiſtory. The author preceded Sydenham in his obſervations concerning the abuſe of hot medicines, and the advantage of cooling diluents, in inflammatory diſeaſes. He wrote, likewiſe, 2. De Syrmaiſmo et ratione purgandi per vomitum ex Ægyptiorum invento et formula, 1672. 3. De Scorbuto Epiſt. duæ, 1624. 4. Conſilia et Experimenta, 1676. He was a great lover of cheeſe, and wrote in defence of it. *Eloy. Dict.*

LANGEAC', a town of France, in the department of the Upper Loire: twelve miles ſouth of Brioude, and eighteen weſt of le Puy.

LANGEAI'S, a town of France, and principal place of a diſtrict, in the department of the Indre and Loire, on the Loire: twelve miles weſt of Tours, and twenty-one eaſt of Saumur. Lat. 47. 18. N. lon. 0. 1. W.

LAN'GEBACH, a town of Germany, in the principality of Culmbach: four miles north of Kirch Lamitz.

LAN'GEDIKE, a dike of North Holland, made a fortified poſt by the Dutch; in 1799 taken by ſir James Pulteney. There is a village of the ſame name, and ſeveral others on the dike, from which the republicans were driven, and 900 priſoners taken, beſides 700 killed and wounded. It is ſix miles north of Alcmaer.

LAN'GEDORF, a town of Wurtzburg: ſeven miles ſouth-weſt of Kiſſingen.

LAN'GEFELD. See LANGENFELD.

LANGEFIO'RD, a ſmall iſland near the coaſt of Lapland. Lat. 69. 38. N.

LAN'GELAND, an iſland of Denmark, ſituated in the ſouth part of the Great Belt, between the iſlands of Laaland and Funen; about thirty miles in length, and from three to five in breadth. This iſland is fertile in every part. In the thirteenth century, it belonged to one of the princes of the blood royal, and was called a principality: it is now only a county, but one of the beſt in the kingdom, and under the ſame governor as Funen. Rudkioping is the chief town. Lat. 55. N. lon. 10. 50. E.

LAN'GELAND (Robert), an Engliſh poet of the fourteenth century, and one of the firſt diſciples of Wickliffe the reformer. He is ſaid to have been born in Shropſhire. He wrote The Viſions of Pierce Plowman; a piece which abounds with imagination and humour, though dreſſed to great diſadvantage in very uncouth verſification and obſolete language. It is written without rhyme, an ornament which the poet has endeavoured to ſupply by making every verſe begin with the ſame letter. Dr. Hickes obſerves, that this kind of alliterative verſification was adopted by Langeland from the practice of the Saxon poets, and that theſe Viſions abound with Saxoniſms. Chaucer and Spenſer have attempted imitations of his Viſions; and the learned Selden mentions him with honour.

LANGELMA'KI, a town of Sweden, in the province of Tavaſtland: forty-two miles north of Tavaſthus.

LAN'GEMAN, *ſ.* A lord of a manor. See *Coke's Inſt.* 5.

LANGELKER'SKANS, a fortreſs of Holland, in Groningen: nine miles eaſt of Winſchotten.

LAN'GELSHEIM, a town of Weſtphalia, and principal place of a bailiwick: ſix miles north-weſt of Goſlar.

LAN'GELN LAN'GLUM, a town of Germany, in the county of Wernigeroda: four miles north of Wernigeroda.

LAN'GEN, a town of Germany, in the county of Bentheim: one mile weſt of Bentheim.

LAN'GEN, a town of Heſſe Darmſtadt: ſix miles north of Darmſtadt.

LAN'GEN-DIE'BACH, a town of Germany, in the county of Iſenburg: four miles north-north-eaſt of Hanau.

LAN'GEN-DOR'BACH, a town of Germany, in the principality of Naſſau Dillenburg: four miles north of Hadamar.

LAN'GEN-RHO'R, a town of Auſtria: one mile ſouth of Tulln.

LAN'GEN-SAL'ZA, a town of Saxony, the capital of Thuringia, on the Salza. The environs of the town are pleaſant, and the manufactures are flouriſhing. Here are about nine hundred houſes, two churches, a college, and a caſtle. In the year 1761, a body of Saxon troops were defeated by the Pruſſians near this town. It is fourteen miles weſt of Erfurt, and eight north of Gotha. Lat. 51. 4. N. lon. 10. 42. E.

LAN'GEN-SEL'BOLD, a town of Germany, in the county of Iſenburg: five miles eaſt-north-eaſt of Hanau, and ſix ſouth-weſt of Budingen.

LANGENAU', a town of Germany, in the principality of Culmbach: nine miles eaſt-ſouth-eaſt of Kirch Lamitz.

LANGENAU', a town of Pruſſia, in the province of Oberland. The church is celebrated for beautiful paintings. It is eight miles north of Biſchofswerder.

LANGENAU', a town of Pruſſia, in the province of Ermeland: twenty-five miles north-weſt of Heilſberg.

LANGENAU', a town of Bavaria, ſituated on a ſmall river which runs into the Danube eleven miles north-eaſt of Ulm.

LANGENAU', a town of Saxony: four miles ſouth of Freyberg.

LANGENAU', a town of Pruſſia, in the province of Ermeland: four miles weſt of Melſack.

LAN'GENBACH, a town of Germany, in the county of Henneberg: ſix miles north-weſt of Schleuſingen.

LAN'GENBERG, a town of Saxony, in the county of Reuſſen: three miles north-weſt of Gera. Lat. 50. 55. N. lon. 11. 58. E.

LAN'GENBERG, a town of the duchy of Berg: fifteen miles north-eaſt of Duſſeldorf.

LANGENBRUCK'EN, a town of the grand duchy of Baden, with a ſalt ſpring: four miles north-eaſt of Bruchſal.

LAN'GENBURG, a town of Germany, in the principality of Hohenloe, on the Jaxt: thirteen miles eaſt of Ohringen, and thirty-two weſt of Anſpach.

LAN'GENDORF, a town in the biſhopric of Naumburg: ſix miles north-eaſt of Zeitz.

LAN'GENES, an iſland in the North Sea, near the coaſt of Norway, about twenty-four miles in circumference. Lat. 59. 20. N.

LAN'GENFELD, a town of Carniola: four miles north-north-weſt of Feldes.

LAN'GENFELD, a town of Auſtria: four miles north-weſt of Crems.

LAN'GENFELD, a town of Saxony: four miles north of Wolkenſtein.

LAN'GENFELD, a town of Germany, in the principality of Culmbach: three miles north-weſt of Neuſtatt.

LAN'GENFELD, a town of Germany, in the county of Henneberg: two miles ſouth-ſouth-weſt of Salzungen.

LAN'GENFELD, LAN'GEFELD, or LEN'GENFELD, a town of Saxony, in the Vogtland: twelve miles north-eaſt of Plauen, and ten ſouth-ſouth-weſt of Zwickau.

LAN'GENHEIM, a town of Germany, in Anſpach: five miles north-north-eaſt of Maynbernheim.

LANGENHES'SEN, a town of Saxony: ſix miles north-weſt of Zwickau.

LANGENHOLZHAU'SEN, a town of Weſtphalia, in the county of Lippe: eight miles north-north-eaſt of Lemgow.

LAN'GENHORST, a town of Germany, in the biſhopric of Munſter: three miles north of Metelen.

LANGENKAN'DEL, a town of France, in the department of Mont Tonnerre: ſeven miles eaſt of Bergzabern, and eight ſouth-ſouth-eaſt of Landau.

LANGENLEHE'RN, a town of Auſtria: two miles north-eaſt of Tulln.

LANGENOR'NA, a river of Saxony, which runs into the Wutach near Neuſtatt.

LANGENSCHWAL'BACH, a town of Weſtphalia, in the county of Catzenelnbogen, celebrated for its mineral waters: nine miles north-weſt of Mentz.

LAN'GENSTADT, a town of Germany, in the principality of Bayreuth: ſeven miles north-weſt of Bayreuth.

LANGENSTEIN'BACH, a town of the grand duchy of Baden, celebrated for its medicinal ſprings and baths: ſix miles weſt-north-weſt of Pfortzheim, and five ſouth of Durlach.

LAN'GENTHAL, a town of Swiſſerland, in the county of Berne, well ſituated for commerce with France and Germany; for the convenience of which here are held three fairs, at which are annually ſold about ten thouſand pieces of linen, eight thouſand of which are whitened; theſe linens are exported to Spain, Portugal, America, &c. Great quantities of cheeſe likewiſe are ſold here, beſides cattle, horſes, grain, and many other articles, both of agriculture and manufacture. Near it are ſome medicinal ſprings. It is eighteen miles north-eaſt of Berne, and ten eaſt of Soleure. Lat. 47. 12. N. lon. 7. 33. E.

LAN'GENTOIS, a town of Auſtria: three miles north of Crems.

LAN'GENTREER, a town of Germany, in the county of Mark: ſix miles eaſt of Bockum.

LAN'GENZENN, a town of Germany, ſituated on the river Zenn, partly in the principality of Anſpach, and partly in the principality of Culmbach, anciently called *Cinna*, or *Cenna*. It is twelve miles weſt of Nuremberg, and ſeventeen north-north-eaſt of Anſpach.

LANGEO'LUM, *ſ.* [*lana*, Lat.] An under garment made of wool, formerly worn by the monks, which reached down to their knees. *Mon. Angl.* p. 419.

LAN'GER A'ER, a town of Holland: eight miles eaſt of Leyden.

LANGERO'GE, a ſmall iſland in the German Sea, near the coaſt of Eaſt Frieſland, with a ſmall town. Lat. 53. 42. N. lon. 7. 24. E.

LAN'GERWISCH, a town of Brandenburg, in the Middle Mark: four miles ſouth of Potzdam.

LAN'GESCHEED, a town of Weſtphalia: twenty-five miles weſt of Brilon.

LAN'GESCHLAG, a town of Auſtria: five miles weſt of Zwetl.

LAN'GESUND, a ſeaport town of Norway, in the dioceſe of Chriſtiania: fifty miles ſouth-ſouth-weſt of Chriſtiania.

LAN'GETZ, a town of France, in Touraine, noted for its excellent melons. It is ſeated on the river Loire, in lat. 42. 20. N. lon. 0. 23. E.

LAN'GEWANG, a town of the duchy of Stiria: ſixteen miles north-eaſt of Pruck.

LANGEWIE'SEN, a town of Germany, in the principality of Schwartzburg: eight miles ſouth of Arnſtadt.

LANG'FIELD, a townſhip of England, in the weſt riding of Yorkſhire. In 1801, the number of inhabitants was 1170, of whom 757 were employed in trade and manufactures: ſix miles weſt of Halifax.

LANG'FORD, a town of the ſtate of Kentucky: twenty-five miles eaſt-ſouth-eaſt of Stamford.

LANG'FORD BAY, a bay of the iſland of Antigua, on the north coaſt, a little to the weſt of Peyerſon's Point.

LAN'GES (Les), lately a ſmall country of Piedmont, ſituated between Alba and Ceva, comprehending fifty-eight ſmall imperial fiefs, ceded to the king of Sardinia by the emperor in the year 1735; now a part of France.

LANG'HOLM. See LONGHOLM.

LANG'HOLM, a ſmall iſland on the eaſt ſide of the gulf of Bothnia. Lat. 60. 45. N. lon. 21. 40. E.

LANG'HOLM, a market-town and burgh of barony under the duke of Buccleugh, is ſituated in a pariſh of the ſame name, in the diſtrict of Eſkdale and county of Dumfries, Scotland. The population of this town is ſtated, in the parliamentary reports of 1801, at 2039 perſons; but it is preſumed this number includes the whole pariſh. A market is held here every week; and four fairs annually; that held on the 26th of July is conſidered as the greateſt in Scotland for lambs. Near this town are ſome medicinal ſprings. It is fifteen miles north of Carliſle, and twenty-two eaſt of Dumfries.

At a ſhort diſtance is the village of NEW LANGHOLM, which was erected by the late duke of Buccleugh for the eſtabliſhment of an extenſive cotton-manufactory. The country along the banks of the Eſk is generally flat, well ſheltered with woods, and yield luxuriant crops particularly of oats and barley. The other parts of the pariſh conſiſt chiefly of ſmall hills, covered with verdure, and affords excellent paſture for ſheep. The duke of Buccleugh built in this neighbourhood a very handſome manſion called Langholm-lodge, which ſtands in a delightful valley.

LANGHOL'MEN, a ſmall iſland on the weſt ſide of the gulf of Bothnia. Lat. 63. 17. N. lon. 18. 57. E.

LANG'HORNE (John), a poet and ingenious writer, was born in 1735, at Kirkby Stephen, in Weſtmoreland. His father, a clergyman who held a living in Lincolnſhire, died when he was young; and the care of his education, with that of three other children, devolved upon his mother, who fulfilled the taſk with great aſſiduity and affection. He received the principal part of his ſchool-learning at Appleby, till the age of eighteen; when, the narrowneſs of his circumſtances not permitting him to enjoy the benefit of academical inſtruction, he engaged himſelf as domeſtic tutor in a family near Ripon. The beauties of Audley-park, in this neighbourhood, called forth his poetic talents; and he compoſed a poem with the title of that place, which he ventured to give to the public. He ſoon after became an aſſiſtant at the free-ſchool of Wakefield, and, taking deacon's orders, acquired popularity as a preacher. In 1759 he undertook the office of preceptor to the ſons of Robert Cracroft, eſq. of Hackthorn, near Lincoln. While in this ſituation, he made a collection of ſuch miſcellaneous poems as he had written, and publiſhed them in a volume for the benefit of a gentleman in diſtreſs. In 1760 he entered his name at Clare-hall, Cambridge, for the purpoſe of taking the degree of B. D. and he dated from thence a poem on the king's acceſſion, printed in the univerſity-collection of verſes on that occaſion, and alſo a poem on the royal nuptials.

The family of Hackthorn conſiſted, beſides the ſons, of three young ladies, daughters of Mr. Cracroft by a former wife. One of theſe, Anne, who was of a ſtudious and contemplative

contemplative diſpoſition, availed herſelf of the inſtructions of the domeſtic tutor; a natural conſequence of which was, an amorous attachment on the part of Langhorne, which he had reaſon to ſuppoſe mutual. The diſparity of circumſtances, however, upon the declaration of his paſſion, produced a refuſal for the preſent, and he immediately afterwards quitted the place. In 1761 he officiated as curate to the clergyman of Dagenham, in Eſſex. Several poems written and publiſhed about this time, made his name known among the votaries of the muſe; and in 1762 he appeared as a proſe writer, by his Letters on religious Retirement, Melancholy, and Enthuſiaſm, and by his eaſtern tale of Solyman and Almena. Another office in which his pen was engaged was that of one of the critics in that reſpectable periodical work, the Monthly Review. We are told, that in this employment he exerciſed a vein of ridicule which created him many enemies. He was certainly too young for a ſober critic.

A work publiſhed in 1763, under the title of Letters ſuppoſed to have paſſed between Theodoſius and Conſtantia, (founded on a ſtory in the Spectator,) became popular, and obtained conſiderable applauſe. Being now enrolled among the profeſſed writers of the age, he removed, in 1764, to the great mart of literature, the metropolis, where he was appointed to the curacy and lecture-ſhip of St. John's, Clerkenwell. In that year he publiſhed two volumes of Sermons, which he choſe to entitle Tracts of Religious Philoſophy, but which ſeem to have conduced little to his reputation as a divine. He, however, obtained from Dr. Hurd the appointment of aſſiſtant preacher at Lincoln's Inn; and, by his Letters on the Eloquence of the Pulpit, did not heſitate to challenge peculiar attention to his own performances. His Letters to and from Select Friends, or Effuſions of Friendſhip and Fancy, added to his fame as a ſentimental writer. By ſome of his former pieces, and the dedications to them, he ſhowed a deſire of ingratiating himſelf with rank and influence; and he is ſaid to have drawn his pen in defence of lord Bute and the exiſting miniſtry. An avowed work of his, Genius and Valour, a paſtoral poem, the ſcope of which was to vindicate the natives of Scotland from the rancorous abuſe thrown upon them by Churchill and other party-writers, could not fail of being agreeable to that nobleman and his countrymen; and produced, in 1766, a complimentary letter from the univerſity of Edinburgh, with a diploma of doctor in divinity.

He was now in a ſtation of reſpectability that gave weight to the amorous ſuit which he had not ceaſed to keep alive; and in 1767 he obtained the hand of the beloved lady. The living of Blagdon in Somerſetſhire was purchaſed, and afforded a deſirable reſidence to the newmarried couple; but this happy union was fatally diſſolved by the death of Mrs. Langhorne in child-bed, in the enſuing year. Not able to bear the ſcene of his loſs, he retired to the houſe of his brother William, a clergyman at Folkſtone in Kent, where he met with the ſoothings of truly fraternal affection. In this retreat he wiſely occupied his mind with a literary taſk of ſome labour and extent; and the two brothers jointly produced a new verſion of Plutarch's Lives, with notes critical and explanatory, and a life of the author, which was publiſhed in 1771, and met with a favourable reception. He alſo wrote a ſet of Letters ſuppoſed to have paſſed between St. Evremond and Waller, 2 vols. 12mo. 1769; and Frederic and Pharamond, or the Conſolations of Human Life, a philoſophical diſcourſe. A poetical work, poſſeſſing conſiderable novelty of deſign and imagery, came from his hand in 1771; this was his Fables of Flora. The attempt to perſonify and give character to ſubjects of the vegetable creation is evidently adding to the ordinary difficulties of fable, and it is ſcarcely poſſible to fix an intereſt upon ſuch inanimate beings. It is not, therefore, to be wondered at that theſe pieces are generally languid, and that the poet often ſtrains hard for his moral. The work, however, from its fancy and deſcriptive elegance, acquired popularity. In the ſame year he wrote another poem, entitled, The Origin of the Veil.

A viſit to his native county, in 1772, produced a ſecond matrimonial connection, with the beautiful daughter of a magiſtrate near Brough. After indulging himſelf and his bride with a tour to the continent, he ſat down again at his living of Blagdon. To the duties of a clergyman he added thoſe of a juſtice of the peace; and, at the inſtigation of his friend Dr. Burn, he gave to the world his ideas of this important office in his poem of The Country Juſtice. Of this, the firſt part appeared in 1774, and was juſtly admired for the manly ſtrain of its ſentiments, and the beauty of its deſcriptions. Two other parts were afterwards added, of inferior merit. The loſs of his ſecond wife, alſo in child-bed, in 1776, muſt have been a ſevere ſtroke. It was in ſome meaſure alleviated by the connexions in the great world which his reputation had procured him; one of the fruits of which was, a preſentation to a prebend in the cathedral of Wells, in 1777, by the biſhop of that ſee, a relation of the Bouverie family. He continued, notwithſtanding a declining ſtate of health, to amuſe himſelf and the public with writings of different kinds, the laſt of which was a romantic tale, entitled, Owen of Carron, much admired by the lovers of fancied ſimplicity, but, in reality, affected and finical. He died at Blagdon, in April 1779, in the forty-fifth year of his age.

Dr. Langhorne is repreſented as a man of amiable manners, fond of ſociety, but rather too much addicted to convivial indulgences, which probably ſhortened his life. As a writer, he cannot be ranked among thoſe of the higheſt order; yet he poſſeſſes facility, elegance, ingenuity, and tenderneſs. His poetry is generally harmonious, abounding in pleaſing imagery, but overloaded with ornament, and not free from obſcurity and affectation. His proſe-writings are rather light and flowery than ſolid and natural. His ſermons have been cenſured for the looſe ſoft texture of their ſtyle, and the falſe pathos of their ſentiment. In religion he was inclined to enthuſiaſm; but the morality of all his works is pure and rational. *Anderſon's Brit. Poets.*

LAN'GIA, a river of Peloponneſus, falling into the bay of Corinth.

LAN'GIN, a town of France, in the department of Mont Blanc: ſix miles north of Bonne.

LAN'GINES, a ſmall iſland of Denmark, in the North Sea, near the weſt coaſt of South Jutland: two miles northweſt from the iſland of Nordſtrand.

LANGIO'NE, a town of the kingdom of Laos, of which it is by ſome called the capital. Lat. 22. 30. N.

LAN'GLE's BAY, a bay on the weſt coaſt of the iſland of Saghalien, ſo called by Monſ. La Perouſe. Lat. 47. 49. N. lon. 142. 49. E.

LANGLE's PEAK, a mountain on the north coaſt of the iſland of Jeſſo, more than 1200 toiſes above the level of the ſea. Lat. 45. 25. N. lon. 412. 20. E.

LANG'LEY. See ABBOT'S LANGLEY, vol. i. and KING'S LANGLEY, vol. xi.

LANG'LEY BROO'M, a ſcattered village in Buckinghamſhire, eighteen miles weſt-ſouth-weſt from London, to the right of the road to Colnbrook. The pariſh conſiſts of three diſtricts, called Weſtmore Green, Horſemore Green, and the Southern or Middle Green; in the laſt of which is the elegant ſeat of Mr. Irby, and a neat houſe built by Mr. Webb, and the reſidence of Robert Spragge, eſq. Langley Broom was frequently appointed by his majeſty as the rendezvous for turning out the deer, and for meeting the nobility previous to the chaſe.

Langley Park, the ſeat of ſir Robert Bateſon Harvey, bart. is a handſome ſtone building, erected by the late duke of Marlborough. It is in the centre of a fine park, abounding with a variety of fine timber. A piece of water runs along the ſouth front of the houſe, at the foot of a ſloping lawn, on which are ſcattered ſome beautiful clumps of trees, and other woodland ſcenery. A riſing

ground at the weſt extremity of the park, leads to an extenſive incloſure, called the Black Park, entirely covered by firs, except where ſome roads are cut. In the centre is a fine lake. There is ſomething of alpine ſcenery in this ſequeſtered ſpot, the idea of which is the more forcibly impreſſed by the ſurrounding ſombre woods of deep-tinted firs.

LANG'LEY ISLAND, a ſmall iſland near the ſouth coaſt of Newfoundland, about three miles ſouth from the iſland of Miquelon. Lat. 46. 42. N. lon. 56. 5. W.

LANG'LEY POINT, a cape on the ſouth coaſt of England: five miles north-eaſt of Beechey head. Lat. 50. 16. N. lon. 0. 20. E.

LANGNAU', a village of Swiſſerland, in the canton of Soleure; an important poſt, taken by the French in 1799: five miles weſt of Soleure.

LANGOBAR'DI, a warlike nation of Germany, along the Spree, called improperly Lombards by ſome. *Tacitus.*

LAN'GOE, a ſmall iſland of Denmark, near the north coaſt of the iſland of Funen. Lat. 55. 35. N. lon. 10. 11. E.

LAN'GOE, an iſland in the North Sea, about eighty miles in circumference, and forty from the coaſt of Norway, celebrated for its marble quarries. Lat. 68. 16. N.

LANGO'GNE, a town of France, and principal place of a diſtrict, in the department of the Lozere: twenty-one miles north-eaſt of Mende, and thirty-three weſt of Privas. Lat. 44. 44. N. lon. 3. 54. E.

LANGOI'RAN, a town of France in the department of the Gironde, on the Garonne: nine miles north of Bazas, and eight ſouth-eaſt of Cadillac.

LANGOL'LEN. See LLANGOLLEN.

LAN'GON, a town of France, in the department of the Gironde: nine miles north of Bazas, and nine weſt of La Reolle.

LAN'GON (Le), a town of France, in the department of the Vendée: ſix miles weſt of Fontenay le Comte.

LAN'GON, a ſmall iſland in the north part of the gulf of Bothnia. Lat. 65. 32. N. lon. 22. 26. E.

LANGON'NET, a town of France, in the department of the Morbihan: four miles north of La Fouet, and ten weſt of Guemene.

LANGOR'AN, a ſmall iſland on the eaſt ſide of the gulf of Bothnia. Lat. 63. 32. N. lon. 22. 18. E.

LANGOUR'LA, a town of France, in the department of the North Coaſts: ſeven miles weſt-ſouth-weſt of Broons, and fourteen north-eaſt of Loudeac.

LANG'PORT, a town of England, in the county of Somerſet, ſituated on the river Parret, which is here navigable for barges. In the time of William the Conqueror, it was a royal borough, and once ſent members to parliament. It has a weekly market on Saturday; and fairs on the ſecond Monday in Lent, June 29, Sept. 24, and Nov. 11; and 754 inhabitants. In the year 1645, a brigade of the royal army, under lord Goring, ſtationed here to guard a paſs, were overpowered by the parliament-forces, with the loſs of three hundred men killed and priſoners: ſir John Digby was dangerouſly wounded, and died ſoon after. It is twelve miles eaſt of Taunton, and 128 weſt of London. Lat. 51. 1. N. lon. 0. 3. W.

LAN'GRES, a city of France, and principal place of a diſtrict in the department of the Upper Marne. This town is very ancient; and, in the time of Julius Cæſar, was the capital of the Lingones. In the irruption of Attila, it was taken and burned; and, after being rebuilt, underwent the ſame fate from the Vandals. It was very early erected into a biſhopric; and, from the reign of Philip Auguſtus to the revolution, the prelates were dukes and peers of France. It afterwards belonged to the kingdom of Burgundy, and fell, with the reſt of the country, to France. The ſituation is on a mountain. Cutlery forms the principal trade of the place: twelve poſts north-weſt of Beſançon, and thirty-four ſouth-eaſt of Paris. Lat. 47. 52. N. lon. 4. 25. E.

LANGRA'VA, a town of Portugal, in the province of Beira. Here is a medicinal ſpring: twelve miles north-weſt of Pinhel, and eighteen ſouth-ſouth-eaſt of St. Joao da Paſqueira.

LANG'RISH (Brown), a phyſician of the laſt century, who diſtinguiſhed himſelf as an advocate for the mechanical theories of phyſiology and medicine, and by the numerous experiments with which he ſupported thoſe doctrines. A more accurate inveſtigation of the nature of the animal economy has exploded them; but Dr. Langriſh had the merit of aſcertaining ſeveral intereſting facts in reſpect to the nature of the circulating powers. He died in London on the 29th of November, 1759; and left the following works: 1. A new Eſſay on Muſcular Motion, founded on Experiments, &c. 1733, 8vo. 2. Modern Theory of Phyſic, 1738, 8vo. 3. Phyſical Experiments upon Brutes, 1745, 8vo. 4. Croonian Lectures on Muſcular Motion, 1747. *Eloy. Dict. Hiſt.*

LANG'SDORF, a town of Germany, in the principality of Solms Braunfels: five miles weſt-ſouth-weſt of Laubach, and three north-weſt of Muntzenberg.

LANGSE'LE, a town of Sweden, in Angermannland, on a river of the ſame name: forty-five miles north-north-weſt of Hernoſand. Lat. 63. 14. N. lon. 16. 49. E.

LANGSE'LE, a river of Sweden, which runs into the Angermann two miles ſouth of Ed.

LANGS'KAR, a ſmall iſland on the eaſt ſide of the gulf of Bothnia. Lat. 63. N. lon. 21. 9. E.

LANGSI'DE, a village of Scotland, in the county of Renfrew. In 1568, a battle was fought here between queen Mary and the regent Murray, in which Mary was defeated. It is ſix miles ſouth-eaſt of Paiſley.

LANG'STONE HAR'BOUR, like that of Portſmouth, from which place it is diſtant three miles, is capacious enough to contain the whole navy of England; but a bar, or bank of ſand, which ſtretches itſelf acroſs the mouth of the harbour, renders the entrance ſomething difficult for large ſhips, there not being a ſufficient depth of water for them to enter at low water. Nor is its ſituation equal to that of Portſmouth; it is only defended from the ſea in ſouth-weſt and weſterly winds by the Iſle of Wight; but the ſoutherly winds blow right into the harbour, without any other ſhelter nearer than the coaſt of France. This harbour has, however, one advantage over moſt others that are barred; namely, its bar never ſhifts; it is always the ſame: whereas the bars of moſt others are ſo changed and ſhifted by every gale of wind, that there is no entering the harbour without a pilot. There is generally about two fathoms and a half water upon the bar at low water; but, as ſoon as you are within the haven, it deepens to four, five, and ſix, fathoms. Veſſels of conſiderable burden go up to the mills at Bedhampton, which is near ſix miles from the harbour's mouth. One of the branches runs to Portſea-bridge, where it meets a branch of Portſmouth-harbour; and boats are continually paſſing this way, from one harbour to the other, at high water. This paſſage is very convenient for carrying timber to the dock at Portſmouth, from the foreſts on the borders of Hampſhire and Suſſex; and accordingly large quantities paſs that way. Another branch of Langſtone-Harbour extends from the channel at Bedhampton to the village of Langſtone, where it is joined by an arm of Chicheſter-haven; ſo that there is a communication by water between Deal-quay, near Chicheſter, and Portſmouth, without paſſing through the mouth of either harbour.

LANG'TON (Stephen), archbiſhop of Canterbury in the thirteenth century, was a native of England; but we have no information concerning either the place or date of his birth. He received his academical education at the univerſity of Paris, where, for a conſiderable time, he taught divinity, and explained the ſcriptures with no ſmall reputation. So highly was his character reſpected, that he was choſen chancellor of that univerſity, made canon of Paris, and afterwards dean of Rheims. The fame of his abilities and learning induced pope Innocent III. to ſend for him to Rome, where he created him a cardinal.

In

In the year 1207, the monks of Canterbury having, upon a vacancy taking place in that ſee, made a double return of archbiſhop-elect, and both parties having appealed to the pope, and ſent agents to Rome to ſupport their reſpective claims; after more than twelve months had been ſpent in pleadings and inveſtigations on the ſubject, his holineſs pronounced a definitive ſentence, declaring both elections irregular and uncanonical, and both parties incapable of being choſen archbiſhop of Canterbury. That important ſee being thus declared vacant, the pope began to unfold his ſcheme, which it is probable he had formed long before, of filling it with a creature of his own, without ſo much as conſulting the king of England. For this purpoſe, he commanded the monks of Canterbury who were then at Rome immediately to proceed to the election of an archbiſhop, and at the ſame time commanded them to chooſe cardinal Stephen Langton. When they objected, that they could not do ſo, without the authority of their convent; the pope haſtily replied, that his authority ſupplied all defects. And, when ſome of them pleaded, that they had ſolemnly ſworn, before they left England, that they would never acknowledge any perſon for archbiſhop of Canterbury, but him whoſe agents they were; his holineſs abſolved them from the obligation of their oaths, and ordered them immediately to obey his commands, under the penalty of the higheſt cenſures of the church. With this they complied; and Langton was conſecrated by the pope at Viterbo. When the bull arrived in England, which intimated the election and conſecration of cardinal Langton, king John was incenſed in the higheſt degree, both againſt the pope and the monks of Canterbury. As theſe laſt were within his reach, they quickly experienced the effects of his indignation; for he ſent two officers, with a company of armed men, to Canterbury, who took poſſeſſion of the monaſtery, baniſhed the monks out of the kingdom, and ſeized all their eſtates. He alſo wrote a ſpirited and angry letter to the pope, whom he accuſed of injuſtice and preſumption, in raiſing a ſtranger to the higheſt dignity in his kingdom, without his knowledge; and he aſſured him that, if his holineſs did not immediately repair the injury which he done him, he would break off all communication with Rome. The iſſue of this buſineſs, and the diſgraceful terms to which John ſubmitted, have been already laid before our readers, in the article ENGLAND, vol. vi. p. 579.

In the year 1213, cardinal Langton came over to England, and took poſſeſſion of his ſee; and, though he owed his advancement to the papal favour, no ſooner did he become an Engliſh baron, than he appears to have been inſpired with a zealous attachment to the liberties and independence of his country; and was highly inſtrumental in procuring Magna Charta. See the above article p. 580. He alſo reſiſted the tyranny of the papal agents, particularly of the pope's legate, who aſſumed to himſelf the power of regulating all eccleſiaſtical affairs in the moſt arbitrary manner, without conſulting with the primate or any of the clergy. In the year 1214, he held a provincial ſynod of his ſuffragans and clergy at Dunſtable, where the moſt loud and vehement complaints were made againſt the legate; and it was agreed to ſend a deputation, who were to intimate to him, that the archbiſhop had appealed to the pope againſt his proceedings, and to inhibit him from granting inſtitution to any more prelates or prieſts within the province of Canterbury. Our prelate aſſiſted at the general council held at Rome, in the year 1216; and, during his abſence from England, king John died. In the year 1222, he held a ſynod at Oxford, in which a remarkable canon was made, prohibiting clergymen from keeping concubines publicly in their houſes, or from going to them in other places ſo openly as to occaſion ſcandal. In the year 1223, at the head of ſome of the principal nobility, he demanded an audience of king Henry III. who had been declared of age by a papal bull, and required the king to confirm the great charter of liberties. When one of the counſellors anſwered for the king, that the great charter was extorted by force, and therefore was not binding; the archbiſhop replied with indignation and warmth: "If you loved the king, ſir, you would not prevent the peace of the kingdom." This reſolute language ſoon convinced the king that their demand was not to be refuſed; and he immediately gave orders for ſummoning a parliament. That the archbiſhop, however, was a friend to the legal prerogatives of the crown, and that he was as ready to oppoſe a rebellious ſpirit of inſubordination in the barons as kingly tyranny, he manifeſted in the following year. The bull which declared Henry of age, commanded alſo all the barons to deliver up the royal caſtles which they held into the king's hands. This the earls of Cheſter and Albemarle, and ſeveral others, refuſed to do; and, raiſing forces to ſupport their refuſal, the nation was threatened with another civil war. In this criſis, the prudence and ſpirit of the archbiſhop prevented that evil; who, by threatening the refractory barons with excommunication, brought them to ſubmit. This prelate died in the year 1228. He wrote Commentaries upon the greateſt part of the books of Scripture, and is ſaid to have been inferior to none of his contemporaries in the knowledge of the Ariſtotelian dialectics, or in the application of them to the doctrines of ſcripture. Nothing of his, however, has been printed, excepting his hiſtory of the tranſlation of the body of Thomas à Becket, at the end of that archbiſhop's letters, printed at Bruſſels in 1682; and his letter to king John, which, together with the king's anſwer, may be ſeen in the third volume of d'Achery's Specilegium. Theſe ſhow him not to be unworthy of the encomium paſſed upon him, that he was a learned and polite author for the age in which he lived. The firſt diviſion of the books of the Old and New Teſtament into chapters is aſcribed to this prelate. *Moſheim.*

LANG'TON, a town of Scotland, in the county of Berwick: two miles ſouth-weſt of Greenlaw.

LANG'TON, a village in Dorſetſhire, between Melcomb Regis and Abbotſbury. It is ſituated on the Fleet, two miles ſouth of the village of that name. The church is an ancient ſmall building.

LANG'TON, a village in Dorſetſhire, one mile eaſt of Blandford Forum, on the north bank of the river Stour, with a ſmall church.

LANG'TON MALTRAVERS, Dorſet; a village conſiſting of one ſtreet near a mile in length; it lies on the top of a hill about two miles weſt from Sandwich, and is divided into Langton Maltravers and Langton-Wallis. The church is an ancient ſtructure, conſiſting of a chancel, body, and two ailes, with an embattled tower.

LAN'GUAGE, *ſ.* [*langage*, Fr. *lingua*, Lat.] Human ſpeech.—We may define *language*, if we conſider it more materially, to be letters, forming and producing words and ſentences; but, if we conſider it according to the deſign thereof, then *language* is apt ſigns for communication of thoughts. *Holder.*—The tongue of one nation as diſtinct from others:

He not from Rome alone, but Greece,
Like Jaſon, brought the golden fleece;
To him that *language*, though to none
Of th' others, as his own was known. *Denham.*

Style; manner of expreſſion:

Others for *language* all their care expreſs,
And value books, as women men, for dreſs:
Their praiſe is ſtill—the ſtyle is excellent;
The ſenſe, they humbly take upon content. *Pope.*

OF THE ORIGIN OF LANGUAGE.

Nature has endowed every animal with powers ſufficient to make known all thoſe of its ſenſations and deſires, with which it is neceſſary, for the preſervation of the individual or the continuance of the kind, that others of the ſame ſpecies ſhould be acquainted. For this purpoſe, the organs of all vocal animals are ſo formed, as, upon any particular impulſe, to utter ſounds, of which thoſe of the ſame ſpecies inſtinctively

tively know the meaning. The ſummons of the hen is inſtantly obeyed by the whole brood of chickens; and in many others of the irrational tribes a ſimilar mode of communication may be obſerved between the parents and the offſpring, and between one animal and its cuſtomary aſſociate. But it is not among animals of the ſame ſpecies only that theſe inſtinctive ſounds are mutually underſtood. It is as neceſſary for animals to know the voices of their enemies as thoſe of their friends; and the roaring of the lion is a ſound, of which, previous to all experience, every beaſt of the foreſt is naturally afraid. Between theſe animal-voices and the language of men there is however very little analogy. Human language is capable of expreſſing ideas and notions, which there is every reaſon to believe that the brutal mind cannot conceive. "Speech," ſays Ariſtotle "is made to indicate what is expedient and what inexpedient, and in conſequence of this what is juſt and unjuſt. It is therefore given to men; becauſe it is peculiar to them, that of good and evil, juſt and unjuſt, they only (with reſpect to other animals) poſſeſs a ſenſe or feeling." The voices of brutes ſeem intended by nature to expreſs, not diſtinct ideas or moral modes, but only ſuch feelings as it is for the good of the ſpecies that they ſhould have the power of making known; and in this, as in all other reſpects, theſe voices are analogous; not to our ſpeaking, but to our weeping, laughing, ſinging, groaning, ſcreaming, and other natural and audible expreſſions of appetite and paſſion.

Another difference between the language of men and the voices of brute animals conſiſts in *articulation*, by which the former may be reſolved into diſtinct elementary ſounds or ſyllables; whereas the latter, being for the moſt part unarticulated, are not capable of ſuch a reſolution. Hence Homer and Heſiod characteriſe man by the epithet μεροψ, or "voice-dividing," as denoting a power peculiar to the human ſpecies; for, though there are a few birds which utter ſounds that may be divided into ſyllables, yet each of theſe birds utters but one ſuch ſound, which ſeems to be employed rather as notes of natural muſic than for the purpoſe of giving information to others; for, when the bird is agitated, it utters cries which are very different, and have no articulation.

A third difference between the language of men and the ſignificant cries of brute animals, is, that the former is from art, and the latter from nature. Every human language is learned by imitation, and is intelligible only to thoſe who either inhabit the country where it is vernacular, or have been taught it by a maſter or by books; but the voices in queſtion are not learned by imitation; and, being wholly inſtinctive, they are intelligible to all the animals of that ſpecies by which they are uttered, though brought together from the moſt diſtant countries on earth. That a dog, which had never heard another bark, would notwithſtanding bark himſelf, and that the barkings or yelps of a Lapland dog would be inſtinctively underſtood by the dogs of Spain, Calabria, or any other country, are facts which admit not of doubt: but there is no reaſon to imagine that a man who had never heard any language ſpoken would himſelf ſpeak; and it is well known that the language ſpoken in one country is unintelligible to the natives of another country where a different language is ſpoken. Herodotus indeed records a fact which, could it be depended upon, would tend to overturn this reaſoning, as it infers a natural relation between ideas and certain articulate ſounds. He tells us, that Pſammetichus king of Egypt, in order to diſcover which was the oldeſt language, cauſed two children, newly born of poor parents, to be brought up by a ſhepherd among his cattle, with a ſtrict injunction that they ſhould never hear a human voice; and that at the end of two years the children pronounced at the ſame time the word βεκκος, which in the Phrygian language ſignified *bread*. Either this is one of the many fables which that credulous hiſtorian collected among the Egyptians, or the conduct and reaſoning of Pſammetichus were very abſurd; for it is added, that from this circumſtance he inferred that the Phrygians were the moſt ancient people, and that they ſpoke the primitive language. The only rational purpoſe for which ſuch an experiment could be inſtituted, would be to diſcover, not which is the oldeſt or the lateſt language, but whether there be ſuch a thing as a language of nature or inſtinct; but in ſuch a language it is obvious that there could be no word to denote *bread*, becauſe in what is called the ſtate of nature bread is unknown. The experiment of Pſammetichus was probably never made; but in the woods of different countries ſolitary ſavages have at different times been caught, who, though they apparently poſſeſſed all the ſagacity which is natural to man, and though their organs both of hearing and of ſpeech were perfect, never uſed articulate ſounds as ſigns of ſenſations or ideas. They uttered indeed the inarticulate cries which are inſtinctively expreſſive of pleaſure and pain, of joy and ſorrow, more diſtinctly and forcibly than men civilized; but, with reſpect to the very rudiments of language, they were what Horace repreſents all mankind to have been originally, *mutum et turpe pecus*. Indeed it ſeems to be obvious, that, were there any inſtinctive language, the firſt words uttered by all children would be the ſame; and that every child, whether born in the deſert or in ſociety, would underſtand the language of every other child, however educated or however neglected. Nay more, we may venture to affirm, that ſuch a language, though its general uſe might, in ſociety, be ſuperſeded by the prevailing dialect of art, could never be wholly loſt; and that no man of one country would find it difficult, far leſs impoſſible, to communicate the knowledge of his natural and moſt preſſing wants to the men of any other country, whether barbarous or civilized. The exerciſe of cultivated reaſon, and the arts of civil life, have indeed eradicated many of our original inſtincts, but they have not eradicated them all. There are external indications of the internal feelings and deſires, which appear in the moſt poliſhed ſociety, and which are confeſſedly inſtinctive. The paſſions, emotions, ſenſations, and appetites, are naturally expreſſed in the countenance by characters which the ſavage and the courtier can read with equal readineſs. The look ſerene, the ſmoothed brow, the dimpled ſmile, and the gliſtening eye, denote equanimity and good will in terms which no man miſtakes. The contracted brow, the glaring eye, the ſullen gloom, and the threatning air, denote rage, indignation, and defiance, as plainly and forcibly as revilings or imprecations. To teach men to diſguiſe theſe inſtinctive indications of their temper, and

"To carry ſmiles and ſunſhine in their face,
"When diſcontent ſits heavy at their heart,"

conſtitutes a great part of modern and refined education. Yet, in ſpite of every effort of the utmoſt ſkill, and of every motive reſulting from intereſt, the moſt conſummate hypocrite, or the moſt hackneyed politician, is not always able to prevent his real diſpoſition from becoming apparent in his countenance. He may indeed, by long practice, have acquired a very great command both over his temper and over the inſtinctive ſigns of it; but at times nature will predominate over art, and a ſudden and violent paſſion will flaſh in his face, ſo as to be viſible to the eye of every beholder. If theſe obſervations be juſt, and we flatter ourſelves with the belief that no man will call them in queſtion, it ſeems to follow, that, if mankind were prompted by inſtinct to uſe articulate ſounds as indications of their paſſions, affections, ſenſations, and ideas, the language of nature could never be wholly forgotten, and that it would ſometimes predominate over the language of art. Groans, ſighs, and ſome inarticulate lively ſounds, are naturally expreſſive of pain and pleaſure, and equally intelligible to all mankind. The occaſional uſe of theſe no art can wholly baniſh; and, if there were articulate ſounds naturally expreſſive of the ſame feelings, it is not conceivable that art or education could baniſh the uſe of them, merely becauſe by the organs of the mouth

mouth they are broken into parts and reſolvable into ſyllables.

It being thus evident that there is no inſtinctive articulated language, it has become an inquiry no leſs curious than important, how mankind were firſt induced to fabricate articulate ſounds, and to employ them for the purpoſe of communicating their thoughts. Children learn to ſpeak by inſenſible imitation; and, when advanced ſome years in life, they ſtudy foreign languages under proper inſtructors; but the firſt men had no ſpeakers to imitate, and no formed language to ſtudy; by what means then did they learn to ſpeak? On this queſtion only two opinions can poſſibly be formed. Either language muſt have been originally revealed from heaven, or it muſt be the fruit of human induſtry. The greater part of Jews and Chriſtians, and even ſome of the wiſeſt Pagans, have embraced the former opinion. The latter opinion is held by Diodorus Siculus, Lucretius, Horace, and many other Greek and Roman writers, who conſider language as one of the arts invented by man. The firſt men, ſay they, lived for ſome time in woods and caves after the manner of beaſts, uttering only confuſed and indiſtinct noiſes; till, aſſociating for mutual aſſiſtance, they came by degrees to uſe articulate ſounds mutually agreed upon for the arbitrary ſigns or marks of thoſe ideas in the mind of the ſpeaker which he wanted to communicate to the hearer. This opinion ſprung from the atomic coſmogony which was framed by Moſchus the Phenician, and afterwards improved by Democritus and Epicurus; and, though it is part of a ſyſtem in which the firſt men are repreſented as having grown out of the earth like trees and other vegetables, it has been adopted by ſeveral modern writers of high rank in the republic of letters, and is certainly in itſelf worthy of examination.

The moſt learned, and on every account the moſt reſpectable, author who now ſupports this opinion, candidly acknowledges, that, if language was invented, it was of very difficult invention, and far beyond the reach of the groſſeſt ſavages. Accordingly he holds, that, though men were originally ſolitary animals, and had no natural propenſity to the ſocial life; yet, before language could be invented, they muſt have been aſſociated for ages, and have carried on of concert ſome common work. Nay, he is decidedly of opinion, that, before the invention of an art ſo difficult as language, men muſt not only have herded together, but have alſo formed ſome kind of civil polity, have exiſted in that political ſtate a very long time, and have acquired ſuch powers of abſtraction as to be able to form general ideas. But it is obvious, that men could not have inſtituted civil polity, or have carried on of concert any common work, without communicating their deſigns to each other; and there are four ways by which the author thinks that this could have been done before the invention of ſpeech; viz. 1ſt, Inarticulate cries, expreſſive of ſentiments and paſſions; 2d. Geſtures and the expreſſion of countenance; 3d. Imitative ſounds expreſſive of audible things; and, 4th. Painting, by which viſible objects may be repreſented.

Of theſe four ways of communication it is plain, that only two have any connection with language, viz. inarticulate cries and imitative ſounds; and of theſe the author abandons the latter as having contributed nothing to the invention of articulation, though he thinks it may have helped to advance its progreſs. "I am diſpoſed (ſays he) to believe, that the framing of words with an analogy to the ſound of the things expreſſed by them belongs rather to languages of art than to the firſt languages ſpoken by rude and barbarous nations." It is therefore inarticulate cries only that muſt have given riſe to the formation of language. Such cries are uſed by all animals who have any uſe of voice to expreſs their wants; and the fact is, that all barbarous nations have cries expreſſing different things, ſuch as joy, grief, terror, ſurpriſe, and the like. Theſe, together with geſtures and expreſſion of the countenance, were undoubtedly the methods of communication firſt uſed by men; and we have but to ſuppoſe (ſays our author) a great number of our ſpecies carrying on ſome common buſineſs, and converſing together by ſigns and cries; and we have men juſt in a ſtate proper for the invention of language. For, if we ſuppoſe their numbers to increaſe, their wants would increaſe alſo; and then theſe two methods of communication would become too confined for that larger ſphere of life which their wants would make neceſſary. The only thing then that remained to be done was to give a greater variety to the inſtinctive cries; and, as the natural progreſs is from what is eaſy to what is more difficult, the firſt variation would be merely by tones from low to high, and from grave to acute. But this variety could not anſwer all the purpoſes of ſpeech in ſociety; and, being advanced ſo far, it was natural that an animal ſo ſagacious as man ſhould go on farther, and come at laſt to the only other variation remaining, namely, *articulation*. The firſt articulation would be very ſimple, the voice being broken, and diſtinguiſhed only by a few vowels and conſonants. And, as all natural cries are from the throat and larynx, with little or no operation of the organs of the mouth, it is natural to ſuppoſe, that the firſt languages were for the greater part ſpoken from the throat; that what conſonants were uſed to vary the cries, were moſtly guttural; and that the organs of the mouth would at firſt be very little employed.

From this account of the origin of language it appears, that the firſt ſounds articulated were the natural cries by which men ſignified their wants and deſires to one another, ſuch as calling one another for certain purpoſes, and other ſuch things as were moſt neceſſary for carrying on any joint work; then in proceſs of time other cries would be articulated, to ſignify, that ſuch and ſuch actions had been performed or were performing, or that ſuch and ſuch events had happened relative to the common buſineſs. The names would be invented of ſuch objects as they were converſant with; but, as we cannot ſuppoſe ſavages to be deep in abſtraction or ſkilful in the art of arranging things according to their genera and ſpecies, all things however ſimilar, except perhaps the individuals of the loweſt ſpecies, would be expreſſed by different words not related to each other either by derivation or compoſition. Thus would language grow by degrees; and, as it grew, it would be more and more broken and articulated by conſonants; but ſtill the words would retain a great deal of their original nature of animal cries. And thus things would go on, words unrelated ſtill multiplying, till at laſt the language would become too cumberſome for uſe; and then art would be obliged to interpoſe, and form a language upon a few radical words, according to the rules and method of etymology.

Thoſe who think that language was originally revealed from heaven, conſider this account of its human invention as a ſeries of mere ſuppoſitions hanging looſely together, and the whole ſuſpended from no fixed principle. The opinions of Diodorus, Vitruvius, Horace, Lucretius, and Cicero, which are frequently quoted in its ſupport, are in their eſtimation of no greater authority than the opinions of other men; for, as language was formed and brought to a great degree of perfection long before the era of any hiſtorian with whom we are acquainted, the antiquity of the Greek and Roman writers, who are comparatively of yeſterday, gives them no advantage in this inquiry over the philoſophers of France and England. Ariſtotle has defined man to be ζωον μιμητικον, an imitative animal; and the definition is certainly ſo far juſt, that man is much more remarkable for imitation than invention; and therefore, ſay the reaſoners on this ſide of the queſtion, had the human race been originally mute, they would have continued ſo to the end of time, unleſs they had been taught to ſpeak by ſome ſuperior intelligence.

That the firſt man ſprung from the earth like vegetables, no modern philoſopher has ventured to aſſert; nor does there anywhere appear ſufficient evidence that men were originally in the ſtate of ſavages. The oldeſt book extant

extant contains the only rational cosmogony known to the ancient nations; and that book represents the first human inhabitants of this earth, not only as reasoning and speaking animals, but also as in a state of high perfection and happiness, of which they were deprived for disobedience to their Creator. Moses, setting aside his claim to inspiration, deserves, from the consistence of his narrative, at least as much credit as Moschus, or Democritus, or Epicurus; and from his prior antiquity, if antiquity could on this subject have any weight, he would deserve more, as having lived nearer to the period of which they all write. Yet we do not mean to say that a reference to scripture will decide the controversy. "God brought every beast of the field and every fowl of the air unto Adam, to see what he would call them; and whatsoever Adam called every living creature, that was the name thereof. And Adam *gave names* to all cattle, &c." *Gen.* ii. 19, 20. Here we are not told whether the Almighty had previously inspired Adam with language, or whether Adam invented it himself.

But the question respecting the origin of language may be decided without resting in authority of any kind, merely by considering the nature of speech, and the mental and corporeal powers of man. Those who maintain it to be of human invention, suppose men at first to have been solitary animals, afterwards to have herded together without government or subordination, then to have formed political societies, and by their own exertions to have advanced from the grossest ignorance to the refinements of science. But, say the reasoners whose cause we are now pleading, this is a supposition contrary to all history and all experience. There is not upon record a single instance well authenticated of a people emerging by their own efforts from barbarism to civilization. There have indeed been many nations raised from the state of savages; but it is known that they were polished, not by their own repeated exertions, but by the influence of individuals or colonies from nations more enlightened than themselves. The original savages of Greece were tamed by the Pelasgi, a foreign tribe; and were afterwards further polished by Orpheus, Cecrops, Cadmus, &c. who derived their knowledge from Egypt and the East. The ancient Romans, a ferocious and motley crew, received the blessings of law and religion from a succession of foreign kings; and the conquests of Rome at a later period contributed to civilize the rest of Europe. In America, the only two nations which at the invasion of the Spaniards could be said to have advanced a single step from barbarism, were indebted for their superiority over the other tribes, not to the gradual and unassisted progress of the human mind, but to the wise institutions of foreign legislators.

From what has been observed in tracing the progress of man from the savage state to that of political society, experience teaches us that in every art it is much easier to improve than to invent. The human mind, when put into the proper track, is indeed capable of making great advances in arts and sciences; but, if any credit be due to the records of history, it has not, in a people sunk in ignorance and barbarity, sufficient vigour to discover that track, or to conceive a state different from the present. If the rudest inhabitants of America and other countries have continued, as there is every reason to believe they have continued, for ages in the same unvaried state of barbarism; how is it imaginable that people so much ruder than they, as to be ignorant of all language, should think of inventing an art so difficult as that of speech, or even to frame a conception of the thing? In building, fishing, hunting, navigating, &c. they might imitate the instinctive arts of other animals; but there is no other animal that expresses its sensations and affections by arbitrary articulate sounds. It is said that, before language could be invented, mankind must have existed for ages in large political societies, and have carried on in concert some common work; but, if inarticulate cries, and the natural visible signs of the passions and affections, were modes of communication sufficiently accurate to keep a large society together for ages, and to direct its members in the execution of some common work, what could be their inducement to the invention of an art so useful and difficult as that of language? Let us however suppose, say the advocates for the cause which we are now supporting, that different nations of savages set about inventing an art of communicating their thoughts, which experience had taught them was not absolutely necessary; how came they all, without exception, to think of the one art of articulating the voice for this purpose? Inarticulate cries, out of which language is fabricated, have indeed an instinctive connexion with our passions and affections; but there are gestures and expressions of countenance with which our passions and affections are in the same manner connected. If the natural cries of passion could be so modified and enlarged as to be capable of communicating to the hearer every idea in the mind of the speaker, it is certain that the natural gestures could be so modified as to answer the very same purpose; and it is strange that, among the several nations who invented languages, not one should have stumbled upon fabricating visible signs of their ideas, but that all should have agreed to denote them by articulated sounds. Every nation whose language is narrow and rude supplies its defects by violent gesticulation; and therefore, as much less genius is exerted in the improvement of any art than was requisite for its first invention, it is natural to suppose, that, had men been left to devise for themselves a method of communicating their thoughts, they would not have attempted any other than that by which they now improve the language transmitted by their fathers. It is vain to urge that articulate sounds are fitter for the purpose of communicating thought than visible gesticulation; for, though this may be true, it is a truth which could hardly occur to savages, who had never experienced the fitness of either; and if, to counterbalance the superior fitness of articulation, its extreme difficulty be taken into view, it must appear little less than miraculous that every savage tribe should think of it rather than the easier method of artificial gesticulation. Savages, it is well known, are remarkable for their indolence, and for always preferring ease to utility; but their modes of life give such pliancy to their bodies, that they could with very little trouble bend their limbs and members into any positions agreed upon as the signs of ideas. This is so far from being the case with respect to the organs of articulation, that it is with extreme difficulty, if at all, that a man advanced in life can be taught to articulate any sound which he has not been accustomed to hear. No foreigner who comes to England after the age of thirty ever pronounces the language tolerably well; an Englishman of that age can hardly be taught to utter the guttural sound which a Scotchman gives to the Greek χ, or even the French sound of the vowel *u*; and of the solitary savages who have been caught in different forests, we know not that there has been one who, after the age of manhood, learned to articulate any language so as to make himself readily understood. The present age has indeed furnished many instances of deaf persons being taught to speak intelligibly by skilful masters moulding the organs of the mouth into the positions proper for articulating the voice; (see DUMBNESS, vol. vi. p. 115.) but who was to perform this task among the inventors of language, when all mankind were equally ignorant of the means by which articulation is effected? In a word, daily experience informs us, that men who have not learned to articulate in their childhood never afterwards acquire the faculty of speech but by such helps as savages cannot obtain; and therefore, if speech was invented at all, it must have been either by children who were incapable of invention, or by men who were incapable of speech. A thousand, nay a million, of children could not think of inventing a language. While the organs are pliable, there is not understanding enough to frame the conception of a language; and, by the time that there is understanding, the organs

are become too ſtiff for the taſk; and therefore, ſay the advocates for the divine origin of language, reaſon as well as hiſtory intimates, that mankind in all ages muſt have been ſpeaking animals; the young having conſtantly acquired this art by imitating thoſe who were older; and we may warrantably conclude, *that our firſt parents received it by immediate inſpiration.*

To this account of the origin of language, an objection readily offers itſelf. If the firſt language was communicated by inſpiration, it muſt have been perfect, and held in reverence by thoſe who ſpake it, i. e. by all mankind. But a vaſt variety of languages have prevailed in the world; and ſome of thoſe which remain are known to be very imperfect, whilſt there is reaſon to believe that many others are loſt. If different languages were originally invented by different nations, all this would naturally follow from the mixture of theſe nations; but what could induce men poſſeſſed of one perfect language of divine original, to forſake it for barbarous jargons of their own invention, and in every reſpect inferior to that with which their forefathers or themſelves had been inſpired?

In anſwer to this objection, it is ſaid, that nothing was given by inſpiration but the faculty of ſpeech and the elements of language; for, when once men had language, it is eaſy to conceive how they might have modified it by their natural powers, as thouſands can improve what they could not invent. The firſt language, if given by inſpiration, muſt in its principles have had all the perfection of which language is ſuſceptible; but from the nature of things it could not poſſibly be very copious. The words of language are either proper names or the ſigns of ideas and relations; but it cannot be ſuppoſed that the All-wiſe Inſtructor would load the memories of men with words to denote things then unknown, or with the ſigns of ideas which they had not then acquired. It was ſufficient that a foundation was laid of ſuch a nature as would ſupport the largeſt ſuperſtructure which they might ever after have occaſion to raiſe upon it, and that they were taught the method of building by compoſition and derivation. This would long preſerve the language radically the ſame, though it could not prevent the introduction of different dialects in the different countries over which men ſpread themſelves. In whatever region we ſuppoſe the human race to have been originally placed, the increaſe of their numbers would in proceſs of time either diſperſe them into different nations, or extend the one nation to a vaſt diſtance on all ſides from what we may call the ſeat of government. In either caſe they would everywhere meet with new objects, which would occaſion the invention of new names; and, as the difference of climate and other natural cauſes would compel thoſe who removed eaſtward or northward to adopt modes of life in many reſpects different from the modes of thoſe who travelled towards the weſt or the ſouth, a vaſt number of words would in one country be fabricated to denote complex conceptions, which muſt neceſſarily be unintelligible to the body of the people inhabiting countries where thoſe conceptions had never been formed. Thus would various dialects be unavoidably introduced into the original language, even whilſt all mankind remained in one ſociety and under one government. But, after ſeparate and independent ſocieties were formed, theſe variations would become more numerous, and the ſeveral dialects would deviate farther and farther from each other, as well as from the idiom and genius of the parent tongue, in proportion to the diſtance of the tribes by whom they were ſpoken. If we ſuppoſe a few people either to have been baniſhed together from the ſociety of their brethren, or to have wandered of their own accord to a diſtance, from which through trackleſs foreſts they could not return (and ſuch emigrations have often taken place), it is eaſy to ſee how the moſt copious language muſt in their mouths have ſoon become narrow, and how the offspring of inſpiration muſt have in time become ſo deformed as hardly to retain a feature of the anceſtor whence it originally ſprang. Men do not long retain a practical ſkill in thoſe arts which they never exerciſe; and there are abundance of facts to prove, that a ſingle man caſt upon a deſert iſland, and having to provide the neceſſaries of life by his own ingenuity, would ſoon loſe the art of ſpeaking with fluency his mother tongue. A ſmall number of men caſt away together, would indeed retain that art ſomewhat longer; but in a ſpace of time not very long, it would in a great meaſure be loſt by them or their poſterity. In this ſtate of baniſhment, as their time would be almoſt wholly occupied in hunting, fiſhing, and other means within their reach to ſupport a wretched exiſtence, they would have very little leiſure, and perhaps leſs deſire, to preſerve by converſation the remembrance of that eaſe and thoſe comforts of which they now found themſelves for ever deprived; and they would of courſe ſoon forget all the words which in their native language had been uſed to denote the accommodations and elegancies of poliſhed life. This at leaſt ſeems to be certain, that they would not attempt to teach their children a part of language which in their circumſtances could be of no uſe to them, and of which it would be impoſſible to make them comprehend the meaning; for, where there are no ideas, the ſigns of ideas cannot be made intelligible. From ſuch colonies as this, diſperſed over the earth, it is probable that all thoſe nations of ſavages have ariſen, which have induced ſo many philoſophers to imagine that the ſtate of the ſavage was the original ſtate of man; and, if ſo, we ſee that from the language of inſpiration muſt have unavoidably ſprung a number of different dialects, all extremely rude and narrow, and retaining nothing of the parent tongue, except perhaps the names of the moſt conſpicuous objects of nature, and of thoſe wants and enjoyments which are inſeparable from humanity. Speech therefore, in this rude condition of men, muſt be extremely narrow, and extremely various. Every new region, and every new climate, ſuggeſts different ideas and creates different wants, which muſt be expreſſed either by terms entirely new or by old terms uſed with a new ſignification. Hence muſt originate great diverſity, even in the firſt elements of ſpeech, among all ſavage nations, the words retained of the original language being uſed in various ſenſes, and pronounced, as we may believe, with various accents. When any of thoſe ſavage tribes emerged from their barbariſm, whether by their own efforts or by the aid of people more enlightened than themſelves, it is obvious that the improvement and copiouſneſs of their language would keep pace with their own progreſs in knowledge and in the arts of civil life; but, in the infinite multitude of words which civilization and refinement add to language, it would be little leſs than miraculous were any two nations to agree upon the ſame ſounds to repreſent the ſame ideas. Superior refinement, indeed, may induce imitation, conqueſts may impoſe a language, and extenſion of empires may melt down different nations and different dialects into one maſs; but independent tribes naturally give riſe to diverſity of tongues, nor does it ſeem poſſible that they ſhould retain more of the original language than the words expreſſive of thoſe objects with which all men are at all times equally concerned.

The variety of tongues, therefore, the copiouſneſs of ſome, and the narrowneſs of others, furniſh no good objection to the divine origin of language in general; for whether language was at firſt revealed from heaven, or in a courſe of ages invented by men, a multitude of dialects would inevitably ariſe as ſoon as the human race was ſeparated into a number of diſtinct and independent nations. We pretend not to decide for our readers in a queſtion of this nature; we have given the beſt arguments on both ſides which we could either deviſe or find in the writings of others; and, if it be ſeen, as we doubt not it will, that our own judgment leans to the ſide of revelation, let it not be haſtily condemned by thoſe whoſe knowledge of languages extends no farther than to Greece and Rome, and France and England; for, if they will carry their philological inquiries to the eaſt, they may perhaps be able to

trace the remains of one original language through a great part of the globe at this day. Numberleſs inſtances of this might be given, but our limits will enable us to produce only a very few. In the Sanſkrit, or ancient language of the Gentoos, OUR ſignifies a day. (See Halhed's Preface to the Code of Gentoo Laws.) In other eaſtern languages, the ſame word was uſed to denote both *light* and *fire*. Thus, in the Chaldee, UR is *fire*; in the Egyptian, OR is the *ſun* or *light*, (Plut. de Oſir. et Iſid.) In the Hebrew, AUR is *light*: in the Greek, αηρ is the *air*, often *light*: in Latin, AURA is the *air*, from the Æolic Greek; and in Iriſh it is AEAR. From the very ſame original we have the Greek word πυρ, and the Engliſh *fire*. In Hebrew, OR ſignifies to *raiſe, lift up one's ſelf*, or *be raiſed*: hence plainly are derived the Greek ορω, to *raiſe, excite*, and the Latin ORIOR *to ariſe*; whence oriens, the eaſt, and Eng. *orient, oriental*; alſo Lat. *origo*, and Eng. *origin, originate*, &c. The word LIGHT Engliſh, LUCHT Flemiſh, LUX Roman, and λυχος Greek, has been traced to Egypt. ARETZ, AREK, ERECH, HERTHA, EARTH, and ERDE, are all one word, from Paleſtine and Chaldea to Britain and Germany. The Chaldeans turned the Hebrew word SHUR or SHOR, which ſignifies an *ox*, into THOR, as likewiſe did the Phenicians; (ſee Plut. Vit. Syll.) hence the Greek ταυρος, the Latin *taurus*, the French *taureau*, and the Italian and Spaniſh *toro*. The Hebrew word BIT or BEITH, which ſignifies *cavity, capacity*, the *concave* or *inſide* of any place, has ſpread itſelf far and wide, ſtill retaining nearly the original ſignification; in the Perſian language it is BAD, BED, BHAD, and ſignifies a *houſe* or *abode*. In all the dialects of the Gothic tongue, BODE ſignifies the ſame thing; hence the Engliſh *abide, abode, booth, boat*, and the French *bateau*. In all theſe inſtances there is a ſtriking reſemblance, in ſound as well as in ſenſe, between the derived and the primitive words; but this is not always the caſe, even when of the legitimacy of the derivation no doubt can be entertained. It has been ſhown (ſee Boſwell's Life of Johnſon), that the French JOUR, *a day*, is derived from the Latin DIES; but it may be certainly traced from a higher ſource. In many of the oriental dialects, DI, *bright*, is a name of the *ſun*; hence the Greek Δις, *Jupiter*, and the Latin DIES, a *day*. From DIES comes DIURNUS; in the pronunciation of which, either by the inaccuracy of the ſpeaker or of the hearer, *diu* is readily confounded with *giu*; then of the ablative of this adjective, corruptly pronounced *giurno*, the Italians make a ſubſtantive GIORNO, which by the French is readily contracted into GIOUR or JOUR. From the ſame root DI, comes Διος, α, ον, the Eolic ΔιFος, the Latin DIVUS, and the Celtic DHIA, God.

Language, whatever was its origin, muſt be ſubject to perpetual changes from its very nature, as well as from that variety of incidents which affect all ſublunary things; and thoſe changes muſt always correſpond with the change of circumſtances in the people by whom the language is ſpoken. When any particular ſet of ideas becomes prevalent among any ſociety of men, words muſt be adopted to expreſs them; and from theſe the language muſt aſſume its character. Hence the language of a brave and martial people is bold and nervous, although perhaps rude and uncultivated; while the languages of thoſe nations in which luxury and effeminacy prevail, are flowing and harmonious, but devoid of force and energy of expreſſion. New diſcoveries and particular circumſtances have enriched or overloaded language. How many new words, and new meanings to old ones, were added by the French republicans! Theſe are now fallen into diſuſe; but thoſe produced by the new chemiſtry ſtill remain, nor indeed can we do without them; and Dr. Davy's ſtill more recent diſcoveries have increaſed them. Yet it is ſingular how few terms Newton invented. Whatever language he found in common uſe, of that he availed himſelf. Scarcely ever did he uſe a known word in a novel ſenſe; and the language which he found ready made he uſed in ſuch a manner as to convey no inconſiderable number of diſcoveries, the moſt important and the moſt original that mortal man has ever been permitted to make. To the inventors of new terms, and to nomenclature-mongers, this will ſpeak with a force that ſhould reſtrain them from loading ſcience with a language that muſt, for a time, be little better than a jargon.

What was the antediluvian language, or whether it was divided into a variety of dialects as at this day, can only be determined by the rules of analogy; and theſe will lead us to believe, that whatever might have been the primitive language of mankind, if human nature was then conſtituted as it is at preſent, a great variety of dialects muſt of neceſſity have ſprung up in the ſpace of near 2000 years. If we adopt the Moſaic account of the antediluvian events, we muſt admit that the deſcendants of Cain for ſome ages lived ſeparate from thoſe of Seth. Their manner of life, their religious ceremonies, their laws, their form of government, were probably different; and theſe circumſtances would of courſe produce a variety in their language. The poſterity of Cain were an inventive race: they found out the art of metallurgy, muſic, and ſome think of weaving; and in all probability many other articles conducive to the eaſe and accommodation of life were the produce of their ingenuity. A people of this character muſt have paid no ſmall regard to their words and modes of expreſſion. Wherever muſic is cultivated, language will naturally be improved and refined. When new inventions are introduced, a new race of words and phraſes of neceſſity ſpring up, correſponding to the recent ſtock of ideas to be intimated. Beſides, among an inventive race of people, new vocables would be continually fabricated, in order to ſupply the deficiencies of the primitive language, which was probably ſcanty in words, and its phraſeology unpoliſhed.

That family of which Noah was deſcended had not incorporated with the race of Cain: it was, according to the ſacred hiſtorian, lineally deſcended from Seth, and had preſerved the worſhip of the true God, when, it is probable, the greateſt part of mankind had apoſtatiſed and become idolaters. According both to ſcripture and tradition, innovations were the province of Cainites, while the deſcendants of Seth adhered to the primitive and truly-patriarchal inſtitutions.

If theſe ſuggeſtions are allowed the merit of probability, we may juſtly infer that the language of Noah, whatever it was, differed very little from that of Adam, and that, if it is poſſible to aſcertain the language of the former, that of the latter will of courſe be diſcovered. And hence we ſhall be enabled to trace the origin and antiquity of the Hebrew tongue; and to ſhow that it claims the honour of being the original language of mankind.

Whatever may have been the dialect of Noah and his family, that ſame dialect, according to the Moſaic account, muſt have obtained, without any alteration, till the era of the building of the tower of Babel. Upon this occaſion a dreadful convulſion took place; the language of mankind was confounded, and men were ſcattered abroad upon the face of all the earth.

How far this cataſtrophe extended, is not the buſineſs of the preſent inquiry. See the word DISPERSION, vol. v. p. 882. One thing is certain beyond all controverſy, namely, that the languages of all the nations which ſettled near the centre of population were but ſlightly affected by its influence. Strabo has obſerved, that three thouſand years after, the inhabitants of thoſe countries exhibited a very ſtrong reſemblance of cognation, "in their language, manner of living, and the lineaments of their bodies. At the ſame time he obſerves, that the reſemblance in all thoſe particulars was moſt remarkable among the inhabitants of Meſopotamia."

It appears, then, that the languages of the Armenians, Syrians, Aſſyrians, Arabians, and probably of the Chanaanim, did not ſuffer materially by the confuſion of tongues. This obſervation may alſo be extended to many of the dialects ſpoken by the people who ſettled in thoſe countries not far diſtant from the region where the ſacred hiſtorian has fixed the original ſeat of mankind after the deluge.

deluge. The inference then is, that, if Noah and his family ſpoke the original language of Adam, as they moſt probably did, the judgment which effected the confuſion of tongues, did not produce any conſiderable alteration in the language of ſuch of the deſcendants of Noah as ſettled near the region where that patriarch had fixed his reſidence after he quitted the ark.

But, ſuppoſing the changes of language produced by the cataſtrophe at the building of the tower as conſiderable as has ever been imagined, it does not, after all, appear certain, that all mankind, without exception, were engaged in this impious project. If this aſſertion ſhould be well founded, the conſequence will be, that there was a choſen race who did not engage in that enterpriſe. If there was ſuch a family, ſociety, or body of men, it will follow, that this family, ſociety, &c. retained the language of its great anceſtor without change or variation.

There is reaſon to believe that Ham, upon the heavy curſe denounced upon him by his father, (Gen. ix. 25.) retired from his brethren, and fixed his reſidence elſewhere. Accordingly we find his deſcendants ſcattered far and wide, at a very great diſtance from the Gordyæan mountains, where the ark is generally ſuppoſed to have reſted immediately after the flood. Some of them we find in Chaldæa, others in Arabia Felix, others in Ethiopia, others in Canaan, and others Egypt; and, finally, multitudes ſcattered over all the coaſt of Africa. Between theſe countries were planted many colonies of Shemites, in Elam, Aſſyria, Syria, Arabia, &c. We find, at the ſame time, the deſcendants of Shem and Japhet ſettled, in a great degree, contiguous to each other. This diſperſion of the Hamites, irregular as it is, can ſcarcely have been accidental; it muſt have been owing to ſome uncommon cauſe, and none ſeems more probable than that aſſigned above. If, then, the deſcendants of Ham ſeparated early, and took different routes, as from their poſterior ſituations it appears they did, they could not all be preſent at the building of the tower.

It is not probable that the deſcendants of Shem were engaged in this undertaking, ſince we find that they were not ſcattered abroad upon the face of all the earth. The children of Shem were Elam, Aſhur, Arphaxad, Lud, and Aram. *Gen.* x. 22. Elam ſettled near the mouth of the river Tigris, in the country which by the Gentile writers was called Elymais. Above him, on the ſame river, lay the demeſne of Aſhur, on the weſtern ſide. In like manner, upon the ſame river, above him, was ſituated Aram, who poſſeſſed the country of Aramea; and oppoſite to him was Arphaxad, or Arbaces, and his country was denominated Arphachites. We find (Ezek. xxvii. 10.) the men of Elam and the men of Lud joined in the defence of Tyre; which ſeems to intimate, that the Elamites and Ludim were neighbours. If this was actually the caſe, then Lud ſettled in the ſame quarter with his brothers. Here, then, is a diſperſion, but ſuch as muſt have originated from the nature of the thing. The four, or rather the five, brothers, all ſettled contiguous, without being ſcattered abroad upon the face of the whole earth. Beſides, there was no confuſion of language among theſe tribes; they continued to uſe one and the ſame through many ſucceeding generations.

From theſe circumſtances it appears that the poſterity of Shem were not involved in the guilt of the builders of the tower, and of conſequence did not undergo their puniſhment. If then the language of the Shemites was not confounded upon the erection of the tower, the preſumption is, that they retained the language of Noah, which, in all probability, was that of Adam. Some dialectical differences would in proceſs of time creep in, but the radical fabric of the language would remain unaltered.

To theſe arguments we may add, that in all probability the worſhip of the true God was preſerved in the line of Arphaxad, after the generality of the other ſects had lapſed into idolatry. Out of this family Abraham was taken, in whoſe line the true religion was to be preſerved. Whether Abraham was an idolater when he dwelt in Chaldea, the ſcripture does not inform us, though it ſeems to be evident that his father was. One thing, however, is certain, namely, that Jehovah appeared to him, and pronounced a bleſſing upon him before he left Ur of the Chaldees. This circumſtance no doubt indicates, that the patriarch had made uncommon advances in piety and virtue, even prior to his emigration. The progenitors of his family had been diſtinguiſhed by adhering to the true religion. About this time, however, they began to degenerate, and to adopt the Zabiiſm of their apoſtate neighbours. It was then that Abraham was commanded by Heaven to "leave his kindred and his father's houſe, and to travel into a land which was to be ſhown him." *Gen.* xii. 1. The Almighty intended that the true religion ſhould be preſerved in his line; and therefore removed him from a country and kindred, by the influence of whoſe bad example his religious principles might be endangered. His family had only of late apoſtatized; till that period they had preſerved both the language and religion of their venerable anceſtors.

But, however much Abraham might differ from the other branches of his family in his religious ſentiments, his language was certainly in uniſon with theirs. The conſequence of this unqueſtionable poſition is, that the language which he carried with him into Canaan was exactly the ſame with that of his family which he relinquiſhed when he began his peregrinations. Hence it will follow, that the language afterwards denominated *Hebrew*, and that of the Chaſidim, or Chaldeans, were originally one and the ſame, and were actually the firſt language upon earth, according to the Moſaic hiſtory.

Of the HEBREW and other EASTERN LANGUAGES.

As we have given a decided opinion upon the priority of the HEBREW to every other language that has been ſpoken by men, we ſhall now proceed to conſider its nature and genius; from which, we think, it will appear ſtill more evidently to be the original language, neither improved or debaſed by foreign idioms. The words of which it is compoſed are ſhort, and admit of very little flexion. The names of places are deſcriptive of their nature, ſituation, accidental circumſtances, &c. Its compounds are few, and inartificially joined together. In it we find few of thoſe artificial affixes which diſtinguiſh the other cognate dialects; ſuch as the Chaldean, Syrian, Arabian, Phœnician, &c. We find in it no traces of improvement from the age of Moſes to the era of the Babyloniſh captivity. In fact, the Jews were by no means an inventive people. We hear nothing of their progreſs in literary purſuits; nor do they ſeem to have been induſtrious in borrowing from their neighbours. The laws and ſtatutes communicated by Moſes were the principal objects of their ſtudies. Theſe they were commanded to contemplate day and night; and in them they were to place their chief delight. The conſequence of this command was, that little or no regard could be paid to taſte, or any other ſubject of philoſophical inveſtigation. Every unimproved language abounds in figurative expreſſions borrowed from ſenſible objects. This is in a peculiar manner the characteriſtic of the language in queſtion: of which it would be ſuperfluous to produce inſtances, as the fact muſt be obvious even to the attentive reader of the Engliſh Bible.

It has been obſerved above, that the language of Abraham and that of the Cheſedim or Chaldeans were originally the ſame; and we are perſuaded, that, if an able critic ſhould take the pains to examine ſtrictly theſe two languages, and to take from each what may reaſonably be ſuppoſed to have been improvements or additions ſince the age of Abraham, he will find intrinſic evidence ſufficient to convince him of the truth of this poſition. There appear ſtill in the Chaldean tongue great numbers of words the ſame with the Hebrew, perhaps as many as mankind had occaſion for in the moſt early ages; and much

much greater numbers would probably be found if both languages had come down to us entire. The conſtruction of the two languages is indeed ſomewhat different; but this difference ariſes chiefly from the ſuperior improvement of the Chaldean. While the Hebrew language was in a manner ſtationary, the Chaldean underwent progreſſive improvements; was mellowed by antitheſes, rendered ſonorous by the diſpoſition of vocal ſounds, acquired a copiouſneſs by compounds, and a majeſty by affixes and prefixes, &c. In proceſs of time, however, the difference became ſo great, that the Iſraelites did not underſtand the Chaldean language at the era of the Babyloniſh captivity. Thus much the prophet intimates, when he promiſes the pious Jews protection "from a fierce people; a people of a deeper ſpeech than they could perceive; of a ſtammering tongue, that they could not underſtand." *Iſa.* xxxiii. 19.

The priority of the Chaldean tongue is indeed contended for by very learned writers. Camden calls it the mother of all languages; and moſt of the fathers were of the ſame opinion. Amira has made a collection of arguments, not inconſiderable, in favour of it; and Myriceus, after him, did the ſame. Erpenius, in his Oration for the Hebrew tongue, thought the argument for it and the Chaldean ſo equal, that he did not chooſe to take upon him to determine the queſtion. Yet, if we anatomize the Hebrew language in their manner, we ſhall reduce it to very great ſimplicity; we ſhall confine it to a few names of things, perſons, and actions; we ſhall make all its words monoſyllables, and give it the true character of an original tongue. If, at the ſame time, we reflect on the ſmall number of radical words in that dialect, we ſhall be more and more convinced of its originality.

It has been made a queſtion, whether the Hebrew language was denominated from *Heber* the progenitor of Abraham, or from a word which in that tongue imports *over, beyond.* Moſt of the Chriſtian fathers, prior to St. Origen, believed that both the Gentile name *Hebrew,* and the name of the language, were derived from the name of the patriarch; but that learned man imagined, that Abraham was called the *Hebrew,* not becauſe he was deſcendant of Heber, but becauſe he was a transfluvianus, or *from beyond the river* Euphrates. The learned Bochart has ſtrained hard to prove the former poſition; but to us his arguments do not appear deciſive. We are rather inclined to believe, that Abraham was called *Chibri,* (Hebrew,) from the ſituation of the country from which he emigrated when he came to the country of Chanaan; and that in proceſs of time that word became a Gentile appellation, and was afterwards applied to his poſterity often by way of reproach, much in the ſame manner as we ſay a *Northlander,* a *Norman,* a *Tramontane,* &c. for we may obſerve, in the reading the firſt book of Samuel, that the Philiſtines always call the Iſraelites *Hebrews* by way of reproach.

Here we may be indulged an obſervation, namely, that Abraham, a Hebrew, lived among the Chaldeans, travelled among the Chanaanites, ſojourned among the Philiſtines, lived ſome time in Egypt, and in all appearance converſed with all thoſe nations without any apparent difficulty. This circumſtance plainly proves, that all theſe nations at that time ſpoke nearly the ſame language; and that the nations had not yet begun to improve their reſpective dialects, nor to deviate in any great meaſure from the monoſyllabic tongue of the Hebrews.

The chief excellencies of the Hebrew language are undoubtedly its ſimplicity, purity, energy, and its fecundity of expreſſions and ſignifications. In all theſe, notwithſtanding its paucity of words, it excels the vaſt variety of other languages which are its cognate dialects. To theſe we may add the ſignificancy of the names, both of men and brutes; the nature and properties of the latter of which are more clearly and more fully exhibited by their names in this than in any other tongue hitherto known. Beſides, its well authenticated antiquity and the venerable tone of its writings ſurpaſs any thing left upon record in any other dialect now extant in the world. Theſe extraordinary qualities excite our admiration at preſent under every diſadvantage; and from this circumſtance we may infer its incomparable beauty in the age of the Jewiſh legiſlator, and what effects it would naturally produce, could we know it now as it was ſpoken and written in the days of David and Solomon.

As far, however, as we underſtand it in its preſent mutilated condition, and are able to judge of its character from thoſe few books that have come down to our time, we plainly perceive that its genius is ſimple, primitive, natural, and exactly conformable to the character of thoſe uncultivated patriarchs who uſed it themſelves, and tranſmitted it to their deſcendants in its native purity and ſimplicity. Its words are comparatively few, yet conciſe and expreſſive; derived from a very ſmall number of radicals, without the artificial compoſition of modern languages. No tongue, ancient or modern, can rival it in the happy and rich fecundity of its verbs, reſulting from the variety and ſignificancy of its conjugations: which are ſo admirably arranged and diverſified, that, by changing a letter or two of the primitive, they expreſs the various modes of acting, ſuffering, motion, reſt, &c. in ſuch a preciſe and ſignificant manner, that frequently in one word they convey an idea which, in any other language, would require a tedious paraphraſe. Theſe poſitions might eaſily be illuſtrated by numerous examples; but to the Hebrew ſcholar theſe would be ſuperfluous, and to moſt others neither intereſting nor entertaining.

To theſe we may add the monoſyllabic tone of the language, which, by a few prefixes and affixes, without affecting the radix, varies the ſignification almoſt at pleaſure, while the method of affixing the perſon to the verb exhibits the gender of the object introduced. In the nouns of this language there is no flexion except what is neceſſary to point out the difference of gender and number. Its caſes are diſtinguiſhed by articles, which are only ſingle letters at the beginning of the word; the pronouns are only ſingle letters affixed; and the prepoſitions are of the ſame character prefixed to words. Its words follow one another in an eaſy and natural arrangement, without intricacy or tranſpoſition, without ſuſpending the attention or involving the ſenſe by intricate and artificial periods. All theſe ſtriking and peculiar excellencies combined, plainly demonſtrate the beauty, the ſtability, and originality, of the Hebrew tongue. Some learned men, ſays Dr. Sharpe, will have it to be the language ſpoken by Adam in Paradiſe, and that the ſaints will ſpeak it in Heaven; alleging, that it is ſo conciſe, and yet ſo ſignificant, ſo pathetic, and yet ſo free from levity or bombaſt, as, of all languages, to approach neareſt to that of ſpirits, who need no words for conveying their ideas to each other.

It is to be obſerved, that there is no piece in all antiquity, written in pure Hebrew, beſides the books of the Old Teſtament; and even ſome parts of thoſe are in Chaldee. But the rabbinnical or modern Hebrew is a very different language, being that which is uſed by the rabbins, in the writings they have compoſed. The baſe or body of it is the Hebrew or Chaldee, with divers alterations in the words of theſe two languages, the meanings whereof they have conſiderably enlarged and extended. Abundance of things they have borrowed from the Arabic; the reſt is compoſed of words and expreſſions chiefly from the Greek; ſome from the Latin; and others from the other modern tongues; particularly that ſpoken in the place where each rabbin lived or wrote. Thus the rabbinical Hebrew muſt be allowed to be a very copious language. Mr. Simon, in his Hiſt. Crit. du Vieux Teſtament, obſerves, that there is ſcarcely any art or ſcience, but the rabbins have treated thereof in it. They have tranſlated moſt of the ancient philoſophers, mathematicians, aſtronomers, and phyſicians; and have written themſelves on moſt ſubjects: they do not want even ora-

tors and poets. Maimonides is their moſt judicious theologian.

The Chaldean, Phœnician, Ethiopian, or Abyſſinian, and Egyptian, languages, are all cognates of the original Hebrew, and have a very ſtrict connection and dialectical analogy among each other; ſo that what is obſerved relating to one of them may, without the leaſt ſtraining, be extended to them all.

The CHALDEANS, or Chaſidim, as they are called in Scripture, were the deſcendants of Cheſed the ſon of Nahor, the brother of Abraham. The deſcendants of this patriarch drove the Cuſhim or Arabians out of Babylonia, and poſſeſſed themſelves of that country at a very early period. As theſe Chaſidim or Chaldeans were the poſterity of Nahor, the deſcendant of Heber, they undoubtedly ſpoke the original Hebrew tongue as well as the other branches of that family. But, being an ingenious inventive people, they ſeem to have poliſhed their language with much care and delicacy of taſte.

The only genuine remains of the ancient Chaldaic language are to be found in the Hebrew Scriptures; and thoſe are contained in 268 verſes: of which we have 200 in Daniel, reaching from verſe 4th chapter 2d to chapter 8th, excluſive; in Ezra 67, in chapter 4th, 17 verſes; chapter 5th, the ſame number; chapter 6th, 18 verſes; and in chapter 7th, 15; in Jeremiah, chapter 10th, there is extant only one verſe. And from theſe fragments, compared with the Hebrew, it plainly appears, that the difference between that language and the Chaldaic is ſcarcely equal to that between the Doric and Ionic dialects of the Greek.

The Chaldean declenſions and conjugations differ ſo little from the Hebrew modifications, that it would be almoſt ſuperfluous to dwell upon them. The moſt effectual way to acquire an idea of the ancient Chaldaic, is to decompound the names confeſſedly of that dialect, which occur in many places of Scripture. By this method of proceeding, its beautiful ſtructure and expreſſive energy will be readily comprehended even by the moſt illiterate claſſes of our readers. At the ſame time, we muſt obſerve, that the Chaldaic and ancient Syriac bear ſo near a reſemblance to each other, that they have generally been claſſed under one head.

The firſt Chaldaic word that occurs in the Old Teſtament is *bara*, he created. This word has all along been aſſigned to the language under conſideration; for what reaſon, we confeſs we are not able to diſcover. The greateſt part of the Hebrew tongue is now loſt. The words *bar*, a ſon, and *bara*, he created, may probably be of that number. Another Scripture-word which is often quoted, and always aſcribed either to the Syriac or Chaldaic, is *jegar ſahadutha*, which ſignifies "a mountain of witneſſes." Every body knows, that, when Jacob and Laban made their compact, the latter denominated the heap of ſtones reared upon that occaſion in this manner; while the former called it *Galeed*, as we now write and pronounce it. This word is probably compounded of *gal*, a heap, and *chad*, eternity, ſo that *galchad*, or *galaad* as it came to be written afterwards, ſignified "an everlaſting heap." Laban then had reſpect to the end for which the monument was erected; but Jacob alluded to its duration.

The Chaldaic names of gods, men, places, &c. which occur in Scripture, appear to be no other than Hebrew poliſhed and improved. Thus *Ur* of the Chaldeans is actually אוֹר *light*, that city being ſacred to the ſun; *Sippora* is plainly the Hebrew word *Zipporah*; *Carchemiſh*, a city on the Euphrates, is evidently compounded of *Kir* or *Kar*, a city, and *Chemoſh*, a name of the ſun. In ſhort, every Chaldean or old Syrian word now extant, without any difficulty, betrays an Hebrew original.

This language was anciently uſed throughout all Aſſyria, Babylonia, Meſopotamia, Syria, and Paleſtine; and is ſtill the language of the Neſtorian and Maronite Chriſtians in thoſe eaſtern parts, in the ſame manner as the Latin is the language of the popiſh Chriſtians in the weſt.

The PHŒNICIAN language is known to have been that of the ancient Canaanites. That this was one of the original dialects, and conſequently a cognate of the Hebrew, is univerſally acknowledged. Bochart has in a manner demonſtrated this point, by deriving almoſt all the names of the Phœnician colonies from the Hebrew, upon the ſuppoſition that the dialect of thoſe people was cloſely connected with that tongue. St. Auguſtine has obſerved, that even in his time many of the vulgar in the neighbourhood of Carthage and Hippo ſpoke a dialect of the old Punic which nearly reſembled the Hebrew. Procopius informs us, that there exiſted even in his days in Africa a pillar with this inſcription in Hebrew: "We flee from the face of Joſhua the robber, the ſon of Nun." The names of all the ancient cities built by the Carthaginians on the coaſt of Africa are eaſily reducible to a Hebrew original. The Carthaginian names of perſons mentioned in the Greek and Latin hiſtory, ſuch as Himilco, Hamilcar, Aſdrubal, Hannibal, Hanno, Dido, Anna or Hannah, Sophoniſba, Giſgo, Maharbal, Adherbal, &c. all evince a Hebrew extraction.

The iſland of Malta was inhabited by a colony of Phœnicians many ages before the Moors took poſſeſſion of it. Among the vulgar of that iſland many Punic vocables are current to this day, all of which may be readily traced up to the Hebrew fountain. To theſe we may add many inſcriptions on ſtones, coins, medals, &c. which are certainly Phœnician, and as certainly of Hebrew extraction.

The ETRUSCAN language muſt have been the ſame, or nearly ſo, with the Hebrew and Phœnician. The firſt Pelaſgic ſettlements in Etruria muſt have taken place not many centuries after the deluge, and very few after the diſperſion; and at that time the languages, or rather dialects, of the Egyptians, Aſſyrians, Babylonians, Celtes, Syrians, and Arabs, muſt have approached extremely near to the Hebrew and Phœnician, which the learned allow to have been almoſt the ſame. In ſhort, both ſacred and profane hiſtory concur in ſhowing the Hebrew, Phœnician, and Etruſcan, tongues to have been, in the earlier ages, nearly the ſame. This alſo appears from the letters and manner of writing anciently uſed in Etruria. The letters are almoſt the ſame with thoſe of the earlieſt Greeks, brought by Cadmus out of Phœnicia. The manner of writing is purely oriental, the letters being drawn from the right hand to the left, agreeably to the practice of the eaſtern nations. The former point is rendered indiſputable by the Eugubian tables, in conjunction with the Sigæan inſcription; and the latter by merely peruſing the Etruſcan inſcriptions. The very remote antiquity of the firſt colonies that ſettled in Etruria, as well as of the Etruſcan language and alphabet, may be eaſily inferred from theſe inſcriptions; for, as the Pelaſgic alphabet, that prevailed in Greece before the age of Deucalion, conſiſted of ſixteen letters, the Etruſcan or Pelaſgic alphabet, firſt brought into Italy, compoſed only of thirteen letters, muſt have preceded the reign of that prince. The high, and indeed the almoſt incredible, antiquity of the Etruſcan language and alphabet, has been clearly evinced in two diſſertations, printed at Oxford, in the year 1746. For other particulars relating to this ſubject, we refer to Dempſter's Etruria regalis, Gori in his Muſeum Etruſcum, publiſhed at Florence in 1737; M. Bourguet's Diſſertation publiſhed in 1733, and Buonarota's of Florence in 1726; and Swinton's Etruſcan alphabet, publiſhed at Oxford.

The ancient language of the ETHIOPIANS was the Chaldee. The language of the Babylonian Cuſhim was Chaldaic, and of conſequence that of the Ethiopian Cuſhim was the ſame. We may therefore reſt aſſured, that, whatever changes the Ethiopian dialect may have undergone in the courſe of three thouſand years, it was originally Chaldaic. Scaliger informs us, that the Ethiopians call themſelves Chaldeans; and that, ſays he, not without reaſon, becauſe of thoſe many ſacred and profane books which are extant among them, the moſt elegant and moſt beau-

tiful are written in a ſtyle near that of the Chaldean or Aſſyrian. Marianus Victorius, who was the firſt that reduced the Ethiopic tongue to the rules of grammar, tells us, in his Procemium, "that the Ethiopians call their tongue Chaldaic; that it ſprings from the Babylonian; and is very like the Hebrew, Syriac, and Arabic: at the ſame time (he concludes) that this language may be eaſily learned by thoſe who are maſters of the Hebrew." The learned Bochart, and biſhop Walton, are clearly of the ſame opinion.

The vulgar letters of the Ethiopians, according to Diodorus Siculus, were the ſame with the ſacred characters of the Egyptians. From this account, if the Sicilian may be truſted, the ſacred letters of theſe people, concerning which ſo many wiſe conjectures have been formed, were actually Chaldaic. To carry on this inveſtigation a little farther, we may obſerve, that ſir William Jones ſeems to have proved, by very plauſible arguments, that the Sanſkrit characters were deduced from the Chaldaic. This circumſtance affords a preſumption that the Ethiopian Cuſhim were likewiſe concerned with the Egyptians, who probably introduced the religion of the Brahmins into Hindooſtan. This is advanced as a conjecture only; and yet, when we conſider the affinity between the Egyptian and Gentoo religions, we are ſtrongly inclined to hope that this ſurmiſe may one day be verified by undeniable facts.

The moſt ancient language of Ethiopia, which we ſhall now call *Abyſſinia* (its modern name), according to Mr. Bruce, was the *Geez*, which was ſpoken by the ancient Cuſhite ſhepherds. This, we ſhould think, approaches neareſt to the old Chaldaic. Upon a revolution in that country, the court reſided many years in the province of Amhara, where the people ſpoke a different language, or at leaſt a very different dialect of the ſame language. During this interval, the Geez, or language of the ſhepherds, was dropped, and retained only in writing, and as a dead language: the ſacred Scriptures being in that tongue only ſaved it from going into diſuſe. This tongue is exceedingly harſh and unharmonious. It is full of the letters *d* and *t*, in which an accent is put that nearly reſembles ſtammering. Conſidering the ſmall extent of ſea that divides this country from Arabia, we need not wonder that it has great affinity with the Arabic. It is not difficult to be acquired by thoſe who underſtand any other of the oriental languages; and, as the roots of many Hebrew words are only to be found here, it ſeems to be abſolutely neceſſary to all thoſe who wiſh to obtain a critical ſkill in that language. The modern Ethiopic alphabet conſiſts of 26 letters, each of which, by a point annexed, varies its ſound in ſuch a manner as that thoſe 26 form as it were 62 diſtinct letters. At firſt they had but 25 of theſe original letters, the Latin P being wanting: ſo that they were obliged to ſubſtitute another letter in its place. *Paulus*, for example, they called *Taulus*, *Aulus*, or *Caulus*: *Petros* they pronounced *Ketros*. At laſt they ſubſtituted T, and added this to the end of their alphabet; giving it the force of P, though it was really a repetition of a character rather than the invention of a new one. Beſides theſe, there are 20 others of the nature of diphthongs; but ſome of them are probably not of the ſame antiquity with the letters of the alphabet, but have been invented in later times by the ſcribes for convenience.

The language of EGYPT appears to be one of the ſiſter-dialects of the Hebrew, Phœnician, Arabic, Chaldaic, &c. but this is difficult to be proved; for the origin of that people, their language, religion, laws, and inſtitutions, have been ſo warped and confounded, both by their own hiſtorians and thoſe of other countries, that one is ſcarcely able to determine what to believe or what to reject. Diodorus Siculus is poſitive that the Egyptians were a colony of Ethiopians; and this he endeavours to prove by the ſimilarity of features, cuſtoms, laws, religious ceremonies, &c. between the two nations. That there was a conſtant intercourſe of good offices between theſe two branches of the Hamites, cannot be queſtioned; and that they nearly reſembled each other in many reſpects, is too evident to admit of contradiction.

According to the ſame Diodorus Siculus, the Egyptians had two kinds of letters; the one ſacred, the other common: the former the prieſts taught their own children, the latter all learned promiſcuouſly. In the ſacred characters the rites and ceremonies of their religion were couched; the other was accommodated to the ordinary buſineſs of life. Clem. Alexand. mentions three different ſtyles of writing employed by the Egyptians: "The pupils, who were inſtructed by the Egyptians, firſt learned the order and arrangement of the Egyptian letters, which is called *epiſtolography*, that is, the manner of writing letters; next, the ſacred character, which the ſacred ſcribes employed; laſtly, the hieroglyphic character, one part of which is expreſſed by the firſt elements, and is called *cyriologic*, that is, *capital*, and the other *ſymbolic*." In this paſſage we have an excellent deſcription of the three different modes of writing uſed by the Egyptians; the common, the ſacred, and the hieroglyphic: and hence it plainly appears, that the ſacred character of the Egyptians was entirely different from the hieroglyphic; and by this conſideration we are in a good meaſure juſtified in ſuppoſing, as we have done all along, that the ſacred letters of the Egyptians were actually the Chaldaic. The inſcriptions on the obeliſks mentioned by Caſſiodorus, ſo often quoted, were certainly engraved in the ſacred character; and the character in which they were drawn was that above-mentioned. If the ſacred letters were Chaldaic, the ſacred language was probably the ſame.

The Egyptians and Phœnicians were in a manner couſin-germans, and conſequently muſt have ſpoken the ſame language; that is, one of the ſiſter-dialects of the Hebrew, Chaldean, Arabian, Cuſhite, &c. This is not a mere conjecture; it may be realized by almoſt numberleſs examples. The deſcendants of Canaan and of Mizraim (Egypt) were ſtrictly connected in their religious ceremonies: they worſhipped the ſame objects, namely, the Hoſt of Heaven; they mourned Oſiris and Adonis in concert; they carried on a joint commerce, and, we think, ſpoke the ſame language; we may therefore conclude, that their vulgar letters were nearly the ſame, both in form, diſpoſition, and number.

We are abundantly ſenſible that there are found upon Egyptian monuments characters altogether different from thoſe we have been deſcribing. At what time, by what people, and to what language, theſe letters belonged, we will not pretend to determine. The Ethiopians, the Chaldeans, the Perſians, the Greeks, the Romans, the Saracens, have, at different times, been ſovereigns of that unhappy country. Perhaps other nations, whoſe memory is now buried in oblivion, may have erected monuments, and covered them with inſcriptions compoſed of words taken from different languages, perhaps, upon ſome occaſions, whimſically deviſed, with a view to perplex the curious antiquaries of future ages. Some of theſe are compoſed of hieroglyphics intermingled with alphabetical characters, artificially deranged, in order to render them unintelligible. Theſe we do not pretend to develope; becauſe the moſt inquiſitive and ſagacious antiquaries are not yet agreed as to their purport and ſignification.

Almoſt all the names of cities belonging to Egypt which are mentioned in Scripture are evidently Hebrew. To be ſatisfied as to this poſition, our curious readers may conſult Jamieſon's Spicilegia, an excellent book very little known. The names of moſt of the Egyptian deities are ſignificant in the Hebrew tongue; and in that dialect the names appear to have been impoſed with great judgment and propriety, plainly indicating ſome office aſſigned them, or pointing to ſome peculiar attribute.

On the hieroglyphical language of the Egyptians, ſee the article EGYPT, vol. vi. p. 371. and HIEROGLYPH, vol. ix.

The ARABIC language is evidently one of the ſiſter-dialects of the Hebrew. Both, we imagine, were originally

nally the ſame; the former highly improved and enlarged; the latter, in appearance, retaining its original ſimplicity and rude aſpect, ſpoken by a people of a genius by no means inventive. There ſeems to be authentic hiſtorical evidence that they were poſitively one and the ſame, at a period when the one as well as the other appeared in its infant unadorned ſimplicity.

"Unto Eber (ſays the Scripture) were born two ſons. The name of one was *Peleg*, becauſe in his days the earth was divided; and his brother's name was *Joktan*," or rather Yoktan. This laſt, ſays the ſacred hiſtorian, "had thirteen ſons; and their dwelling reached from Meſha (Mocha) to Sephar, a mount of the eaſt." *Gen.* x. 25–30. According to this account, the deſcendants of Yoktan poſſeſſed all the maritime coaſt of Arabia from Mocha to Mount Sephar, towards the eaſt of that peninſula. Moſes, deſcribing the rivers of paradiſe, tells us, that one of the branches of that river "encompaſſed the whole land of Havilah, where there was gold." *Gen.* ii. 11. Havilah was the twelfth ſon of Yoktan, whom the Arabians call *Kobtan*; and conſequently his territory was ſituated towards the eaſtern limit of the poſſeſſions of the poſterity of the youngeſt ſon of Eber. Yoktan, or Kobtan, was too young to be concerned in building the tower of Babel; and conſequently retained the language of his family, which was undoubtedly the Hebrew. His deſcendants muſt have carried the ſame language into their reſpective ſettlements, where it muſt have been tranſmitted to ſucceeding generations. The original language of all the tribes of the Arabians who inhabit a vaſt tract of country along the ſouthern ſhore, according to this deduction, was that of their father Kobtan, that is, the Hebrew. Indeed the moſt learned Arabians of modern times unanimouſly acknowledge this patriarch as the founder of their language as well as of their nation.

The other diſtricts of Arabia were peopled by the offſpring of Abraham. The Iſhmaelites, the poſterity of that patriarch by Hagar, penetrated into the very centre of the peninſula; incorporated, and in proceſs of time became one people, with the Kobtanites. Another region was poſſeſſed by the children of the ſame holy man by Keturah his ſecond wife. The Moabites, Ammonites, Edomites, Amalekites, &c. who ſettled in the various regions of Arabia Petræa, were all branches of Abraham's family, and uſed the ſame language with their great progenitor. The Scripture indeed ſpeaks of people who inhabited the country laſt mentioned prior to the branch of Abraham's family; but theſe, according to the ſame hiſtory, were extirpated by the former. The concluſion then is, if we credit the Moſaic account, that all the inhabitants of the three diviſions of Arabia did, in the earlieſt periods, univerſally uſe the Hebrew tongue.

There was, we are ſenſible, a region of Arabia inhabited by the Cuſhim, or deſcendants of Cuſh. This diſtrict was ſituated on the confines of Babylonia. Our tranſlators have confounded this country with the modern Ethiopia; and have conſequently aſcribed the exploits of the Arabian Cuſhim to the Ethiopians. The Arabian kings of Babylon were thoſe of Cuſhim. Theſe were conquered and expelled Babylonia by the Chaſidim. Theſe ſpoke the Chaldean dialect; and here the candid reader is deſired to bear in mind, that the Hebrew and Chaldaic are cognate dialects.

The Arabic tongue, originally pure Hebrew, was in proceſs of time greatly transformed and altered from its ſimple unſophiſticated ſtate. The Arabians were divided into many different tribes; a circumſtance which naturally produced many different dialects. Theſe, however, were not of foreign growth. No foreign enemy ever conquered thoſe independent hords. The Perſians, Greeks, and Romans, ſometimes attempted to invade their territories; but the roughneſs of the ground, the ſcarcity of forage, the penury of water, and their natural bravery, always protected them. They were indeed once invaded by the Abyſſinians, or Ethiopians, with ſome ſhow of ſucceſs; but theſe invaders were in a ſhort time expelled the country. Their language, of conſequence, was never adulterated with foreign words or exotic phraſes and idioms. Whatever augmentations or improvements it received were derived from the genius and induſtry of the natives, and not from adventitious or imported acquiſitions. From this circumſtance we may juſtly infer, that the Arabian tongue was a long time ſtationary, and of courſe differed in no conſiderable degree from its Hebrew archetype. The learned Schultens, in his Commentary on Job, hath ſhown, to the conviction of every candid inquirer, that it is impoſſible to underſtand that ſublime compoſition without having recourſe to the Arabic idioms. That patriarch was a Chuzite. His country might be reckoned a part of Arabia. His three friends were actually Arabians, being the deſcendants of Iſhmael and Eſau. His country bordered upon that of the predatory Chaldeans, who were an Arabian banditti. When we conſider all theſe circumſtances, we are ſtrongly inclined to believe that the book of Job was actually written in Arabic, as the language ſtood at that period; which, according to the moſt probable opinion, could not have been later than the age of Moſes. The learned are generally agreed that this whole book, the three firſt chapters excepted, is a poetical compoſition, replete with the moſt brilliant and moſt magnificent imagery, the boldeſt, the juſteſt, and moſt gorgeous, tropes and alluſions, and a grandeur of ſentiment wholly divine. Whoever has read the poetical compoſitions of the modern Arabians, on divine ſubjects, with any degree of taſte, will, we flatter ourſelves, diſcover a ſtriking ſimilarity both of diction and ſentiment. Be this as it may, we think there is no reaſon to conclude that the Arabic dialect deviated much from the Hebrew ſtandard prior to the Chriſtian era.

There were two principal dialects of the original Arabic: the *Hamyarite*, ſpoken by the genuine Arabs; and the *Koreiſhite*, or pure Arabic, which at laſt became the general language of that people. The former of theſe inclined towards the Syriac or Chaldean; the latter being, according to them, the language of Iſhmael, was deeply tinctured with the Hebrew idiom. The oriental writers tells us that Terah, the grandfather of Hamyar, was the firſt whoſe language deviated from the Syriac to the Arabic. Hence, ſay they, the Hamyaritic dialect muſt have approached nearer to the purity of the Syriac, and of conſequence muſt have been more remote from the true genius of the Arabic than that of any of the other tribes. The fact ſeems to ſtand thus: The Hamyarites were neighbours to the Chaldeans and Syrians, and conſequently were connected with thoſe people by commerce, wars, alliances, &c. This circumſtance introduced into their language many phraſes and idioms from both theſe nations. That Terah was concerned in adulterating the dialect of the Hamyarites, is a mere oriental legend, fabricated by the Arabs after they began to peruſe the Hebrew Scriptures. The Koreiſh, being ſituated in the centre of Arabia, were leſs expoſed to intercourſe with foreigners, and therefore preſerved their language more pure and untainted.

The learned well know, that the Koran was written in the dialect of the Koreiſh; a circumſtance which communicated additional ſplendour to that branch of the Arabian tongue. It has been proved, that the language of the original inhabitants of Arabia was genuine Hebrew; but upon this ſuppoſition a queſtion will ariſe, namely, whether the Arabians actually preſerved their original tongue pure and unſophiſticated during a ſpace of 3000 years, which elapſed between the deluge and birth of Mahomet? or whether, during that period, according to the ordinary courſe of human affairs, it underwent many changes and deviations from the original ſtandard? The admirers of that language ſtrenuouſly maintain the former poſition; others, who are more moderate in their attachment, are diſpoſed to admit the latter. Chardin obſerves, of the oriental languages in general, that they do not vary and fluctuate with time like the European tongues: "Ce qu'il y a de plus admirable, dit il, et de plus remarquable, dans ces langues, c'eſt, qu'elles ne changent point, et

n'ont point changé du tout, ſoit à l'égard des termes, ſoit à l'égard du tour: rien n'y eſt ni nouveau ni vieux, nulle bonne façon de parler n'a ceſſé d'etre en crédit. L'Alcoran, par exemple, eſt aujourdhui, comme il y a mille années, le modele de plus pure, plus courte, et plus eloquente diction." It is not to our purpoſe to tranſcribe the remaining part of the author's reflections upon this ſubject: from the above it plainly appears that he concludes, that the Arabian tongue has ſuffered no change ſince the publication of the Koran; and at the ſame time inſinuates, that it had continued invariable in its original purity through all ages, from the days of Kobtan to the appearance of that book.

The Arabic authors boaſt moſt unconſcionably of the richneſs and variety of their language. No human underſtanding, ſay they, is capacious enough to comprehend all its treaſures. Inſpiration alone can qualify one for exhauſting its ſources. Ebn Chalawalb, a moſt renowned grammarian of theirs, has ſpent a whole volume upon the various names of the lion, which amount to five hundred; another on the names of the ſerpent, which make up two hundred. Mohammed al Firancabodius affirms, that he wrote a book on the uſefulneſs and different denominations of honey, in which he enumerates eighty of them; and, after all, he aſſures us that he was ſtill far from having exhauſted his ſubject. To excel in a language ſo amazingly copious, was certainly a proof of uncommon capacity, and conſidered as no mean talent even among the Koreiſhites. Hence Mahomet, when ſome people were expreſſing their adminiſtration of the eloquence of the Koran, told them that he had been taught by the angel Gabriel the language of Iſhmael, which had fallen into deſuetude.

In a language ſo richly repleniſhed with the choiceſt and moſt energetic terms, both oratory and poetry were cultivated with eaſe. All the difficulty conſiſted in making a choice among words and phraſes equally elegant. The orations of the Arabs were of two kinds, metrical and proſaic. The former they compared to pearls ſet in gold, and the latter to looſe ones. They were ambitious of excelling in both; and whoever did ſo, was highly diſtinguiſhed. His ſucceſs in either of thoſe departments was thought to confer honour, not only on his family, but even on his tribe. In their poems were preſerved the genealogies of their families, the privileges of their tribes, the memory of their heroes, the exploits of their anceſtors, the propriety of their language, the magnificence of banquets, the generoſity of their wealthy chiefs and great men, &c. After all, we cannot avoid being of the unpopular opinion, that this mighty parade of eloquence and poetry did not reach backward above two centuries before the birth of Mahomet, as it certainly vaniſhed at the era of the propagation of his religious inſtitutions. The two ſucceeding centuries were the reigns of ſuperſtition and bloodſhed. The voice of the muſes is ſeldom heard amidſt the din of arms.

The ancient Arabs, at whatever time poetry began to be in requeſt among them, did not at firſt write poems of conſiderable length. They only expreſſed themſelves in metre occaſionally, in acute rather than harmonious ſtrains. The Proverbs of Solomon and the book of Eccleſiaſtes ſeem to be compoſed in this ſpecies of verſification. The proſody of the Arabs was never digeſted into rules till ſome time after the death of Mahomet; and this is ſaid to have been done by Al Khalti al Farabidi, who lived in the reign of the caliph Haroun Alraſhid.

When we conſider the richneſs and variety of the Arabic tongue, we are led to conclude, that to acquire a tolerable degree of ſkill in its idioms, is a more difficult taſk than is generally imagined; at leaſt ſome people who have acquired the knowledge of the Greek and Latin, and likewiſe of the more faſhionable modern languages, with facility enough, have found it ſo. Be that as it may, there are two claſſes of men who, in our opinion, cannot handſomely diſpenſe with the knowledge of that almoſt univerſal tongue; the gentleman, who is to be employed in the political tranſactions of the moſt reſpectable mercantile company upon earth, in the eaſtern parts of the world; and the divine, who applies himſelf to inveſtigate the true purport of the ſacred oracles: without this, the former will often find himſelf embarraſſed in both his civil and mercantile negociations; and the latter will often grope in the dark, when a moderate acquaintance with that tongue would make all ſunſhine around him.

The learned profeſſors of the univerſity of Leyden were the firſt who entered upon the career of Arabian learning. To them the European ſtudents are principally indebted for what knowledge of that language they have hitherto been able to attain. Though ſeveral Italians have contributed their endeavours, yet the fruit of their labours has been rendered almoſt uſeleſs by more commodious and more accurate works printed in Holland. The palm of glory, in this branch of literature, is due to Golius, whoſe works are equally profound and elegant; ſo perſpicuous in method, that they may always be conſulted without fatigue, and read without languor. Erpenius's excellent grammar, and his memorable dictionary, will enable the ſtudent to explain the hiſtory of Taimur by Ibni Arabſhah. If he has once maſtered that ſublime work, he will underſtand the learned Arabic better than moſt of the Khatabs of Conſtantinople or of Mecca.

The Arabian language, however, notwithſtanding all its boaſted perfections, has undoubtedly ſhared the fate of other living languages; it has gradually undergone ſuch conſiderable alterations, that the Arabic ſpoken and written in the age of Mahomet may be now regarded as a dead language; it is indeed ſo widely different from the modern language of Arabia, that it is taught and ſtudied in the college of Mecca juſt as the Latin is at Rome. The dialect of the highlands of Yemen is ſaid to have the neareſt analogy to the language of the Koran, becauſe theſe Highlanders have little intercourſe with ſtrangers. The old Arabic is through all the Eaſt, like the Latin in Europe, a learned tongue, taught in colleges, and only to be acquired by the peruſal of the beſt authors.

The PERSIAN language is divided into the ancient and modern. The former is at this day very imperfectly known; but the latter is at preſent one of the moſt expreſſive, and at the ſame time one of the moſt highly poliſhed, in the world.

When Mahomet was born, and Anu-Shiravan, whom he calls the *juſt king*, ſat on the throne of Perſia, two languages were generally prevalent in that empire. The one was called Deri, and was the dialect of the court, being only a refined and elegant branch of the *Parſi*, ſo called from the province of which Shiraz is now the capital; and that of the learned, in which moſt books were compoſed, and which had the name of *Pahlavi*, either from the heroes who ſpoke it in former times, or from *pahlu*, a tract of land which included ſome conſiderable cities of Perſia. The ruder dialects of both were ſpoken by the ruſtics of ſeveral provinces; and many of theſe diſtinct idioms were vernacular, as happens in every kingdom of conſiderable extent. Beſides the Parſi and Pahlavi, a very ancient and abſtruſe tongue was known to the prieſts and philoſophers, called the language of the *Zend*, becauſe a book on religious and moral duties which they held ſacred, and which bore that name, had been written in it; while the Pazend, or comment on that work was compoſed in Pahlavi, as a more popular dialect. The letters of this book were called *zend*, and the language *aveſta*.

The Zend and the old Pahlavi are now almoſt extinct, and very few even of the Guebres can read it; while the Parſi, remaining almoſt pure, has, by the intermixture of Arabic words, and many imperceptible changes, now become a new language, exquiſitely poliſhed by a ſeries of fine writers both in proſe and verſe, analogous to the different idioms gradually formed in Europe after the ſubverſion of the Roman empire.

The very learned and laborious ſir William Jones is of opinion,

opinion, that the Pahlavi, or ancient Perſian, was a cognate dialect of the Chaldean, Hebrew, Arabic, Phœnician, &c. M. Anquetil has annexed to his tranſlation of the Zendaveſta two vocabularies in Zend and Pahlavi, which he found in an improved collection of *Rawayat*, or Traditional Pieces, in modern Perſian. His vocabulary of the Pahlavi ſtrongly confirms this opinion concerning the Chaldaic origin of that language. But, with reſpect to the Zend, it abounded with vaſt numbers of pure Sanſkrit words, to ſuch a degree, that ſix or ſeven words in ten belonged to that language. From this deduction it would appear, that the oldeſt languages of Perſia were Chaldaic and Sanſkrit; and that, when they had ceaſed to be vernacular, the Pahlavi and Zend were deduced from them reſpectively, and the Parſi either from the Zend, or immediately from the dialect of the Brahmins.

To corroborate the cognation between the Chaldean and Pahlavi languages, we ſhall ſubjoin a few arguments derived from the Moſaic hiſtory, and the other writings of the Old Teſtament. Elam is always allowed to have been the progenitor of the Perſians. This patriarch was the eldeſt ſon of Shem, the ſon of Noah; and, according to the Moſaic account, his poſterity ſettled in the neighbourhood of the deſcendants of Aſhur, Arphaxad, Lud, and Aram, the other ſons of Shem. The country where they ſettled was denominated Elymais as late as the beginning of the Chriſtian era. This name was retained till the Saracens conquered and took poſſeſſion of that country. If this was the caſe, as it certainly was, the Elamites, or Perſians, ſpoke a dialect of the primary language, which we have proved to have been the Hebrew. When the four eaſtern monarchs invaded the five cities of the plain in Canaan, Chedorlaomer king of Elam was at the head of the confederacy. Amraphel king of Shinar, that is, Babylon or Chaldea, was one of the allies; Arioch king of Elaſar was another; and Tidal, king of (ſome ſcattered) nations (in the ſame neighbourhood), was the fourth. That Chedorlaomer was principal in this expedition, is obvious from the hiſtorian's detail of the ſecond, where that prince is placed firſt, and the reſt are named *the kings that were with him*. Gen. xiv. This paſſage likewiſe demonſtrates, that Elam, Shinar, and Elaſar, lay contiguous, and were engaged in the ſame cauſe. Wherever the country in queſtion is mentioned in Scripture prior to the era of Daniel and Ezra, it is always under the name of Elam.

It now appears, we hope, to the entire ſatisfaction of our readers, that the Pahlavi is a remnant of the old Perſian, and that the latter is a cognate branch of the Hebrew, Chaldaic, Syriac, &c. The empire of the *Arſacidæ* or Parthians, we apprehend, produced a very important alteration upon the ancient Perſian. They were a demi-Scythian tribe; and, as they conquered the Perſians, retained the dominion of thoſe parts for ſeveral centuries, and actually incorporated with the natives, their language muſt neceſſarily have given a deep tincture to the original dialect of the Perſians. The Perſians, it is true, did once more recover the empire; but the invaſion of the Saracens in 636 demoliſhed every monument of antiquity, and introduced a language, though not entirely new, yet widely differing from the old exemplar.

From the ſeventh till the tenth century, the Perſian tongue, now impregnated with Arabic words, appears to have laboured under much diſcouragement and neglect. Bagdad, built by Almanſor, became ſoon after the year 762 the chief reſidence of the caliphs, and the general reſort of the learned and the ambitious from every quarter of the empire. At length the acceſſion of the Buyah princes to the Perſian throne marked in the tenth century the great epoch of the revival of Perſian learning. About the year 977 the throne of Perſia was filled by the great Azaduddawla; who firſt aſſumed the title of *Sultan*, afterwards generally adopted by eaſtern princes. He was born in Iſpahan, and had a ſtrong attachment to his native kingdom. His court, whether at Bagdad or in the capital of Perſia, was the ſtandard of taſte and the favourite reſidence of genius. The native dialect of the prince was particularly diſtinguiſhed, and became ſoon the general language of compoſition in almoſt every branch of polite learning. From the end of the tenth till the fifteenth century may be conſidered as the moſt flouriſhing period of Perſian literature. The epic poet Firduſi, in his romantic hiſtory of the Perſian kings and heroes, diſplays an imagination and ſmoothneſs of numbers hardly inferior to Homer. The whole fanciful range of Perſian enchantment he has interwoven in his poems, which abound with the nobleſt efforts of genius. This bard has ſtamped a dignity on the monſters and fictions of the caſt, equal to that which the prince of epic poetry has given to the mythology of ancient Greece. His language may at the ſame time be conſidered as the moſt refined dialect of the ancient Perſian, the Arabic being introduced with a very ſparing hand; whilſt Sadi, Jami, Hafiz, and other ſucceeding writers, in proſe as well as verſe, have blended in their works the Arabic without reſerve; gaining perhaps in the nervous luxuriance of the one language what may ſeem to have been loſt in the ſofter delicacy of the other. Hence Ebn Fekreddin Anju, in the preface to the dictionary called *Farhang Jehanguiri*, ſays, that the Deri and the Arabic idioms were the languages of heaven; God communicating to the angels his milder mandates in the delicate accents of the firſt, while his ſtern commands were delivered in the rapid accents of the laſt.

For near three hundred years the literary fire of the Perſians ſeems indeed to have been almoſt extinguiſhed; ſince, during that time, hardly any thing of that people which deſerves attention has appeared in Europe; enough, however, has already been produced, to inſpire us with a very high opinion of the genius of the eaſt. In taſte, the orientals are undoubtedly inferior to the beſt writers of modern Europe; but in invention and ſublimity, they are excelled, perhaps equalled, by none. The Perſians affect a rhetorical luxuriance, which to a European wears the air of unneceſſary redundance. If to theſe leading diſtinctions we add a peculiar tone of imagery, of metaphor, of alluſion, derived from the difference of government, of manners, of temperament, and of ſuch natural objects as characteriſe Aſia from Europe; we ſhall ſee, at one view, the great points of variation between the writers of the eaſt and weſt. Amongſt the oriental hiſtorians, philoſophers, rhetoricians, and poets, many would be found who would do honour to any age or people; whilſt their romances, their tales, and their fables, ſtand upon a ground which Europeans have not yet found powers to reach. We might here quote the Arabian Nights Entertainments, Perſian Tales, Pilpay's Fables, &c.

We have already obſerved, that the language under conſideration is partly Arabic and partly Perſian, though the latter generally has the aſcendant. The former is nervous, impetuous, and maſculine; the latter is flowing, ſoft, and luxuriant. Wherever the Arabic letters do not readily incorporate with the Perſian, they are either changed into others or thrown away. Their letters are the Arabic with little variation; theſe being found more commodious and expeditious than the other letters of the Deri and Parſi. Their alphabet conſiſts of thirty-two letters, which, like the Arabic, are read from right to left.

We muſt not here omit to put the reader in mind of the vaſt utility of the Arabian and Perſian languages. Numberleſs events are preſerved in the writings of the orientals which were never heard of in Europe, and muſt have for ever lain concealed from the knowledge of its inhabitants, had not theſe two tongues been ſtudied and underſtood by the natives of this quarter of the globe. The knowledge of theſe two languages has laid open to Europe all the treaſures of oriental learning, and has enriched the minds of Britons with Indian ſcience as much as the produce of thoſe regions has increaſed their wealth and enervated their conſtitutions.

ARMENIAN language. The Armenians, according to the account given of them by Moſes Chorenenſis, were,

in their original ſtate, rude and ſavage, without letters, knowledge, and culture, in a great degree ignorant of the hiſtory of their anceſtors; and indebted for the ſcanty information reſpecting them to the books of their neighbours. They had no written characters, and thoſe of their neighbours were not fit for expreſſing the ſounds of their language. At length, however, the art of writing was introduced among them. For a conſiderable time their tranſactions were recorded in the Aſſyrian language; in proceſs of time they employed that of the Greeks; and afterwards they made uſe of that of the Perſians. In the time of Moſes Chorenenſis, the names of their towns, and ſome other particulars, were expreſſed in one of theſe three languages. It was after the introduction of Chriſtianity, that Mieſrob, either towards the cloſe of the fourth or the commencement of the fifth century, invented letters that accurately expreſſed the ſounds of the Armenian language, and which are in uſe among them at this day. This invention, according to the tradition of the country, was revealed to Mieſrob in a dream, after the author had in vain attempted to make the diſcovery himſelf, and after he had taken many uſeleſs journeys to procure aſſiſtance from the learned. Sir William Jones (Aſiat. Reſ. vol. iii.) is of opinion, that the baſis of the Armenian language was ancient Perſian, of the ſame Indian ſtock with the Zend, and that it has been gradually changed ſince the time when Armenia ceaſed to be a province of Irân, or Perſia. However, the letters in which it now appears are allowed to be comparatively modern; and, if they be not derived from the Pahlavi, or ancient Perſian, they are probably, as this ingenious writer imagines, an invention of ſome learned Armenians in the middle of the fifth century. According to Strabo, the language of the ancient Armenians was ſimilar to that of the Syrians; at leaſt it is very probable, from Polyænus (l. iv.), that they uſed the Syrian characters. The modern Armenians pretend, that, beſides their vulgar language, they have a learned one, which has no affinity with the other oriental languages, and which is very expreſſive, and enriched with all the terms of religion, and of arts and ſciences.

The SANSKRIT, though one of the moſt ancient languages in the world, was little known even in Aſia till about the middle of the preſent century. Since that period, by the indefatigable induſtry of the very learned and ingenious ſir William Jones and the other worthy members of the Aſiatic Society which he founded, that noble and ancient language has at length been brought to light; and from it vaſt treaſures of oriental knowledge have been communicated both to Europe and Aſia; knowledge which, without the exertions of that happy eſtabliſhment, muſt have eſcaped the reſearches of mankind to the end of the world.

The Sanſkrit language had for many centuries lain concealed in the hands of the bramins of Hindooſtan. It is by them deemed ſacred, and is of conſequence confined ſolely to the offices of religion. Its name imports the *perfect language*, or, according to the eaſtern ſtyle, *the language of perfection*. It is the grand ſource of Indian literature, and the parent of almoſt every dialect, from the Perſian gulf to the China ſeas; and accordingly traces of its original extent may be diſcovered in almoſt every diſtrict of Aſia. Thoſe who are acquainted with that language have often found the ſimilitude of Sanſkrit words to thoſe of Perſian and Arabic, and even of Latin and Greek; and that not in technical and metaphorical terms, which refined arts and improved manners might have occaſionally introduced, but in the main ground-work of language, in monoſyllables, the names of numbers, and appellations of ſuch things as would be firſt diſcriminated on the immediate dawn of civilization.

Though numberleſs changes and revolutions have from time to time convulſed Hindooſtan, that part of it which lies between the Indus and the Ganges ſtill preſerves that language whole and inviolate. Here they ſtill offer a thouſand books to the peruſal of the curious: ſome of theſe have been lately tranſlated.

The Sanſkrit language is very copious and nervous. The firſt of theſe qualities ariſes in a great meaſure from the vaſt number of compound words with which it is almoſt overſtocked. "The Sanſkrit (ſays ſir William Jones,) like the Greek, Perſian, and German, delights in compounds; but to a much higher degree, and indeed to ſuch exceſs, that I could produce words of more than twenty ſyllables; not formed ludicrouſly like that by which the buffoon in Ariſtophanes deſcribes a feaſt, but with perfect ſerioufneſs, on the moſt ſolemn occaſions, and in the moſt elegant works." But the ſtyle of its beſt authors is wonderfully conciſe. In the regularity of its etymology it far exceeds the Greek and Arabic; and, like them, has a prodigious number of derivatives from each primary root. The grammatical rules alſo are numerous and difficult, though there are not many anomalies. As one inſtance of the truth of this aſſertion, it may be obſerved, that there are ſeven declenſions of nouns, all uſed in the ſingular, the dual, and the plural, numbers, and all of them differently formed, according as they terminate with a conſonant, with a long or a ſhort vowel; and again, different alſo as they are of different genders; not a nominative caſe can be formed to any one of theſe nouns without the application of at leaſt four rules, which vary likewiſe with each particular difference of the nouns, as above ſtated; add to this, that every word in the language may be uſed through all the ſeven declenſions, which is a full proof of the difficulty of the idiom.

Perhaps our readers may feel a curioſity to be informed of the origin of this oriental tongue. If we believe the bramins themſelves, it was coeval with the race of man. The bramins, however, are not the only people who aſcribe a kind of eternity to their own particular dialect. We find that the Sanſkrit in its primitive deſtination was appropriated to the offices of religion. It is indeed pretended, that all the other dialects ſpoken in Hindooſtan were emanations from that fountain, to which they might be traced back by a ſkilful etymologiſt. Indeed, if we admit the authority of the Moſaic hiſtory, all languages whatſoever are derived from that of the firſt man. It is allowed that the language under conſideration is impregnated with Perſian, Chaldaic, Phœnician, Greek, and even Latin, idioms. This, we think, affords a preſumption that the Sanſkrit was one of thoſe original dialects which were gradually produced among the deſcendants of Noah, in proportion as they gradually receded from the centre of population. What branch or branches of that family emigrated to Hindooſtan, it is not eaſy to determine. That they were a party of the deſcendants of Shem is moſt probable, becauſe the other ſepts of his poſterity ſettled in that neighbourhood. See the article HINDOOSTAN, vol. x. p. 3.

Though moſt of the ancient oriental tongues are read from right to left, like the Hebrew, Chaldaic, Arabic, &c. yet ſuch as properly belong to the whole continent of India proceed from left to right, like thoſe of Europe. The Arabic, Perſian, &c. are the grand ſources whence the former method has been derived; but, with theſe, the numerous *original* dialects of Hindooſtan have not the ſmalleſt connection or reſemblance.

The learned are now convinced that the uſe of numerical figures was firſt derived from India. Indeed the antiquity of their application in that country far exceeds the powers of inveſtigation. All the numerals in Sanſkrit have different forms for the different genders, as in Arabic. There appears a ſtrong probability that the European method of computation was derived from India, as it is much the ſame with the Sanſkrit, though we think the Europeans learned it from the Arabians. The Bengaleſe merchants compute the largeſt ſums by *fours*; a cuſtom evidently derived from the original mode of reckoning by the fingers.

The

The Sanſkrit language, among other advantages, has a great variety in the mode of arrangement; and the words are ſo knit and compacted together, that every ſentence appears like one complete word. When two or more words come together *in regimine*, the laſt of them only has the termination of a caſe; the others are known by their poſition; and the whole ſentence ſo connected forms but one compound word, which is called a *foot*. For particulars relating to the other languages and dialects of the vaſt continent of India, with ſome elegant tranſlated ſpecimens, ſee the article HINDOOSTAN, vol. x. p. 152–162, and p. 185.

In the tenth volume of the Aſiatic Reſearches, we have a paper from Dr. J. Leyden, On the Language and Literature of the Indo-Chineſe Nations; that is, of the countries between India and China. A voyage to the Eaſtern Iſles, required by the ſtate of his health in 1805, during which he reſided ſome time at Penang, and viſited Achin, with ſome other places on the coaſt of Sumatra and the Malayan Peninſula, furniſhed Dr. Leyden with an opportunity of collecting the materials for this diſquiſition.

The iſlands ſcattered over the Indian Ocean between Hindooſtan and China, are each inhabited by two claſſes of people, diſſimilar in religion, language, and manners. The peninſula of Malacca, and the ſea-coaſts of theſe iſlands, are occupied by the hardy race of Mahometan navigators, denominated MALAYS, from their principal ſeat. There is, however, no reaſon to ſuppoſe them of a different ſtock from the aboriginal inhabitants of the interior. Their converſion to Mahometaniſm, their maritime ſituation, and their intercourſe with ſtrangers, ſufficiently account for the changes they have undergone; whilſt their configuration reſembles that of their neighbours in the interior. Their language, according to Dr. Leyden, conſiſts of three principal component parts. The firſt of theſe, which is rather the moſt copious and current in converſation, may perhaps, in the preſent ſtate of our knowledge, be regarded as original, though it is not only connected with the inſular languages, but with ſome of the monoſyllabic, as of the Birmans and Siameſe. The ſecond, which is obviouſly derived from the Sanſkrit, is rather inferior in the number of vocables to the firſt, though, as far as regards general uſe, greatly ſuperior to the third part, which is derived from the Arabic. The firſt, Mr. Marſden attributes to what he reckons the original inſular language of the South Seas; and this language itſelf, ſir William Jones conjectured to be a derivative from Sanſkrit. Dr. Leyden, on the other hand, obſerves, that, if this original part ſhould itſelf turn out to be derived from different ſources, the idea of an original inſular language will fall to the ground. But it may be obſerved, in reply, that, after allotting to the Birmans, Siameſe, Javaneſe, &c. the words derived from each reſpectively, it is ſtill highly probable that a maſs will remain derivable from none of thoſe ſources to which Mr. Marſden's appellation may with propriety be applied. A curious fact which Dr. L. has aſcertained is, that the Sanſkrit part of the Malay tongue was derived from the kingdom of Calinga, of which the maritime portion is now better known by the name of the Five Circars. This probably reached Malacca through the medium of Java; for he obſerves "it is from the Javaneſe that the Malays profeſs to have received all their early mythological fables; and a great variety of their books profeſs to be tranſlations from that language: even in compoſitions profeſſedly tranſlated from the Calinga language, the Javaneſe name of the ſtory is often mentioned." Malay literature, though chiefly poetical, compriſes works on a variety of ſubjects, written in a character ſlightly changed from the Arabic, to expreſs ſounds unknown to the latter. The language, and the manners of thoſe who ſpeak it, widely diſperſed over the coaſts of diſtant iſles, neceſſarily receive an impreſſion from thoſe of their neighbours in the interior, to whom now we direct our attention.

The inhabitants of the inland part of the eaſtern iſles, ſecluded, by their poſition, from intercourſe with foreigners, retain their primeval manners and ancient ſuperſtitions. But, concerning the latter, ſo little is known, that it is but ſeldom we can aſcertain whether they are branches of the Hindoo religion, or of that of Buddha, which prevails on the adjacent continent. This uncertainty, however, does not extend to the more poliſhed inhabitants of Java, whoſe early intercourſe with India appears to have introduced and eſtabliſhed among them the Brahminical doctrines, together with the feſtive rites of the Hindoo divinities. The language of the interior has a cloſe and intimate connexion with Sanſkrit; and expreſſes the ſimpleſt objects and ideas by vocables, which ſeem to differ no further from the Sanſkrit than in the corrupt pronunciation neceſſarily produced by the uſe of a leſs perfect alphabet. The probability is ſtrong, that the inhabitants of the Malay peninſula were in poſſeſſion of an alphabet of the ſame model with that of the Hindoos, and were even ſkilled in compoſition, before the Mahometans introduced their learning and character among them. Frequent alluſions to the moſt celebrated works of the Hindoo mythological poets, eſpecially the Mahabharat and the Ramayan, occur in the Malay writings; and theſe alluſions imply that tranſlations of the works were formerly in the hands of the Malays. The Malayan language has been called the Italian of the eaſt; it poſſeſſes a ſmoothneſs and ſweetneſs of ſound rendering it well adapted to poetry, to which the Malayans are paſſionately addicted. They amuſe all their leiſure hours, including the greater portion of their lives, with the repetition of ſongs, which are, for the moſt part, proverbs illuſtrating, or figures of ſpeech applied to, the occurrences of life. Some, which they rehearſe in a kind of recitative at their *bimbangs*, or feaſts, are hiſtorical love-tales, like our old Engliſh ballads, but often extempore. There are numerous works written in the Malay language, beſides hiſtorical ballads, or ſongs on national traditions.

Dr. Leyden conſiders the language ſpoken by the BATTA tribes as the moſt ancient of Sumatra. Their ſavage manners, and the horrid cuſtom of anthropophagy ſubſiſting among them, have often been mentioned; but our author contends that their cannibaliſm is not confined to priſoners of war, and to perſons condemned for crimes, as ſtated by Mr. Marſden: "When a man becomes infirm, and weary of the world, he is ſaid to invite his own children to eat him, in the ſeaſon when ſalt and limes are cheapeſt. He then aſcends a tree, round which his friends and offspring aſſemble; and, as they ſhake the tree, join in a funeral dirge, the import of which is, *The ſeaſon is come—the fruit is ripe—and it muſt deſcend*. The victim deſcends; and thoſe that are neareſt and deareſt to him, deprive him of life, and devour his remains in a ſolemn banquet." This, adds Dr. Leyden, is the account of ſome of the Battas themſelves. This inhuman cuſtom, and the ſimilarity of name, naturally reminds our author of the Padaioi, mentioned by Herodotus, about five hundred years before our era, as not only addicted to eating raw fleſh, but accuſtomed to kill and eat their relations when they grew old. The Batta alphabet has nineteen letters; and is written from bottom to top, in a manner the reverſe of the Chineſe.

The TAGALA character, uſed by the natives of the Philippines, reſembles that of the Battas, and, like it, is written from bottom to top. The inhabitants of many iſles have never advanced to the uſe of letters. The Tirun tribe, on the north-eaſt of Borneo; the Idan, conſidered as its original inhabitants; the Haraforras, found in moſt of the eaſtern iſles; have probably the ſame origin, as they retain the ſame manners. We think it probable that the diſuſe of the more atrocious practices of the Battas, and the want of letters, alone diſtinguiſh them from that ſavage race. One rational hypotheſis appears to us to embrace all the facts brought before us. The ſavage tribes repreſent the aboriginal natives, unchanged by intercourſe with more civilized nations. The people of Java (or the *Iſle of Barley*, which we think Ptolemy calls it, and which

the word really ſignifies in Sanſkrit), by a connexion of commerce or conqueſt with Hindooſtan, and by the adoption of its religion, early acquired gentler propenſities; and, by their victories and traffic in the iſlands to the eaſtward, diſſeminated, in unequal portions, a tincture of civilization and of the arts.

Dr. Leyden informs us that the languages of the iſlanders are polyſyllabic, whilſt thoſe of the continental nations, extending from India to China, are monoſyllabic. In this caſe, the vocabulary muſt be too limited to admit of each object being expreſſed by a diſtinct word, and the ſpeaker muſt have recourſe to a variety of intonations to diſcriminate thoſe conſiſting of the ſame letters, but of different ſignification; and to this method it appears they have recourſe. The monoſyllabic texture is leaſt apparent in the countries bordering on Bengal, but increaſes in advancing eaſtward, until we reach China, where it excluſively prevails.

In all the continental regions from India to China, the religion of Buddha is the reigning form of ſuperſtition. Literature and ſcience are preſerved in the PALI language, in which the native authors chiefly compoſe their works, and the prieſts celebrate the rites of their religion; the vernacular tongues, with their reſpective alphabets, being confined to buſineſs and converſation. 1. ARACAN limits the eaſtern province of Bengal, but their languages have no affinity. The inhabitants are admitted by the Birmans to have preceded them in civilization. Their alphabet correſponds in arrangement with the Devanagari. Many Pali compoſitions are tranſlated into the vernacular tongue; but their titles are ſufficient to demonſtrate that they moſtly relate to the mythology and hiſtory of the Hindoos. 2. The language of PEGU is conſidered by Dr. L. as original, and it is ſaid to have no affinity with thoſe of the adjacent countries. 3. The powerful and enterpriſing nation of Birmans ſpeak a dialect of the Aracan language, which has undergone ſome changes from their peculiar pronunciation. They poſſeſs a multitude of books in every branch of literature, but chiefly tranſlations from the Pali. 4. The SIAMESE are divided into two tribes, of which the more ancient inhabit the country bounded by the Menam and the river of Cambodia. Their language is alſo conſidered by Dr. L. as original, though connected with ſome of the Chineſe dialects. Here, alſo, the Pali language and the religion of Buddha has given currency to the expreſſions and legendary traditions of India. 5. The Laos are repreſented as ſpeaking a more ancient and leſs corrupt dialect of the Siameſe. In their country are found the moſt remarkable veſtiges of the founders of the religion of Buddha; and their laws and inſtitutions are ſaid to have been adopted by their weſtern neighbours. 6. The language of the Anam, or people of Cochin-china and Tonquin, appears to have a greater affinity with the Chineſe, than with thoſe to the weſt. The people are ſectaries of Buddha, and employ the Chineſe characters in their compoſitions, although they poſſeſs a peculiar alphabet.

Dr. Leyden has enriched his valuable eſſay by the firſt ſpecimen of the Pali language we have yet ſeen exhibited. He is, undoubtedly, fully juſtified in conſidering this widely-extended language as approaching much nearer the pure Sanſkrit than any other dialect.

The exiſtence of three original and diſtinct languages in countries proximate, if not adjacent, ſeems to us a very queſtionable fact. We may venture to predict, that, in the ſame manner that the advancement of phyſical knowledge will be found to reduce the number of ſubſtances conſidered as elementary, ſo a more perfect acquaintance with the languages ſpoken in the world, will diminiſh the number accounted original. It may be true, that thoſe of the Indo-Chineſe nations of the continent have no other affinity with Sanſkrit than might be naturally ſuppoſed to reſult from the influence of the Pali, operating through the medium of their religion, and of their literature. But, all the particulars communicated by Dr. Leyden appear to us to authoriſe the deduction, that the baſis of theſe tongues is the Chineſe. Their monoſyllabic ſtructure, and the variety of intonations neceſſary to diſcriminate ſignification, ſeem ſtrongly to countenance this conjecture, in itſelf highly probable. We think it alſo confirmed by the ſimilarity of the corporeal configuration of all theſe people with the Chineſe, though the prominent characteriſtics of feature are, as might be expected, more forcibly marked in the latter.

The CHINESE language is not only one of the moſt ancient in the univerſe, but is, perhaps, the only language of the early ages which is ſtill ſpoken and living: it is indeed as extraordinary as the people who ſpeak it, and has no relation whatever to any known language. Its genius is ſuch, that no laws of analogy can comprehend it. It has no alphabet, and the words which compoſe it conſiſt of one ſyllable only, and are very few in number. The words always remain the ſame; that is to ſay, monoſyllables, even when two are united to ſignify one ſingle thing; whether they are written or pronounced, they remain always ſeparate and diſtinct, and are never blended into one. Theſe monoſyllables never produce but one ſound. When they are written by the European alphabet, they begin by the letters *ch, tch, f, g* or *j, i, k, l, m, n, ng, p, s, ts, v, ou*; the final letters are *a, e, i, o, oi, ou, u, l, n, g*.

The characters of the Chineſe language were originally traced, in moſt inſtances, with a view to expreſs either real images, or the allegorical ſigns of ideas; a circle, for example, for the ſun, and a creſcent for the moon. A man was repreſented by an erect figure, with lines to mark the extremities. The difficulty and tedioufneſs of imitation ſoon occaſioned a change to traits more ſimple, and more quickly traced. A faint reſemblance, however, ſtill remains, in a few inſtances, of the original forms in the preſent hieroglyphic characters; and a gradation of their changes is traced in ſeveral Chineſe books. Not above half a dozen of the preſent characters conſiſt each of a ſingle line; but moſt of them conſiſt of many, and a few even of ſeventy different ſtrokes. A certain connexion is to be perceived in the arrangement of the written characters of the Chineſe; as if it had been originally formed upon a ſyſtem to take place at once, and not to grow up, as other languages, by ſlow and diſtant intervals. Upwards of two hundred characters, each conſiſting of a few lines, are made to mark the principal objects of nature. Theſe may be conſidered as the genera or roots of language, in which every other word or ſpecies, in a ſyſtematic ſenſe, is referred to its proper genus. The heart is a genus, of which the repreſentation of a curve line approaches ſomewhat to the form of the object; and the ſpecies referable to it include all the ſentiments, paſſions, and affections, that agitate the human breaſt. Each ſpecies is accompanied by ſome mark denoting the genus, or "heart." Under the genus "hand" are arranged moſt trades and manual exerciſes. Under the genus "word," every ſort of ſpeech, ſtudy, writing, underſtanding, and debate. A horizontal line marks a unit; croſſed by another line, it ſtands for ten. The five elements, of which the Chineſe ſuppoſe all bodies in nature to be compounded, form ſo many genera, each of which comprehends under it a great number of ſpecies. As in every compound character or ſpecies, the abridged mark of the genus is diſcernible, a perſon is ſoon enabled to conſult the Chineſe dictionary, in which theſe characters are arranged under their proper genera. The characters of the genera are placed at the beginning of the dictionary, in an order, which, like that of the alphabet, is invariable, and ſoon becomes familiar to the learner. The ſpecies under each genus follow each other, according to the number of ſtrokes of which each conſiſts, independently of the one or few which ſerve to point out the genus. The ſpecies wanted is thus ſoon found out, and its meaning and pronunciation are given through other words in common uſe, the firſt of which denotes its ſignification, and the other its ſound. When no one word is found to render exactly the

the ſame ſound, it is communicated by two words, with marks to inform the inquirer, that the conſonant of the firſt word, and the vowel of the ſecond, joined together, form the preciſe ſound wanting. The compoſition of many of the Chineſe characters often diſplays conſiderable ingenuity, and ſerves to give an inſight into the opinion and manners of the people. The character expreſſive of happineſs, includes abridged marks of land, the ſource of their phyſical, and of children, that of their moral, enjoyments. This character, embelliſhed in a variety of ways, is hung up in almoſt every houſe.

Before the time of Fohi, the firſt Chineſe emperor, the Chineſe uſed knotted cords, ſimilar to thoſe of the Peruvians. Fohi, in the place of theſe knots, employed two horizontal lines, the one whole, the other divided, and by their various combinations in threes, formed the text of the moſt ancient work among the Chineſe, known under the name of *Ye-King*, or the Book of Production. The Chineſe regard this work as a precious monument of the moſt ancient philoſophy; but, notwithſtanding the numerous commentaries which have been publiſhed upon it, ſome ſo early as 1100 years before Chriſt, it is ſtill unintelligible. They are, however, ſuppoſed to contain, in a few lines, the moſt ſublime truths, and are ſtill employed for the purpoſes of divination. Subſequent to the trigrams of Fohi, Xin-nang, the next in ſucceſſion, is ſaid to have invented ſixty-four hexagrams, which are ſuppoſed to expreſs the whole circle of human knowledge, and, together with the trigrams, are to be conſidered as the moſt ancient written characters of the Chineſe.

Upon the formation, changes, and alluſions, of compound characters, the Chineſe have publiſhed many thouſand volumes of philological learning. No where does criticiſm more abound, or is more ſtrict. The introduction or alteration of a character is a ſerious undertaking, and ſeldom fails to meet with oppoſition. The moſt ancient writings of the Chineſe are ſtill claſſical among them. The language ſeems in no inſtance to have been derived from or mixed with any other. The written ſeems to have followed the oral language, ſoon after the men who ſpoke it were formed into a regular ſociety. The Chineſe printed character is the ſame as is uſed in moſt manuſcripts, and is chiefly formed of ſtraight lines in angular poſitions, as moſt letters are in eaſtern tongues. A running hand is uſed by the Chineſe only on trivial occaſions, or for private notes, for the eaſe and expedition of the writer; and differs from the other as much as an European manuſcript does from print.

The conſtruction of Chineſe ſentences is often the ſimpleſt and moſt artleſs poſſible, and ſuch as may naturally have occurred at the origin of ſociety. A ſimple character repeated, ſtands ſometimes for more than one of the objects which ſingly it denotes; and ſometimes for a collective quantity of the ſame thing. The character of *moo*, ſingly, is a tree; repeated, is a thicket; and tripled, is a foreſt. The nouns and verbs admit of no flexions; in ſhort, every thing relating to this language is peculiar, and incapable of being compared with any other dialect ſpoken by any civilized people. Moſt barbarous languages exhibit ſomething that reſembles an attempt towards thoſe diacritical modifications of ſpeech; whereas the Chineſe, after a ſpace of four thouſand years, have not advanced one ſtep beyond the very firſt elements of ideal communication. This circumſtance, we think, is a plain demonſtration that they did not emigrate from that region where the primitive race of mankind is thought to have fixed its reſidence. Some have imagined, we believe with good reaſon, that they are a Tartarian race, which, breaking off from the main body of that numerous and widely-extended people, directed their march towards the ſouth-eaſt. There, falling in with delightful and fertile plains which their poſterity now inhabit, they found themſelves accommodated ſo much to their liking, that they dropped all deſire of changing their habitations. The country of China is, indeed, ſo environed with mountains, deſerts, and ſeas, that it would have been difficult for men in their primitive ſtate to have emigrated into any of the neighbouring regions. Thus ſecluded from the reſt of mankind, the Chineſe, in all probability, were left to the ſtrength of their own inventive powers to fabricate a language, as well as the other arts and improvements neceſſary for the ſupport and convenience of life.

It is indeed obvious that their ſtock of vocables, when they emigrated from Tartary, was neither ample nor properly accommodated to anſwer the purpoſes of the mutual conveyance of ideas. With this ſlender ſtock, however, they ſeem to have been ſatisfied; for it does not appear that any additions were afterwards made to that which was originally imported. Inſtead of framing a new race of terms by compounding their primitive ones; inſtead of diverſifying them by inflections, or multiplying them by derivatives, as is done in every other language; they rather choſe to retain their primitive words, and, by a variety of modifications, introduced upon their orthography or pronunciation, to accommodate them to a variety of ſignifications. Were it poſſible to ſcrutinize all the Tartarian dialects, and to reduce them to their primitive monoſyllabic character, perhaps the original language of the Chineſe might be inveſtigated and aſcertained. We know that attempts have been made to compare it with ſome of the other Aſiatic languages, eſpecially the *Hebrew*. This labour has, however, proved unſucceſsful, and no primeval identity has been diſcovered. Before this compariſon could be inſtituted with the moſt diſtant proſpect of ſucceſs, the language laſt mentioned muſt be ſtripped of all its adventitious qualities; and not only ſo, but it muſt be reduced to the monoſyllabic tone, and then contraſted with the Chineſe monoſyllables; an undertaking which we are perſuaded would not be readily executed. After all, we are convinced that no reſemblance of any importance would be diſcovered.

We are therefore clearly of opinion, that the Chineſe bears all the ſignatures of an original unimproved language. It is univerſally allowed that, in ſtructure, arrangement, idioms, and phraſeology, it reſembles no other language. Is not every learned man now convinced that all the Aſiatic languages yet known diſcover unequivocal ſymptoms of their cognation and family reſemblance? The Ethiopians, Chaldeans, Arabians, Perſians, Egyptians, Hebrews, Phœnicians, the Brahmans, Bengaleſe, the Hindoos bordering upon China, all ſpeak only different dialects of one language, varying from the original in dialect only, ſome in a greater, ſome in a ſmaller, degree. Why ſhould the Chineſe alone ſtand altogether inſulated and unallied?

The languages of the north all wear congenial features. The Tartar or Tatar dialects of every clan, of every canton, of every denomination, exhibit the moſt palpable proofs of a near affinity: the Gothic and Sclavonian dialects, which pervade a great part of Europe and ſome parts of Aſia, are obviouſly brethren, and may eaſily be traced up to an Aſiatic original. Even ſome of the American jargon-dialects contain vocables which indicate an Aſiatic or European original. Our readers, we flatter ourſelves, will agree with us, that, had the language of the Chineſe been the original language, a reſemblance muſt have ſtill exiſted between it and its deſcendants. If it had originated from any other language, it would have retained ſome characteriſtic features of its parent archetype. As neither of theſe is to be found in the fabric of the language under conſideration, the concluſion muſt be, that it is a language entirely different from all other tongues; that it is conſtructed upon different principles, deſcended from different parents, and framed by different artiſts.

The Chineſe have ever looked upon themſelves as greatly ſuperior to the reſt of mankind. In ancient times they entertained ſuch contemptible notions of foreigners, that they ſcorned to have any further commerce with them

than to receive their homage. They were indeed, at a very early period, highly revered by the Indians, Perſians, and Tartars. In conſequence of this veneration, they looked upon themſelves as the favourites of heaven. They imagined they were ſituated in the middle of the earth, in a kind of paradiſe, in order to give laws to the reſt of mankind. Other men they looked upon with contempt and diſdain, and deemed them deformed in body and defective in mind, caſt out into the remote corners of the world as the droſs and refuſe of nature. They boaſted that themſelves only had received from God rational ſouls and beautiful bodies, in order to qualify them for being ſovereigns of the ſpecies.

Such are the ſentiments of the Chineſe; and with ſuch ſentiments it is by no means ſurpriſing that their improvements in language, in writing, and other appendages of the belles lettres, have not been proportioned to their progreſs in mechanics. When people are once fully perſuaded that they have already arrived at the ſummit of perfection, it is natural for them to ſit down contented, and ſolace themſelves with the idea of their own ſuperior attainments. The Chineſe had early entertained an exalted opinion of their own ſuperiority to the reſt of mankind; and therefore imagined that they had already carried their inventions to the *ne plus ultra* of perfection; the conſequence was, that they could make no exertions to carry them higher.

The Chineſe, for the ſpace of three thouſand years, had ſcarcely any intercourſe with the reſt of mankind. This was the conſequence of their inſulated ſituation. They, of courſe, *compared themſelves with themſelves*; and, finding that they excelled their barbarian neighbours, they readily excelled all the reſt of mankind in an equal proportion. This conceit at once ſtifled the emotions of ambition, and deprived them of all opportunities of learning what was going forward in other parts of the world.

They deſpiſed every other nation. People are little diſpoſed to imitate thoſe whom they deſpiſe; and this perhaps may be one reaſon why they are at this day ſo averſe from adopting the European inventions. A ſuperſtitious attachment to the cuſtoms of the ancients, is the general character of the Aſiatic nations. This is evidently a kind of diacritical feature among the Chineſe. The inſtitutions of Fohi are looked up to among them with equal veneration as thoſe of Thoth were among the Egyptians. Among the latter, there was a law which made it capital to introduce any innovation into the muſic, painting, or ſtatuary art, inſtituted by that legiſlator. We hear of no ſuch law among the former; but cuſtom eſtabliſhed, and that invariably, for a ſpace of three thouſand years, might operate as forcibly among them as a poſitive law did among the people firſt mentioned. An attachment to ancient cuſtoms is often more powerful and more coercive than any law that can be promulgated and enforced by mere human authority. Theſe reaſons, we think, may be aſſigned as the impediments to the progreſs of the Chineſe in the belles lettres, and in the improvement of their language.

The following general remarks upon the Chineſe and other monoſyllabic languages are collected from a German work entitled *Mithridates*, by John Chriſtopher Adelung; 1807.

The monoſyllabical tongues prevail in the ſouth-eaſt of Aſia; they are uſed in China, Thibet, the countries in the north of India, the empire of the Birmans, the kingdoms of Pegu, Siam, Tonquin, Cochin-china, Cambaya, and Laos; that is to ſay, in the eighth part of Aſia. There, within the ſpace of 1300 ſquare miles, from 150 to 180 millions of men ſtill liſp the unformed language of the infancy of human kind. It is ſurpriſing that the miſſionaries of Pekin ſhould have repreſented China as the *only* region whoſe language is monoſyllabical, when, on the coaſt of China, ſo many other nations lie under the ſame diſadvantage. The nations, properly ſpeaking, do not poſſeſs words, but merely the materials of which words are formed, rude radical ſounds, which ſuffice for general notions, and the moſt obvious phraſes; but can neither expreſs the modifications nor ideas neceſſary to ſyſtematic order. *Co*, for inſtance, is to the Chineſe what the radical *hab* is to the Germans; it gives a vague idea of poſſeſſion, appurtenance. But the Chineſe, through all the ſhades of this idea, have only the ſteril and the invariable term *co*; on the contrary, in addition to *hab*, the Germans have many other deciſive words; as, *haben*, to have; *ich habe*, I have; *du haſt*, thou haſt; *wir haben*, we have; *ich hatte*, I had; *habend*, having; *die habe*, to have it, &c. &c.

The monoſyllabical tongues, uſing the root of each word, without any change, can but very imperfectly expreſs the greater part of ideas, which are only the variations from, and additions to, the primitive ſenſe. Hence it happens, that this language is ſo poor, that it wants terms to diſtinguiſh the moſt neceſſary things without confuſion; which, in common life, opens a vaſt field for equivoque and obſcurity; which, in matters of ſcience an unprofitable and hopeleſs inſtrument, does but multiply and conſolidate error, to perpetuate the infancy of reaſon. Indeed the Japaneſe call it the language of confuſion.

As long as the Chineſe ſet bounds to their language, ſuch as it is, it will always be impoſſible to ſucceed in naturaliſing among them the ſciences, or even the arts, of Europe. To attain this noble end, the way lies open to them, and to all their neighbours, who only utter monoſyllables; to enrich their language with inflection, derivation, and compoſition, if they dare undertake it, and it be done with diſcernment.

Among the Birmans, *to* deſignates the plural; and *i* the genitive, as in Latin. Thus they ſay, *ſa ken*, a lord; *ſa ken i*, of a lord; *ſa ken to*, lords. If they would venture to unite their ſigns, and to ſpeak or write *ſaken*, *ſakeni*, *ſakento*, &c. they would then have declenſions, and the advantages thence reſulting. But the ſyſtem of pronunciation modulated by peculiar tones, keeps the monoſyllabic nations wide of the right path. Syllables, added to the principal terms in derived or declined words, cannot with them preſerve their real ſounds; or elſe the primitive term would loſe its ſound, and thereby its meaning alſo; for every word has different ſenſes which are expreſſed by the tone; to ſuppreſs therefore the tones, would only add to the obſcurity of the language, and overturn the whole ſyſtem.

Whilſt all other nations, even the moſt rude, have ſucceeded in conquering this obſtacle, and thus obtained clearneſs and harmony, is it not wonderful that ſo many nations, who very anciently had brought their language to a certain degree of culture, ſhould always have preſerved the monoſyllabical paucity? We muſt aſſign as a reaſon, not only the force of habit, ſo ſtrong in theſe burning climates, where inaction of body and mind is the ſpecial prerogative of gods and of ſovereigns, but alſo the extreme iſolation by which China and the neighbouring countries are hemmed in, on one ſide by the ocean, and on the other by an enormous chain of mountains. It is this circumſtance, more than any other, which has prevented any innovation in theſe countries; and the ſame cauſe has hindered a change of inhabitants; for we find at preſent the direct deſcendants of the firſt colonies which were eſtabliſhed in the infancy of the world.

It is not to be ſuppoſed, however, that the monoſyllabical tongues have remained preciſely as barren as they were at the origin of the human ſpecies. Time and other circumſtances have operated upon the ſound and ſenſe of the words; but the form and ſuperſtructure of the languages of theſe countries are ſtill the ſame as we may conceive them to have been in the firſt infancy of reaſon. The following table may ſerve to compare the roots of monoſyllabical languages.

Face,

	Chineſe.	*Tibetan.*	*Tonquineſe.*	*Birmanic.*	*Pegouan.*	*Siameſe.*
Face.	Mien; la.	Tong.	Mat.	Mien.		
Eyes.	Yen.	Tſchien.	Com-mat.	Miezz-i.	Mech-loun.	
Earth.	Tou.	Sa.	Dat; dia.	Mié.	- - - -	Din.
Fire.	Ke-koua.	Me.	Loua.	Mi.		
Fiſh.	You.	Gnia.	Ca.	Nga.		
Foot.	Ca; ſou.	Canh.	Chan.	Kié.	Keh	
Hand.	Tſcho.	Tſchia; la.	Tai.	Lek.	Leh.	
Heart.	Seng; ſin.	Sem.	Lao.	Zeit.	- - - -	Tſchai.
Heaven.	Tien; li.	Nam; kai.	Thien; bloi.	Mo.	Kaoun-gen.	Sa-vang.
Head.	Chin.	Kam; go.	Daou.	Gaoun.	Gaou.	
Man.	Po; loung.	Po.	Nam.	Bou.	- - - -	Pou; kon.
Mother.	Mou.	Ma; youm.	Mou.	Amé.		
Noſe.	Ni; pi.	- - - -	Moui.	Nahh-aoun.	Nag-aou.	
Star.	King-ſeng.	- - - -	Ngoi-ſao.	Chié.	Tara.	
Street; Way.	Lou-tou.	Lam.	Dang.	Lan.		
Day.	Je; chil.	Tzhe; kji.	Ngai.	Ne.	- - - -	Van.
Father.	Pe; fou; chou.	Pa; jap.	Cha; tſcha.	Apa.		
Bird.	Miao.	Pzia.	Tſchim.	Ngek.		
Water.	Tſcho; chiou.	Tſchiou.	Nou-di.	Re.		
Wind.	Hong.	- - - -	Chio.	Le.		
Teeth.	Ki-ya.	- - - -	Rang.	Sao.	Zhona.	
Tongue.	Ché.	Nga; na.	Louoi.	Hlia.	Scha.	

We ſhall ſay a few words on the manner in which Europeans ought to write and tranſlate monoſyllabic languages, becauſe it is eaſy to miſtake. Thus oftentimes we meet with a word of many ſyllables, eſpecially when intended to repreſent an object which we conceive as a ſingle idea. This is altering the whole ſyſtem of the language. For inſtance, the Chineſe words *ngo tem* (I another) would be expreſſed in Engliſh by one word, *we*; but we muſt not forget that in the Chineſe every word has a ſound peculiar to itſelf, and which is loſt by uniting many words into one. We muſt therefore avoid uniting monoſyllables. It is ſtill worſe to unite words which ought to be ſeparated even in a language not monoſyllabic. For example; in a verſion of the Lord's Prayer into the Pegouan tongue, we find *makoan* for *ma koan* (arched heaven;) thus confounding in a ſingle word the ſubſtantive and the adjective. There is however no impropriety in uniting by a hyphen as many words as form but one in our European languages; for thus we reconcile clearneſs of the diction with the genius of the monoſyllabical languages.

In theſe tongues all the words are radical, inſulated, and indeterminate, without declenſion, conjugation, or derivation; we muſt therefore avoid joining them when we would write or tranſlate literally. The firſt words of the Lord's Prayer in Tonquineſe, literally tranſlated, are theſe: "I much honour heaven, earth, true maſter." To give the meaning, an European muſt aſſiſt the literal ſenſe, and enlighten the obſcurity of the monoſyllables by more perfect language. Even with theſe precautions we ſhall find ourſelves much embarraſſed if we are ignorant of the ſenſe of certain ſmall words deſigned to connect the different parts of diſcourſe, and if we are not familiar with certain very ſingular idioms.

Though we may doubt or abſolutely contradict the great antiquity of the Chineſe nation and the high degree of their ancient civilization, it is not ſo with regard to the antiquity of their language. However late we may preſume their origin as a nation, their country was certainly one of the firſt inhabited on the earth, and their language bids defiance to analogy or derivation. Notwithſtanding their revolutions, and in ſpite of the change of their dynaſties cauſed by barbarian conquerors, the Chineſe have continued to preſerve their language and their manners.

It is deſirable to know whether the Mongol form be general throughout China, or confined to certain northern tribes; whether we behold now the Chineſe form of ancient times, or whether this form proceeds from intermixture of races from 1210 to 1568. In the firſt caſe, the Chineſe are original Mongols; but their language offers no veſtige of this deſcent. The ſecond hypotheſis is therefore the moſt probable. According to the Arabian travellers, the Chineſe in the ninth century were handſomer than the Hindoos; they aſſure us, that they reſembled the Arabs in their hair, their dreſs, and their moral habits. This could not be, if the Chineſe had always had this Mongol uglineſs; they are then of a more recent date. The laws of Menou appear to ſpeak the language of truth, when they aſſert, that the Chineſe were originally emigrants from Hindooſtan, eſpecially if they extend this name to Thibet, as is often done. The Chineſe are now, it is true, the moſt eaſtern people who uſe a monoſyllabical language, and conſequently the fartheſt removed from the ſoil which was the beginning of the human race. But, if we ſurmiſe (and, from the want of monuments, what can we do more?) that, from the increaſe and progreſs of human kind, new races repelled one after another the ancient ones, even till the ſtrong natural barriers (as here the ocean) arreſted their courſe, then the Chineſe will appear as the immediate deſcendants of the primitive race of men.

Theſe conjectures are ſtrengthened, as Mr. Adelung thinks, by an examination of the Chineſe language, the moſt ſimple of the monoſyllabical tongues; and hence the leaſt removed from the primitive idiom. It is no longer indeed a language compoſed merely of vowel ſounds; there remains of theſe firſt ſhapeleſs eſſays of language only ſome words preſerved in particular phraſes; but, upon the whole, the Chineſe tongue is characteriſed by the higheſt poſſible degree of ſimplicity; and it is that which urges us to aſſign it the firſt rank. See Webb's Hiſtorical Eſſay on the Probability that the Chineſe is the original Language; Lond. 1669. Many of the remarks of M. Adelung are borrowed from this work, which is now very ſcarce.

The Chineſe monoſyllables conſiſt, in general, but of two letters, a ſingle vowel preceded by a ſingle conſonant. The two or three vowels which Europeans uſe to expreſs many Chineſe words, does not prevent our conſidering theſe words as pure monoſyllables; and the ſame may be ſaid of the addition *n* or *ng*, to be met with in other words. Theſe accumulated vowels are brought on only as helps to expreſs the ſounds of pure Chineſe monoſyllables of two letters: The words we write *tiao*, and *ſiao*, are ſoftened and ſimplified in the Chineſe pronunciation, nearly as if written *to* and *ſo*. As to the naſal ſound, it is the true complement of the ſyllable, an accident of the vocal inſtrument: for *kjoun*, *kjang*, *ljoung*, *nge*, *ngo*, are monoſyllables only.

The mandarin dialect, and indeed moſt of the dialects of the Chineſe language, have no ſounds to expreſs *b*, *d*, *r*, *x*, *z*; but *p*, *t*, *l*, *s*, are uſed inſtead of them. Nor can the Chineſe expreſs two conſecutive conſonants: thoſe articulations which we render compound by writing them *ps* or *tſch*, are ſimple in their mouths. The following is a remarkable conſequence of this fact. If, in a foreign idiom, they meet with many conſonants in ſucceſſion, they alter the word, ſeparating each conſonant from the following by inſerting a vowel. *Crux* written by a Chineſe, makes *cou-lou-ſou*; Chriſtus is *Chi-li-ſi-tou-ſou*; gratia is *gue-la-tſi-a*; ſpiritus, *ſou-pi-li-tou-ſou*, &c.

The Chineſe at preſent have 328 radicals, or, according to others, 350. Bayer and Fourmont, Father le Compte and Thomas Hyde, have publiſhed liſts of them in European characters; the two former according to the Portugueſe pronunciation, Le Comte according to the French, and Hyde after the Engliſh. To multiply theſe roots, the only method of the Chineſe is to vary the tone and accent; a method worthy the infancy of the human mind. There are, for each root, five principal ſounds: the firſt, ſimple or natural; the ſecond, hollow, deep, low; the third begins high, and falls at the concluſion, like *no* pronounced in anger; the fourth riſes like a cry of admiration; the fifth and laſt, ſhort and broken, like an expreſſion of fear. Beſides theſe tones, there are others, reſerved apparently for particular caſes; ſome count eight in all, others twelve, and even thirteen; the greater part of which eſcape the ear as well as the vocal organ, of a ſtranger, and which however varies the ſenſe of the word. Thus, *chou*, according to the different tones in which it is pronounced may ſignify a book, a tree, great heat, to relate, aurora, to move, to rain, ſoftneſs, to be accuſtomed, to loſe a wager, &c. Likewiſe *tchoun* anſwers to maſter, hog, kitchen, a column, liberal, to prepare, old woman, to break or cut, favourable, little, to moiſten, ſlave, or priſoner, making up thirteen different meanings to one word. But each of theſe ſignifications has, beſides the proper ſenſe, a figurative one alſo. Nay, there are words ſuſceptible of even fifty different ſignifications, which the niceſt modulation, that even of a Chineſe himſelf, cannot diſtinguiſh by a ſufficient variation of tone. In ſuch caſes, they are obliged to employ an additional word. For inſtance, when they would uſe the word *ſouh* in the ſenſe of father, they place after it the word *tſchin* or *djin*, pronounced ſo as to ſignify man or parent; *ſouh-tſchin*; and in like manner for mother, they ſay *mou-tſchin*. And it is, perhaps, in this mode that other languages firſt formed words of two ſyllables, as *pater* and *mater*, for example.

By means of the principal tones only, the 328 roots produce 1625 different words; and the uſe of aſpiration increaſes them to 3250, or at moſt to 7700, which the ear of the Chineſe, ſingularly delicate, and exerciſed from infancy to the niceſt diſcriminations, ſucceeds in diſtinguiſhing without any confuſion. We muſt not ſuppoſe that theſe tones make a chant; the Chineſe, in uſing them, chant no more than the Engliſh, for example, when, by an exact pronunciation, they expreſs to the ear certain equivocal words, as, *born*, *borne*, &c.

The 328 roots, thus diverſified by tone and aſpiration, are the whole foundation of the Chineſe language; and hence it muſt be extremely difficult to render the abſtract ſenſe, the concrete ſenſe, and all the figurative ſenſes, of words.

This language is not diſtinguiſhed by what we call the parts of ſpeech; each word ſerves for ſubſtantive, adjective, verb, &c. Derivation and inflexion are wanting, and conſequently declenſion and conjugation. In great difficulties they have recourſe to periphraſes. *Ti* or *tie*, added to a noun, expreſſes the genitive; *you* the dative, ſingular or plural; and *toung* or *tſhoung* the ablative; for example, *guch*, love, *guch-te*, of love, *you-guch*, to love; *toung* or *tſound guch*, from love. The plural is expreſſed, 1ſt. By collective words; as *tou tſchin*, (or *djin*,) many men; *tſchoung tſchin*, all men. 2d. By ſuch words as *tem*, other; *poi* or *men*, much, many: example, *ngo tem*, (me other,) or *ngo poi*, or *ngo men*, (me much;) that is to ſay, *we*. 3d. By the reduplication of a name; as, *djin djin*, (man man,) men; *tou tou tſchin*, a multitude of men. The adjective precedes the ſubſtantive; as, *chaou djin*, good man; *pai mah*, white horſe. The word which is uſed to expreſs the genitive forms an adjective when it is preceded by an abſtract noun; as, *pai tie*, white; *tſche tie*, hot. *Keng*, before the poſitive adjective, ſignifies more: example, *keng yiou*, more ſoft. The ſuperlative is expreſſed by repeating the poſitive, or by ſome word either before or after it.

The perſonal pronouns are: *ngo* or *go*, me; *nih*, thee; *ta*, he; *nih tem*, (thee other,) you; *ta poi* or *ta men*, (him many,) them; &c. The pronouns poſſeſſive are formed by joining the ſign of the genitive caſe to the perſonal pronouns. Example, *ngo te*, (of me,) my, mine; *ngo men tie*, (of me many,) of us, our.

Verbs have only three tenſes; the preſent, expreſſed by the radical word; the preterite, by adding *loi*; and the future by prefixing *yah*. Example: *ngo leh lio*, I am come; *ngo yah leh*, I ſhall come. In the familiar ſtyle, they ſay with more preciſion, *ngo youen y leh*, I am reſolved to come. But ſo much perſpicuity would not ſuit the more elevated ſtyle.

In ſhort, much obſcurity always prevails in the Chineſe language; and it can hardly be otherwiſe from the want of articles, of many conjunctions, and other diſcriminating marks. A Chineſe text is but an enigmatical collection of harſh ſounds, of words without connection, without modification, without definite meaning. The following is a literal tranſlation: "Engliſh good, Chineſe better, ſea no bounds." The connection of ideas, the order in which the words are arranged, the geſture, the periphraſis, explain ſome things, but ſtill leave much to gueſs at; how much more then in written language! It is above all in poetry that this obſcurity is perceptible. The following is the literal ſenſe of an ode of the Chi-King, inſerted in Barrow's Voyage to China: "Peach-tree fine, agreeable, its foliage flouriſh, charming: thus ſpouſe who enters, care of her family." This laſt phraſe means, that thus the wife ſhines when ſhe enters the houſe of her huſband, and is occupied with domeſtic cares. This paucity would render the language extremely eaſy to learn, if the minute variety of ſound and accent did not make it the moſt difficult of any to a foreigner.

In the *Memoires concernant les Chinois*, by the miſſionaries of Pekin, Paris, 1776, b. viii. p. 133. there is an Eſſay on the Chineſe Language, which contains ſuch exaggerated praiſe as might be miſtaken for irony. The well-informed reader muſt have great faith if he does not ſmile when they would perſuade him, that, of all languages in the world, the Chineſe is the richeſt, the moſt harmonious, and the moſt perfect. As to its richneſs, it is true that the language is verboſe; it expreſſes laboriouſly in three, four, or more, words what others tell in one. Inſtead of *I bore it*, a Chineſe will ſay, *Ngo na chi kien tao ta*. This falſe abundance proves its penury; and, when laconic, which it very frequently is, it degenerates into profound obſcurity. The Chineſe ſtudy much their *Kings*, or ancient claſſical books; but they ſcarcely comprehend them; each explains them according to his fancy. The author of the Eſſay already quoted acknowledges, indeed, that the Chineſe tongue is not calculated to expreſs abſtract ideas, and is therefore uſeleſs in metaphyſics; but this defect, the author conſiders as a perfection: "This language, ſays he, was not made for uſeleſs knowledge."

The writing of the Chineſe, ſtill more ſingular than their language, is unique in its kind. It is neither literal nor ſyllabical, and does not conſiſt (now) of hieroglyphics, either natural or ſymbolical. It expreſſes each idea by a peculiar character, and theſe characters are not connected with the vocal language. It ſpeaks to the eye; and the characters are ſomewhat ſimilar to our numerical figures, which every body knows, but which each expreſſes

preſſes in his own idiom. We may therefore read the Chineſe writing, or tranſlate it, without knowing a word of the Chineſe language. It is however this language which ſerved in a certain degree as a model for the writing, as we muſt now proceed to prove. Five or ſix vowels perform the principal part in the ſpoken language. Of theſe vowels, differently articulated according to the conſonants which precede them, are formed the 328 or 350 radical words. In like manner, with ſix lines, either ſtraight or variouſly curved, are formed 214 elementary characters called *keys*; and theſe ſerve to form all the other characters, amounting to not more than 80,000. Theſe keys, engraved, are to be met with in the *Muſeum Sinicum* of Bayer, and, ſtill better engraved, in the *Grammatica Sinica* of Fourmont, and in the *Encyclopédie Elémentaire*, or the *Bibliotheque des Amateurs*, Paris, 1766.

If this writing were the ſyſtematical work of one or more men of talent, the 214 keys would become the ſigns of 214 of the moſt eſſential ideas; the other characters would be merely diſtinct and well-claſſed combinations of the elementary ſigns. But this is not the caſe: the Chineſe characters form a confuſed maſs, wherein the ſigns of the moſt heterogeneous objects are mingled together, as if the firſt inventors had been directed in their labour by mere caprice.

The characters had at firſt ſome reſemblance to the thing repreſented; there ſtill ſubſiſts traces of this primitive reſemblance. They ſeem therefore to have been the firſt eſſay at writing, coarſely executed, at a time when civilization was but little advanced, when men had but few wants, conſequently but few ideas to expreſs. Nothing can more ſtrongly prove the ſhort-ſightedneſs and littleneſs of mind of the more modern literati, than their not having entirely laid aſide theſe characters, proper only for a nation in its infancy, but to have continued ever to walk in this inconvenient path, the firſt opened. For they have at length, by repeated additions, by ſucceſſive combinations of the keys and their parts, formed ſo formidable a quantity of characters, that to know them well would require more than the whole life, not only of a Chineſe, but of a Leibnitz or a Newton; and, with all this unfortunate abundance of marks, it is ſtill impoſſible for a Chineſe to expreſs, though but imperfectly, all that the Europeans, with about twenty letters, can render with ſo much exactneſs and rapidity. See the article CHINA, vol. ix. p. 463, 4.

The Chineſe require a character for every idea; and often one word, by reaſon of the different ideas it expreſſes, is connected with more than 240 characters. And it is very ſingular that, notwithſtanding this, a great number of ſimple ideas are expreſſed by ſigns very much compounded. Thus, the word which ſignifies night is *ye*; but the character which expreſſes this idea is compoſed of three keys, which expreſs the ideas, *darkneſs*, *to cover*, and *man*, to mark the darkneſs which covers man, or in which the man conceals or covers himſelf; for we find in the written language the ſame want of perſpicuity as in the vocal. To write the word which will ſay *to complain*, requires the key *dog* and the key *voice*; for the word which ſignifies *king*, there wants the key *ſceptre*, the key *eye*, the key *dignity*. One may eaſily conceive how much all this diſplays the infancy and poverty of mind. And yet this miſerable writing, as well as the Chineſe tongue, has found panegyriſts in Europe. Here, they ſay, is an univerſal tongue and an univerſal character. Can there be any thing more childiſh than this? If an univerſal tongue or an univerſal character were either poſſible, ſurely better might be invented than theſe wretched efforts of the infancy of human nature. To ſearch now in China for models of language and writing, is at the age of virility to return to one's nurſe.

If, down to the preſent time, the Chineſe have made ſo little progreſs in the ſciences; if with regard to the culture of the mind they ſeem for ever condemned to a nullity, or at leaſt to great mediocrity; the cauſe is principally in the imperfection of their language, and in the exceſſive inconvenience of their writing. He who, to learn to read and write a little, conſumes the moſt active half of his life, will never be more than a great boy. The immenſe number of ſigns exhauſts the intellectual faculties. When, in thirty or forty years, by long and painful efforts, a Chineſe ſucceeds in acquiring 10,000 characters, he is in his country a diſtinguiſhed ſcholar. Does he wiſh at a ripe age to apply his mind to real ſcience? He cannot do it but with extreme difficulty. His judgment is become too weak, becauſe it has not been exerciſed. Nothing is more common than to hear theſe men aſking of the Europeans, by what means they may ſtrengthen their memory. The examinations, ſo much ſpoken of, and which muſt be ſubmitted to, in order to ſucceed to the mandarinate, that is to ſay, to be, as men of letters, qualified for public employments, conſiſt in a long and tedious trial whether the candidate is ſufficiently expert to read and write two thouſand characters; this is all that is required. Thus the Chineſe, who are called learned, can read and write juſt as much as is abſolutely neceſſary; but, properly ſpeaking, they know neither art nor ſcience. Add to this, the obſtacles which oppoſe the culture of the mind, from the circumſtance of their unformed language being incapable of expreſſing abſtract ideas, which are the beginning of all ſcience. It is a diverting thing, ſays one of our learned European writers, to witneſs a ſcientific converſation between two Chineſe. They diſpute without underſtanding each other; they accumulate ſynonymous terms, which perplex them more and more; when they have exhauſted the terms of their language, they have recourſe to their fans, with which they repreſent characters in the air, and ſketch the figure of what they would expreſs; at length they ſeparate as far advanced as when they began the diſcuſſion.

Theſe obſervations apply, with little exception, to the writing of the court, and the language of diſtinguiſhed perſons, which is called in China *kouan-hoa*, and, in Europe, the language of the mandarins, becauſe it is the cuſtomary language of the learned, and of the officers of rank. It is the dialect of the province of Kiang-nan, where the ancient emperors, natives of China, held their reſidence. It is ſpoken to this day in that province and its environs. When the Manchoos, after having ſubdued China, fixed the capital nearer the frontiers, they preſerved among themſelves the language of their country; but retained for all public affairs the language of Kiang-nan, which was that of the court, and is ſo ſtill. Hence it is, that in the modern capital, Pekin, this language is ſpoken with much correctneſs and elegance, among perſons of the ſuperior claſſes. The *Kouan-hoa*, and the language of the ancient books of religion, or the Five Kings, called eſpecially *kou-ouan*, and even the common language of the Chineſe books, called *ouan-tſchang*, are really one and the ſame language. The only difference between them, is, that the ſtyle is more lofty and ſolemn in the Kings; more pure and elegant in the books; leſs ſtudied, and more ſimple, in ordinary converſation.

A country ſo extenſive as China muſt have a number of dialects. It is to be regretted that we have ſo little information on this ſubject. The miſſionaries and ambaſſadors are the only perſons from whom we might expect elucidation; but they always aimed at keeping near the centre of power: thus they learn the language of the court, and trouble themſelves very little about the popular dialects called *kiang-tan* in the country. It appears however that theſe dialects are all monoſyllabic; which announces a common origin. China conſiſts of fifteen large provinces, ſubdivided into different diſtricts. Every province, and almoſt every principal city, has its own proper dialect. Kæmpfer, in his Voyage to Japan, ſpeaking of the three eaſtern provinces Kiang-nan, Tſe-kiang, and Fo-kien, attributes to each a different tongue. Du Halde alſo diſcovered the dialect of Fo-kien, of which there is, in the Berlin library, a grammar and dictionary; this is monoſyllabical, and very analogous to the mandarin tongue. Nevertheleſs the words are pronounced differ-

ently, and receive different ſignifications; thus they admit of the articulations *r*, *d*, and *b*, unknown in the *kouan-hoa*, or the mandarin tongue. They uſe *gue*, inſtead of *ti*, to indicate the genitive; *goua*, and not *ngo*, for the pronoun me; and *gouan* for the pronoun we: this dialect of Fo-kien is ſubdivided into five others.

In the mountains of China, as in other places of Aſia, there are ſtill many ſavage people little known; but we know at leaſt that they have a language, or at leaſt a dialect, peculiar to themſelves. We may juſt mention the Maou-lao, who extend over ſix provinces; the Miao-tſe, who inhabit five provinces in the middle of the empire; the Lo-los, in the province of the Yun-nan. And there are many others. On the coaſts of the iſle of Hai-nam the Chineſe is generally ſpoken; but the ſavages of the interior have a language totally unknown elſewhere.

Adelung has given three Chineſe verſions of the Lord's Prayer, adding literal verſions in the German language. Then follows a fragment of the hiſtorical book *Siao-oul-loun*, which is taught to all children deſtined to the mandarinate, till they have attained their fifteenth year. It is an introduction to the ancient hiſtory of China. We have put the Chineſe text of this fragment in Roman characters, with a literal verſion in Latin underneath, from Bayer's Muſeum Sinicum. This extract from an elementary book (which is a great curioſity in itſelf) will ſet in the cleareſt light the defects and poverty of the Chineſe language, and how many obſtacles it leaves in the way of ſtudy and improvement in the ſciences. In ſhort, by this we may perceive, that what is preſented to us as the ancient hiſtory of China, is a wretched coſmogony, a chronicle much disfigured or badly invented.

Siao oul loun
Parvi filii inſtitutio

Lie ta ti vain ſſoum ki.
Succedentium magnorum imperatorum regum univerſalis memoria.

Tay kou houm lieou, ni toun
Magna antiquitas, aqua adveniens, fluens, pacifica, compoſita,

tſchi, fouen kham khi, kou ſſiven tſchi y.
ſubſedit, diviſit ſuperiora ſæcula, eo produxit formam-rerum.

Tien hoam khi hioum ti
Cæli auguſta familia fratres (fuere) majores minores (que)

khe ſan chin ko ye van, pa ſſien foui.
tredecim homines; ſinguli (vixere) myriadem unam, octies (que) mille annos.

Ti hoam khi hioum ti
Terræ auguſta familia fratres-majores (fuerunt) minores (que)

khe ye chin ko ye van pa ſſien foui.
undecim homines, ſinguli (vixerunt) myriadem unam octies (que) mille annos.

Chin Hoam khi kioum ti nieou chin, ko fou
Hominum Auguſta familia fratres-majores minores (que) novem homines ſinguli quatuor

van ou ſſien lo pe foui.
myriades quinquies mille ſexies centum annos.

Yen quouo khi kiao chin ti mo gvei
Habens fructum familia docuit hominem terram-colere, arbores habere

quouo y kiou tſchou.
fructus (que) ad ædificia (et) manſiones.

Soui chin khi, ſſouon mo ſſoui
Ignem (tractans) hominum familia, terebrando lignem concepit

ho kiao chin pem chou.
ignem, docuit (que) homines metalla-fundere (et) coquere.

San hoam v ti ki
Trium hoam (et) quinque ti recenſio (hæc eſt.)

Tay hao fo hi khi ſoum ſem khe
Tay hao fo hi familia, ſpiritus generavit ſerpentem

Khoun chin kheou, hoai
(quoad) *corpus, hominem* (que) (quoad) *caput, docuit ſones muſicos,*

pi kien tſchi, tem pa qoua. Sſai
in pi kien medicus (fuit;) *inſtituit octo ſortes. Fuit*

hoei ye pe ye khe v nien.
honoratus, (id eſt, *regnavit*) *unum centum unum decem quinque annos.*

Niou-koua khi fum ſem
Niou-koua familia, ſpiritus generavit (eam)

ſſiam tſchim khe v khi koum
ſimul complexam decem quinque familias ſimul

ye ſſien ſan pe lo khe yn mien.
unum mille ter centum ſexaginta ſuperſtites (fuerunt) annos,

Yen ti tſchini noungi khi
Yen-ti-tſchin noung familia,

kiam ſem chin khin yeou
ex-optimâ-regiâ-domo natus homo (quoad) corpus bos

kheou ſſai kio feou tſchi
(quoad) *caput aravit ſulcos, fecit* (per) *colles medicus* (fuit)

ſſo

ſſo	y	chou;	ſſai	gvei	ye	pe	fou	ke	mien.
fecit	*medicorum*	*librum;*	*fuit*	*regnans*	*unum*	*censum*	*quadraginta*		*annos.*
Ti	ling	quei	kin	noung	ſſu,	ſſai	gvei		
Ti—ling—quei—kin—noung					*filius,*	*fuit*	*regnans*		
pa	khe	nien.	-	-	-	-	-	-	-	-	-	-	-	-
octoginta		*annos.*	-	-	-	-	-	-	-	-	-	-	-	-

In Engliſh thus.—*Inſtructions for a Youth about to ſucceed to the Government of a great Empire; to be had in continual Remembrance.* From great antiquity water appeared, flowing peacefully and ſmoothly; which, having ſubſided, and being divided, produced the form of matter. There were of a noble and heavenly race, elder and younger branches, thirteen generations; each lived eighteen thouſand years. Of an auguſt and earthly race there were, elder and younger branches, eleven generations; each lived eighteen thouſand years. Of a noble race of men, there were, elder and younger branches, nine generations; each lived forty-five thouſand ſix hundred years. Of a fruitful race, who taught men huſbandry, horticulture, and architecture, the uſe of fire, the art of working in wood, of digging metals and refining them, may be reckoned three *hoam*, and five *ti*. Of the race of Tay-hoa-fo-hi, the ſpirit begat the ſerpent as the body, and man as the head; taught muſical ſounds, inſtituted eight ſorts of pi-kien-tſchi, or phyſicians; governed a hundred and fifteen years. The ſpirit begat the race Niou-koua: they together completed fifteen generations, making one thouſand three hundred and ſixty years. The race of Yen-ti-tſchin-noung, born of the ſtock of the houſe of the beſt of kings, had the body of a man, and the head of an ox: he ploughed furrows, cut through hills, was a phyſician, wrote medical books, and reigned one hundred and forty years; his ſon Ti-ling-quei-kin-noung reigned eighty years.

Of the GREEK LANGUAGE.

The Greeks, according to the moſt authentic accounts, were deſcended of Javan or Ion, the fourth ſon of Japhet, the eldeſt ſon of Noah. The ſcriptures of old, and all the orientals to this day, call the Greeks *Ionim*, or *Iaunam*, or *Iavenoth*. We have already obſerved, in the beginning of the article concerning the Hebrew language, that only a few of the deſcendants of Ham, and the moſt profligate of the poſterity of Shem and Japhet, were concerned in building the tower of Babel. We ſhall not now reſume the arguments then collected in ſupport of that poſition; but proceed to inveſtigate the character of that branch of the poſterity of Javan which inhabited Greece and the neighbouring regions.

At what period the coloniſts arrived in theſe parts cannot be certainly determined; nor it is of great importance in the queſtion before us. That they carried along with them into their new ſettlements the language of Noah and his family, is, we think, a point that cannot be controverted. We have endeavoured to prove that the Hebrew, or at leaſt one or other of its ſiſter-dialects, was the primæval language of mankind. The Hebrew, then, or one of its cognate branches, was the original dialect of the Ionim, or Greeks. But, before theſe people make their appearance in profane hiſtory, their language deviates very widely from this original archetype. By what means, at what period, and in what length of time, this change was introduced, is, we believe, a matter not eaſy to be elucidated. That it was progreſſive, is abundantly certain both from the rules of analogy and reaſon.

The colonies, which traverſed a large tract of country before they arrived at their deſtined ſettlements, muſt have ſtruggled with numberleſs difficulties in the courſe of their peregrinations. The earth, during the period which immediately ſucceeded the univerſal deluge, muſt have been covered with foreſts, interſected with ſwamps, lakes, rivers, and numberleſs other impediments. As the neceſſaries, and a few of the conveniences, of life, will always engroſs the firſt cares of mankind, the procuring of theſe comforts will, of neceſſity, exclude all concern about arts and ſciences which are unconnected with theſe purſuits. Hence we think it probable, that moſt of thoſe colonies which migrated to a very great diſtance from the plains of Shinar, which we believe to have been the original ſeat of mankind, in a great meaſure neglected the practice of the polite, but unneceſſary, modes of civilization which their anceſtors were acquainted with, and practiſed before the era of their migration. Certain it is, that thoſe nations which continued to reſide in the neighbourhood of that centre of civilization, always appear in a cultivated ſtate; while, at the ſame time, the coloniſts who removed to a conſiderable diſtance appear to have ſunk into barbariſm, at a period more early than the annals of profane hiſtory can reach. This appears to have been the ſituation of the primary inhabitants of Greece. Their own hiſtorians, the moſt partial to their own countrymen that can well be imagined, exhibit a very unpromiſing picture of their earlieſt progenitors. Diodorus Siculus, in delineating the character of the original men, we believe ſketches his draught from the firſt inhabitants of Greece. He repreſents them as abſolute ſavages, going out in ſmall parties to make war upon the wild beaſts of the field, which (according to him) kept them in continual alarm. "Neceſſity obliged them to band together for their mutual ſecurity; they had not ſagacity enough to diſtinguiſh between the wholeſome and poiſonous vegetables; nor had they ſkill enough to lay up and preſerve the fruits of autumn for their ſubſiſtence during the winter." The ſcholiaſt on Pindar deſcribes the ſituation of the inhabitants of Peloponneſus in the following manner. "Now ſome have affirmed that the nymphs, who officiated in performing the ſacred rites, were called *Meliſſæ*. Of theſe Mnaſeas of Patara gives the following account: They prevailed upon men to relinquiſh the abominable practice of eating raw fleſh torn from living animals, and perſuaded them to uſe the fruits of trees for food. Meliſſa, one of them, having diſcovered bee-hives, ate of the honeycombs, mingled the honey with water for drink, and taught the other nymphs to uſe the ſame beverage. She called bees Μελισσαι, from her own name, and beſtowed much care on the management of them. Theſe things (ſays he) happened in Peloponneſus; nor is the temple of Ceres honoured without nymphs, becauſe they firſt pointed out the mode of living on the fruits of the earth, and put an end to the barbarous practice of feeding on human fleſh. The ſame ladies, too, from a ſenſe of decency, invented garments made of the bark of trees."

Hecatæus the Mileſian, treating of the Peloponneſians, affirms, "that, before the arrival of the Hellenes, a race of barbarians inhabited that region; and that almoſt all Greece was, in ancient times, inhabited by barbarians. In the earlieſt times (ſays Pauſanias) barbarians inhabited moſt part of the country called *Hellas*." The original Greeks, if we may believe Pliny, were ſtrangers to all the moſt uſeful inventions of life. Even the uſe of fire was unknown till it was found out and communicated by Prometheus, who is thought to have been one of the firſt civilizers of mankind. Hence Æſchylus introduces Prometheus commemorating the benefits which he had conferred upon mankind by his inventions, in a ſtrain that indicates the uncultivated ſtate of the world prior to the age in which he flouriſhed:

——————Of the human race
Now hear the tale, how fooliſh erſt they were:
I taught them thought and exerciſe of reaſon;
If aught they ſaw before, they ſaw in vain.
Hearing, they heard not; all was ſhapeleſs dreams
For a long ſpace of time, at random mixt

In wild confuſion: for they neither knew
Tile-cover'd houſes ſtanding in the ſun,
Nor timber work; but, like the earth-bred ant,
They lodg'd in ſunleſs caves dug under ground:
No certain ſign had they of winter cold,
Nor of the flow'ry ſpring, or ſummer ſtore,
But blindly manag'd all; till I them taught
What time the ſtars appear, what time they ſet,
Hard to be ſcann'd: then arithmetic rare,
That queen of arts, by dint of patient thought
Deſcry'd, I taught them; and how vocal ſounds
From letters join'd aroſe. Ver. 441. & ſeq.

This character, though applied to mankind in general, was in reality that of the moſt ancient Greeks. Theſe forbidding features had been tranſmitted to the poet by tradition as thoſe of his anceſtors: he was a Greek, and of conſequence imputes them to all mankind without diſtinction.

Phoroneus, the ſon and ſucceſſor of Inachus, is ſaid to have civilized the Argives, and to have taught them the uſe of ſome new inventions. This circumſtance raiſed his character ſo high among the ſavage aborigines of the country, that ſucceeding ages deemed him the firſt of men. Pelaſgus obtained the like character, becauſe he taught the Arcadians to live upon the fruit of the *fagus*, to build ſheds to ſhelter them from the cold, and to make garments of the ſkins of ſwine.

But what clearly demonſtrates the unpoliſhed character of the moſt ancient Greeks is, the extravagant honours laviſhed by them upon the inventors of uſeful and ingenious arts. Moſt of theſe were advanced to divine honours, and became the objects of religious worſhip to ſucceeding generations. The family of the Titans affords a moſt ſtriking inſtance of this ſpecies of adulation. Jupiter, Juno, Mars, Apollo, Venus, Diana, &c. ſprung from this family. By the uſeful inventions which theſe perſonages communicated to the uncultivated nations of Greece, they obtained ſuch laſting and ſuch extravagant honours, that they juſtled out the ſidereal divinities of the country, and poſſeſſed their high rank as long as Paganiſm prevailed in thoſe regions.

While matters were in this ſituation with reſpect to the primitive Ionim, or Greeks, a new colony arrived in thoſe parts, which in a few years conſiderably changed the face of affairs. The people who compoſed this colony were called *Pelaſgi*; concerning whoſe origin, country, character, and adventures, much has been written, and many different opinions exhibited by the learned. It is not our province to enter into a detail of their arguments and ſyſtems; we ſhall only inform our readers, that the general opinion is, that they were natives either of Egypt or Phœnicia. Be this as it may, nothing is more certain than that the Pelaſgi were the firſt people who in ſome degree civilized the ſavages of ancient Greece; and, whether we ſuppoſe them to have been the offſpring of the Phœnicians, Egyptians, or Arabian ſhepherds, it will make little difference as to their language; every man of learning and reſearch is convinced that thoſe three nations, eſpecially at that early period, ſpoke a dialect of the Hebrew. The Pelaſgi, then, muſt have ſpoken a dialect of that language when they arrived in Greece. Perhaps it might have undergone ſeveral changes, and acquired ſome new modifications, during ſo many years as had paſſed ſince they began to be a ſeparate nation, and in the courſe of ſo many peregrinations. Some monuments ſtill extant prove this fact beyond all contradiction. As theſe people incorporated with the aborigines of Greece, the remains of the original language of mankind, or at leaſt ſo much of it as had been retained by them, gradually coaleſced with that of the new ſettlers. From this, we think, it is obvious, that, prior to the arrival of the new coloniſts from the eaſt, the language now current among the two united tribes muſt have been a dialect of the Phœnician, Arabian, Hebrew, &c. Be that as it may, Herodotus affirms that the Pelaſgi in his time ſpoke a barbarous language, quite unintelligible to the modern Greeks.

The reaſon of this difference between the language of the Hellenes, or Greeks, in the age of Herodotus, and that of the remains of the Pelaſgi at that period, ſeems to be this: Prior to the time of that hiſtorian, the Greek language had, from time to time, undergone many changes, and received vaſt improvements; whereas, on the contrary, that of the remnant of the Pelaſgi, who were now reduced to a very low ſtate, had remained ſtationary, and was then juſt in the ſame predicament in which it had been perhaps a century after their arrival in the country.

As the Pelaſgi, as was obſerved above, were a people highly civilized and well inſtructed in the various arts at that time known in the eaſtern world, they were ſkilled in agriculture, architecture, muſic, &c. The preſumption then is, that they could not be unacquainted with alphabetical writing. This moſt uſeful art was well known in the countries from which they emigrated; and of courſe it is impoſſible to imagine that they did not export this art as well as the others above-mentioned. Diodorus Siculus imagines that the Pelaſgi knew not the uſe of alphabetical letters, but that they received them from Cadmus and his Phœnician followers; that thoſe letters were afterwards called *Pelaſgic*, becauſe the Pelaſgi were the firſt people of Greece who adopted them. This account muſt go to the ſcore of national vanity, ſince very ſoon after he acknowledges that Linus wrote the exploits of the firſt Bacchus and ſeveral other romantic fables in Pelaſgic characters; and that Orpheus, and Pronapides the maſter of Homer, employed the ſame kind of letters. Zenobius likewiſe informs us that Cadmus ſlew Linus for teaching characters differing from his. Theſe letters could be none other than the Pelaſgic.

Pauſanias, in his Attics, relates, that he himſelf ſaw an inſcription upon the tomb of Coræbus, who lived at the time when Crotopus, who was contemporary with Deucalion, was king of the Argives. This inſcription then was prior to the arrival of Cadmus; and conſequently letters were known in Greece before they were introduced by this chief. It likewiſe appears, from Herodotus himſelf, that the Ionians were in poſſeſſion of alphabetical characters before the coming of the Phœnicians. "For (ſays he) the Ionians having received letters from the Phœnicians, changing the figure and ſound of ſome of them, *ranged them with their own*, and in this manner continued to uſe them afterwards." Lib. i. c. 58.

Beſides theſe hiſtorical proofs of the exiſtence of Pelaſgic characters, monuments bearing inſcriptions in the ſame letters have been diſcovered in ſeveral parts of Greece and Italy, which place this point beyond the reach of controverſy. What characters theſe were may be eaſily determined. As the Pelaſgi emigrated from Arabia, the preſumption is that their letters were Phœnician. They are ſaid by Dr. Swinton to have been thirteen in number, whereas the Phœnician alphabet conſiſts of ſixteen. The three additional letters were probably invented by the latter people after the Pelaſgi had left the eaſtern quarters. The Phœnician letters imported by the Pelaſgi were, no doubt, of a coarſe and clumſy contexture, unfavourable to expedition in writing, and unpleaſant to the ſight. Beſides, the Phœnician characters had not as yet received their names; and accordingly the Romans, who derived their letters from the Arcadian Pelaſgi, had no names for theirs. The probability is, that prior to this era the Pelaſgic letters had not been diſtinguiſhed by names. They were of courſe no other than the original letters of the Phœnicians in their firſt uncouth and irregular form; and for this reaſon they eaſily gave way to the Cadmean, which were more beautiful, more regular, and better adapted to expedition.

Hitherto we have ſeen the Pelaſgi and the Ionim incorporated, living under the ſame laws, ſpeaking the ſame language, and uſing the ſame letters. But another nation, and one too of vaſt extent and populouſneſs, had at an early period taken poſſeſſion of a conſiderable part of the country afterwards diſtinguiſhed by the name of *Hellas*, or

Greece. The Thracians were a great and mighty nation; inferior to none except the Indians, ſays the father of Grecian hiſtory. Theſe people at a very early period, had extended over all the northern parts of that country. They were, in ancient times, a learned and poliſhed nation. From them, in ſucceeding ages, the Greeks learned many uſeful and ornamental ſciences. Orpheus the muſician, the legiſlator, the poet, the philoſopher, and the divine, is known to have been of Thracian extraction. Thamyris and Linus were his diſciples, and highly reſpected among the Greeks for their learning and ingenuity. That theſe people ſpoke the ſame language with the Greeks, is abundantly evident from the connection between them and theſe Thracian bards. The Thracian language, then, whatever it was, contributed in a great proportion towards forming that of the Greeks. From the remains of the Thracian dialect there appears to have been a very ſtrong reſemblance between it and the Chaldean. It appears, however, that the Thracians, Getæ, and Daci or Davi, ſpoke nearly the ſame language. The Goths, ſo much celebrated in the annals of the lower empire, were the deſcendants of the Getæ and Daci, and conſequently retained the dialect of their anceſtors. The reader, therefore, muſt not be ſurpriſed, if, in tracing, the materials of which the Greek language is compoſed, we ſhould ſometimes have recourſe to the remains of the Gothic.

We have now found out three branches of the Greek language; that of the Ionim, or Aborigines, that of the Pelaſgic tribe, and that of the Thracians. Theſe three, we imagine, were only dialects of the very ſame original tongue.

Some centuries after the arrival of the Pelaſgi, Cadmus, an Egyptian by birth, and a ſojourner in Phœnicia, arrived in Bœotia with a multitude of followers. This colony-chief and his countrymen introduced letters and ſeveral other uſeful improvements into the country in queſtion. As theſe people were natives of Phœnicia and its environs, their alphabet was that of their native country, conſiſting of ſixteen letters. That the Phœnician alphabet was nearly the ſame with the Samaritan and Hebrew, has been ſo often and ſo clearly demonſtrated by the learned of this and the former century, that it would be altogether ſuperfluous to inſiſt upon it in this ſhort inquiry. The Phœnicians, as is generally known, wrote from right to left, and the old Grecian characters inverted, exactly reſemble the other. The names of the Cadmean characters are Syrian, which ſhows the near reſemblance between that language and the Phœnician. They ſtand thus: *alpha*, *betha*, *gamla*, *delta*, &c. The Syrians uſed to add *a* to the Hebrew vocables; hence alph becomes alpha, beth, betha or beta, &c. In the Cadmean alphabet we find the vowel letters, which is an infallible proof that this was the practice of the Phœnicians in the age of Cadmus; and this very circumſtance furniſhes a preſumption that the Jews did the ſame at the ſame period. After all, it is evident that the oldeſt Greek letters, which are written from right to left, differ very little from thoſe of the Pelaſgi. The four double letters θ, ϕ, ξ, χ, are ſaid to have been added by Palamedes about twenty years before the war of Troy. Simonides is generally ſuppoſed to have added the letters ζ, η, ψ; though it appears by ſome ancient inſcriptions that ſome of theſe letters were uſed before the days of Palamedes and Simonides.

In the year of our Lord 1456 ſeven brazen tables were diſcovered at Eugubium, a city of Umbria in the Appennines, of which five were written in Pelaſgic or Etruſcan characters, and two in Latin. The firſt of theſe tables is thought to have been compoſed about 168 years after the taking of Troy, or 1206 years before Chriſt. By comparing the inſcription on theſe tables with the old Ionic characters, the curious have been enabled to diſcover the reſemblance. The old Ionic character, written from right to left, continued in general uſe for ſeveral centuries; it was compoſed of the Cadmean and Pelaſgic characters, with ſome variations of form, poſition, and ſound. The Athenians continued to uſe this character till the year of Rome 350. The old Ionic was gradually improved into the new, and this quickly became the reigning mode. After the old Ionic was laid aſide, the bouſtropedon came into cuſtom, which goes backwards and forwards as the ox does with the plough. They carried the line forward from the left, and then back to the right. The words were all placed cloſe together; and few ſmall letters were uſed before the fourth century. If our curious readers would wiſh to know more of letters and alphabets, we muſt remit them to Chiſhul, Morton, Poſtellus, the great Montfaucon, Gebelin, Aſtle, &c.

The original materials of the Greek tongue were undoubtedly rough and diſcordant, as we have deſcribed them above. They had been collected from different quarters, were the produce of different countries, and had been imported at very diſtant periods. It would therefore be an entertaining, if not an inſtructing, ſpeculation, if it were poſſible to diſcover by what men, and by what means, this wonderful fabric was founded, erected, and carried to perfection. The writers of Greece afford us no light. Foreigners were unacquainted with that originally inſignificant canton. Every thing beyond Homer is buried in eternal oblivion. Orpheus is indeed reported to have compoſed poems; but theſe were ſoon obliterated by the hand of time. The verſes now aſcribed to that philoſophical hero are none of his. Linus wrote, in the Pelaſgic dialect, the achievements of the firſt Bacchus; Thamyris the Thracian wrote; and Pronapides the maſter of Homer was a celebrated poet. The works of all theſe bards did not long ſurvive; and it is a certain fact that the Greek tongue was highly poliſhed even more early than the age in which theſe worthies flouriſhed. Homer, no doubt, imitated their productions, and ſome are of opinion that he borrowed liberally from them. The Greeks knew no more of the original character of their language, than of the original character and complexion of their progenitors. They allowed, indeed, that their language was originally barbarous and uncouth; but by what means or by what perſons it was poliſhed, enriched, and finally arranged, was to them an impenetrable ſecret.

We have already demonſtrated that the Ionim, or aborigines of Greece, were a race of barbarians; that conſequently their language, or rather their jargon, was of the ſame contexture. The Pelaſgi found both the people and their ſpeech in this uncultivated ſtate. Theſe people arrived in Greece about the year before Chriſt 1760. It was then that the language of Greece began to be cultivated. Before the age of Homer the work ſeems to have been completed. Nothing of conſequence was afterwards added to the original ſtock. The Pelaſgi, as was ſaid before, arrived in Greece B.C. 1760. Homer is thought to have been born B.C. 1041; conſequently, the cultivation of the Greek tongue was completed in a period of about 700 years. But, upon the ſuppoſition that Orpheus, Linus, Thamyris, &c. wrote long before Homer, as they certainly did, that language had arrived nearly at the ſtandard of perfection two centuries before; by which computation the period of its progreſs towards its ſtationary point is reduced to 500 years. But, as the Pelaſgi were a colony of foreigners, we ought to allow them one century at leaſt to ſettle and incorporate with the natives, and to communicate their language, laws, manners, and habits, to the aborigines of the country. By this deduction we ſhall reduce the term of cultivation to leſs than four centuries.

During this period Greece was furiouſly agitated by tumults and inſurrections. That country was divided into a number of independent ſtates, which were perpetually engaged in quarrels and competitions. The profeſſion of arms was abſolutely neceſſary for the protection and preſervation of the ſtate; and the man of conduct and proweſs was honoured as a demi-god, and his exploits tranſmitted with eclat to poſterity. The Greek tongue was then

rough and unpoliſhed; becauſe, like the ancient Romans, the braveſt men were more diſpoſed to act than to ſpeak. Every language will take its colour from the temper and character of thoſe who employ it; and, had it not been owing to one claſs of men, the Greek tongue would have continued equally rough to the era of Homer as it had been a century after the arrival of the Pelaſgi.

There has appeared among barbarous or half-civilized people a deſcription of men whoſe profeſſion it has been to frequent the houſes or palaces of the great, in order to celebrate their achievements, or thoſe of their anceſtors, in the ſublimeſt ſtrains of heroic poetry. Accordingly, we find that the Germans had their *bards*, the Gauls their *fads*, the Scandinavians their *ſcalds*, the Iriſh their *ſileas*, all retained for that very purpoſe. They lived with their chieftains or patrons; attended them to battle; were witneſſes of their heroic deeds; animated them with martial ſtrains; and celebrated their proweſs, if they proved victorious; or, if they fell, raiſed the ſong of woe, and chanted the mournful dirge over their ſepulchres. Theſe bards were always both poets and muſicians. Their perſons were held ſacred and inviolable. They attended public entertainments, and appeared in all national conventions. The chief of them were employed in the temples of the gods; and the leſs illuſtrious, like our minſtrels of old, ſtrolled about from place to place, and exerciſed their functions wherever they found employment. Among the ancient Greeks there was a numerous tribe of men of the very ſame deſcription, who were at once poets and muſicians, and whoſe office it was to celebrate the praiſes of the great, and to tranſmit their exploits to poſterity in the moſt exaggerated encomiums. Theſe poetical vagrants were ſtyled αοιδοι, or ſongſters. Some of theſe lived in the houſes of great men; while others, leſs ſkilful or leſs fortunate, ſtrolled about the country in the manner above deſcribed. The more illuſtrious of theſe, who were retained in the temples of the gods, were certainly the firſt improvers of the language of the Greeks. Among the Hebrews we find the firſt poetical compoſitions were hymns in honour of Jehovah, and among the Pagans the ſame practice was eſtabliſhed. In Greece, when all was confuſion and devaſtation, the temples of the gods were held ſacred and inviolable. There the αοιδοι improved their talents, and formed religious anthems on thoſe very models which their progenitors had chanted in the eaſt. The language of the Greeks was yet rugged and unmellowed: their firſt care was to render it more ſoft and more flexible. They enriched it with vocables ſuited to the offices of religion; and theſe, we imagine, were chiefly imported from the eaſt. Homer every where mentions a diſtinction between the language of gods and men. The language of gods imports the oriental terms retained in the temples, and uſed in treating of the ceremonies of religion; the language of men intimates the ordinary civil dialect which ſprung from the mixed dialects of the country. The prieſts, no doubt, concurred in promoting this noble and important purpoſe. From this ſource the ſtrolling αοιδοι drew the rudiments of their art; and from theſe laſt the vulgar deduced the elements of the poliſhed ſtyle. To theſe αοιδοι of the ſuperior order we would aſcribe thoſe changes mentioned in the preceding part of this inquiry, by which the Greek tongue acquired that variety and flexibility, from which two qualities it has derived a great ſhare of that eaſe, beauty, and verſatility, by which it now ſurpaſſes moſt other languages.

We are told that the practice of writing in verſe was antecedent to the date of proſaic compoſition. Here, then, the αοιδοι and the miniſters of religion chiefly diſplayed their ſkill and diſcernment. By a judicious mixture of ſhort and long ſyllables; by a junction of conſonants which naturally ſlide into each other; by a careful attention to the rhythm, or harmony reſulting from the combination of the ſyllables of the whole line, they completed the metrical tone of the verſe, guided by that delicacy of muſical feeling of which they were poſſeſſed before rules of proſody were known among men. Verſes, however, were as yet clumſy and irregular, as the quantity of vowels was not duly aſcertained, and the colliſion of heterogeneous conſonants not always avoided. Probably theſe primitive verſes differed as widely from the finiſhed ſtrains of Homer and his ſucceſſors, as thoſe of Chaucer and Spenſer do from the ſmooth poliſhed lines of Dryden and Pope.

The Grecian poets, however, enjoyed another advantage which that claſs of writers have ſeldom poſſeſſed, which aroſe from the different dialects into which their language was divided. All thoſe dialects were adopted indifferently by the prince of poets; a circumſtance which enabled him to take advantage of any word from any dialect, provided it ſuited his purpoſe. This, at the ſame time that it rendered verſification eaſy, diffuſed an agreeable variety over his compoſition. He even accommodated words from Macedonia, Epirus, and Illyricum, to the purpoſes of his verſification. Beſides, the laws of quantity were not then clearly aſcertained; a circumſtance which afforded him another convenience. Succeeding poets did not enjoy theſe advantages, and conſequently have been more circumſcribed both in their diction and numbers.

The Greek language, as is generally known, was divided into many different dialects. Every ſept, or petty canton, had ſome peculiar forms of ſpeech which diſtinguiſhed it from the others. There were, however, four different dialectical variations which carried it over all the others. Theſe were the Attic, Ionic, Æolic, and Doric. Theſe four dialects originated from the different countries in the eaſt from which the tribes reſpectively emigrated. The Attics conſiſted, 1ſt, of the barbarous aborigines; 2d, of an adventitious colony of Egyptian Saïtes; 3d, a branch of Ionians from the coaſt of Paleſtine. Theſe laſt formed the old Ionian dialect, from which ſprung the Attic and modern Ionic. The Æolians emigrated from a different quarter of the ſame coaſt; the inhabitants of which were a remnant of the old Canaanites, and conſequently different in dialect from the two firſt-mentioned colonies. The Dores ſprang from an unpoliſhed race of purple-fiſhers on the ſame coaſt, and conſequently ſpoke a dialect more coarſe and ruſtic than any of the reſt. Theſe four nations emigrated from different regions; a circumſtance which probably laid the foundation of the different dialects by which they were afterwards diſtinguiſhed. It is impoſſible in this ſhort ſketch to exhibit an exact view of the diſtinguiſhing features of each dialect. We ſhall content ourſelves with a few obſervations.

The Athenians, being an active, briſk, volatile, race, delighted in contractions. Their ſtyle was moſt exquiſitely poliſhed. The moſt celebrated authors who wrote in that dialect were Plato, Thucydides, Xenophon, Demoſthenes, and the other orators; Æſchylus, Euripides, Sophocles, Ariſtophanes, Menander, Diphilus, with the other comic and tragic poets. That dialect was either ancient or modern. The ancient Attic was the ſame with the Ionic.

The Ionic, as was ſaid, was the ancient Attic; but, when that nation emigrated from Attica, and ſettled on the coaſt of Aſia Minor, they mingled with the Carians and Pelaſgi, and of courſe adopted a number of their vocables. They were an indolent, luxurious, and diſſolute, people; of courſe their ſtyle was indeed eaſy and flowing, but verboſe, redundant, and without nerves. This, however, is the leading ſtyle in Homer; and after him a prodigious number of writers on every ſubject have uſed the ſame dialect, ſuch as Herodotus of Halicarnaſſus, the celebrated hiſtorian; Cteſias of Cnidus, the hiſtorian of Perſia and India; Hecatæus of Miletus; Megaſthenes the hiſtorian, who lived under Seleucus Nicator; Hippocrates, the celebrated phyſician of Coos; Hellanicus, the hiſtorian often mentioned with honour by Polybius; Anacreon of Teia, Alcæus, Sappho of Leſbos, excellent poets;

Pherecydes

Pherecydes Syrus the philoſopher, and a multitude of other perſons of the ſame profeſſion, whom it would be ſuperfluous to mention upon the preſent occaſion.

The Æolic and Doric were originally cognate dialects. When the Dorians invaded Peloponneſus and ſettled in that peninſula, they incorporated with the Æolians, and their two dialects blended into one produced the new Doric. The original Dores inhabited a rugged mountainous region about Oſſa and Pindus, and ſpoke a rough unpoliſhed language ſimilar to the ſoil which they inhabited. Andreas Schottus, in his Obſervations on Poetry, lib. ii. cap. 50. proves, from an old manuſcript of Theocritus, that there were two dialects of the Doric tongue, the one ancient and the other modern; that this poet employed the Ionic and the modern Doric; that the old Doric dialect was rough and cumbrous; but that Theocritus adopted the new, as being more ſoft and mellow. A prodigious number of poets and philoſophers wrote in this dialect, ſuch as Epicharmus the poet; Ibycus the poet of Rhegium; Corinna the poteſs of Theſpis, or Thebes, or Corinth, who bore away the prize of poetry from Pindar; Erynna a poteſs of Leſbos; Moſcus the poet of Syracuſe; Sappho the poteſs of Mitylene; Pindarus of Thebes, the prince of lyric poets; Archimedes of Syracuſe, the renowned mathematician; and almoſt all the Pythagorean philoſophers. Few hiſtorians wrote in that dialect; or, if they did, their works have not fallen into our hands. Moſt of the hymns ſung in temples of the gods were compoſed in Doric; a circumſtance which evinces the antiquity of that dialect, and which, at the ſame time, proves its affinity to the oriental ſtandard.

After that the Greek tongue was thoroughly poliſhed by the ſteps which we have endeavoured to trace, conſcious of the ſuperior excellency of their own language, the Greeks, in the pride of their heart, ſtigmatized every nation which did not employ their language with the contemptuous title of *barbarians*. Such was the delicacy of their pampered ears, that they could not endure the untutored voice of the people whom they called βαρβαροφωνοι. This extreme delicacy produced three very pernicious effects. 1ſt. It induced them to metamorphoſe, and ſometimes even to mangle, foreign names, in order to reduce their ſound to the Grecian ſtandard. 2d. It prevented their learning the languages of the eaſt, the knowledge of which would have opened to them an avenue to the records, annals, antiquities, laws, cuſtoms, &c. of the people of thoſe countries, in compariſon of whom the Greeks themſelves were of yeſterday, and knew nothing. By this unlucky bias, not only they, but even we who derive all the little knowledge of antiquity we poſſeſs through the channel of their writings, have ſuffered an irreparable injury. By their transformation of oriental names, they have in a manner ſtopped the channel of communication between the hiſtories of Europe and Aſia. This appears evident from the fragments of Cteſias's Perſian hiſtory, from Herodotus, Xenophon, and all the other Grecian writers who have occaſion to mention the intercourſe between the Greeks and Perſians. 3d. It deprived them of all knowledge of the etymology of their own language, without which it was impoſſible for them to underſtand its words, phraſeology, and idioms, to the bottom. We mentioned Plato's Cratylus above. In that dialogue, the divine philoſopher endeavours to inveſtigate the etymology of only a few Greek words. His deductions are abſolutely childiſh, and little ſuperior to the random conjectures of a ſchool-boy. Varro, the moſt learned of all the Romans, has not been more ſucceſsful. Both ſtumbled on the very threſhold of that uſeful ſcience; and a ſcholar of very moderate proficiency in our days knows more of the origin of theſe two noble languages, than the greateſt adepts among the natives did in theirs. The derivation of the Greek primitives from the oriental tongues will, in general, ſet aſide as nugatory and erroneous the derivations of the ancient ſcholiaſts, and of thoſe modern lexicographers who have adopted their explanations. Theſe ſcholiaſts and grammarians are valuable as expounders of the Greek text; but, as they were apparently ignorant of the oriental tongues, the account which they give of the words thence derived are often frivolous in the extreme. It is neceſſary to juſtify this aſſertion by a few examples. Αιμασια, a hedge or fence, occurs in Theocritus, Idyl. i. 47. and the ſcholiaſt derives it from αιμα, blood; becauſe thoſe who paſs through ſuch a fence are made to bleed. This derivation, nugatory as it appears, is adopted by Hedericus in his Lexicon; whereas its origin is the Hebrew אמץ, *amez*, to ſtrengthen, to ſecure, and thence applied to a hedge, which by ſurrounding defends a place. On the ſame principle κηπος, a garden, the origin of which neither Hedericus nor any of the ancient ſcholiaſts, we believe, have attempted to unfold, is borrowed from קוף, *koph*, to ſurround: hence the term denoted a place ſurrounded or ſecured as a garden is. Lennep indeed derives it from καπος, breath, a word quite foreign to the purpoſe. The word βουξεια, a fountain, (Theocritus, Idyl. vii. 10.) is derived by the ſcholiaſt from the particle βου, an ox, and ξεω, to flow, becauſe it reſembles the noſtrils of an ox; whereas βουξεια is evidently the Hebrew באר, *baar*, or בור *bur*, a fountain. The Greek ſcholia, annexed to every author, abound with ſuch puerilities as the above; nor is the Etymologicum Magnum to be excepted, though the Greek lexicographers have ſought for no better or more rational guides in their inquiries after the origin of the words which they explain. Hemſteruſe, Valckenaer, Ruhnken, Villoiſon, Lennep, Scheid, are indeed juſtly celebrated among modern critics for their reſearches into the origin and meaning of the Greek tongue. Their theories contain many valuable obſervations on the analogy by which that language grew from comparatively few radicals to its preſent complicated form; but their ſyſtem of etymologies appear to us, for the moſt part, fanciful and erroneous; becauſe in no inſtance, or at leaſt in very few inſtances, have they ſought the Greek terms in the languages of the Eaſt, whence aſſuredly they had been derived. Hemſteruſe derives Θεος, Deus, from the verb θεω, to run, to diſpoſe; while its real origin, in our opinion, is the Hebrew and Arabic צאה, *zae*, pronounced in the latter language *dhao*, to ſhine. The Chaldeans repreſented the Supreme Good under the figure of light; and to this repreſentation the ſacred writer ſeems to allude, when he ſays that God is light. Scheid derives τερας, an omen, from τερω, *tero*, to wear, becauſe omens, ſays he, *obterant, quaſi, ſive ſtupore percellant, enecent que mortales*. But the word is the Hebrew טיר, *teer*, a bird, divination, which was taken from birds. The ſame writer will have τενδω, or τενθω, to eat, to have come from τενω, or τεινω, to ſtretch, though far more naturally it points to the Perſian דנך, *dend*, a tooth; and hence τενδω primarily meant, to cut with the teeth. The Hebrew צהר, *zer*, to ſhine, to ſcorch, gave birth to ξηρος, dry; but Villoiſon fooliſhly derives it from ξεω, *radere*. The ſame critic as wiſely traces ξυλον to the ſame root, becauſe, ſays he, *lignum ſit ad radendum aptum*. But its origin is evidently אשל, a grove, hence αξυλος, wood, and by dropping the firſt vowel ξυλον, and by tranſpoſition αλσος, a grove, or foreſt. This is a fair ſpecimen of the manner in which theſe etymologiſts have, by certain analogies, founded on their own fancies rather than on the real ſtructure of the Greek tongue, yoked together under one common root words the moſt foreign to each other.

The ancient Greeks had no accentual marks. They learned thoſe modifications of voice by practice from their infancy; and we are aſſured by good authority, that in pronunciation they obſerve them to this day. The accentual marks are ſaid to have been invented by a famous grammarian, Ariſtophanes of Byzantium, keeper of the Alexandrian library under Ptolemy Philopater, and Epiphanes, who was the firſt likewiſe who is ſuppoſed to have invented punctuation. Accentual marks, however, were not in common uſe till about the ſeventh century, at

which time they are found in manuſcripts. If our curious readers would wiſh to enter into the theory of accents, we muſt remit them to Origin of Language, vol. ii. lib. 2. and to Mr. Foſter's Eſſay on the different Nature of Accent and Quantity. And the Greek ſtudent who intends to penetrate into the depths of this excellent language, will endeavour to be thoroughly acquainted with the books aftermentioned. Ariſtotle's Rhetoric and Poetics, his book De Interpretatione, eſpecially with Ammonius's Commentary. Ammonius was a native of Alexandria, and by far the moſt acute of all the ancient grammarians. Dion. Halic. De Structura Orationis, where, amidſt abundance of curious and intereſting obſervations, will be found the true pronunciaion of the Greek letters. Demetrius Phalereus De Elocutione; a ſhort eſſay, but replete with inſtruction concerning the proper arrangement of words and members in ſentences. Longinus, the prince of critics, whoſe remains are above commendation. Theodorus Gaza and the other refugees from Conſtantinople, who found an hoſpitable reception from the munificent family of the Medici, and whoſe learned labours in their native language once more revived learning and good taſte in Europe. Theſe, with ſome other critics of leſs celebrity, but equal utility, will unlock all the treaſures of Grecian erudition, without however diſcloſing the ſource from which they flowed. To theſe one might add a few celebrated moderns, ſuch as Monſ. Fourmont the Elder, Monſ. Gebelin, Abbé Pezron, Salmaſius, and eſpecially the learned and induſtrious lord Monboddo.

We ſhall now give a very brief account of the vaſt extent of the Greek language, even before the Macedonian empire was erected; at which period, indeed, it became in a manner univerſal, much more than ever the Latin language could accompliſh, notwithſtanding the vaſt extent of the Roman empire. Greece, originally Hellas, was a region of ſmall extent, and yet ſent out many numerous colonies into different part of the world. Theſe colonies carried their native language along with them, and induſtriouſly diffuſed it wherever they formed a ſettlement. The Ions, Æoles, and Dores, poſſeſſed themſelves of all the weſt and north-weſt coaſt of the Leſſer Aſia and the adjacent iſlands; and there even the barbarians learned that poliſhed language. The Greek colonies extended themſelves along the ſouth coaſt of the Euxine ſea as far as Sinope, now Trebiſond, and all the way from the weſt coaſt of Aſia Minor; though many cities of barbarians lay between, the Greek tongue was underſtood and generally ſpoken by people of rank and faſhion. There were Greek cities on the north coaſt of the Euxine ſea to the very eaſtern point, and perhaps beyond even thoſe limits; likewiſe in the Taurica Cherſoneſus, or Crim Tartary; and even to the mouth of the Danube, the ſtraits of Caffa, &c. In the neighbourhood of all theſe colonies, the Greek language was carefully propagated among the barbarians who carried on commerce with the Greeks. A great part of the ſouth of Italy was planted with Greek cities on both coaſts; ſo that the country was denominated Magna Græcia. Here the Greek tongue univerſally prevailed. In Sicily it was in a manner vernacular. The Ionians had ſent a colony into Egypt in the reign of Pſammetichus; and a Greek ſettlement had been formed in Cyrenia many ages before. The Phocians had built Maſſilia, or Marſeilles, as early as the reign of Cyrus the Great, where ſome remains of the Greek language are ſtill to be diſcovered. Cæſar tells us, that in the camp of the Helvetii regiſters were found in Greek letters. Perhaps no language ever had ſo extenſive a ſpread, where it was not propagated by the law of conqueſt.

The Greek tongue, at this day, is confined within very narrow limits. It is ſpoken in Greece itſelf, except in Epirus, and the weſtern part of Macedonia. It is likewiſe ſpoken in the Grecian and Aſiatic iſlands, in Candia or Crete, in ſome parts of the coaſt of Aſia Minor, and in Cyprus; but in all theſe regions, it is much corrupted and degenerated.

We ſhall conclude this ſection with a brief detail of the moſt diſtinguiſhed ſtages and variations through which this noble tongue made its progreſs from the age of Homer to the taking of Conſtantinople, B. C. 1453; a period of more than 2000 years. Homer gave the Greek poetry its colour and conſiſtency, and enriched, as well as harmonized, the language. It ſeems, from the coincidence of epithets and cadence in Homer and Heſiod, that the Greek heroic verſe was formed ſpontaneouſly, by the old ἀοιδοι, and that Homer and his firſt followers adopted their verſification. The Iliad and Odyſſey have much of the air of extempore compoſitions; an epithet is never wanting to fill up a verſe; and a ſet of expreſſions are mechanically annexed to ſuch ideas as were of frequent recurrence. Hence that copiouſneſs and waſte of words in the old Greek bard, which forms ſuch a contraſt to the condenſed and laboured compoſition of Virgil. The Greek proſe was of a more difficult ſtructure; and it may be diſtributed into different ſtyles or degrees of purity. Of the proſe-authors now extant, the firſt and beſt ſtyle is that of Herodotus, and of Plato in the florid or mixed kind, of Xenophon in the pure and ſimple, of Thucydides and Demoſthenes in the auſtere. Nothing, perhaps, is ſo conducive to form a good taſte in compoſition as the ſtudy of theſe writers. The ſtyle of Polybius forms a new epoch in the hiſtory of the Greek language: it was the idiotic or popular manner of expreſſion, eſpecially among military men, in his time, about the 150th Olympiad. It became the model of ſucceeding writers, by introducing a ſimple unſtudied expreſſion, and by emancipating them from the anxious labour of the old Greeks reſpecting the cadence and choice of words. The ſtyle of the New Teſtament, being plain and popular, frequently reſembles that of Polybius, as has been ſhown by Raphelius, and by Kirchmaier, de Paralleliſmo N. T. et Polybii, 1725. Before this hiſtorian, the Alexandrian Jews had formed a new or Helleniſtic ſtyle, reſulting from the expreſſion of oriental ideas and idioms in Greek words, after that language had loſt of its purity, as it gained in general uſe, by the conqueſts of Alexander. The Helleniſtic is the language of the Septuagint, the Apocrypha, the New Teſtament, and partly of Philo and Joſephus. This mixture in the ſtyle of the evangeliſts and apoſtles is one credential of the authenticity of the beſt of all books, a book which could not have been written but by Jewiſh authors in the firſt century. See the fine remarks of biſhop Warburton, Doctrine of Grace, book i. Critics loſe their labour in attempting to adjuſt the Scripture-Greek to the ſtandard of Atticiſm. The diction of the Greek hiſtorians, and geographers of the Auguſtan age, is formed on that of Polybius; but improved and modernized, like the Engliſh of the preſent age, if compared with that of Clarendon or Bacon. More perſpicuous than refined, it was well ſuited to ſuch compilations as were then written by men of letters, ſuch as Dionyſius, Diodorus, and Strabo, without much experience or rank in public life. The eccleſiaſtical ſtyle was cultivated in the Chriſtian ſchools of Alexandria, Antioch, and Conſtantinople; rank and luxuriant, full of oriental idioms, and formed in a great meaſure on the Septuagint verſion. Such is, for inſtance, the ſtyle of Euſebius. After him, the beſt Chriſtian writers poliſhed their compoſitions in the ſchools of rhetoric under the later ſophiſts. Hence the popular and flowing purity of St. Chryſoſtom, who has more good ſenſe than Plato, and perhaps as many good words. On the Greek of the Byzantine empire, there is a good diſſertation by Ducange, De Cauſis Corruptæ Græcitatis, prefixed to his Gloſſary, together with Portius's Grammar of the modern Greek. This laſt ſtage of the Greek language is a miſerable picture of Turkiſh barbariſm. And, which is moſt ſurpriſing, there is no city of Greece where the language is more different from the ancient than at Athens. The reaſon of that is, becauſe it has been long inhabited by a mixed multitude of different nations.

Of all the nations whoſe memory hiſtory has tranſmit-

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ted to us, none have been ſo eminently diſtinguiſhed for their literary accompliſhments, as well as acquaintance with the polite arts, as the Greeks; nor are we as yet acquainted with a language poſſeſſed of ſo many advantages, with ſo few defects, as that which they uſed, and which continues ſtill to be known by their name. The original ſounds of the Greek language are the moſt harmonious, and the moſt agreeable to the ear, of any that have hitherto been invented. They are indeed agreeable to every perſon who hears them, even when the meaning of the words is not underſtood; whereas almoſt all other languages, till they are underſtood, appear, to an ear which has not yet been accuſtomed to them, jarring and diſcordant. This is the fundamental excellence of that juſtly-admired language; nor did the people fail to improve this to the utmoſt of their power, by many aids of their own invention. From the progreſs of arts and ſciences; from the gaiety and inventive genius of the people; from the number of free ſtates into which Greece was divided, each of which invented words of its own, all of which contributed to the general ſtock; and from the natural communication which took place between theſe ſtates, which excited in the ſtrongeſt degree the talents of the people; it acquired a copiouſneſs unknown to any ancient language, and excelled by few of the moderns. In point of harmony of numbers, it is altogether unrivalled; and, on account of the eaſe as well as dignity which from the cauſes above mentioned it acquired, it admits of perfection in a greater number of particular kinds of compoſition than any other language known. The irreſiſtible force and overwhelming impetuoſity of Demoſthenes ſeem not more natural to the genius of the language, than the more flowery charms of Plato's calm and harmonious cadences, or the unadorned ſimplicity of Xenophon; nor does the majeſtic pomp of Homer ſeem to be more agreeable to the genius of the language in which he wrote, than the more humble ſtrains of Theocritus, or the laughing feſtivity of Anacreon. Equally adapted to all purpoſes, when we peruſe any of theſe authors, we might imagine the language was moſt happily adapted for his particular ſtyle alone. The ſame powers it likewiſe, in a great meaſure, poſſeſſed for converſation; and the dialogue ſeems not more natural for the dignity of Sophocles or Euripides, than for the more eaſy tenderneſs of Menander, or the buffoonery of Ariſtophanes. In ſhort, the powers of the Greek are vaſtly beyond thoſe of any other tongue. Whatever the Greeks deſcribe is always felt, and almoſt ſeen; motion and muſic are in every tone, and enthuſiaſm and enchantment poſſeſs the mind.

Of the LATIN, and its DERIVATIVES.

The Latin language, like every other ſpoken by barbarians, was in its beginning rough and uncultivated. What people the Romans were, is a point in which antiquarians are not yet agreed. In their own opinion they were ſprung from the Trojans; Dion. Halicar. derives them from the Greeks; and Plutarch informs us that ſome people imagined that they were ſprung from the Pelaſgi. The fact is, they were a mixture of people collected out of Latium and the adjacent parts, which a variety of accidents had drawn together, to eſtabliſh themſelves on that mountainous region, in order to ſecure their own property, and plunder that of their neighbours. They were in all probability compoſed of Arcadians, Sabines, Latins, Hetruſcans, Umbrians, Oſcans, Pelaſgi, &c. and, if ſo, their language muſt have been a mixture of the different dialects peculiar to all theſe diſcordant tribes. The Latin language ought then to be a mingled maſs of the Arcadian, that is, the Æolian Greek, the Pelaſgic, Hetruſcan, and Celtic, dialects. Theſe jarring elements, like the people to whom they belonged reſpectively, gradually incorporated, and produced what was afterwards called the *Latin* tongue.

The Arcadians were a Pelaſgic tribe, and conſequently ſpoke a dialect of that ancient Greek produced by the coalition of this tribe with the ſavage aborigines of Greece. This dialect was the ground-work of the Latin. Every ſcholar allows, that the Æolian Greek, which was ſtrongly tinctured with the Pelaſgic, was the model upon which the Latin language was formed. From this deduction it appears, that the Latin tongue is much more ancient than the modern Greek; and of courſe we may add, that the Greek, as it ſtood before it was thoroughly poliſhed, bore a very near reſemblance to that language. Hence we think we may conclude, that the knowledge of the Latin language is neceſſary in order to underſtand the Greek. Let us not then expect to find the real ingredients of the Greek tongue in the academic groves of Athens, or in Smyrna, or in Rhodope, or in Hæmos; but on the banks of the Tiber, and on the fields of Laurentum.

A very conſiderable part of the Latin tongue was derived from the Hetruſcan. That people were the maſters of the Romans in every thing ſacred. From them they learned the ceremonies of religion, the method of arranging games and public feſtivals, the art of divination, the interpretation of omens, the method of luſtrations, expiations, &c. It would, we believe, be eaſy to prove, that the Pelaſgi and Hetruſci were the ſame race of people; and, if this was the caſe, their languages muſt have differed in dialect only.

The Hetruſci were variouſly denominated by the Greeks and Romans. The former called them Τυρσηνοι; which was their true name, for they actually emigrated from Tarſhiſh, or the weſtern coaſt of Aſia Minor. The Æolians changed α into υ; hence in that dialect they were called Τυρσηνοι, from Tarſus. The Romans ſtyled them *Tuſci*, probably from the Greek verb θυω, to ſacrifice, alluding to the ſkill which that people profeſſed in the ceremonies of religion. They called their country *Hetruria*, perhaps from the Chaldaic word *heretum*, a magician or ſorcerer; a name deduced from their ſkill in divination.

The Umbrian or Celtic enters deeply into the compoſition of the Latin tongue. Whether the old Celtic differed eſſentially from the Pelaſgic and Hetruſcan, would be a matter of curious inveſtigation, were this a proper ſubject for the preſent article. The Latin abounds with oriental words, eſpecially Hebrew, Chaldaic, and Perſian. Theſe are certainly remains of the Pelaſgic and Hetruſcan tongues, ſpoken originally by people who emigrated from regions where thoſe were parts of the vernacular language. The Greeks, in poliſhing their language, gradually diſtorted and diſfigured vaſt numbers of the rough eaſtern vocables, which made a very great part of it. The Romans, of leſs delicate organs, left them in their natural ſtate, and their natural air readily betrays their original. In this language, too, there are not a few Gothic terms. How theſe found their way into the Latin, it is not eaſy to diſcover, unleſs, as Pelloutier ſuppoſes, the Celtic and Gothic languages were originally the ſame; or perhaps we may conjecture, that ſuch words were parts of a primitive language, which was at one time univerſal. There are, beſides, in the Latin a great number of obſolete Greek words, which were in proceſs of time obliterated, and others ſubſtituted in their room; ſo that, upon the whole, we are perſuaded, that the moſt effectual method to diſtinguiſh the difference between the early and modern Greek, would be to compare the ancient Latin with the latter; there being, we imagine, very little difference between the ancient Greek and Latin in the earlieſt periods.

However that may be, it is certain that the Roman letters were the ſame with the ancient Greek. *Formæ literis Latinis quæ veterrimis Græcorum*, ſays Tacitus; and Pliny ſays the ſame thing, and for the truth of his aſſertion he appeals to a monument extant in his own times. Theſe old Greek letters were no other than the Pelaſgic, which we have ſhown from Diodorus Siculus to have been prior to the Cadmean.

That the Latins borrowed the plan of their declenſions

from the Greeks, is evident from the exact reſemblance of the terminations of the caſes throughout the three ſimilar declenſions. In nouns of the firſt declenſion, the reſemblance is too palpable to ſtand in need of illuſtration. In the ſecond, the Greek genitive is *ου*. In Latin the *o* is thrown out, and the termination becomes *i*. In the ancient Greek, the ſounds of *ι* and *υ* differed very little; therefore the Latins uſed *ι* inſtead of *υ*. The Latin dative ends in *o*, which is the Greek dative, throwing away *ι* ſubſcriptum, which was but faintly ſounded in that language.

No genuine Greek word ended in *μ*, or *m*. The Hellenes ſeemed to have abhorred that bellowing liquid; it is, however, certain that they imported it from the eaſt, as well as the other letters, and that they employed it in every other capacity, except in that of cloſing words. In the termination of flexions, they changed it into *ν*. The Latins retained *m*, which had been imported to them as a terminating letter at an era before the Greek language had undergone its laſt refinement. Hence the Latin accuſative in *um*, inſtead of the Greek *ον*. The vocative caſe, we imagine, was in this declenſion originally like the nominative. The Latins have no dual number, probably becauſe the Æolian dialect, from which they copied, had none. The third declenſions in both languages are ſo exactly parallel, that it would be ſuperfluous to compare them.

The Latins have no articles, which is certainly a defect in their language. The Pelaſgic, from which they copied, had not adopted that word in the demonſtrative ſenſe. Homer indeed ſeldom uſes it; and the probability is, that the more early Greek uſed it leſs frequently, at leaſt in the ſenſe above-mentioned. Thus in Latin, when I ſay, *Video hominem*, it is impoſſible to find out by the bare words whether the word *hominem* intimates *a* man, or *the* man: whereas in Greek it would be Βλεπω ανθρωπον, I ſee a man; Βλεπω τον ανθρωπον, I ſee the man. Hence the firſt expreſſion is indefinite, and the ſecond definite.

The ſubſtantive-verb *ſum* in Latin ſeems to be partly formed from the Greek, and partly not. Some of the perſons of the preſent tenſe have a near reſemblance to the Greek verb εω or ειμι, while others vary widely from that archetype. The imperfect præterite and præterperfect have nothing common with the Greek verb, and cannot, we think, be forced into an alliance with it. The future *ero* was of old *eſo*, and is indeed genuine Greek. Upon the whole, in our apprehenſion, the Latin ſubſtantive-verb more nearly reſembles the Perſian verb *heſten* than that of any other language we are acquainted with. From what exemplar the Latin verbs were derived, is not, we think, eaſily aſcertained. We know that attempts have been made to deduce them all from the Æolic Greek, and that the Romans themſelves were extremely fond of this chimera; but the almoſt numberleſs irregularities, both in the formation and conjugation of their verbs, induce us to believe that only a part of them were formed upon that model. We are apt to think that the terminations in *bam*, *bas*, *bat*, *bamus*, &c. are produced by their union with a fragment of ſome obſolete verb, which is now wholly loſt. In the verb *amo*, e.g. we are ſure that the radix *am* is the Hebrew word *mother*; but how *am-abam*, *am-abo*, *am-arem*, were fabricated, and connected with the radical *am*, is not ſo eaſily determined. That Latin verbs are compoſed of an inflexible radix and another flexible verb, as well as the Greek, cannot be doubted; but what this flexible auxiliary was, we think, cannot now be clearly aſcertained. It is not altogether improbable that ſuch parts of the verbs as deviate from the Greek archetype were ſupplied by fragments of the verb *ha*, which pervades all the branches of the Gothic language, and has, we think, produced the Latin verb *habeo*. When the Greeks began to etymologize, they ſeldom overpaſſed the verge of their own language; the Latins purſued nearly the ſame courſe. If their own language preſented a plauſible etymology, they embraced it; if not, they immediately had recourſe to the Greek; and this was the extent of their etymological reſeaches. Cicero, Quintilian, Feſtus, &c. and even Varro, the moſt learned of all the Romans, ſtop here; all beyond is either doubt or impenetrable darkneſs.

The want of aoriſts or indefinite tenſes ſeems to us a palpable defect in the Latin language. The uſe of theſe among the Greeks enabled the writer to expreſs the ſpecific variations of time with more accuracy and preciſion than the Latins, who never attempted to ſpecify them by any other tenſes but the imperfect and plu-perfect. Indeed we ſhould imagine, that both the Greeks and Latins were much inferior to the Engliſh in this reſpect. The Latin word *lego*, for example, may be tranſlated into Engliſh three different ways: 1ſt, I read; 2d, I do read; 3d, I am reading.

The Latins, in reducing verbs to their four conjugations, formed their inflexions in a very irregular manner. Many verbs of the firſt claſs inflect their præterite and ſupine like thoſe of the ſecond: thus *domo*, inſtead of giving *avi* and *atum*, has *ui* and *itum*, like *monui* and *monitum*. Again, not a few verbs of the third conjugation have *ivi* and *itum*, as if they belonged to the fourth; e.g. *peto*, *petivi*, *petitum*. Then, ſome verbs have *io* in the preſent, *ivi* in the præterite, and *itum* in the ſupine, while, contrary to the rules of analogy, they in reality belong to the third: ſuch are *cupio*, *cupivi*, *cupitum*, *cupere*, &c. Some verbs of the ſecond conjugation have their præterite and ſupine as if they belonged to the third; thus, *jubeo*, *juſſi*, *juſſum*, *jubere*; *augeo*, *auxi*, *auctum*, *augere*. Some verbs, which are actually of the fourth conjugation, have their præterite and ſupine as if they were of the third; thus *ſentio*, *ſenſi*, *ſenſum*, *ſentire*; *haurio*, *hauſi*, *hauſtum*, *haurire*, &c. If theſe are not manifeſt irregularities, we cannot ſay what deſerves the name. The fact ſeems to ſtand thus: The Romans were originally a banditti of robbers, bankrupts, runaway ſlaves, ſhepherds, huſbandmen, and peaſants of the moſt unpoliſhed character. They were engaged in perpetual broils and quarrels at home, and ſeldom enjoyed repoſe abroad. Their profeſſion was robbery and plunder. Like Iſhmael, their hands were againſt every man, and every man's hand againſt them. In ſuch a ſtate of ſociety no time was left for cultivating the ſciences. Accordingly the arts of war and government were their ſole profeſſion. This is ſo true, that their own poet characterizes them in the following manner: *Excudunt alii ſpirantia mollius æra, &c.* Another blemiſh in the Latin tongue is occaſioned by its wanting a participle of the præterite tenſe in the active voice. This defect is perpetually felt, and is the cauſe of an awkward circumlocution wherever it happens to preſent itſelf. Another palpable defect ariſes from the want of a participle of the preſent paſſive. This again muſt produce an inconvenience upon many occaſions, as will be obvious to every Latin ſtudent almoſt every moment. The Latin gerunds form another unnatural anomaly. Every Latin ſcholar knows that thoſe words are nothing but the neuters of the participles of the future paſſive. The fabricators of the Latin tongue, however, elevated them from their primary condition, giving them upon many occaſions an active ſignification. Another inconvenience, perhaps more ſeverely felt than any of the preceding, ariſes from the want of the uſe of the preſent participle of the verb *ſum*. Every body knows what a convenience is derived from the frequent uſe of the participle ων in Greek; and indeed it appears to us ſomewhat ſurpriſing that the Latins neglected to introduce the participle *ens* into their language. In this we believe they are ſingular. Here again a circumlocution becomes neceſſary in ſuch a caſe as the following: "The ſenate, being at Rome, paſſed a decree." Inſtead of ſaying, *Senatus, ens Romæ, legem tulit*, we are obliged to ſay, *Cum ſenatus Romæ eſſet, &c.* If the words *ens* or *exiſtens* had been adopted, as in the Greek, this odious circumlocution would have been avoided.

Many other defects of the like kind will occur to every perſon who ſhall chooſe to ſearch for them, and thoſe in the moſt approved claſſical authors. In ſhort, whoever will take the trouble to compare the ſtructure of the Greek and

and Latin languages will, we think, quickly be convinced that their characteriſtic features are extremely different. The genius of the former ſeems eaſy and natural; whereas that of the latter, notwithſtanding the united efforts of poets, orators, and philoſophers, ſtill bears the marks of violence and reſtraint. Hence it appears that the Latin tongue was preſſed into the ſervice, and compelled almoſt againſt its will to bend to the laws of the Grecian model. Take a ſentence of Hebrew, Chaldean, Arabian, &c. and try to tranſlate it into Greek without regarding the arrangement of the words, and you will find it no difficult attempt; but make the ſame trial with reſpect to the Latin, and you will probably find the labour attended with conſiderable difficulty. To tranſlate Greek into Engliſh is no laborious taſk; the texture of the two languages is ſo congenial, that the words and phraſes, and even the idiomatic expreſſions, naturally ſlide into each other. With the Latin the caſe is quite otherwiſe; and, before elegant Engliſh can be produced, we muſt deviate conſiderably from the original. Should we attempt to tranſlate a piece of Engliſh into Greek, and at the ſame time into Latin, the tranſlation of the former would be attended with much leſs difficulty than that of the latter, ſuppoſing the tranſlator equally ſkilled in both languages.

This incongruity ſeems to ſpring from the following cauſes. The Romans, a people of fierce and warlike diſpoſition, for many ages during the infancy of their republic, more intent on purſuing conqueſts and military glory than in making improvements on literature or the fine arts, beſtowed little attention to their language. Of a nature leſs ſocial or more phlegmatic than the Greeks, they gave themſelves no trouble about rendering their language fit for converſation; and it remained ſtrong and nervous, but, like their ideas, was limited and confined. More diſpoſed to command reſpect by the power of their arms than by the force of perſuaſion, they deſpiſed the more effeminate powers of ſpeech; ſo that, before the Punic wars, their language was perhaps more reſerved and uncourtly than any other at that time known. But, after their rival Carthage was deſtroyed, and they had no longer that powerful curb upon their ambition; when riches flowed in upon them by the multiplicity of their conqueſts; luxury began to prevail, the ſtern auſterity of their manners to relax, and ſelfiſh ambition to take place of that diſintereſted love for their country ſo eminently conſpicuous among all orders of men before that period. Popularity began then to be courted; ambitious men, finding themſelves not poſſeſſed of that merit which enſured them ſucceſs with the virtuous ſenate, amuſed the mob with artful and ſeditious harangues; and by making them believe that they were poſſeſſed of all power, and had their ſacred rights encroached upon by the ſenate, led them about at their pleaſure, and got themſelves exalted to honours and riches by theſe inſidious arts. It was then the Romans firſt began to perceive the uſe to which a command of language could be put. Ambitious men then ſtudied it with care, to be able to accompliſh their ends; while the more virtuous were obliged to acquire a ſkill in it, that they might be able to repel the attacks of their adverſaries. Thus it happened, that in a ſhort time that people, from having entirely neglected, began to ſtudy their language with the greateſt aſſiduity; and, as Greece happened to be ſubjected to the Roman yoke about that time, and a friendly intercourſe was eſtabliſhed between theſe two countries, this greatly conſpired to nouriſh in the minds of the Romans a taſte for that art of which they had lately become ſo much enamoured. Greece had long before this period been corrupted by luxury; their taſte for the fine arts had degenerated into unneceſſary refinement; and all their patriotiſm conſiſted in popular harangues and unmeaning declamation. Oratory was then ſtudied as a refined art; and all the ſubtleties of it were taught by rule. But, while they were idly trying who ſhould be the lord of their own people, the nerves of government were relaxed, and they became an eaſy prey to every invading power. In this ſituation they became the *ſubjects*, under the title of the *allies*, of Rome, and introduced among them the ſame taſte for haranguing which prevailed among themſelves. Well acquainted as they were with the powers of their own language, they ſet themſelves with unwearied aſſiduity to poliſh and improve that of their new maſters; but, with all their aſſiduity and pains, they never were able to make it arrive at that perfection which their own language had acquired; and in the Auguſtan age, when it had reached the ſummit of its glory, Cicero bitterly complains of its want of copiouſneſs in many particulars. *Harris's Hermes.*

But, as it was the deſire of all who ſtudied this language with care, to make it capable of that ſtately dignity and pomp neceſſary for public harangues, they followed the genius of the language in this particular; ſo that, while it acquired more copiouſneſs, more harmony, and preciſion, it remained ſtiff and inflexible for converſation: nor could the minute diſtinction of nice grammatical rules be ever brought down to the apprehenſion of the vulgar; whence the language ſpoken among the lower claſs of people remained rude and unpoliſhed even to the end of the monarchy. The Huns who overran Italy, incapable of acquiring any knowledge of ſuch a difficult and abſtruſe language, never adopted it; and the native inhabitants, being made acquainted with a language more natural and eaſily acquired, quickly adopted that idiom of ſpeech introduced by their conquerors, although they ſtill retained many of thoſe words which the confined nature of the barbarian language made neceſſary to allow them to expreſs their ideas. And thus it was that the language of Rome, that proud miſtreſs of the world, from an original defect in its formation, although it had been carried to a perfection in other reſpects far ſuperior to any northern language at that time, eaſily gave way to them, and in a few ages the knowledge of it was loſt among mankind; while, on the contrary, the more eaſy nature of the Greek language has ſtill been able to keep ſome ſlight footing in the world, although the nations in which it has been ſpoken have been ſubjected to the yoke of foreign dominion for upwards of two thouſand years, and their country has been twice ravaged by barbarous nations, and more cruelly depreſſed than ever the Romans were.

The Latin language is ſtately and ſolemn; it does not charm the ear, ſo as to make it liſten with delighted attention. To one acquainted with the language indeed, the nervous boldneſs of the thoughts, the harmonious rounding of the periods, the full ſolemn ſwelling of the ſounds, ſo diſtinguiſhable in the moſt eminent writers in that language which have been preſerved to us, all conſpire to make it pleaſant and agreeable. In theſe admired works we meet with all its beauties, without perceiving any of its defects; and we naturally admire, as perfect, a language which is capable of producing ſuch excellent works. Yet, with all theſe ſeeming excellencies, this language is leſs copious, and more limited in its ſtyle of compoſition, than many modern languages; far leſs capable of preciſion and accuracy than almoſt any of them; and infinitely behind them all in point of eaſineſs in converſation. But theſe points have been ſo fully proved already, as to require no further illuſtration. Of the compoſitions in that language which have been preſerved to us, the Orations of Cicero are beſt adapted to the genius of the language, and we there ſee it in its utmoſt perfection. In the Philoſophical Works of that great author we perceive ſome of its defects; and it requires all the powers of that great man to render his Epiſtles agreeable, as theſe have the genius of the language to ſtruggle with. Next to oratory, hiſtory agrees with the genius of this language; and Cæſar, in his Commentaries, has exhibited the language in its pureſt elegance, without the aid of pomp or foreign ornament. Among the poets, Virgil has beſt adapted his works to his language. The flowing harmony and pomp of it is well ſuited to the epic ſtrain, and the correct delicacy of his taſte rendered him perfectly equal to the taſk. But Horace

race is the only poet whoſe force of genius was able to overcome the bars which the language threw in his way, and ſucceed in lyric poetry. Were it not for the brilliancy of the thoughts, and the acuteneſs of the remarks, which ſo eminently diſtinguiſh this author's compoſitions, his Odes would long ere now have ſunk into utter oblivion. But ſo conſcious have all the Roman poets been of the unfitneſs of their language for eaſy dialogue, that ſcarcely any of them, after Plautus and Terence, have attempted any dramatic compoſitions in that language. Nor have we any reaſon to regret that they neglected this branch of poetry, as it is probable, if they had ever become fond of theſe, they would have been obliged to adopt ſo many unnatural contrivances to render them agreeable, as would have prevented us (who of courſe would have conſidered ourſelves as bound to follow them) from making that progreſs in the drama which ſo particularly diſtinguiſhes the productions of modern times.

We have obſerved already, that the Latin tongue was a colluvies of all the languages ſpoken by the vagrant people who compoſed the firſt elements of that republic. The prevailing dialects were the Pelaſgic or Hetruſcan, which we think were the ſame; and the Celtic, which was the aboriginal tongue of Italy. Hence the primary dialect of the Romans was compoſed of diſcordant materials, which in our opinion never acquired a natural and congenial union. Be that as it may, this motley mixture was certainly the original dialect of the Romans. The Pelaſgic or Hetruſcan part of it retained a ſtrong tincture of the oriental ſtyle. The Celtic part ſeems to have been prevalent, ſince we find that moſt of the names of places, eſpecially in the middle and northern parts of Italy, are actually of Celtic original. It is therefore clear that the ſtyle of the firſt Romans was compoſed of the languages abovementioned. Who thoſe firſt Romans were, we believe it is impoſſible to determine with any degree of certainty. The Roman hiſtorians afford us as little information upon that ſubject, as their etymologiſts do upon the origin of their language. Their moſt celebrated writers upon this point were Ælius Gallus, Quintus Cornificius, Nonius Marcellus, Feſtus, and ſome others of leſs note. At the head of theſe we ought to place Terentius Varro, whom Cicero ſtyles the moſt learned of all the Romans. From theſe writers we are to expect no light. Their etymologies are generally childiſh and futile. Of the language of the moſt ancient Romans we can only reaſon by analogy; and by that rule we can diſcover nothing more than what we have advanced above.

In the firſt place we may reſt aſſured that the dual number, the articles, the participle above-mentioned, the aoriſts, and the whole middle voice, never appeared in the Latin tongue; and accordingly were not current in thoſe languages from which it was copied, at leaſt at the time when it was firſt fabricated. Beſides all this, many circumſtances concur to make it highly probable that, in the earlieſt period of the language, very few inflexions were introduced. 1ſt, When the Pelaſgi left Greece, the Greek language itſelf was not fully poliſhed. 2d, The Arcadians were never thoroughly cultivated. They were a ruſtic paſtoral people, and little minded the refinements of a civilized ſtate; conſequently the language they brought into Italy at that era muſt have been of a coarſe and irregular contexture. 3d, When the Theſſalian Pelaſgi arrived in Italy about the time of Deucalion, the Greek itſelf was rude and barbarous; and, which is ſtill of more conſequence, if we may credit Herodotus quoted in the former ſection, that people had never adopted the Hellenic tongue. Hence it appears, that the part of the Latin language derived from the Pelaſgic or Hetruſcan (for thoſe we believe to have been the ſame) muſt have taken a deep tincture from the oriental tongues. If we may judge of the Celtic of that age by that of the preſent, the ſame character muſt likewiſe have diſtinguiſhed its ſtructure.

From theſe circumſtances, we think it appears that the earlieſt language of the Romans was very little diverſified with inflexions. It nearly reſembled the oriental exemplar, and conſequently differed widely from the modern Latin. The effect of this was, that the modern Romans could not underſtand the language of their early progenitors. Polybius, ſpeaking of the earlieſt treaty between the Romans and Carthaginians, makes the following obſervation: "Believe me (ſays he), the Roman language has undergone ſo many changes ſince that time to the preſent, that even thoſe who are moſt deeply ſkilled in the ſcience of antiquities cannot underſtand the words of that treaty but with the greateſt difficulty." Lib. iii. This treaty, according to the ſame hiſtorian, was concluded in the conſulſhip of Lucius Junius Brutus and Marcus Valerius, twenty-eight years before Xerxes made his deſcent upon Greece. B. C. 509.

After the Romans became acquainted with the Æolian Greeks, who gradually ſeized upon both coaſts of Italy towards the ſouth, which they called Magna Græcia, they began to affect a Grecian air, and to torture their language into that foreign contexture. It appears, however, that at firſt the Grecian garb ſat rather awkwardly, and ſeveral marks of violence were eaſily diſcerned. The moſt ancient ſpecimen of this kind that we can recollect conſiſts of the remains of the Twelve Tables. Here every thing is rude and of a clumſy caſt; for, though by this time conſiderable progreſs had been made in refinement, and the language of Rome had begun to appear in a Grecian uniform, ſtill thoſe changes were not altogether natural. Soon after appeared Marcus Fabius Pictor and Siſenna; hiſtorians often quoted by Livy, but whoſe works are long ſince loſt. The Faſti Capitolini are often mentioned; but they too periſhed in the burning of the Capitol during the civil wars between Marius and Sylla. Had thoſe monuments eſcaped the ravages of time, we ſhould have been able to mark the progreſs of the Latin tongue from ſtage to ſtage, and to aſcertain with the greateſt accuracy its gradual configuration in the courſe of its progreſs towards the Grecian ſtandard. We muſt therefore leave the Latin tongue during thoſe periods rude and barbarous, and deſcend to others better known and more characteriſtically marked. Thoſe commenced after that

> Græcia capta ferum victorem cepit, et artes
> Intulit agreſti Latio.

In this period we find Ennius, who wrote a Roman hiſtory in hexameter verſe in eighteen books, which he called *Annals*; moſt part of which is now loſt. He likewiſe tranſlated *Euhemerus de Origine Deorum*; a work often mentioned by the Chriſtian fathers in their diſputes with the Pagans. It is ſometimes quoted by Cicero. Then followed Caius Lucilius the famous ſatiriſt, and a number of other writers, ſuch as Accius, Valerius, Edituus, Alpinus, &c. whoſe fragments were publiſhed by the Stephens, Paris, 1564. All theſe imitated the writers of Greece, or tranſlated from them. By their perſeverance and active exertions the ſpirit of theſe authors was tranſuſed into the Latin tongue, and its ſtructure accommodated to the Grecian plan.

Plautus and Terence, by tranſlating the comedies of Menander and Diphilus into their own language, taught the Latin muſes to ſpeak Attic Greek. To ſpeak that language was then reckoned polite, as it is now with us to talk French. Greek tutors were retained in every reputable family; and many Romans of the firſt rank were equally qualified to ſpeak or write both in Greek and Latin. The original jargon of Latium was now become obſolete and unintelligible; and Cato the Elder condeſcended to learn Greek at eighty years of age.

To pretend to enumerate the various, and we may add inimitable, examples of the Auguſtan or golden age of the Roman tongue, would be an inſult to the underſtanding of our readers. This golden age, however, was very ſhort. According to the moſt judicious critics, it commenced with the era of Cicero's oratorical productions, and terminated with the reign of Tiberius, or perhaps it

did not reach beyond the middle of that prince's reign. It is generally believed that eloquence, and with it every thing liberal, elevated, and manly, was baniſhed Rome by the deſpotiſm of the Cæſars. Deſpotiſm, however, was firmly eſtabliſhed among the Romans about the middle of the reign of Auguſtus; and yet that period produced ſuch a group of learned men as never adorned any other nation in ſo ſhort a ſpace of time. Deſpotiſm, we acknowledge, might have affected the eloquence of the bar; the noble and important objects which had animated the republican orators being now no more; but this circumſtance could not much affect poetry, hiſtory, philoſophy, &c. The age of Louis XIV. was the golden period of the French tongue; and we think that age produced a race of learned men in every department ſuperior in number and equal in genius to the literati who flouriſhed under the noble and envied conſtitution of Britain during the ſame age, though the latter is univerſally allowed to have been the golden period of this country. In the eaſt the ſame obſervation is confirmed. The Perſians have long groaned under the Mahometan yoke; and yet every oriental ſcholar will allow, that in that country, and under the moſt galling tyranny, the moſt amazing productions of taſte, genius, and induſtry, that ever dignified human nature, have been exhibited. Under the Arabian caliphs, the ſucceſſors of Mahomet, appeared writers of a moſt ſublime genius, though never was deſpotiſm more cruelly exerciſed than under thoſe fanatics. The revival of letters at the era of the reformation was chiefly promoted and cheriſhed by petty deſpotical princes. We cannot therefore be perſuaded, that the deſpotiſm of the Cæſars baniſhed eloquence and learning from Rome. Longinus indeed has attributed this misfortune to that cauſe, and tells us, "It is liberty that is formed to nurſe the ſentiments of great geniuſes, to puſh forward the propenſity of conteſt, to inſpire them with hopes, and the generous ambition of being the firſt in rank." When Longinus wrote this, he did not reflect that he himſelf was a ſtriking inſtance of the unſoundneſs of his obſervation.

As to ſcience, the fact is undoubtedly on the other ſide. That Seneca was ſuperior to Cicero in philoſophy, cannot be reaſonably contradicted. The latter had read, and actually abridged, the whole extent of Grecian philoſophy: this diſplayed his reading rather than his learning. The former had addicted himſelf to the ſtoic ſect; and, though he does not write with the ſame flow of eloquence as Tully, he thinks more deeply and reaſons more cloſely. Pliny's Natural Hiſtory is a wonderful collection, and contains more uſeful knowledge than all the writings of the Auguſtan age condenſed into one maſs. We think the hiſtorical annals of Tacitus, if inferior to Livy in ſtyle and majeſty of diction, much ſuperior in arrangement and vigour of compoſition. In ſhort, we diſcover in theſe productions a deep inſight into human nature, an extenſive knowledge of the ſcience of government, a penetration which no diſſimulation could eſcape, together with a ſincere attachment to truth both with reſpect to events and characters; nor is he inferior in the majeſty, energy, and propriety, of his harangues, wherever an equal opportunity preſents itſelf. Quintilian, Pliny the younger, Suetonius, Petronius Arbiter, and Juvenal, deſerve high eſteem; nor are they inferior to their immediate predeceſſors.

We think there is good reaſon to conclude, that the loſs of liberty among the Romans did not produce the extinction of eloquence, ſcience, elevation of ſentiment, or refinement of taſte. There were, we believe, other circumſtances which chiefly contributed to produce that revolution. Velleius Paterculus aſſigns ſome plauſible and very judicious reaſons for this cataſtrophe: "Emulation (ſays he) is the nurſe of genius; and one while envy, and another admiration, fires imitation. According to the laws of nature, that which is purſued with the greateſt ardour mounts to the top; but to be ſtationary in perfection is a difficult matter; and, by the ſame analogy, that which cannot go forward goes backward. As at the outſet we are animated to overtake thoſe whom we deem before us, ſo, when we deſpair of being able to overtake or to paſs by them, our ardour languiſhes together with our hope, and what it cannot overtake it ceaſes to purſue; and, leaving the ſubject as already engroſſed by another, it looks out for a new one upon which to exert itſelf. That by which we find we are not able to acquire eminence we relinquiſh, and try to find out ſome object elſewhere upon which to employ our intellectual powers. The conſequence is, that frequent and variable tranſitions from ſubject to ſubject proves a very great obſtacle to perfection in any profeſſion."

This perhaps was the caſe with the Romans. The heroes of the Auguſtan age had borne away the prize of eloquence, of hiſtory, of poetry, &c. Their ſucceſſors deſpaired of being able to equal, much leſs to ſurpaſs, them, in any of theſe walks. They were therefore laid under the neceſſity of ſtriking out a new path by which they might arrive at eminence. Conſequently Seneca introduced the *ſtile coupé*, as the French call it; that is, a ſhort, ſparkling, figurative, diction, abounding with antitheſes, quaintneſſes, witticiſms, embelliſhed with flowers and meretricious ornaments; whereas the ſtyle of the Auguſtan age was natural, ſimple, ſolid, unaffected, and properly adapted to the nature of the ſubject and the ſentiments of the author. The hiſtorian Salluſt laid the foundation of the unnatural ſtyle above-mentioned. Notwithſtanding all the excellencies of that celebrated author, he everywhere exhibits an affectation of antiquity, an antithetical caſt, an air of auſterity, an accuracy, exactneſs, and regularity, contrary to that *air degagé* which nature diſplays in her moſt elaborate efforts. His words, his clauſes, ſeem to be adjuſted exactly according to number, weight, and meaſure, without exceſs or defect. Velleius Paterculus imitated this writer; and, as is generally the caſe with imitators, ſucceeded beſt in thoſe points where his archetype had failed moſt egregiouſly. Tacitus, however excellent in other reſpects, deviated from the Auguſtan exemplars, and is thought to have imitated Salluſt; but, affecting brevity to exceſs, he often falls into obſcurity. The other contemporary writers employ a cognate ſtyle; and, becauſe they have deviated from the Auguſtan ſtandard, their works are held in leſs eſtimation, and are thought to bear about them marks of degeneracy.

That degeneracy, however, did not reach the ſentiments, as it had done the ſtyle; for in that point we think they were ſo far from falling below the meaſure of the writers of the former age, that in many inſtances they ſeem to have ſurpaſſed them. With reſpect to ſentiment and mental exertions, the authors in queſtion preſerved their vigour, till luxury and effeminacy, in conſequence of power and opulence, enervated both the bodies and minds of the Romans. The contagion ſoon became univerſal; and a liſtleſſneſs, or intellectual torpor, the uſual concomitant of luxury, ſpread indolence over the mental faculties, which rendered them not only averſe to, but even incapable of, induſtry and perſeverance. This lethargic diſpoſition of mind ſeems to have commenced towards the concluſion of the ſilver age; that is, about the end of the reign of Adrian. It was then that the Roman eagle began to ſtoop; the genius of Rome, as well in arts as in arms, began to decline; and the ſtyle of the ſilver age was gradually vitiated with barbariſms and exotic forms of ſpeech. The multitudes of barbarians who flocked to Rome from all parts of the empire; the ambaſſadors of foreign princes, and often the princes themſelves, with their attendants; the prodigious numbers of ſlaves who were entertained in all the conſiderable families of the capital, and over all Italy; the frequent commerce which the Roman armies upon the frontiers carried on with the barbarians; all concurred to vitiate the Latin tongue, and to interlard it with foreign words and idioms. In ſuch circumſtances, it was impoſſible for that or any other language to have continued pure and untainted. This vitiated character both of ſtyle and ſentiment became more and

more prevalent, in proportion as it deſcended from the reign of Adrian towards the era of the removal of the imperial ſeat from Rome to Conſtantinople. Then ſucceeded the iron age, when the Roman language became abſolutely rude and barbarous.

Towards the cloſe of the ſilver and during the whole courſe of the brazen age, there appeared, however, many writers of no contemptible talents. The moſt remarkable was Seneca the ſtoic, the maſter of Nero, whoſe character both as a man and a writer is diſcuſſed with great accuracy by the noble author of the Characteriſtics, to whom we refer our readers. About the ſame time lived Perſius the ſatiriſt, the friend and diſciple of the ſtoic Cornutus; to whoſe precepts he did honour by his virtuous life; and by his works, though ſmall, he ſhowed an early proficiency in the ſcience of morals. Under the mild government of Adrian and the Antonines lived Aulus Gellius, an entertaining writer in the miſcellaneous way, well ſkilled in criticiſm and antiquity. His works contain ſeveral valuable fragments of philoſophy, which are indeed the moſt curious part of them. With Aulus Gellius we may rank Macrobius; not becauſe he was a contemporary (for he is ſuppoſed to have lived under Honorius and Theodoſius), but from his near reſemblance in the character of a writer. His works, like thoſe of the other, are miſcellaneous; filled with mythology and ancient literature, with ſome philoſophy intermixed. In the ſame age with Aulus Gellius flouriſhed Apuleius of Madaura in Africa; a Platonic writer, whoſe matter in general far exceeds his perplexed and affected ſtyle, too conformable to the falſe rhetoric of the age in which he lived. Boethius was deſcended from one of the nobleſt of the Roman families, and was conſul in the beginning of the ſixth century. He wrote many philoſophical works; but his ethic piece on the Conſolation of Philoſophy deſerves great encomiums, both for the matter and ſtyle; in which latter he approaches the purity of a far better age than his own. By command of Theodoric king of the Goths this great and good man ſuffered death; and with him the Latin tongue, and the laſt remains of Roman dignity, may be ſaid to have ſunk in the weſtern world. There were beſides a goodly number both of poets and hiſtorians who flouriſhed during this period; ſuch as Silius Italicus, Claudian, Auſonius, &c. There flouriſhed, too, a number of eccleſiaſtical writers, ſome of whom deſerve great commendation. The chief of theſe is Lactantius, who has been deſervedly dignified with the title of the Chriſtian Cicero.

The Roman authors amount to a very ſmall number in compariſon of the Greek. At the ſame time, when we conſider the extent and duration of the Roman empire, we are juſtly ſurpriſed to find ſo few writers of character and reputation in ſo vaſt a field.

For a while the Latin tongue was confined almoſt wholly within the walls of Rome; nor would the Romans allow the common uſe of it to their neighbours, or to the nations they ſubdued. Cicero obſerved, that, even in his time, Greek was uſed almoſt among every people, but the Latin was confined to a very narrow compaſs. By degrees they were brought to grant the uſe of it as a favour; and, in time, became ſenſible of the neceſſity there was of its being generally underſtood, for the conveniency of commerce; and, accordingly, uſed their utmoſt endeavours, that all the nations ſubject to their empire ſhould be united by one common language; ſo that at length they impoſed that as a law which they had before granted as a favour.

After the tranſlation of the ſeat of the empire from Rome to Conſtantinople, the emperors of the Eaſt, being always deſirous of preſerving the title of Roman emperors, appointed the Latin to be ſtill retained in uſe, both in their reſcripts and edicts, as appears by the conſtitutions of the eaſtern emperors, collected in the Theodoſian Code; but at length the emperors, neglecting the empire of the Weſt, abandoned all care of the Latin tongue, and allowed their judges to paſs ſentence in Greek; and, accordingly, we find the emperor Juſtinian's Novels are compoſed in Greek.

Charlemagne, coming to the empire of the Weſt, appointed the law-proceedings in ſovereign courts to be made in Latin; and the notaries were to draw their acts and inſtruments in the ſame tongue; this practice continued a long time through a great part of Europe; but at length it gave way, and the French took place of the Latin, not only in France, but, in ſome meaſure, in England too; and the reaſon given for it was, that abundance of difficulties aroſe about the underſtanding of Latin terms.

The Latin, however, was prodigiouſly degenerated and corrupted, before it came to be laid aſide. At laſt, being introduced amongſt the monks, and become the common language of miſſals and breviaries, it was debauched to that degree, that it was almoſt become ſcandalous to uſe it. In this condition it was found at the time of the reformation, when Vives, Eraſmus, &c. began to open the way for its recovery; ſince which time monkiſh Latinity has been declining, and all endeavours have been uſed to retrieve the pure language of the Auguſtan age.

Upon the whole, the Latin tongue deſerves our attention beyond any other ancient one now extant. The grandeur of the people by whom it was ſpoken; the luſtre of its writers; the empire which it ſtill maintains among ourſelves; the neceſſity we are under of learning it in order to obtain acceſs to almoſt all the ſciences, nay even to the knowledge of our own laws, of our judicial proceedings, of our charters; all theſe circumſtances, and many others too numerous to be detailed, render the acquiſition of that language in a peculiar manner at once improving and highly intereſting. Spoken by the conquerors of the ancient nations, it partakes of all their revolutions, and bears continually their impreſſion. Strong and nervous while they were employed in nothing but battles and carnage, it thundered in the camps, and made the proudeſt people to tremble, and the moſt deſpotic monarchs to bend their ſtubborn necks to the yoke. Copious and majeſtic, when, weary of battles, the Romans inclined to vie with the Greeks in ſcience and the graces, it became the learned language of Europe, and by its luſtre made the jargon of ſavages diſappear who diſputed with it the poſſeſſion of that quarter of the globe. After having controlled by its eloquence, and humanized by its laws, all thoſe people, it became the language of religion. In ſhort, the Latin language will be ſtudied and eſteemed as long as good ſenſe and fine taſte remain in the world.

The modern languages derived from the Latin are the Spaniſh, Portugueſe, Italian, and French.

Every refined and poliſhed nation has a vulgar language in its remote provinces, and even in its capital, among the common people, in which there are innumerable words and phraſes that have never been admitted into books. This muſt doubtleſs have been the caſe with the Romans; and it is the opinion of ſome perſons of great eminence in literature, among whom may be numbered the learned cardinal Bembo and the marquis Maffei, that the ancient Romans had at all times an oral vulgar language which was different from that of books; and that this colloquial language, leſs grammatical and elegant than that of the learned, was carried by the Romans into all the provinces under their dominion. It is therefore probable that this, and not the written language of Italy, was the mother of the Provençal, Sicilian, Italian, and Spaniſh, dialects. But, ſuppoſing ſuch a language was ever ſpoken, it could not be laid aſide for another all at once; and, when we are told of a particular period or century during which the Latin tongue ceaſed to be ſpoken in France and Italy, and the Provençal French, or Italian, began, credulity itſelf is ſtaggered, and unable to reconcile it to probability. Every language is long ſpoken before it is written; and, though the firſt poet of Italy or Provence, who committed his verſes to writing in the vulgar tongue, could be named, no one would venture to tell us by whom it was firſt ſpoken. The learned Maffei (Verona illuſtrata, lib. ii, p. 106.)

p. 106.) is of opinion, that there was a vulgar language in Italy long before the irruption of the Lombards, Goths, or Franks; and has traced its uſe as early as the time of Quintilian, who tells us, that he had often heard the croud in the Circus applaud, or demand ſomething of the champions, in a barbarous language; that is, in a vulgar and plebeian dialect, different from pure Latin, Sammonicus, who lived in the time of Septimius Severus, mentions this vulgar language; and both Pliny and St. Jerome ſpeak of the military language as of the ſame kind. The latter even tells us, that Fortunatianus, biſhop of Aquileia, wrote a Commentary on the Evangeliſts in this vulgar language, *Ruſtico Sermone*, during the time of Conſtantine: but this was a ſingular inſtance, which was not imitated. It appears however, from the Dialogues of St. Gregory the Great, written in 593, that there was then a language merely colloquial at Rome. For he tells us that a new convert, of whom he is ſpeaking, was ſent to a convent with two veſſels of wine, "which the vulgar call flaſks." And Gregory of Tours, ſo early as 572, complains of this vulgar or ruſtic tongue gaining ground in France, and being more in favour than Latin, the language of the learned. It was therefore by degrees that Latin ceaſed to be underſtood by the common people, and the Romance language gained admiſſion into books. In 813 it was ordered by a canon, at the council of Tours, that the biſhops ſhould be employed in tranſlating homilies into the Roman ruſtic tongue, that they might be the more eaſily underſtood by the common people. The ſame canon we are told was renewed in a council at Arles in 851. In the ninth century hiſtorians tell us, that Charlemagne and his ſons and ſucceſſors ſpoke in the Romance language, ſpecimens of which may be ſeen in Fauchet, Paſquier, and ſeveral other writers on the French language. And in the twelfth century it began to be the general language of poets and polite writers. Some of the ſermons written and preached by St. Bernard, about 1137, in this language, are ſtill preſerved among the manuſcripts of the convent of Feuillans, in the Rue St. Honoré at Paris. In the times of the emperors, the Romans inſtituted ſchools and academies in the principal cities of Gaul for teaching the Latin language; and a reſcript of Gratian ſtill ſubſiſts for the election and appointments of profeſſors of theſe ſeminaries. In the latter end of the fourth century, by theſe means, and the offices of dignity and profit conferred on thoſe who were maſters of this language, it became general among perſons of education, and conſequently would be imitated, though in an awkward and incorrect manner, by thoſe of a lower claſs. Strabo tells us, that in the time of Auguſtus the Spaniards and Portugueſe had forgotten their own language, and uſed only that of the Romans.

The great corruption of the Latin tongue about the end of the ſeventh century is manifeſt in the collection of the formules of the monk Marculf, ſtill preſerved, as well as public acts, charters, teſtaments, and diplomas. In theſe records it appears, that the dialects of the neighbouring people had begun to diſfigure the Latin nouns, by certain contractions of ſyllables and frequent repetitions of pronouns. Indeed the repetitions of the pronoun *ipſe* were innumerable, on account of the articles *le* and *la* having been long before this period introduced into the vulgar tongue. An evident proof of the introduction of the articles *ille* and *illa* contracted and diſguiſed is found in the litanies written about the year 780 in the dioceſe of Soiſſons. In theſe, the prayers for pope Adrian I. for Charlemagne, his wife, and children, are terminated by *tu lo juva*, inſtead of the uſual formula, *tu illum juva*. Even ſo early as the ſixth century, according to Gregory of Tours, the rules of grammar with reſpect to caſes and genders were diſregarded, and proper names frequently deprived of their Latin terminations; as Theodoric for Theodoricus, &c. This common or vulgar language is frequently mentioned under the title *Sermo Ruſticanus Lingua Romana*, becauſe of its derivation from the language of the Romans, which was Latin. *Lingua Laica* and *Lingua Gallicana* are frequently mentioned in ancient Latin manuſcripts before it ſeems to have been written; and ſome of the moſt ancient fragments of this language now ſubſiſting are verſes in rhyme. The colloquial language uſed only in familiar converſation was called by the Romans *Sermo uſualis, quotidianus, pedeſtris, vulgaris, militaris, ruſticus*, &c. It is ſuppoſed by M. Bonamy, as well as others, that from this vulgar Latin not only the French language and its different dialects, but the Spaniſh and Italian, are derived. Indeed it is moſt probable that the Latin tongue, in its periods of greateſt purity, was only the language of the learned in the Roman provinces remote from the capital; and that it was never ſo generally cultivated in other times as to exclude the vulgar dialect. In the frequent revolutions and ſtruggles for empire during theſe ages, the Roman language muſt have been debaſed and corrupted, while new tongues were forming, which, though not ſufficiently fixed and grammatical to be uſed in books, were doubtleſs long the vulgar and colloquial dialects before the Latin ceaſed to be the common language of the learned.

Of all the languages which ſprang up from the mixture of the Latins with the northern people on the deſtruction of the Roman empire, none approaches ſo near to the genius of the Latin as the SPANISH. For, as the Spaniards have been always remarkable for their military proweſs and dignity of mind, their language is naturally adapted to expreſs ideas of that kind. Sonorous and ſolemn, it admits nearly of as much dignity as the Latin. For converſation, it is the moſt elegant and courteous language in Europe.

The humane and generous order of chivalry was firſt invented, and kept its footing longeſt, in this nation; and, although it ran at laſt into ſuch a ridiculous exceſs as deſervedly made it fall into univerſal diſrepute, yet it left ſuch a ſtrong tincture of romantic heroiſm upon the minds of all ranks of people, as made them jealous of their glory, and ſtrongly emulous of cultivating that heroic politeneſs which they conſidered as the higheſt perfection they could attain. Every man diſdained to flatter, or to yield up any point of honour which he poſſeſſed; at the ſame time, he rigorouſly exacted from others all that was his due. Theſe circumſtances have given riſe to a great many terms of reſpect and courteous condeſcenſion, without meanneſs or flattery, which gave their dialogue a reſpectful politeneſs and elegance unknown to any other European language. This is the reaſon why the characters ſo finely drawn by Cervantes in Don Quixote are ſtill unknown to all but thoſe who underſtand the language in which he wrote. Nothing can be more unlike the gentle meekneſs and humane heroiſm of the knight, or the native ſimplicity, warmth of affection, and reſpectful loquacity, of the ſquire, than the inconſiſtent follies of the one, or the impertinent forwardneſs and diſreſpectful petulance of the other, as they are exhibited in every Engliſh tranſlation. Nor is it, as we imagine, poſſible to repreſent ſo much familiarity, united with ſuch becoming condeſcenſion in the one, and unfeigned deference in the other, in any other European langnage, as is neceſſary to paint theſe two admirable characters.

Although this language, from the ſolemn dignity and majeſtic elegance of its ſtructure, is perhaps better qualified than any other modern one for the ſublime ſtrains of epic poetry; yet, as the poets of this nation have all along imitated the Italians by a moſt ſervile ſubjection to rhyme, they never have produced one poem of this ſort, which in point of poeſy or ſtyle deſerves to be tranſmitted to poſterity. And in any other ſpecies of poetry but this, or the higher tragedy, it is not naturally fitted to excel. But, although the drama and other polite branches of literature were early cultivated in this country, and made conſiderable progreſs in it, before the thirſt of gain debaſed their ſouls, or the deſire of univerſal dominion made them forfeit that liberty which they once ſo much prized; ſince they became enervated by an overbearing pride, and

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their minds enſlaved by ſuperſtition, all the polite arts have been neglected; ſo that, while other European nations have been advancing in knowledge, and improving their language, they have remained in a ſtate of torpid inactivity; and their language has not arrived at that perfection which its nature would admit, or the acute genius of the people might have made us naturally expect.

The ſixteenth century beheld the Spaniſh language in all its purity; while the dialects of France and England were as yet imperfectly formed. The elegant productions of Italy were naturalized in Spain, after the travels of Charles V. into Italy; and Boſcan, who accompanied this prince, endeavoured to domeſticate in Spain the beauties of Italian poetry, and its hendecaſyllabic verſe. His ſonnets, octave-rhymes, and epiſtles, had eminent ſucceſs. Garcilaſſo de la Vega, a friend of Boſcan, contributed like him to give new forms to Spaniſh literature. Theſe two authors carried the language to its higheſt poliſh. The erotic poems of Garcilaſſo have been compared with thoſe of Tibullus; and many of his eclogues paſs for maſterpieces among Spaniards; they poſſeſs, indeed, amenity and grace. The muſe of Fernando de Herrera alſo inſpired elegies and ſonnets, which diſplay a pure ſtyle and claſſical reading. Diego Hurtado de Mendoza, the author of a popular novel intitled the Adventures of Lazarillo de Tormes, adopted the innovations propoſed by Boſcan and Garcilaſſo; but his verſes are harſh and devoid of harmony; and he owed the better part of his reputation to his hiſtory of the Civil Wars of Grenada. At the ſame period, Luis Ponce de Leon, a monk, carried lyric poetry to a height which no ſubſequent rival has ſurpaſſed. His ſacred Odes have tranſplanted the beauties of Scripture; but his fineſt poem is the Ode on the Loves of Rodrigo and Caba. This Ponce poſſeſſed great magnanimity. Having been detained long in the priſon of the Inquiſition, and at length permitted to occupy again the chair of profeſſor of theology at Salamanca, he reſumed his functions with calmneſs, and began his lecture with the remarkable words, "We were obſerving yeſterday," &c.

Manuel Eſtebau de Villegas, the Anacreon of Spain, enriched the art of verſification with various Greek and Latin metres, and tranſlated Theocritus. Bartholomeo and Lupercio Argenſola imitated Horace, and ſcattered the rules of criticiſm in ſatiric and didactic productions. Deſcriptive poetry boaſts the colorific pencil of Cayraſco Figueroa, who ſang the gardens of Aranjuez. Vicente Eſpinel, in his Temple of Memory, has endeavoured to preſerve the names of the eminent poets of Caſtile; and Alonzo de Ercilla y Zuniga compoſed the only epic poem which Spain ventures to boaſt. It is entitled Araucana, from a ſavage tribe of Chili ſo called, againſt which he ſerved in war; and it is divided into thirty-ſeven cantos, preſenting a few beauties amid numerous faults. It has no plan, no unity of purpoſe, no art in the tranſitions, but abounds with improbable epiſodes, fatiguing repetitions, and awkward imitations of Taſſo, Arioſto, and Homer; relieved, however, by intereſting details, energetic thoughts, rich deſcription, and an elegant and ſonorous verſification. Patriotic enthuſiaſm offered to him numberleſs tributes of admiration. This age, the moſt brilliant for the peninſula, alſo produced Miguel de Cervantes. Like Homer, he had no country while he lived, but many claimed him after he died. His admirable book, known by the whole world, was the firſt of good romances, and is perhaps ſtill the beſt. It excites that frank and natural laugh, which is called the *inextinguiſhable*. To narrate with more naïveté, grace, and genius, is impoſſible. The morality is pure, the reflections are juſt, and always pregnant with original pleaſantry. It is the maſterpiece of good ſenſe, of the true comic; and one of thoſe books which all nations will chooſe to poſſeſs in their own tongue, and which is ever read again with the deſire of once more peruſing it. Cervantes knew only misfortune. He loſt one hand in the battle of Lepanto, was a ſlave among the Moors, and was perſecuted at his return by the duke of Lerma. So many ſorrows could not deſtroy his natural gaiety; and he wrote Don Quixote to conſole himſelf for his misfortunes. He afterwards gave to the public his Perſiles and Sigiſmonda, which includes ſome intereſting adventures; a Trip to Parnaſſus, which ſatirizes the poets of his time; and ſome plays.

The Spaniſh theatre has furniſhed many traits, ſituations, and characters, to the French theatre; and it began, in a like manner, by the repreſentation of religious myſteries. To the myſtery of the Paſſion ſucceeded a *paſtoral*, as it was called, or an amorous dialogue; with ſcenes in which the interlocutors were choſen from the loweſt claſs of ſociety, and in which both good ſenſe and decency were lamentably outraged. The comedies of the Portugueſe Ferreira Vaſconcellos, which ſucceeded on the Spaniſh ſtage, are remarkable for a cyniciſm of expreſſion, to which the theatrical language of other modern nations does not deſcend. Lope de Rueda reformed theſe obſcenities, and gave ſome nature and conſiſtency to his characters. John de la Cueva adopted a higher elevation of language. Cervantes divided the action of a play into three days, and attempted a defence of the taſte of antiquity; but Lope de Vega Carpio, the moſt celebrated of the Spaniſh dramatiſts, choſe to be led by the taſte of the vulgar, and produced a multiplicity of monſtrous pieces; in which, amid the ſallies of a diſorderly fancy, may be diſcovered frequent felicities of incident, a lively portraiture of character, a fertile talent, brilliant thoughts, and a ſpirited and correct diction. No rule is obſerved in his numerous works; the ſame piece takes the ſpectator to Germany, to India, and to Italy; and, as Boileau ſays,

Là, ſouvent, le héros d'un ſpectacle groſſier,
Enfant au premier acte, eſt barbon au dernier.

Vicious plots, odd reſources, capricious irregularities, all theſe faults were compenſated in the public eſtimation by a ſtyle which is pictureſque, and full of action and ſhow. The firſt meritorious Spaniſh tragedies appeared in the middle of the ſixteenth century. They are few in number, and only preſent beauties of detail; for their arrangement is not leſs defective than that of the comedies.

The *Baſque*, or Biſcay language, is ſpoken in the three provinces of Biſcay, in ſeveral towns of Navarre, and in the part of France called Pays de Labour. Being completely different from the neighbouring tongues, it would not be fair to call it a mere dialect; while it will be found, we ſuſpect, juſt as little entitled to the high encomiums beſtowed on it by ſome enthuſiaſtic admirers. It has been exhibited in print no where but at Bayonne; and there the number of works in it ſcarcely exceeds half-a-dozen. Several diſquiſitions on it, however, have been publiſhed, both in French and Spaniſh. The preſervation of a ſeparate tongue in ſo limited a diſtrict has puzzled the literati the more, becauſe they are by no means agreed as to any connection between it and the original Spaniſh. It conſiſts in a great meaſure of diſſyllabic radicals, and its rules of grammar are, as may be expected, few and undefined. The pronunciation of the letters is ſimilar to the Caſtilian. Their nouns are inflected by the addition of the article, and their tenſes by the addition of auxiliary words. The farther conjugation takes place by the employment of auxiliary verbs; and thoſe verbs which have no auxiliaries conſtitute the irregulars.

The PORTUGUESE language is more remote from that of Spain than might be expected from circumſtances. As the royal race was of French extract, it is ſuppoſed that many of the words are derived from the Limouſin and other dialects of the ſouth of France. It is a grave and ſolemn ſpeech; but would have been little known among foreigners, had it not been diffuſed by the fame of the Luſiad. This celebrated work is full of elegant and accurate deſcriptions, of charming recitals, of graceful imagery, of affecting epiſodes, (among which eſpecially to be admired that of Ines de Caſtro,) and of new and bold fictions which ſometimes approach the ſublime; but the want of connec-

tion in the plan, the monſtrous mixture of the gods of antiquity with the ſaints of Chriſtianity, and the ſcanty and ill-balanced ſtock of perſonages who have not the heroic mould which poetry requires; all contribute to give it the rank of a poetic relation, rather than that of a true epopea. The literature of Portugal may be ſaid to commence with Deniz, the ſixth ſovereign, who cultivated poetry and the belles lettres, and founded the univerſity of Coimbra. In his reign lived Vaſco Lobeira, who is ſaid to have been the original author of that famous romance Amadis de Gaul. In more recent times, Saà da Miranda has acquired reputation in paſtoral poetry. The chief hiſtorians are, Joaõ de Barros, Fr. Luiz de Souſa, Fr. Bernardo de Brito Vieira, Oſorio biſhop of Sylves, Duarte Ribeiro de Macedo, the venerable Bartholomeo do Quartal, and the count de Ericeira. Among the poets are celebrated Camoens, Digo Bernardes, Antonio Barboza, Bacelar, and Gabriel Pereira; two dramatic writers are alſo mentioned, Vicente Antonio Joſephar, whoſe plays are publiſhed in four volumes; and Nicola Luis, called the Portugueſe Plautus. In mathematics, Pedro Nunez diſtinguiſhed himſelf at the beginning of the ſixteenth century. Of late years natural hiſtory begins to be a little ſtudied: but Portugal is the laſt of nations in that department. This language is ſpoken on all the coaſts of Africa and Aſia, as far as China, but mixed with the languages of the ſeveral nations in thoſe diſtant regions.

That the ITALIAN tongue is derived from the vulgar language of the ancient Romans, ſeems the opinion of the beſt critics; but to diſcover and point out by what degrees it was ſmoothed and poliſhed to the ſtate in which Dante, Petrarch, and Bocaccio, found it in the fourteenth century, would require more time, and occupy more ſpace, than the ſubject ſeems neceſſarily to deſerve. However, as the Italian language has been truly called by Metaſtatio *muſica ſteſſa*, and is ſo favourable to vocal purpoſes as to be more muſical in itſelf, when merely ſpoken with purity, than any other in Europe, an inquiry into the cauſes of its mellifluence and natural melody does not ſeem foreign to a hiſtory of language in general. Muratori has given innumerable paſſages, from authors of the eighth and ninth centuries, to prove, that, after the Franks and Germans were ſettled in Italy, articles were uſed in the Latin language, inſtead of pronouns and changes of termination, in order to ſave the trouble of inflecting the caſes of nouns; but pretends not to ſay what this vulgar language was, or whether the clergy preached to the common people, or merchants carried on their correſpondence, in Latin or Italian.

The learned Maffei allows the Provençal, French, Spaniſh, and Italian, languages to be deſcendants from the Latin; but denies that the ancient inhabitants of Italy adopted any words from the Goths or Huns who invaded them. The genius of the German, Francic, or Teutonic, language, which was ſpoken by the Lombards, was ſo diametrically oppoſite to that of the Italians, that it ſeems incredible there ſhould have been any exchange or union of dialects between them: the one being as remarkable for its numerous conſonants and harſh terminations, as the other for its open vowels and mellifluous endings. As it is the opinion of this profound critic that the Romans had always a vulgar dialect, leſs grammatical and elegant than that of the ſenate and books, he ſuppoſes the French, Spaniſh, and Italian, languages, to have been different modifications of this ruſtic plebeian dialect. But it is as difficult to aſſign a reaſon for all theſe daughters of one common mother being ſo diſſimilar, as it is to account for the little reſemblance that is frequently found between other children of the ſame parents. And why the French language ſhould have ſo many naſal endings; the Spaniſh ſo many ſibillating, and the Italian alone have none but vocal, terminations, can only have been occaſioned by ſome particular and radical tendency in the vulgar and plebeian language of each country, from very high antiqnity. The Romans had two words for moſt purpoſes: the one elegant, and uſed by writers and perſons of education, and the other vulgar and common. The word *caput*, for inſtance, was a claſſical term for the head; and *teſta*, uſed by Auſonius, an ignoble expreſſion for the ſame thing. *Os*, the mouth, according to Plautus and Juvenal, was called *bucca* by the common people; whence the word *bocca* in Italian. *Equus*, a horſe, according to Horace and Perſius, was called *caballus* and *cabillinus* by the plebeians, which the Italians have ſoftened into *cavallo*. The learned author has collected a great number of proofs in confirmation of his opinion that the Romans had at all times two languages; the one elegant, grammatical, and uſed by the patricians and the learned; and the other mean, vulgar, inaccurate, and uſed only by the plebeians. That this vulgar language, rather than the pure Latin, was the parent of the Provençal, French, Spaniſh, and Italian, languages, appears by the examples he has furniſhed; but the Italian was not only derived from the trivial and vulgar words in the Latin language, but from grammatical ſoleciſms and popular inaccuracies of pronunciation. It is not to be imagined that the common people of Rome at any period ſpoke ſuch correct and elegant language as their beſt authors have left us in their writings. Ever eager to convey their meaning, and to arrive at the true end of ſpeech by the ſhorteſt road, they diſliked the trouble of polyſyllables, and had a natural propenſity to abbreviate them. Of this Maffei has furniſhed innumerable examples in the Latin language of very high antiquity: as, *ſis* for *ſi vis*, *ain* for *aiſne*, *ſi re nipſe* for *ſimilis re ipſa*, and *cauneas* for *cave ne eas*. But eliſions of conſonants were ſtill more frequent: as, *per hoc* was ſoftened into *però*, *ſic* into *ſi*; and by the omiſſion of the *m* final in the accuſative caſe ſingular of nouns, as *amore* for *amorem*, *fama* for *famem*, &c. Thus innumerable words in the Latin language inſenſibly became Italian; and, as it was impoſſible for the common people, ignorant of grammar, to know all the neceſſary inflections of nouns, it was natural for them to take greater liberties with the accuſative and ablative caſes than any other; and it is from theſe two caſes that the genius of the Italian language is chiefly derived. The learned marquis goes through all the caſes of nouns and tenſes of verbs; ſhows the formation of adverbs, and the mutation of letters, in order to remove harſhneſs and facilitate utterance. And it appears that the Roman ſoldiers and common people totally loſt the terminations *um*, *ur*, and *us*, which rendered the article neceſſary to diſtinguiſh caſes, numbers, and perſons, as well as auxiliary verbs to facilitate the conjugations of other verbs.

It was the opinion of Muratori, that theſe changes or corruptions were occaſioned by the barbarians who invaded Italy; but both Maffei and Severino have proved that the Romans had introduced them long before the Goths, Franks, or Vandals, had invaded them. This language continued to partake of its barbarous origin, remaining rude, unformed, and without rules, as long as the uſe of Latin was preſerved in courts of juſtice, public acts, and polite converſation; and it was not till the twelfth century that the Muſes honoured the vulgar language of Italy ſo far as to admit it into their company.

The ſuperiority of the Tuſcan dialect over all the others of Italy is aſcribed by Gravina to the ancient democratic form of government at Florence, which, before the Medici family had uſurped the ſovereignty, furniſhed the citizens with frequent opportunities of ſpeaking in public, and encouragement for poliſhing this language, "in order to bring the people over to their opinions, by the ſweetneſs of their eloquence."

That every language of a learned and commercial people is greatly changed in the courſe of a few centuries, is well known. Horace complains of the want of permanence in that of the Romans, Quintilian tells us that in his time ſcarcely any of the ancient language was left; and in the time of Juſtinian new inflexions and modes of ſpeech, neglect of ſyntax, abbreviations, and vulgar barbariſms,

bariſms, were leading to a new language. It was the faſhion of learned in Italy to write their familiar letters in Latin, even to women, ſo late as the time of Petrarch; and it was cuſtomary to preach in that language; but preaching was then leſs frequent than at preſent. Even ſo late as the year 1500, the biſhops and dignified clergy, after preaching in Latin to a ſelect congregation of well-educated perſons, had their ſermons repeated the next day to the common people by the friars in the vulgar tongue. The ſermons in theſe early periods by St. Francis, St. Anthony of Padua, Bernardino of Sienna, and many others that have been preſerved, are all in Latin. But it is a curious circumſtance that after this period many ſermons are found half in Latin and half in Italian; for the preachers, accommodating themſelves by degrees to the vulgar, avoided the trouble of a regular tranſlation, by interlining the Latin with fragments of Italian. But this is ſtill leſs extraordinary than the barbariſm of our Engliſh ſermons, which not many years ago were almoſt half Latin. An Italian congregation, from the affinity of the two languages, was likely to underſtand a conſiderable part of what was uttered in Latin, which was not the caſe with the Engliſh. The ſermons of the famous Jeremy Taylor in the time of Charles I. are crouded with Greek in every page.

When Dante wrote his Vita Nuova, in the beginning of the fourteenth century, he ſaid that the Italian language had not ſubſiſted more than one hundred and fifty years; and that it was firſt uſed by ſome poet for the ſake of his miſtreſs, by whom the verſes addreſſed to her in Latin began to be underſtood with great difficulty. Corticelli, in his Eloquenza Toſcana, aſſerts, that "in Italy lyric verſes preceded all other poetry; and ſo general is the love for this ſpecies of verſification, that there is no nation, however barbarous, without it." And this author imagined that lyric poetry had its riſe in Tuſcany, about the year 1184, upon the following occaſion. The emperor Frederic Barbaroſſa being hunting in Mugello, a delightful country of Tuſcany, and a ſtag paſſing precipitately by him, Ubaldino Ubaldini, a valiant Florentine knight, ſeized him by the horns, and held him while the emperor ſlew him; for which boldneſs and dexterity the emperor gave him the ſtag's head, with a permiſſion to aſſume it in his family arms. Ubaldino compoſed an inſcription to commemorate this event, which is ſtill to be ſeen engraved on marble at Florence; and, though written like proſe, it conſiſts of ſhort verſes in rhyme, with a mixture of Latin words; and is ſuppoſed to have the firſt attempt at lyric poetry in Tuſcany. But he believes that the firſt ſongs in the modern language were written in Sicily; whence the art paſſed into Provence among the troubadours, of whom the Italians learned it, about the thirteenth century. Few other veſtiges are to be found before the year 1200. Rhymes written upon the ſubject of love by the emperor Frederic II. who was born in 1104, are among the moſt ancient that have been preſerved.

Though the French began to write in their own dialect much ſooner than the Italians, yet their language was brought to no perfection before the ſeventeenth century; but the writings of the Italians of the fourteenth century are ſtill regarded as models of perfection, with reſpect to diction and conſtruction. According to Creſcembini, the Italian written language was not wholly formed till the thirteenth century, though it was colloquially uſed much earlier. Many verſes and memorials ſtill remain of the Italian tongue during this period. But the Sicilians, ſays the ſame writer, were the firſt who committed to paper verſes in Italian, whoſe ſucceſs excited other poets in Italy, eſpecially the Tuſcans, to imitate them; and Petrarch was in doubt whether the Sicilians imitated the Provençals, or the Provençals the Sicilians, in their poetical compoſitions. But, as both theſe countries were long under the ſame ſovereigns, the inhabitants would naturally cultivate and encourage the ſame arts and language. If the Sicilians were the firſt poets in a vulgar tongue, they were at leaſt very negligent in preſerving ſufficient examples of their ancient poetry to aſcertain its title to priority. Indeed Muratori ſays, that the moſt ancient ſonnets in the Italian language were written by the Sicilians; but he neither gives ſpecimens, nor names the authors of them. Creſcembini, however, confeſſes, as Bembo, Redi, and many Italian writers of eminence, had done before, that the Provençals were regarded by his countrymen as the fathers of their poetry; and that Dante, Cino da Piſtoia, Guido Cavalcante, Petrarch, and Bocaccio, allowed them to have formed their own language, and produced an infinite number of poems, long before the Italians could boaſt of either. Indeed, by a compariſon of the moſt ancient Italian poems now ſubſiſting with thoſe of Provence, it appears that they imitated the forms and ſtructure of the poetical compoſitions of the ancient troubadours, who furniſhed them likewiſe with their poetical terms of art, which are the ſame in both languages. The Provençal poets had no *verſi ſciolti*, or blank verſe, like the Italians; all their poetry was in rhyme; ſo that it ſeems as if the Italians in their blank verſe had imitated the Latins, and in rhyming the Provençals.

The Italian is accounted one of the moſt perfect among the modern tongues. It is complained, indeed, that it has too many diminutives and ſuperlatives, or rather augmentatives; but without any great reaſon: for, if thoſe words convey nothing farther to the mind than the juſt ideas of things, they are no more faulty than our pleonaſms and hyperboles. The language correſponds to the genius of the people: they are ſlow and thoughtful; and, accordingly, their language runs heavily, though ſmoothly; and many of their words are lengthened out to a great degree. They have a great taſte for muſic; and, to gratify their paſſion this way, have altered abundance of their primitive words; leaving out conſonants, taking in vowels, ſoftening and lengthening out their terminations for the ſake of the cadence. Hence the language is rendered extremely muſical, and ſucceeds better than any other in operas, and ſome parts of poetry, particularly in the tender tone of elegy; and here it remains unrivalled and alone; the plaintive melody of the ſounds, and ſmooth flow of the language, being perfectly adapted to expreſs that ſoothing melancholy which this ſpecies of poetry requires. On this account the plaintive ſcenes of the Paſtor Fido of Guarini have juſtly gained to that poem an univerſal applauſe. We muſt obſerve with ſurpriſe, that the Italians, who have fettered every other ſpecies of poetry with the ſevereſt ſhackles of rhyme, have in this ſpecies ſhowed an example of the moſt unreſtrained freedom; the happy effects of which ought to have taught all Europe the powerful charms attending it; yet with amazement we perceive, that ſcarcely an attempt to imitate them has been made by any poet in Europe except by Milton in his Lycidas; no dramatic poet, even in Britain, having ever adopted the unreſtrained harmony of numbers to be met with in this and many other of their beſt dramatic compoſitions.

Rouſſeau's character of the Italian language, and deſcription of its beauties, and advantage over all others, for vocal purpoſes, are ſo appoſite to the preſent inquiry, that we ſhall faithfully tranſlate the whole paſſage. "If it ſhould be aſked what language is the moſt grammatical, I ſhould anſwer, that of the people who reaſon the beſt; and, if it ſhould be aſked what people are likely to have the beſt muſic, I ſhould ſay, thoſe that have the beſt language for it. Now, if there is in Europe one language more favourable to muſic than another, it is certainly the Italian; for this language is ſoft, ſonorous, melodious, and more accentuated than any other; four qualities peculiarly important to vocal muſic. It is *ſoft* from its articulations being uncompounded; from the infrequency of claſhing conſonants; and from every word in the language being terminated by a vowel. It is *ſonorous* from the moſt of its vowels being open; its diphthongs uncompounded; from having

having no nasal vowels; and from its articulations being few and easy, which render the sound of each neat and full. It is *melodious* from its own native sweetness, which renders it vocal even in declamation and common speech, without the assistance of musical notes. But what renders the Italian language more peculiarly mellifluous, as well as more expressive of sentiment, than any other, is the great compass and variety of its tones, and the choice it allows in painting the passions. To prove this, let any one who imagines it to be only the language of love and tenderness, take the trouble of comparing the two following stanzas of Tasso:

Teneri sdegni e placide è tranquille
Repulse e cari vezzi e liete pace,
Sorrisi, parolette, e dolce stille
Di pianto e sospir, tronchi e molli bacci
Fuse tai cose tutte, e poscia unille,
Et al foce tempro di lente faci;
E ne formo quel si mirabil cinto,
Di ch' ella avena il bel fianco succinto.

Canto IV. *Stanza* xxxiii.

Chiama gl' abitator de l'ombre eterne
Il rauco suon de la tartarea tromba;
Treman le spaziose atre caverne,
E l'aer cieco a quel romor rimbomba;
Ne si stridendo mai de la superne
Regione del cielo il folgor piomba,
Ne si scossa giammai trema la terra
Quando i vapori in sen gravida serra.

Canto XVI. *Stanza* xxv.

"It will be found, perhaps, equally difficult to express in any other language the sweetness of the one, or the vigour of the other, of these stanzas. But the roughness of the last stanza does not consist in hard and uncouth words; they are all sonorous, and, though rough to the ear, easy of utterance."

These stanzas, however, which Rousseau, and, after him, almost all musical writers, have instanced as of remarkably easy utterance, should have been confined to reading and declamation; for better lyrical or vocal verses may be found in Metastasio, and, indeed, in almost all Italian lyric poets, since it has been found that the vowel *a* is the best for divisions, and all the other vowels have been long in disuse for such purposes by the best Italian composers for the stage. In the stanza cited as a model of softness, in vocal verses, there are but two words, to which, in a lively air, divisions would be given; *Cari pace*. But even these, in which the vowel *a* occurs in the first syllable, would have no long divisions assigned them, if there was a final syllable terminated by that letter, as in the third person singular of the future tense of verbs, *vedrà, ucciderà, farà, darà, parlerà, cantarà, fuggirà*; in the elision of the infinitive mood, *trionfar, ripofar, fcordar, lufingar, naufragar*; and in the substantives, *fedeltà, pietà, felicità, libertà, crudeltà*, and *Mar*. In setting Metastasio's early operas, till about the middle of the present century, we find the best composers giving divisions to the vowels *o* and *e*; as in *morirò, dovrò, fugirò, re, te, fè, freme, fpeme, vender, voler, è, mercè*, &c. but never to *i* or *u*. Rousseau declined discussing the accents of the Italian tongue; but if, as has been imagined, the Greek accents were used as a notation of the tone or tune of voice in reading or speaking; the acute accent raising the voice, the grave depressing it, and the circumflex keeping it at a middle pitch or tone; the Italian would afford a more varied and pleasing melody than any of the other European dialects.

The multitude of sovereign states into which Italy was divided has given rise to a great number of different dialects in that language; which, however, are all good in the place where they are used. The Tuscan is usually preferred to the other dialects, and the Roman pronunciation to that of the other cities; whence the Italian proverb, "Lingua Toscana in bocca Romana."

The Italian is generally pretty well understood throughout Europe, and is frequently spoken in Germany, Poland, and Hungary. At Constantinople, in Greece, and in the ports of the Levant, the Italian is used as commonly as the language of the country; indeed in those places it is not spoken so pure as in Tuscany, but is corrupted with many of the proper words and idioms of the place; whence it takes a new name, and is called *Frank Italian*.

"The English, French, and Germans, (says Mr. Enfor, in his Independent Man,) should apply themselves to Italians were they to derive no other advantage from speaking it than to soften their own expression. That it would have this effect, is proved by a collateral circumstance; it is uniformly remarked that the Germans in Russia (and the Russian resembles the Italian) are much superior to their countrymen in the suavity of their utterance. The beauty of the Italian language is a trivial circumstance compared with the excellence of the writers in poetry, history, and politics, who have illustrated themselves and their country.

"Italy, since the records of time, has ever surpassed the world in some eminent manner; its existing language is the dialect, and its towns are the theatres, of the arts; though the French have abridged the profuse display of its specimens. The violence of those plunderers, and the reflections of some dilettanti, force me to say that this persecuting enemy did not show their love of pictures and statuary by seizing them; they loved plunder, not the arts. The Roman general who sacked Corinth, also seized its paintings and statues: but who ever imagined that by this conduct he exemplified the elegance of his taste? he, who threatened those to whom he confided their transport, that if they lost them they should replace them! Nero, that paragon of governors, was also a great collector of the arts from subjected countries. According to Pausanias, he brought fifty statues from Delphi. Was he a connoisseur, he who had the statue of Alexander by Lysippus gilt? a signal declaration of his taste! They love not the arts, who wrest their productions from their native land; they are consecrated to the genius of the place, and should be their own sanctuary. Execrated therefore be the memory of these marauders! Praised be the name of Frederic, who, having conquered Dresden, refused to accept the famous Nativity by Correggio, though coveted by him, and presented to him by the electress? Let also the name of Fabius live, who, when he took Tarentum, which nearly equalled Corinth in the precious monuments of the arts, with a mind superior to Marcellus, as Livy writes, abstained from the plunder.

"The French have gained little; Italy and the world have lost much; for the statues and paintings have been so ill-treated in their carriage, that many have been broken, defaced, and utterly ruined. The crimes of nations, as of individuals, never go unpunished; and they are often repaid by reprisals of the same kind. The horses by Lysippus were forced from Greece to adorn the church of St. Sophia at Constantinople; they were thence conveyed to enrich the shrine of St. Mark at Venice; they now adorn the imperial palace of the Thuilleries; and, if revolutionary madness do not cause them to be melted, as it did the famed equestrian statue of Henry the Fourth, they have probably not yet reached the limit of their travels. In despite, however, of the irresistible injuries of time, and the plunder and destruction of Goths, ancient and modern, this country, to every lover of the fine arts, is pre-eminent. Much, the French had not time to remove: much escaped them through their ignorance; and very much defied their tyranny. Its stupendous ruins, its modern architecture, its fresco paintings by all those consummate in the art, by Correggio, Raphael, Michael Angelo, defy their rapacity: besides, all the private collections of sculpture and painting (for some terms were to be kept with the natives) remain entire. Italy also adds daily to its curiosities, by the exquisite antiques

which

which are daily extracted from the earth, and by the works of its living artiſts, who rival the Grecian ſchool in the ſublimity of their deſigns and in the elegance of their execution. In this country, the youth can beſt ſtudy the fine arts; the air, the ſoil, the ſituation, all conſpire to ſupply the means, and open the mind to receive their impreſſion!"

The FRENCH language is allowed to have originated from corrupt Latin, ancient Gallic, and Teutonic, brought into Gaul by the Franks; but in the ſouthern parts of France, bordering upon the Mediterranean, many Greek words are ſtill diſtinguiſhable, which are ſuppoſed to have been brought thither by the colonies of Phoceans planted there in remote antiquity, and perhaps by Greek merchants trading to Marſeilles. According to M. de Sainte Palaie, the principal difference between the French and Provençal languages during the twelfth and thirteenth centuries, conſiſted in the terminations of the ſame words. When the French uſed the *e* feminine, the Provençals uſed *a* or *o*, neither of which however was pronounced, as is the caſe in our words *ſea* and *people*. The Provençal terminations reſembled thoſe of the Italian and Spaniſh languages, and, where the French uſed *eux* and *eur*, the Provençals had *os* and *or*.

M. de la Ravaliere obſerves, that laymen in the provinces began to write the vulgar language much earlier than in the capital, where Latin was longer underſtood. The year 1130 was the date of the firſt poem in French, of which, tradition has preſerved the name; "Priſe de Jeruſalem, par le chevalier Bechada:" but no veſtige of this work is come down to the preſent times. The moſt ancient remnants of the French proſe language are the laws of William the Conqueror, who died 1087, and the ſermons of St. Bernard, written early in the following century; in which it appears that this language differed conſiderably from that of Provence, of the ſame period, as it was written by the Troubadors. See l'Abbé Lebeuf, Mem. de Litt. tom. xvii.

It is difficult to ſeparate the Provençal dialect from the language that was ſpoken during the middle ages in other parts of the French dominions. The Normans made it their boaſt at the beginning of the eleventh century, that they ſpoke the Romance language with purity, particularly at Rouen. Some of the writers of thoſe times call the French language *Lingua Gallica*, and ſome *Romana*, or *Romana Ruſtica*. The term *Romance*, derived from the language in which tales and novels were firſt written, did not for many years after this period convey the ſame idea as at preſent. *Parler Roman* was another expreſſion for ſpeaking French. In the time of Charles V. of France, the ſame expreſſion is uſed by Guillaume de Nangy. And, as the ruſtic Romance language was that of the courts of French princes in general, every heroic hiſtory and metrical narration, and indeed almoſt every thing that was written in that language, was called Romans, or Romance. This is confirmed by a line of the Roman d'Alexandre, by Lambert le Cors: *Veſtu comme François, et ſot parler Romans*; He dreſſed like a Frenchman, and ſpoke the Romance.

It was not till the reign of Philip Auguſtus, at the latter end of the twelfth and beginning of the thirteenth century, ſays M. de la Ravaliere, that men of learning and reputation in the capital ventured to write in the vulgar tongue; when, ſtill leaving the Latin language in poſſeſſion of hymns, and other poems on ſacred ſubjects, they exerciſed their talents upon themes merely ſecular; but moſt frequently in lyric compoſitions. And we are told, that, in the regiſter of the chamber of accounts of that time, there is a purity perceived almoſt equal to that of the preſent age.

However, the French was ſtill a very imperfect language till the reign of Francis I. The cuſtom of ſpeaking Latin at the bar, and of writing the public acts and inſtruments of the courts of juſtice in that language, had made them overlook the French, their own language. Beſides, the preceding ages had been remarkable for their ignorance, which was owing, in good meaſure, to the long and calamitous wars in which France had been engaged; whence the French nobleſſe deemed it a kind of merit not to know any thing; and the generals regarded little, whether or not they wrote and talked politely, provided they could but fight well. But Francis I. who was the reſtorer of learning, and the father of the learned, changed the face of things; and, after his time, Henry Stephens printed his book, "De la Precellence du Langage François."

The change was become very conſpicuous at the end of the ſixteenth century, and under Henry IV. Amyot, Coeffeteau, and Malherbe, contributed towards bringing it to its perfection; which the cardinal de Richelieu completed, by the eſtabliſhment of the French academy; an aſſembly, wherein the moſt diſtinguiſhed perſons of the church, the ſword, and the gown, have been members. Nor did the long reign of Louis XIV. contribute a little to the improvement of the language; the perſonal qualities of that prince, and his taſte for the polite arts, and that of the princes of the blood, rendered his court the politeſt in Europe. Wit and magnificence ſeemed to vie; and his generals might have diſputed with the Greeks, Romans, &c. the glory of writing well, if they could not that of fighting. From the court, the elegance and purity of the language ſoon ſpread itſelf into the provinces; and now there is ſcarcely any body there who does not write and ſpeak good French. One of the characters of the French language is, to be natural and eaſy. The words are ranged in it much in the ſame order as the ideas in our minds; in which it differs exceedingly from the Greek and Latin, where the inverſion of the natural order of words is reputed a beauty. Indeed the Hebrew ſurpaſſes even the French in this point; but then it comes ſhort of it in copiouſneſs and variety.

The French has but few compound words: wherein it differs widely from the Greek, High Dutch, and Engliſh. This the French authors own a great diſadvantage in their language; the Greek and Dutch deriving a great part of their force and energy from the compoſition of words, and frequently expreſſing that in one ſounding word which the French cannot expreſs but by a periphraſis. The diminutives in the French are as few as the compounds; the greateſt part of thoſe remaining in uſe having loſt their diminutive ſignification; but what diſtinguiſh the French moſt are its juſtneſs, purity, accuracy, and flexibility.

French is the moſt univerſal and extenſive language in Europe. The policy of ſtates and courts has rendered it neceſſary for the miniſters of princes, and their officers, &c. and the taſte for arts and ſciences has had the ſame effect with regard to the learned. In Germany, and elſewhere, the princes and perſons of diſtinction value themſelves on underſtanding French; and in ſeveral courts of Europe, French is almoſt as much known as the language of the country; though the court of Vienna is an exception from this rule: French is there very little uſed; the emperor Leopold could not bear to hear it ſpoken in his court; the Latin and Italian are there cultivated inſtead of it. This extenſiveneſs of the French language is no modern advantage; William the Conqueror gave laws to England in the French language; and the ancient cuſtoms of moſt of the provinces of the Netherlands are written in the ſame. Laſtly, the French is the ſame language every where; not only in all the provinces of France, but, in all places where it is ſpoken, out of France.

For a critical acquaintance with what regards the French tongue, ſee the Remarques of M. Vaugelas; and the obſervations M. Corneille has made on thoſe remarks; the Remarques of F. Bouhours; and the doubts of a Bas-Breton gentleman, by the ſame father; the converſations of Ariſte and Eugene; the obſervations of M. Menage, and his etymologies, with thoſe of M. Huet; F. Buffier's French grammar, and that of the abbé Regnier; and ſome performances of a later date.

Of the SCLAVONIAN LANGUAGE.

This language pervades a conſiderable part of Europe, and ſeems to have originated in the eaſt. It is ſpoken by the Dalmatians, by the inhabitants of the Danubian provinces, by the Poles, Bohemians, and Ruſſians. The word *ſlab* (whence the French word *eſclave*, and our word *ſlave*) ſignifies "noble, illuſtrious;" but becauſe, in the lower ages of the Roman empire, vaſt multitudes of theſe people were ſpread over all Europe in the quality of ſlaves, that word came to denote the ſervile tribe by way of diſtinction in the ſame manner as the words *Geta*, *Davus*, and *Syrus*, did among the Greeks at a more early period.

The Sclavonian language is ſpoken in Epirus, the weſtern part of Macedonia, in Boſnia, Servia, Bulgaria, in part of Thrace, in Dalmatia, Croatia, in Poland, Bohemia, Ruſſia, and Mingrelia in Aſia, whence it is frequently uſed in the ſeraglio at Conſtantinople. Many of the great men of Turkey underſtand it, and frequently uſe it; and moſt of the janiſſaries, having been ſtationed in garriſons on the Turkiſh frontiers in Europe, uſe it as their vulgar tongue. The Hungarians, however, and the natives of Walachia, ſpeak a different language; and this language bears evident ſignatures of the Tartarian dialect, which was the tongue of the original Huns. Upon the whole, the Sclavonian is by much the moſt extenſive language in Europe, and extends far into Aſia.

The Slavi dwelt originally on the banks of the Boryſthenes, now the Dnieper, or Nieper. They were one of the tribes of the European Sarmatians, who in ancient times inhabited an immenſe tract of country, bounded on the weſt by the Viſtula, now the Weiſel; on the ſouth-eaſt by the Euxine ſea, the Boſphorus Cimmerius, the Palus Mœotis, and the Tanais or Don, which divides Europe from Aſia. In this vaſt tract of country, which at preſent comprehends Poland, Ruſſia, and a great part of Tartary, there dwelt in ancient times many conſiderable tribes. To enumerate theſe, we believe, would not much edify our readers; we ſhall only inform them, that among theſe Sarmatian clans were the Roxolani, now the Ruſſians, and likewiſe the Slavi, who dwelt near the Boryſthenes, as was obſerved above. The Slavi gradually advanced towards the Danube; and in the reign of Juſtinian, having paſſed that river, they made themſelves maſters of that part of Illyricum which lies between the Drave and the Save, and is to this day from them called *Sclavonia*. Theſe barbarians by degrees overran Dalmatia, Liburnia, the weſtern parts of Macedonia, Epirus; and on the eaſt they extended their quarters all along to the weſtern bank of the Danube, where that river falls into the Euxine. In all theſe countries, the Sclavonian was deeply impregnated with the Greek, which was a thing of courſe, ſince the barbarian invaders ſettled in thoſe regions, and mingled with the aborigines, who ſpoke a corrupt dialect of that language.

The Poles are the genuine deſcendants of the ancient Sarmatæ, and conſequently ſpeak a dialect of their language, but much adulterated with Latin words, in conſequence of the attachment the Polanders have long profeſſed to the Roman tongue.

The Sileſians and Bohemians have corrupted their dialects in the very ſame manner. In thoſe countries, then, we are not to ſearch for the genuine remains of the ancient Sarmatian.

The modern Ruſſians, formerly the Rhoxani or Roxolani, are the poſterity of the Sarmatæ, and are a branch of the Slavi; they inhabit a part of the country which that people poſſeſſed before they fell into the Roman provinces; they ſpeak the ſame language, and wear the very ſame dreſs; for, on the hiſtorical pillar at Conſtantinople, the Sclavonians are dreſſed like the Ruſſian boors. If then the Slavi are Sarmatæ, the Ruſſians muſt of courſe be the deſcendants of the ſame people. They were long a ſequeſtered people, and conſequently altogether unconnected with the other nations of Europe. They were ſtrangers to commerce, inhoſpitable to ſtrangers, tenacious of ancient uſages, averſe to improvements of every kind, wonderfully proud of their imaginary importance; and, in a word, a race of people juſt one degree above abſolute ſavagiſm. A people of this character are, for the moſt part, enemies to innovations; and, if we may believe the Ruſſian hiſtorians, no nation was ever more averſe to innovations than the one in queſtion. From the ninth century, at which era they embraced Chriſtianity, it does not appear that they moved one ſtep forward towards civilization, till Peter the Great, not a century ago, in conſequence of his deſpotic authority, compelled them to adopt the manners and cuſtoms of their more poliſhed neighbours.

We may then conclude, that the Ruſſians made as little change in their language during that period, as they did in their dreſs, habits, and manner of living. Whatever language they ſpoke in the ninth century, the ſame they employed at the beginning of the eighteenth. They were, indeed, according to Appian, once conquered by Diophantus, one of Mithridates's generals, but that conqueſt was for a moment only; they were likewiſe invaded, and their country overrun, by the great Timur, or Tamerlane; but this invaſion was like a torrent from the mountains, which ſpreads devaſtation far and wide while it rages, but makes little alteration on the face of the country. We find likewiſe, that upon ſome occaſions they made incurſions upon the frontiers of the Roman empire; but we hear of no permanent ſettlements formed by them in theſe quarters. Upon the whole, we take the Ruſſians to have been, with reſpect to their language, in the very ſame predicament with the highlanders and iſlanders of Scotland, who, according to the general opinion, have preſerved the Celtic dialect pure and entire, in conſequence of their having never mingled with foreigners.

From this deduction we may infer two things: firſt, that the Russian language is the genuine Sclavonian; and, ſecondly, that the latter is the ſame, or nearly the ſame, with the ancient Sarmatian.

In the Ruſſian, there are found a great number of words reſembling the old ſimple roots of the Greek, both in ſound and ſignification; its grammatical genius is nearly the ſame; and we are informed by the very beſt authority, that there is in this language a tranſlation of Epictetus, in which there are whole pages, in both original and tranſlation, without one ſingle tranſpoſition. Monſ. Leveque, who has publiſhed a tranſlation of a hiſtory of Ruſſia, is ſo entirely convinced of the ſtrict analogy between the ancient Greek and the modern Ruſſe, that he is poſitive that the former is derived from the latter. Monſ. Freret, a very learned French academician, is clearly of the ſame opinion. Yet perhaps theſe coincidences ariſe from the relics of the primitive language of mankind; veſtiges of which, we believe, are to be found almoſt in every tongue now exiſting.

As the Ruſſians were a generation of ſavages, there is no probability that they were acquainted with the uſe of letters and alphabetical writing till they acquired that art by intercourſe with their neighbours. It is certain, beyond all contradiction, that few nations had made leſs proficiency in the fine arts than that under conſideration; and we think there is little appearance of their having learned this art prior to their converſion to Chriſtianity. Certain it is, that the Slavi, who ſettled in Dalmatia, Illyria, and Liburnia, had no alphabetical characters till they were furniſhed with them by St. Jerome. The Serviau character, which very nearly reſembles the Greek, was invented by St. Cyril; on which account the language written in that character is denominated *Chiurilizza*. Theſe Sclavonic tribes knew nothing of alphabetic writing prior to the era of their converſion. The Mœſian Goths were in the ſame condition till their biſhop Ulphilas fabricated them a ſet of letters. If the Slavi and Goths, who reſided in the neighbourhood of the Greeks and Romans, had not learned alphabetical writing prior to the era of their converſion to Chriſtianity, it muſt hold, *à fortiori*, that the

Ruſſians, who lived at a very great diſtance from thoſe nations, knew nothing of this uſeful art antecedent to the period of their embracing the Chriſtian faith.

The Ruſſians pretend that they were converted by St. Andrew; but this is known to be a fable. Chriſtianity was firſt introduced among them in the reign of the grand duke Wolodimar, who, marrying the daughter of the Grecian emperor Baſilius, became her convert about the year 989. About this period, we imagine, they were taught the knowledge of letters by the Grecian miſſionaries, who were employed in teaching them the elements of the Chriſtian doctrines. Their alphabet conſiſts of 31 letters, with a few obſolete additional ones; and theſe characters reſemble thoſe of the Greek ſo exactly, that there can be no doubt of their being copied from them. It is true, the ſhape of ſome has been ſomewhat altered, and a few barbarian ones have been intermingled. The Ruſſian liturgy, every body knows, was copied from that of the Greeks; and the beſt ſpecimen of the old Ruſſian is the church-offices for Eaſter, in the very words of Chryſoſtom, who is called by his name *Zlato uſtii*, "golden-mouthed." The power of the clergy in Ruſſia was exceſſive; and no doubt their influence was proportioned to their power. The firſt race of clergy in that country were undoubtedly Greeks. We know how active and induſtrious thoſe people were in propagating their language as well as their religion. The offices of religion might be at firſt written and pronounced in the Greek tongue, but it would ſoon be found expedient to have them tranſlated into Ruſſian. The perſons employed in this work muſt have been Greeks who underſtood both languages.

As it is confeſſedly impoſſible that a people ſo dull and uninventive as the Ruſſians originally were could ever have fabricated a language ſo artificially conſtructed as their preſent dialect; and as it is obvious, that, till Chriſtianity was introduced among them by the Greeks, they could have no correſpondence with that people—it muſt appear ſurpriſing by what means their language came to be faſhioned ſo exactly according to the Greek model. We have obſerved above, that the Ruſſian letters muſt have been invented and introduced into that country by the Greek miſſionaries. We think it probable, that thoſe apoſtles, at the ſame time that they taught them a new religion, likewiſe introduced a change into the idiom of their language. The influence of thoſe ghoſtly teachers over a nation of ſavages muſt have been almoſt boundleſs; the force of their precepts and example almoſt incontrollable. If the ſavage converts accepted a new religion from the hands of thoſe Grecian apoſtles, they might with equal ſubmiſſion adopt improvements in their language. Such of the natives as were admitted to the ſacerdotal function muſt have learned the Greek language, in order to qualify them for performing the offices of their religion. A predilection for that language would be the immediate conſequence. Hence the natives, who had been admitted into holy orders, would co-operate with their Grecian maſters in improving the dialect of the country; which, prior to the period above-mentioned, muſt have greatly deviated from the original ſtandard of the Sarmatian tongue. Upon this occaſion, we imagine the Greek apoſtles, in conjunction with their Ruſſian diſciples, reduced the language of the country to a reſemblance with the Greek idiom. They retained the radical vocables as they found them; but by a variety of flexions, conjugations, derivations, compoſitions, and other modifications, transformed them into the Grecian air and apparel. They muſt have begun with the offices of the church; and, among a nation of ſavages newly converted, the language of the new religion would quickly obtain a very extenſive circulation. When the Grecian garniture was introduced into the church, the laity would, in proceſs of time, aſſume a ſimilar dreſs. The fabric of the Grecian declenſions, conjugations, &c. might be grafted upon Ruſſian ſtocks without affecting the radical parts of the language.

The Ruſſian language, like moſt others, contains eight parts of ſpeech, noun, pronoun, &c. Its nouns have three genders; maſculine, feminine, and neuter; it has alſo a common gender for nouns intimating both ſexes. It has only two numbers, ſingular and plural. Its caſes are ſeven; nominative, genitive, dative, accuſative, vocative, inſtrumental, and prepoſitive. Theſe caſes are not formed by varying the termination, as in Greek and Latin; but generally by placing a vowel after the word, as, we imagine, was the original practice of the Greeks. Nouns ſubſtantive are reduced to four declenſions, and adjectives make a fifth. Theſe agree with their ſubſtantives in caſe, gender, and number. They have three degrees of compariſon, as is common in other languages; the poſitive, comparative, and ſuperlative. The comparative is formed from the feminine of the nominative ſingular of the poſitive, by changing *a* into *te*; the ſuperlative is made by prefixing *pre* to the poſitive. Theſe rules are general; for the exceptions, recourſe muſt be had to the Ruſſian grammars. The numeral adjectives have three genders like the reſt, and are declined accordingly. Their pronouns have nothing peculiar, and are divided and arranged in the ſame manner as in other languages. Verbs in the Ruſſian language are comprehended under two conjugations. The moods are only three; the indicative, the imperative, and the infinitive; the ſubjunctive is formed by placing a particle before the indicative. Its tenſes are eight in number; the preſent, the imperfect, the preterite ſimple, the preterite compound, the pluperfect, the future indeterminate, the future ſimple, the future compound. The verbs have their numbers and perſons as in other languages. To enter into a detail of their manner of conjugating their verbs, would neither be conſiſtent with our plan, nor, we are perſuaded, of much conſequence to our readers. Their other parts of ſpeech differ nothing from thoſe of other languages. Their ſyntax nearly reſembles that of the Greek and Latin. All theſe articles muſt be learned from a grammar of the language. Whether there is any grammar of the Ruſſian language compoſed in Engliſh we know not. That of Monſ. Charpentier in French, printed at Peterſburgh in 1768, is the only one we have ſeen, and which appears to us a very excellent one.

The Ruſſian language (ſays Mr. Pinkerton) is extremely difficult to pronounce, and not leſs difficult to acquire, as it abounds with extraordinary ſounds, and anomalies of every kind. The characters amount to no leſs than thirty-ſix; and the common ſounds are ſometimes expreſſed in the Greek character, ſometimes in characters quite unlike thoſe of any other language; the tones peculiar to the Ruſſian are often expreſſed by letters which wear a very ill-choſen ſemblance to the Greek or Roman. In ſome reſpects the ſounds ſeem to approach the Perſian and Arabic; a circumſtance which can hardly ariſe from the Mahometan domination of the Tartars, as after Neſtor, who wrote his annals about the year 1000, there is a ſucceſſion of Ruſſian authors. Among other ſingularities, there is one letter to expreſs the *ſch*, and another the *ſſch*, the latter (ſays Mr. Pinkerton) a ſound hardly pronounceable by any human mouth.

The Ruſſian literature ſucceeded, as uſual, the converſion of the empire to Chriſtianity. As there is no inducement for ſtrangers to learn the language, for the purpoſe of peruſing works of genius, it is unneceſſary to enlarge upon it in a work of this general nature. The elder authors are either writers of annals, or compilers of martyrologies and lives of ſaints: Neſtor, the earlieſt hiſtorian, alſo ſet an example of the latter kind. In recent times the beſt authors reſident in Ruſſia, ſuch as Pallas and many others, have had recourſe to the German language; and little can be expected from the native literature, till the language ſhall have been reduced to the more preciſe alphabet and poliſhed form of other European dialects.

Of the CELTIC LANGUAGE.

In treating of the origin of the Latin tongue; we obſerved that a great part of it is derived from the Celtic. We ſhall now endeavour to give ſome account of the origin and extent of that ancient language; ſtill leaving the minutiæ to grammars, as we have done with reſpect to the other dialects which have fallen under our conſideration. Our candid readers, it is hoped, will remember, that we are acting in the character of philologers, not in that of grammarians.

The deſcendants of Japhet, having peopled the weſtern parts of Aſia, at length entered Europe. Some broke into that quarter of the globe by the north, others found means to croſs the Danube near its mouth. Their poſterity gradually aſcended towards the ſource of that river; afterwards they advanced to the banks of the Rhine, which they paſſed, and thence ſpread themſelves as far as the Alps and the Pyrenees. Theſe people, in all probability, were compoſed of different families; all, however, ſpoke the ſame language; their manners and cuſtoms bore a near reſemblance; there was no variety among them but that difference which climate always introduces. Accordingly they were all known, in the more early times, by the general name of *Celto-Scythæ*. In proceſs of time, becoming exceedingly numerous, they were divided into ſeveral nations, which were diſtinguiſhed by different names and territorial appellations. Thoſe who inhabited that large country bounded by the ocean, the Mediterranean, the Rhine, the Alps, and the Pyrenees, were denominated *Gauls* or *Celts*. Theſe people multiplied ſo prodigiouſly in the ſpace of a few centuries, that the fertile regions which they then occupied could not afford them the means of ſubſiſtence. Some of them now paſſed over into Britain; others croſſed the Pyrenees, and formed ſettlements in the northern parts of Spain. Even the formidable barriers of the Alps could not impede the progreſs of the Gauls; they made their way into Italy, and colonized thoſe parts which lie at the foot of the mountains; whence they extended themſelves towards the centre of that rich country. By this time the Greeks had landed on the eaſtern coaſt of Italy, and founded numerous colonies in thoſe parts. The two nations, vying as it were with each other in populouſneſs, and always planting colonies in the courſe of their progreſs, at length rencountered about the middle of the country. This central region was at that time called *Latium*. Here the two nations formed one ſociety, which was called *the Latin people*. The languages of the two nations were blended together; and hence, according to ſome, the Latin is a mixture of Greek and Celtic.

As the Gauls were a brave and numerous people, they certainly maintained themſelves in their priſtine poſſeſſions, uninvaded, unconquered, till their civil animoſities and domeſtic quarrels expoſed them as a prey to thoſe very Romans whom they had ſo often defeated, and ſometimes driven to the brink of deſtruction. They were not a people addicted to commerce; and, upon the whole, conſidering their ſituation both in their primary ſeats and afterwards in Italy, they had little temptation or opportunity to mingle with foreigners. Their language, therefore, muſt have remained unmixed with foreign idioms. Such as it was when they ſettled in Gaul, ſuch it muſt have continued till the Roman conqueſts. If therefore there is one primitive language now exiſting, it muſt be found in the remains of the Celtic. It is not, then, ſurpriſing, that ſome very learned men, upon diſcovering the coincidence of very great numbers of words in ſome of the Greek dialects with other words in the Celtic, have been inclined to eſtabliſh a ſtrict affinity between thoſe languages. The ancient Pelaſgic and the Celtic at leaſt muſt have nearly reſembled each other, admitting a dialectical difference only, and that diſcrimination which climate and a long period of time muſt always produce.

Some have thought that the Gauls loſt the uſe of their native language ſoon after their country was conquered by the Romans; but Monſieur Bullet, in his Memoires de la Langue Celtique, has proved, almoſt to a demonſtration, that the vulgar among thoſe people continued to ſpeak it ſeveral centuries after that period. When a great and populous nation has for many ages employed a vernacular tongue, nothing can ever make them entirely relinquiſh the uſe of it, and adopt unmixed that of their conquerors. Many learned men, among whom is the lexcographer above-mentioned, have ſhown that all the local names in the north of Italy are actually of Celtic extraction. Theſe names generally point out or deſcribe ſome circumſtances relating to the nature of their ſituation; ſuch as expoſure, eminence, lowneſs, moiſtneſs, dryneſs, coldneſs, heat, &c. This is a very characteriſtic feature of an original language; and in the Celtic it is ſo prominent, that the Erſe names of places all over Scotland are, even to this day, peculiarly diſtinguiſhed by this quality.

Gaelic, or Erse, is the name of that dialect of the ancient Celtic language which is ſpoken in the Highlands of Scotland. According to the opinion of antiquarians, the Celtic, at the time of the Roman invaſion, was univerſally ſpoken all over the weſt of Europe. Though it is divided into a variety of dialects, yet they all bear the cleareſt internal proofs of their being deſcended from one common origin. The moſt remarkable dialects of the Celtic ſtill in exiſtence, are the Gaelic, the Welch, the Manks, the Iriſh, and the Corniſh, the laſt of which appears to be nearly loſt. To this liſt may juſtly be added the dialect which is ſpoken by the natives of the province of Bretagne in France. The Gaelic, which, from a variety of cauſes, is preſerved in a conſiderable degree of its original purity, is bold, expreſſive, and copious. It derives no aſſiſtance from the languages either of Greece or Rome, from which it differs in its ſtructure and formation. Having its affixes and prefixes, it greatly reſembles the Hebrew, particularly in the inflexions of its nouns and verbs. Like the modern French, it only knows two genders, the maſculine and feminine. If ever the Gaelic poſſeſſed an alphabet peculiar to itſelf, no traces whatever of it now remain. Nor can it boaſt of any original literary production, unleſs the poems of Oſſian be allowed to form an exception.

We have ſaid that the moſt genuine remains of the Gaelic tongue to be found in the Highlands of Scotland; and the reaſon is obvious. The Scottiſh Highlanders are the unmixed unconquered poſterity of the ancient Britons, into whoſe barren domains the Romans never penetrated; not, we imagine, becauſe they were not able, ſince they ſubdued both North and South Wales, equally inacceſſible, but becauſe they found no ſcenes there either to fire their ambition or allure their avarice. Amidſt all the revolutions that from time to time ſhook and convulſed Albion, thoſe mountainous regions were left to their primitive lords, who, like their ſouthern progenitors, hoſpitable in the extreme, did not, however, ſuffer ſtrangers to reſide long among them. Their language, accordingly, remained unmixed, and continues ſo even unto this day, eſpecially in the moſt remote parts and unfrequented iſlands.

Of late the Scriptures and other religious books have been very correctly tranſlated into Gaelic, from which the inhabitants of the Highlands derive conſiderable advantages. Notwithſtanding every diſcouragement and oppoſition on the part of the Highland proprietors, who conſider, perhaps not without reaſon, the exiſtence of the Gaelic as operating againſt the general improvement of that part of the kingdom, it is ſo far from being on the decline, that it has actually, within the laſt century, in many places, encroached on the Engliſh. Such as would wiſh to arrive at accuracy in topographical knowledge, would do well to ſtudy Gaelic, as more than two thirds of the names of places in the united kingdom are evidently of Celtic extraction. A few years ago a chapel was opened in London, where divine worſhip is performed in Gaelic according to the forms of the church of Scotland.

The Irish language appears to differ conſiderably from the original Celtic. Some very ingenious eſſays however

however have been lately publiſhed by the learned and laborious members of the Antiquarian Society of Dublin; in which the coincidence of that tongue with ſome of the oriental dialects has been ſupported by very ſtrong arguments. In a diſſertation publiſhed in the year 1772, they have exhibited a collection of Punico-Malteſe words compared with words of the ſame import in Iriſh, where it muſt be allowed the reſemblance is palpable. In the ſame diſſertation they have compared the celebrated Punic ſcene in Plautus with its tranſlation into the Iriſh; in which the words in the two languages are ſurpriſingly ſimilar. If thoſe criticiſms are well founded, they will prove that the Celtic is coeval and congenial with the moſt ancient languages of the eaſt; which we think highly probable. Be that as it may, the Danes and Norwegians formed ſettlements in Ireland; and the Engliſh have long been ſovereigns of that iſland. Theſe circumſtances muſt have affected the vernacular idiom of the natives; not to mention the neceſſity of adopting the language of the conquerors in law, in ſciences, and in the offices of religion.

The WELSH language, though certainly much corrupted by time and circumſtances, yet preſerves much of the ſimplicity of the oriental tongues. There are two papers in the Monthly Magazine, (vol. ii. p. 609. and vol. iii. p. 10.) which exhibit ſuch a ſtring of coincidences of the Hebrew and Greek languages with the Welſh, as muſt appear very curious, and we think very ſatisfactory on the ſubject. Theſe we ſhall not copy, but refer the reader to that widely-circulating miſcellany. However, in the volume firſt quoted, there is an account of the "Structure of the Welſh Language," from which we ſhall take a few extracts.

"In the firſt place, there are in it thirty-ſix letters; being, I believe, the exact amount of the powers of articulation. The vowel-ſounds, unconnected with conſonants, imply motion or action, in various times. All the poſſible changes of ſimple ſounds, or primary combinations of vowels and conſonants, ſuch as *ak*, *ci*, *da*, *eb*, and the like, are about three hundred. Theſe ſounds, having reſpectively a fixed abſtract meaning, conſtitute the baſis, from which every longer word is regularly formed in all its parts. Some of the ſimple ſounds ſtand always for principals, or nouns; and others remain as qualities; and the latter generally dropping their vowels, are prefixed to the others, in forming the firſt ſort of compounds; which are monoſyllables, like *bod*, *cad*, *man*, and *pen*. All words of this kind that have a common baſis, do neceſſarily preſerve the fundamental idea originally annexed to ſuch baſis, however qualified by different prefixes, for the ſake of diſcrimination, and multiplying of terms. This may be illuſtrated, by putting the qualifying prefixes—*cy*, *fy*, *gy*, *hy*, *'ly*, *ny*, *py*, *'ry*, *ſy*, to the noun EN, which form the following claſs of words: *Cen*, what is foremoſt, or uppermoſt; a point, a head. *Fen*, what has aptneſs to proceed, or to flow; breath. *Gen*, intellect, or ſoul; organ of utterance; a mouth. *Hen*, that is fully advanced, or matured; old. *'Len*, what is over, or covering; a veil. *Nen*, what ſpreads over; a vault, or canopy; the ſky. *Pen*, what is ſuperior; a head, a top; chief. *'Ren*, the ſupreme; the moſt high; God. *Sen*, what is put forward, or conſpicuous; a ſtigma. All words of one ſyllable, like thoſe laſt mentioned, become verbs, when they are farther compounded, by affixing a vowel. The terminations of verbs, which are generally conſidered as mere arbitrary ſigns of the different inflexions, are real words, with appropriate meanings, deſcriptive of ſuch modes, or times, for which they ſtand; and are ſo uſed ſeparately.

"In the next place, thoſe elementary ſounds, with ſuch meanings as are annexed to them in Welſh, explain abſtractedly moſt words in different languages, agreeable to the appropriate ſignifications given to them. That the hint may receive ſome illuſtration, two or three examples ſhall be given; and firſt, where the fundamental idea is preſerved through a whole claſs of words: *Sy* (exiſting as a quality, or agent), that ſends, forces, raiſes, or ſhoots out from a point, in any direction. *Bal* (*by* the agent, and *al* the element), what is ſent, impelled, raiſed, or projected, from a point, in any direction. Now, let the reader turn in his mind all the words he can collect, in different languages, beginning with *Sy* and with *Bal*; he will then perhaps, fancy that he perceives thoſe two leading ideas preſerved throughout. For the ſake of brevity, one inſtance ſhall ſuffice with reſpect to particular words: The appropriate import of the Engliſh word *Run* is well known; the abſtract meaning of the ſame ſound in Welſh, by conſidering its component parts, would be *exceſs of energy, or activity*; but it is appropriated, in Welſh, to expreſs *agitation*, or *ſhivering*; and the word *'Red* is uſed ſynonimouſly to *Run* in Engliſh; which alſo implies *exceſs of motion*. The prefix uſed to both words is *'Ry* or *Re*, *over*, *much*, *to exceſs*; and perhaps this fixes the meaning of the common prefix *Re* to mean *over* or paſt a given point, as in *Reverſe*, and the like.

"A very great number of compound words, reſolvable to their primitives in the *Welſh*, run through many languages. It would be difficult to adduce a ſingle article, or form of conſtruction in the *Hebrew* Grammar, but the ſame is to be found in *Welſh*; and there are many whole ſentences in both languages exactly the ſame in the very words. The *Iriſh* and *Welſh* are fundamentally the ſame, but differing much in dialect and pronunciation. The *Sclavonic*, *Breton*, and *Welſh*, are one language, with but little variation of dialect; which I conceive to be an important diſcovery. The *Sclavons* and *Welſh* being ſeparate people from a very remote period, militates greatly againſt the common notion of the inſtability of language.

"There is not the leaſt difference between the language of the Laws of Howel in the tenth, or Geoffrey of Monmouth's Hiſtory in the twelfth, century, and that now ſpoken in Wales." It has been objected that Geoffrey of Monmouth wrote his Hiſtory in Latin; which the writer admits, but obſerves, in reply, that "Geoffrey made no leſs than two tranſlations of Tyſilio's original hiſtory *into Welſh*, as he ſays himſelf at the concluſion of ſome of the copies; and one he made *from his own augmented Latin verſion in his old age*. We have now extant three different hiſtories in Welſh; one I judge to be the original of Tyſilio, and the other two are accounted for by Geoffrey. There is a valuable manuſcript containing the laws, chronicle of the Saxons, and Geoffrey's laſt verſion, all in Welſh, in the Britiſh Muſeum. There is in the Welſh School, in London, alſo, a copy in Welſh of the ſame hiſtory, collated with five manuſcripts, judged to be as old as the age of Geoffrey. There are in the Welſh School about ſixty manuſcripts of Welſh poetry, cloſing with the ſixteenth century; yet this is but an inferior collection to ſeveral others in Wales. There has not yet been a hundredth part of the ancient poetry tranſlated, in any form; conſequently, a ſtranger to the language cannot in the leaſt be a judge of its merits." *Monthly Mag.* ii. 542, 688.

As to the CORNISH language, we believe it muſt be now regarded as abſolutely extinct. Dr. Pryce, of Redruth, made an attempt to revive or preſerve it in the year 1790, by the publication of an elaborate work, entitled Archæologia Cornu Britannica; from which we ſhall make ſome extracts, accompanied by a few remarks. In his preface he obſerves that, "As the diſcovery of an original language is the firſt and leading ſtep to the progreſſional examination of all other antiquities of a country, it follows of courſe, that the oldeſt tongue ought to be ſtudied and underſtood previouſly to our entering on the remains and records of leſs remote ages. On this conſideration, I am inclined to believe that a work of this tendency will be very acceptable both to the antiquarian and the philologiſt; eſpecially as I can very ſafely aſſert that the old Corniſh-Britiſh, which is here diſtinguiſhed very preciſely from the modern Corniſh dialect, is the moſt pure, and neareſt the original, of any ſpeech now uſed in Armorica, or the northern provinces of France, Great Britain, and Ireland." We agree, with the author, that to the ſtudi-

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ous and exact antiquary, an acquaintance with the original language, if it can be attained, is likely to prove highly conducive to the illuſtration of other ſubjects which fall under his notice; yet how many are there who take pleaſure in archæological inquiries, and have neither the leiſure nor the means for ſuch an acquiſition? they are therefore indebted to thoſe who endeavour, as in the work before us, to facilitate their progreſs.

It ſeems to be allowed, and with great reaſon, among thoſe who have moſt cloſely inveſtigated the point, that the Hebrew is the general ſource whence other languages have originated; the Phenician (or Canaanitiſh) was no doubt connected with it, or rather formed on it. From the Phenician, as this writer, together with others, remarks, the Greeks, and afterward the Latins, compoſed their letters; and from the Greek and old Latin tongues, our author ſuppoſes the ancient and true Corniſh is moſtly derived. But here we are inclined to aſk, why he ſhould apply to them, when there is a probability at leaſt, that, anterior to the Greeks and Romans, the Phenicians viſited Britain, and particularly the coaſts of Cornwall? If, about the time of the Trojan war, they firſt diſcovered theſe ſhores, as he apprehends, and traded for the tin which they produced, it is natural to conclude that their language would in ſome degree be communicated; and this indeed the doctor afterward appears to acknowledge, when, treating more generally on the Britiſh Iſle, he adds, "The language at that time ſpoken in other parts of this iſland, having travelled acroſs a vaſt continent, was compounded and impure, and therefore we may boldly infer, that the ſuperior purity of the ancient Corniſh is chiefly to be aſcribed to its genuine introduction from the ſhores of Greece and Sidon." Though Greece is here united with Sidon, it ſhould ſeem likely that the intercourſe with the latter was prior to that of the former; but this is a point which we leave to be determined by thoſe who can afford it more attention.

It is well known, that, when our Britiſh anceſtors were compelled to retire before their hoſtile intruders, numbers of them croſſed over to France; the province of Bretagne, in particular, ſeems to have received its name from that circumſtance, which alone would be ſufficient, we apprehend, to account for ſome colloquial reſemblance; although we are not unwilling to allow that it might, in a degree, have had a higher original. The low French, and the Corniſh, in Bas Bretagne, Dr. Pryce remarks, appear almoſt one and the ſame dialect: "If I had not been otherwiſe (he adds) well appriſed of this fact, yet my opinion would have been confirmed by what I have heard from a very old man now living at Mouſhole near Penzance, who is, I believe, at this time, the only perſon capable of holding half an hour's converſation on common ſubjects in the Corniſh tongue. He tells me, that above threeſcore years ago, being at Morlaix, on-board a ſmuggling cutter, and the only time he was ever there, he was ordered on-ſhore with another man to buy ſome greens; and, not knowing a word of French, as he thought, he was much ſurpriſed to find, that he underſtood part of the converſation of ſome boys at play in the ſtreet; and, on farther inquiry, he found that he could make known all his wants in Corniſh, and be better underſtood than he could be at home when he uſed that dialect. I am well ſatisfied of the fact, as he is quite an illiterate man, and could have neither the temptation nor the ingenuity to invent a ſtory ſo uſeleſs to himſelf."

The old Britiſh language, after the ſucceſs of the Saxons, became unintelligible and uſeleſs in the body of this iſland, whence it was driven to the borders, ſuch as Scotland, Wales, and Cornwall; where, we are told, it ſtill maintains a regard and footing among the reſpective inhabitants, in the dreſs of different dialects. However this may be, it is a fact that the Welſh alone have manifeſted this veneration to the purpoſe of preſerving it among the natives; many thouſands of them, it is here obſerved, and we believe with juſtice, ſcarcely knowing how to make themſelves underſtood in the Saxon or Engliſh. It is no new remark, that numbers of our Welſh neighbours have carried their enthuſiaſm in this reſpect to a great height indeed; which ſome among them, we are well informed, ſtill maintain; ſo that "they hold all other ſpeech in the utmoſt contempt, preferring their own predilection with the moſt ſtubborn perverſeneſs, and ſhunning in the moſt contumacious manner every ſort of interlocution and communion with any other tongue, till overcome by the preſſure of their neceſſities, and the unavoidable intercourſe of mankind in trade and buſineſs." Dr. Pryce laments that the inhabitants of Cornwall had not poſſeſſed ſuch a degree of this pertinacity as might have prevented the ancient dialect from becoming altogether obſolete, if not totally dead, as he fears is now the caſe. For, he continues, "Such has been the inattention of our anceſtors, and the depredations of time, that our primitive ſpeech was nearly annihilated before the art of printing could perpetuate the memory of it to poſterity. So habitually inattentive were they, that many years after the diſcovery of this art they never adverted to the preſervation of the manuſcripts in their language, ſo that the only manuſcript extant was that found in the Cotton Library, now about 800 years old, from which time no other manuſcript appears till about the fifteenth century, when we meet with one, which exhibits three ordinalia or interludes taken from Holy Writ, the originals of which, with two or three more, are in the Bodleian Library."

Yet we are told by Mr. Warner, (Tour through Cornwall, 1809,) that ſo late as the time of Henry VIII. it was the univerſal dialect of the county; and Dr. John Moreman, vicar of Menhynnet towards the concluſion of that reign, was the firſt who taught his pariſhioners the Lord's Prayer, Creed, and Ten Commandments, in the Engliſh tongue. It is a curious exception to that general rule of the attachment manifeſted by nations or provinces to their vernacular language, that the Corniſh, at the Reformation, requeſted to have the Liturgy in Engliſh, rather than in their mother-tongue. The requeſt was complied with, and the ſervice in moſt places performed thenceforth in Engliſh. A few pariſhes, however, patriotically preferred their native dialect; and, in 1640, Mr. William Jackſon, vicar of Pheoke, found himſelf under the neceſſity of adminiſtering the ſacrament in Corniſh, as his pariſhioners underſtood no other language. From this period its limits were gradually circumſcribed, as its trade and intercourſe with England increaſed; ſo that a century ſince it was only to be found, as a vehicle of converſation, amongſt the inhabitants of Paul's and St. Juſt, in the weſtern extremity of the county. Mr. Ray, in his Itineraries, p. 281, tells us, "that Mr. Dickan Gwyn was conſidered as the only perſon who could then *write* in the Corniſh language, and who lived in one of the moſt weſtern pariſhes, called St. Juſt, where there were few but what could ſpeak Engliſh, whilſt few of the children alſo could ſpeak Corniſh; ſo that the language would ſoon be entirely loſt." Mr. Daines Barrington made a journey into Cornwall, in ſearch of its remains, in 1768, but could find only one perſon, Dolly Pentreath, an old fiſher-woman, at Mouſehole, who ſpoke Corniſh. She died in January 1778, at Mouſehole, aged 102. It is evident, from more recent reſearches, that his inquiries were not ſo ſucceſsful as they might have been, had he poſſeſſed more knowledge than he did of the ſubject that engaged his attention; but their reſult may alſo convince us that forty years ago the faculty of ſpeaking the language was exceedingly limited. "Notwithſtanding our moſt aſſiduous inquiries, (ſays Mr. Warner,) we were unable to diſcover any one who ſpoke it at preſent; though, from Whitaker's account, we had no doubt that it ſtill lurked in ſome hole or corner, arrived to the laſt fluttering pulſe of its exiſtence, and doomed probably to give up the ghoſt, without being again brought forward into public notice."

The MANKS language is merely a dialect of the Gaelic, or that uſed in the Highlands of Scotland, with a com-

mixture of Welſh, Saxon, and Daniſh, words. The radixes, indeed, are chiefly Welſh. The New Teſtament, and ſeveral ſcriptural publications, have been tranſlated into the Manks tongue; and in the country pariſhes it is cuſtomary to preach in this language and in Engliſh every alternate Sunday.

Of the GOTHIC and its Derivatives.

The Celtic and Gothic tongues at one time divided Europe between them. Both were of equal antiquity, both originated in Aſia, both were dialects of the original language of mankind. The Celtic, however, was firſt imported into Europe. The Gauls, or Celts, had penetrated fartheſt towards the weſt; a circumſtance which plainly intimates the priority of their arrival. In the population of countries, we believe it may be held as a maxim, that the colonies who emigrated firſt were generally impelled by ſucceeding emigrants; and that of conſequence the moſt early were puſhed forward to the parts moſt diſtant. The Celts, then, having overſpread the moſt weſtern parts of Europe, muſt have arrived more early in thoſe regions.

The Goths and Getæ were the ſame race of people, according to Procopius; and Strabo informs us, that they ſpoke the ſame language with the Thracians, from whoſe confines they had ſpread themſelves northward as far as the weſtern banks of the Danube. Vopiſcus, in the Hiſtory of Probus, tells us, that this emperor obliged "the Thracians, and all the Getic tribes, either to ſurrender or accept of his friendſhip." This expreſſion indicates, that the Thracians and the Getic tribes were deemed the ſame race of people. From this deduction it is clear, that the Getæ and Thracians were brethren; that they ſpoke the ſame language; and that their laws, manners, cuſtoms, and religious tenets, were the ſame, might eaſily be ſhown, were this a proper place for an inquiry of that nature. Now the Thracian language, as might be demonſtrated from names of perſons, offices, places, and cuſtoms, among that people, was nearly related to the Chaldean and other oriental languages. They are thought to have been the deſcendants of Tiras, one of the ſons of Japhet, and conſequently muſt have preſerved the ſpeech of the Noachic family. The Gothic language abounds with Pahlavi, or old Perſic words, which are no doubt remains of the primeval dialect of mankind. The Thracians peopled a conſiderable part of the northern coaſt of Aſia Minor; and conſequently we meet with many names of cities, mountains, rivers, &c. in thoſe parts, exactly correſponding with many names in Europe, evidently impoſed by our Gothic progenitors. Any perſon tolerably acquainted with the remains of the Gothic tongue, will be able to trace theſe with little difficulty.

We learn from Herodotus, that Darius, in his expedition againſt the wandering Scythians who lived on the other ſide of the Iſter or Danube, in his progreſs ſubdued the Getæ; and in the ſame paſſage the hiſtorian informs us, that theſe people held the immortality of the human ſoul, and that they were the braveſt and moſt juſt of all the Thracians. After this period, we find them mentioned by almoſt every Greek writer, even familiarly; for Geta, in the comedies of that nation, is a common name for a ſlave. The Getæ then occupied all that large tract of country which extended from the confines of Thrace to the banks of the Danube; were a brave and virtuous people; and ſpoke the ſame language with the Thracians, with whom they are often confounded both by Greek and Roman hiſtorians. But the name of *Goths* is by no means ſo ancient. It was utterly unknown both to the ancient Greeks and Romans. The firſt time that the name Goth is mentioned is in the reign of the emperor Decius, about the year of Chriſt 250. About that time they burſt out of Getia, and, ruſhing like a torrent into the empire, laid waſte every thing with fire and ſword. The name of their leader or king was *Cneva*. Decius, endeavouring to expel them from Thrace, was vanquiſhed and ſlain. See the article Goths, vol. viii. p. 707. After this irruption, we find them frequently in the Latin authors under the name of *Getæ* or *Gothi*; though the Greeks generally denominate them *Scythæ*. Torfæus tells us, that *get* and *got* are actually the ſame word, which anciently, according to him, denoted a ſoldier. *Got* in Icelandic ſignifies a horſe or horſeman, and *gata* a wanderer; and this laſt was perhaps the import of the term *Geta*, they being originally an unſettled vagrant people. As nations generally aſſume to themſelves ſome high auſpicious denomination, we may believe the Goths did the ſame. We may therefore reſt ſatisfied, that the Getæ aſſumed the Icelandic name abovementioned as their national one; or perhaps, notwithſtanding their Greek denomination, they called themſelves *Gots* or *Goths* from the beginning.

The original ſeat of the Goths was the country now called Little Tartary, into which they had extended themſelves from the frontiers of Thrace. This country was called Little Scythia by the Greek writers; and it was the ſtation whence thoſe innumerable ſwarms advanced, which, in conjunction with the Alani and other barbarous tribes, at length overran and ſubverted the weſtern empire. One part of the Gothic nation was allowed by Conſtantine to ſettle in Mœſia. Before the year 420 moſt of the Gothic nations who had ſettled within the limits of the Roman empire had been converted to the Chriſtian faith; but, unhappily, the greater part of the apoſtles by whom they had been proſelyted were Arians, which proved fatal to many of the orthodox Chriſtians; for the Arian Goths perſecuted them with unrelenting cruelty. About the year 367, Ulphilas, biſhop of the Mœſian Goths, tranſlated the New Teſtament into the Gothic language. The remains of this tranſlation furniſh a genuine, and at the ſame time venerable, monument of the ancient Gothic dialect. No more is now extant of that valuable tranſlation than the four Goſpels, and another fragment containing part of the Epiſtle to the Romans. The Goſpels have been repeatedly publiſhed ſince the firſt edition by Junius 1665, down to that of Mr. Lye. Other fragments of the Gothic language have alſo been found, which our curious readers may ſee in Lye's Notes to his Edition of the Gothic Goſpels. The fragment of the Epiſtle to the Romans was lately diſcovered in the library at Wolfenbuttle, and publiſhed by Knitel archdeacon of Wolfenbuttle.

The Goths, prior to the age of Ulphilas, were ignorant of the uſe of alphabetical characters. The biſhop fabricated an alphabet for them, which is a medley of Greek and Roman letters, but rather inclining to the former. This alphabet conſiſts of 25 letters: Junius has carefully analyzed thoſe letters, and pointed out their powers and ſounds in his Gothic alphabet, prefixed to his Gloſſarium Gothicum. They were long retained in all the European languages derived from the Gothic ſource, which will be enumerated in the ſequel.

What kind of language the ancient Gothic was, is plain from the fragments above mentioned; but in what reſpects it agrees with the oriental tongues, or differs from them, is not eaſy to aſcertain with preciſion. We have obſerved in our ſection on the Greek, that a conſiderable part of that language muſt have been derived from the Thracian; which, according to Strabo there quoted, was the ſame with the Getic or Gothic. The Thracian tongue will, we are convinced, upon compariſon, be found analogous to the Chaldean or Syrian. The German, which is a genuine deſcendant of the Gothic, is full of Perſian words; the old Perſian, or Pahlavi, appears to be a dialect of the Chaldean. The learned Junius, near the beginning of his Gothic alphabet, remarks, that a very conſiderable part of the language in queſtion is borrowed from the moſt ancient Greek.

Both the learned Ihre in his Gloſſarium Suio-Gothicum, and Wachter in his excellent German and Latin Dictionary, often remark the coincidence of Gothic and German words with oriental vocables of the like ſound and of the ſame ſignification. In the old Saxon, which is another ramification of the Gothic tongue, numberleſs terms

terms of the very ſame complexion appear. From this deduction we hope it will follow, that the Gothic tongue, in its original unmixed ſtate as it was ſpoken by the ancient Getæ, was a dialect of the primeval language; that language which the ſons of Tiras brought with them from the plains of Shinar, or from Armenia, or from any other region where the primitive mortals had fixed their reſidence.

Almoſt every word truly Gothic may with a little pains and judgment be traced to ſome oriental root or cognate. We may juſt obſerve, that many Gothic nouns end in *a*, like the Chaldaic and Syriac; that their ſubſtantive-verb very much reſembles that of the Perſian, Greek, and Latin; and that their active and auxiliary verb has furniſhed the common preterperfect tenſe of Greek verbs in the active voice; that verb is *haban*, but originally *ha*, as the common people pronounce it at this day, eſpecially in the north of Scotland, and among the Swedes, Danes, Norwegians, and Icelanders.

Sir William Jones gives it as his opinion, that the Greek, Latin, and Gothic, originated in one and the ſame language; namely, the ancient language of Perſia. Theſe three languages, therefore, originally reſembled each other, not merely becauſe they borrowed ſome words one from the other, but becauſe they had the ſame words, phraſes, and even conſtruction, in conſequence of having derived them from the common tongue. And here we cannot help mentioning one feature in which the ancient Gothic bore a very ſingular reſemblance to the Greek in the time of Homer, or that dialect of the Greek (namely, the Æolic) from which the Latin was principally derived: we mean the much-diſputed Æolic *digamma*. In the oriental languages gutturals abounded: theſe, by degrees, ſoftened into a mere aſpirate; and for this aſpirate was, in very numerous inſtances, ſubſtituted a labial letter, *w* or *v*, or *f* or *φ*. Thus *khaan*, a king, degenerated into *hân*; and, being introduced into Greek in the form of *αναξ*, or *ανασσω*, was pronounced *φαναξ*, *φανασσω*. While the oral Greek was thus corrupted, the written retained the aſpirate; and, as the works of Homer became the ſubject of univerſal ſtudy, the true orthography triumphed over the caprice of oral ſounds. But the Latins had no ſuch monument of genius as the Iliad to ſtudy; the corruptions of pronunciation, therefore, prevailed, and the digamma was univerſally ſubſtituted for the aſpirate. Thus *εστια*, *veſta*, *εσπερα*, *veſpera*. The digamma was alſo prefixed to a broader open vowel, and always inſerted between a diphthong: as *οις*, pronounced *owis*, *ovis*; *οινος*, *woinos*, *vinum*; *οικος*, *woikos*, *vicus*. Now, this ſame digamma runs through the Gothic language; which ſhows that a great part of it, through ſome channel or other, was derived from the Greek about the early age in which the Latin ſeparated into a diſtinct dialect. We ſhall give a few examples of this fact. The Greek *ανεμος*, in Gothic, is written conformably to the corrupt pronunciation of *φαναξ*, *fân*; *αειν*, *ſpirare*, is *waian*; *αξειν*, (which is equivalent to *αεκσειν*) is *wahſgan*, *creſcere*; *εργαζειν*, *waurkgan*; hence the Engliſh, *to work*.

The Icelandic language is the moſt ancient and venerable, and of courſe the pureſt, dialect of the Gothic. It has engaged the attention of many profound ſcholars, who have conſidered it as the parent of the Norwegian, Daniſh, and Swediſh, and in a great degree of the Engliſh; though this laſt may probably be more connected with the Friſic, and other dialects of the north of Germany. In Iceland, extraordinary as it may ſeem, letters flouriſhed in a very high degree from the 11th to the 14th century; and, independent of the fabulous *ſagas*, which were very numerous, the ſolid and valuable works then produced in that iſland might fill a conſiderable catalogue. From Iceland we derived the Edda, and our knowledge of the ancient Gothic mythology. From Iceland the Swedes, Norwegians, Danes, and Orcadians, drew their chief intelligence concerning their ancient hiſtory; Snorro in particular being ſtyled the Herodotus of the North; and the *Landnama*, or Book of the Origins of Iceland, is an unique work, diſplaying the names and property of all the original ſettlers, and the circumſtances attending the diſtribution of a barbaric colony.

The Swedish language is very nearly related to the Icelandic; that it is a daughter of the Gothic is fully ſhown in the Gloſſarium Suio-Gothicum, mentioned before. In the ſouth of Sweden, which contains the chief maſs of population, ſome German and French words have been adopted; while the Dalecarlian on the north-weſt is eſteemed a peculiar dialect, perhaps only becauſe it contains more of the ancient terms and idiom. The Finniſh gradually yields to the Swediſh; but the rude Laplander retains his old ſpeech, or rather a dialect of the Finniſh adopted by his anceſtors. The Swediſh language is ſufficiently ſonorous, if the pronunciation were more emphatic. The affectation of terminating names in *us*, as if they were Latin, begins gradually to expire after a reign of two centuries.

The Danish language is that dialect of the Gothic which is called the Scandinavian. It differs very little from the Swediſh; its chief difference ſeems to ariſe from the drawling tone with which it is pronounced by the Danes. The pronunciation of the Norwegians comes nearer that of the Swedes. There is beſides a greater admixture of German words in the Daniſh language than in the Swediſh, the German language being univerſally ſpoken beyond Flenſburg in Sleſwic, till very near the Little Belt, and generally underſtood in the capital. It is but lately that the Danes have taken any pride in their own language. All the laws and public inſcriptions are now in Daniſh.

The German language may be almoſt regarded as a primitive one, as it is the mother-tongue of the Dutch, Flemiſh, Daniſh, Swediſh, and Engliſh. Its dominion extends from the boundaries of Lapland and Finland to thoſe of France and Italy. In the middle ages, the ſimilarity between the idioms derived from the German was ſo great, that the German and Engliſh miſſionaries, who went to Sweden, Denmark, and Norway, had no difficulty in making themſelves underſtood in thoſe countries. The dialect known by the name of Low German, or Low Dutch, is now diſuſed in writing, and wholly confined to the vulgar in the kingdom of Weſtphalia, in the duchies of Mecklenburgh and Holſtein, and in Pomerania; it comes very near the Dutch. The High German, or High Dutch, has been conſiderably improved ſince Luther's time; it is remarkable for ſtrength, richneſs, bold inverſions, and compound words, which render it admirably fit for the higher ſtrains of epic poetry. The learned dictionaries of Adelung, Eberhard, and Campe, have ſerved to elucidate the meaning of every one of its terms, ſo that it may now be conſidered as fixed. It is ſpoken in its greateſt purity in Upper Saxony, part of Lower Saxony, and on the banks of the Necker and the Mayne. There are ſtill ſome traces of the Sclavonian language left on the ſhores of the Baltic, in ſome diſtricts of Pomerania, in Sileſia, Bohemia, and Moravia; but it is diſappearing very faſt. Buſbequius informs us, that the clowns of Crim Tartary, remains of the ancient Goths, ſpeak a language almoſt German. Theſe clowns were no doubt deſcendants of the ancient Goths, who remained in their native country after the others had emigrated. It is therefore apparent, from the whole of this inveſtigation, that the Gothic was introduced into Europe from the eaſt, and is probably a dialect of the language originally ſpoken by men.

The Germans have written much and well on the philoſophy of language. Three of the Berlin prize-diſſertations are juſtly celebrated: Fulda on the Low and High Dutch dialects, Herder on the Origin of Speech, and Jeniſch on the relative Value of the European Languages. Klopſtock, by his early Fragments on Language, and by his ſubſequent Dialogues and Treatiſes, laid the foundation for ſyſtematic reform, for rational innovation in German ſtyle, and for change by the concert of authors in

conſequence of a preliminary philoſophical diſcuſſion; he faſhioned a ſect of *whig-grammarians*. Adelung, by his Grammar, his Dictionary, and his numerous Tracts, has ſhown the condition and the reſources of the German language; but he conſiders ſtability as of ſo great a value, that no abbreviations of ſpelling, no regulations of inflection, no importations of expreſſion, find favour in his eye, nor even toleration from his criticiſm; he heads the *tory-grammarians*. The projects of Klopſtock, particularly his ſtrange ſcheme of orthography, if realized, would have amounted to a total revolution in the language of Germany, and would ſoon have rendered unintelligible and obſolete the whole extant maſs of literature, to the no ſmall advancement of modern reputations. Yet one or another of his ſuggeſted improvements has been adopted by moſt of the newer writers; and by a gradual inſertion much has been done of what he propoſed to accompliſh at once.

A great change has taken place in Germany in the laſt two centuries, with regard to the proportion which works publiſhed in the Latin tongue bear to thoſe that are written in the language of the country. At the beginning of the ſeventeenth century, among ſeven hundred new publications, four hundred were compoſed in Latin; at the commencement of the eighteenth, four hundred and twenty out of ſix hundred were in that language; and, at the opening of the preſent century, the proportion was reduced to not quite two hundred out of more than two thouſand. This proportion is ſtill perhaps greater than can be found in any other country; and it is rather ſurpriſing that ſufficient motives ſhould yet exiſt for preferring on ſo many occaſions an ancient language to the mother-tongue. On more minute examination, however, it will appear that a great (perhaps the greater) part of thoſe Latin publications belong to the claſs of compoſitions which the profeſſors at the Univerſities, and the maſters of endowed ſchools, are obliged *ex officio* to publiſh at certain ſtated periods, under the title of *Programmata*; and in which they are by ancient cuſtom confined to the uſe of the Latin tongue; or that they are diſſertations written for the purpoſe of obtaining univerſity-honours.

In recommending the ſtudy of the German, Mr. Enſor (Independent Man, vol. ii.) obſerves, that "languages are the means of information, and render a man more competent to aſſociate with many nations. If the ſtudent be not diſpoſed to learn German, let him not excuſe his neglect by ſaying it is unpleaſing to his ears; moſt languages not underſtood, are ſo; nor by ſaying, with Burnet, that it is difficult to be learnt; this proceeds from idleneſs; nor, as another writer on education, that the beſt German authors compoſe in Latin; which, as proved above, is no longer a fact. The German language is much more ſpoken in Denmark, Sweden, Ruſſia, and Poland, than the French. It is cultivated in England; it is not unknown in France and Italy; it is ſpoken from Riga to Hamburg, and from Dantzic to Trieſte, being the popular language of forty millions of people." Men who are enamoured of letters and habituated to literary induſtry, whoſe future life promiſes leiſure, and alſo ſtateſmen, and thoſe who are deſigned for the higher walks of commerce, ſhould certainly not remain ignorant of the German language. Its copiouſneſs conſtitutes its chief difficulty; but, owing to its affinity to our own tongue, it is much more eaſily attained by an Engliſhman than the French would be without a previous knowledge of Latin.

The ENGLISH is ſuch a compound of languages diſſonant and diſſimilar in ſtructure, as would appear fitted to produce a chaotic jargon; but, as four contradictory ſubſtances compoſe the rich and cordial liquor denominated punch, ſo this Babyloniſh mixture of tongues, happily blended and gradually mellowed, have formed one language in many reſpects ſuperior to them all.

Every nation aſpiring at high deſcent will be ready to claim priority in the formation and culture of its language; and it would perhaps be as difficult to ſettle the demands equitably, and to the ſatisfaction of all parties, as the political claims of the ambitious and contending powers at a general diet. Perhaps the ſpecimens of the Welch and Saxon languages that might be produced in favour of our own pretenſions in this iſland, are of ſuch antiquity as no other country can equal; for the poems of Taliеſin, Lyward Hên, Anewrin Gwawdrydd, Myrddin Wyllt, and Avan Veiddig, who all flouriſhed about the year 560, are preſerved, though hardly intelligible to the moſt learned Cambro-Britiſh antiquary. (See Evans's ſpecimens of Welch Poetry.) But the dialect of our Alfred, of the ninth century, in his Saxon tranſlation of Boethius and Bede, is more clear and intelligible than the vulgar language, equally ancient, of any other country in Europe. For we are acquainted with no other language, which, like our own, can mount, in a regular and intelligible ſeries, from the dialect in preſent uſe to that of the ninth century; that is, from pure Engliſh to pure Saxon, ſuch as was ſpoken and written by king Alfred, unmixed with Latin, Welſh, or Norman. And this may be done for a period of nine hundred years, by means of the Chronicon Saxonicum of biſhop Gibſon, the excellent Anglo-Saxon Dictionary of the late Rev. Mr. Lye, and ſuch a chain of ſpecimens of our tongue at different ſtages of its perfection as Dr. Johnſon has inſerted in the Hiſtory of our Language prefixed to his Dictionary.

Mr. Ellis (Specimens of the early Engliſh Poets) aſſigns the complete formation of our preſent language to the beginning of the thirteenth century. He adds, "From this time to the reign of Edward III. our infant language was enriched, or perhaps overloaded, by a conſtant acceſſion of French words. This, indeed, might be expected. Wealth, when accompanied by freedom, generally gives birth to magnificence, but it does not of neceſſity and immediately become the parent of taſte and invention. During the thirteenth and fourteenth centuries, even our kings and nobles were in the habit of expending their whole ſtock of gaiety, as well as their treaſure, on the four great feſtivals of the year; and the intervening times of leiſure were employed in deviſing modes of amuſement, and providing a diſpoſition to be amuſed. The recitation of tales of chivalry was neceſſary to the ſolemnity of theſe feſtivals; and, as the French minſtrels had long ſince preoccupied the fabulous era of every known hiſtory, their Engliſh ſucceſſors were reduced to the neceſſity of tranſlating. In executing this taſk, under the conſtraint of finding a conſtant ſucceſſion of rhymes in a language which was hitherto rude and untractable, they might often be led to borrow the words and phraſes of the original. At leaſt it was their intereſt to adopt and give a currency to every new term, which had acquired the authority of colloquial uſage; ſo that the compoſitions of our early writers are become nearly unintelligible to thoſe, who are not familiarly acquainted with the Norman vocabulary. It is very poſſible that our language may not have received much real improvement from this indiſcriminate adoption of foreign idioms; but perhaps it was in ſome meaſure indebted to them for its reception at court, where it ſupplanted the Norman-French, which had excluſively prevailed there from the time of the conqueſt. This alteration, which inſured to our national literature all the advantages that patronage can beſtow, ſeems to have taken place in the reign of Edward III. whoſe policy led him to excite a hatred of France among his ſubjects, and who proſcribed the excluſive uſe of French in our laws, and in the elements of education. Gower, as we have ſeen, commenced his literary career by aſpiring to the character of a French poet, and only began his Engliſh work in his old age, during the reign and by the command of Richard II. The faſhionable dialect, therefore, had probably changed during the interval; and it may be preſumed, that this change alſo procured us the advantage of Chaucer's talents, which, from the circumſtances of his birth and education,

cation, would naturally have been employed, had he written a few years ſooner, in cultivating a foreign rather than his native language."

In the ſucceeding century, the language had made ſuch rapid advances, that, even as early as the reign of Henry VI. we find it vary very little from that of the reign of Henry VIII. There are papers preſerved by Rymer and others, written in the reign of Henry VI. and compoſed with a force and preciſion which may appear ſurpriſing. The works of Forteſcue, in the following reign of Edward IV. are not only dictated by excellent ſenſe; but, ſetting aſide the orthography, might even be peruſed by the common reader. In the reign of Elizabeth, a century after, the Engliſh language had acquired ſuch copiouſneſs, dignity, force, and melody, as perhaps, in the eye of very diſtant poſterity, moderns may be ſuppoſed never to have exceeded; what is gained in elegance being generally loſt in power. Sidney's Defence of Poeſy may be regarded as a good ſpecimen of Engliſh proſe; not to mention Hooker's Eccleſiaſtical Polity, and other large works of that period, which continue to be read and admired. The common tranſlation of the Bible is a noble ſpecimen of the dignified proſe of the following reign; beyond which it is unneceſſary to conduct this ſketch, as our libraries abound with the ſucceeding publications.

Of all the languages which have branched from the ancient Gothic ſtock, the Scotch and the Engliſh have retained the neareſt relationſhip to each other; ſo near as to form no more than two dialects of the ſame tongue. Yet two remarkable differences exiſt; one reſpecting the ſound of the vowels; the other reſpecting the contrivances which have been adopted for ſoftening or melodizing the language. It is well known that the Engliſh have fallen into a pronunciation of the vowels which is remarkably different from that of all the other nations who partake of the ſame origin; and conſequently it is to be preſumed that the deviation from the primitive ſounds is on the part of the Engliſh. It would be a curious inquiry, if any traces remain which might conduct us to the point, to aſcertain at what time, or by what degrees, and by what cauſes, the peculiarities in the Engliſh pronunciation were produced. Whatever thoſe cauſes might be, the Scots, it appears, were exempt from their influence; and, in their dialect, the ſounds of the vowels remained nearly the ſame as in the languages of the other countries of Europe. Beſides other differences in the pronunciation of their language, they have two ſounds of which the Engliſh is deprived; namely, that which we may denominate the French *u*, and the guttural or German *ch*. Theſe are ſounds, the pronunciation of which it is found very difficult for Engliſhmen to learn; and the uſe of them renders complete in the Scotch dialect the combination of all the ſounds which the ſeveral languages of Europe contain: a circumſtance which yields ſome facilities to Scotchmen acquiring the pronunciation of foreign languages.

Beſides this difference in the ſounds of the vowels, the mode in which the Scots have faſhioned the words for pronunciation is often peculiar; and the character of the changes which they have thus introduced well deſerves to be remarked. They are almoſt all intended for the purpoſe of ſoftening the pronunciation; the Scottiſh dialect, therefore, is conſidered as having, in point of ſmoothneſs, great advantages over the Engliſh. The Scots, by the operation of ſome particular cauſes which it is not eaſy to trace, anciently had a very muſical turn; and the ear of melody, being thus exerciſed, naturally demanded a melodious utterance; conſtituting one principal cauſe of the ſuperior ſweetneſs which their dialect is regarded by natives as manifeſting. This opinion, however, reſpecting the harmony and ſmoothneſs of the Scottiſh dialect, will be conſidered by Engliſhmen as ſtanding in need of proof. It is now a provincial dialect; and all provincialiſm is apt to ſound like barbarity. In ſpeaking of the harmony of a dialect, alſo, the *tone*, the *muſical inflections*, with which it is ſpoken, and the ſoftneſs of the dialect itſelf, though two very different things, are very liable to be confounded; but any language may be ſpoken with any tone. We may ſpeak Engliſh with the tone of a Scotchman, or Scotch with the tone of an Engliſhman; while the ſoftneſs or harſhneſs of the articulation, or rather (if we might make a new word) the *articulability* of the language, remains ſtill the ſame. The ſoftneſs of a language depends on the diſpoſition of its vowels and conſonants; and it is with reſpect to that diſpoſition alone that we are now conſidering what may be called the northern dialect of the Britiſh language. When the vowels and conſonants of a language are ſo mixed, that too many vowels or too many conſonants are never allowed to ſtand together, that language is eaſily pronounced, and is denominated harmonious. When too many vowels concur, the voice experiences a difficulty in paſſing from the one to the other; and that diſagreeable ſound is produced which the Latin rhetoricians called *hiatus*. When too many conſonants come together, it is extremely difficult to make the voice give intimation of them all; and the ſound emitted is that which we denominate *harſh*. Some of the vowels and ſome of the conſonants harmonize with one another better than others; and a concourſe of ſome of them is leſs diſagreeable than of others, or in ſome caſes may be even harmonious; but the general and grand cauſe of harſhneſs of articulation is the running together of too many letters of the ſame deſcription. It will be found that by far the greater number of the differences in the words of the Scottiſh language, as compared with the Engliſh, are changes intended to prevent the diſagreeable concourſe of vowels and conſonants, where it has not been prevented in the Engliſh; and, as all the languages principally founded on the Gothic abound in conſonants, it is to avoid the harſh concurrence of thoſe conſonants, that ſuch changes have generally been introduced.

Upon the whole, the Engliſh tongue is perhaps poſſeſſed of a greater degree of excellence, blended with a greater number of defects, than any of the languages we have hitherto mentioned. As the people of Great Britain are a bold, daring, and impetuous, race of men, ſubject to ſtrong paſſions, and, from the abſolute freedom and independence which reigns amongſt all ranks of people throughout this happy iſle, little ſolicitous about controlling theſe paſſions; our language takes its ſtrongeſt characteriſtical diſtinction from the genius of the people; and, being bold, daring, and abrupt, is admirably well adapted to expreſs thoſe great emotions which ſpring up in an intrepid mind at the proſpect of intereſting events. Peculiarly happy too in the full and open ſounds of the vowels, which forms the characteriſtic tone of the language, and in the ſtrong uſe of the aſpirate *h* in almoſt all thoſe words which are uſed as exclamations, or marks of ſtrong emotions upon intereſting occaſions, that particular claſs of words called interjections have, in our language, more of that fulneſs and unreſtrained freedom of tone, in which their chief power conſiſts, and are puſhed forth from the inmoſt receſſes of the ſoul in a more forcible and unreſtrained manner, than in any other language whatever. Hence it is more peculiarly adapted for the great and intereſting ſcenes of the drama than any language that has yet appeared on the globe. Nor has any other nation ever arrived at that perfection which the Engliſh may juſtly claim in that reſpect; for, however faulty our dramatic compoſitions may be in ſome of the critical niceties which relate to this art, in nervous force of diction, and in the natural expreſſion of thoſe great emotions which conſtitute its ſoul and energy, we claim, without diſpute, an unrivalled ſuperiority. Our language too, from the great intercourſe that we have had with almoſt all the nations of the globe by means of our extenſive commerce, and from the eminent degree of perfection which we have attained in all the arts and ſciences, has acquired a copiouſneſs beyond what any other modern language can lay claim to; and even the moſt partial favourers of the Greek language are forced to acknowledge, that, in this reſpect, it muſt give place to the Engliſh.

liſh. Nor is it leſs happy in that facility of conſtruction which renders it more peculiarly adapted to the genius of a free people than any other form of language. Of an idiom purely analogous, it has deviated leſs from the genius of that idiom, and poſſeſſes more of the characteriſtic advantages attending it, than any other language that now exiſts; for, while others, perhaps by their more intimate connexion with the Romans, have adopted ſome of their tranſpoſitions, and clogged their language with unneceſſary fetters, we have preſerved ourſelves free from the contagion, and ſtill retain the primitive ſimplicity of our language. Our verbs are varied by auxiliaries, our nouns remain free from the perplexing embarraſſment of genders, and our pronouns mark this diſtinction, where neceſſary, with the moſt perfect accuracy; our articles alſo are freed from this unnatural encumbrance, and our adjectives preſerve their natural freedom and independence. Another advantage is in the poſſeſſive pronoun, and which we are enabled to take the advantage of, in conſequence of the nonapplication of gender to inanimate ſubſtances. We ſay *his book* or *her book*, ſhowing diſtinctly to whom the book belongs, which cannot be known either by the *ejus liber* of the Latins, or *ſon livre* of the French. From theſe cauſes our language follows an order of conſtruction ſo natural and eaſy, and the rules of ſyntax are ſo few and obvious, as to be within the reach of the moſt ordinary capacity. So that from this, and the great clearneſs and diſtinctneſs of meaning with which this mode of conſtruction is neceſſarily accompanied, it is much better adapted for the familiar intercourſe of private ſociety, and liable to fewer errors in uſing it, than any other language yet known; and on this account we may boaſt, that in no nation of Europe do the lower claſs of people ſpeak their language with ſo much accuracy, or have their minds ſo much enlightened by knowledge, as in Great Britain. What then ſhall we ſay of the diſcernment of thoſe grammarians, who are every day echoing back to one another complaints of the poverty of our language on account of the few and ſimple rules which it requires in ſyntax? As juſtly might we complain of an invention in mechanics, which, by means of one or two ſimple movements, obvious to an ordinary capacity, little liable to accidents, and eaſily put in order by the rudeſt hand, ſhould poſſeſs the whole powers of a complex machine, which had acquired an infinite apparatus of wheels and contrary movements, the knowledge of which could only be acquired, or the various accidents to which it was expoſed by uſing it be repaired, by the powers of the ingenious artiſt, as complain of this characteriſtic excellence of our language as a defect.

But, if we thus enjoy in an eminent degree the advantages attending an analogous language, we likewiſe feel in a conſiderable meaſure the defects to which it is expoſed; as the number of monoſyllables with which it muſt always be embarraſſed, notwithſtanding the great improvements which have been made ſince the revival of letters in Europe, prevents in ſome degree that ſwelling fulneſs of ſound which ſo powerfully contributes to harmonious dignity and graceful cadence in literary compoſitions. And, as the genius of the people of Britain has always been more diſpoſed to the rougher arts of command than to the ſofter inſinuations of perſuaſion, no pains have been taken to correct theſe natural defects of our language; but, on the contrary, by an inattention of which we have hardly a parallel in the hiſtory of any civilized nation, we meet with many inſtances, even within this laſt century, of the harmony of ſound being ſacrificed to that brevity ſo deſirable in converſation, as many elegant words have been curtailed, and harmonious ſyllables ſuppreſſed, to ſubſtitute in their ſtead others, ſhorter indeed, but more barbarous and uncouth. Nay, ſo little attention have our forefathers beſtowed upon the harmony of ſounds in our language, that one would be tempted to think, on looking back to its primitive ſtate, that they had on ſome occaſions ſtudiouſly debaſed it.

Our language, at its firſt formation, ſeems to have laboured under a capital defect in point of ſound, as ſuch a number of S's enter into the formation of our words, and ſuch a number of letters and combinations of other letters aſſume a ſimilar ſound, as to give a general hiſs through the whole tenor of our language, which muſt be exceedingly diſagreeable to every unprejudiced ear. We ſhould therefore have naturally expected, that at the revival of letters, when our forefathers became acquainted with the harmonious languages of Greece and Rome, they would have acquired a more correct taſte, and endeavoured, if poſſible, to diminiſh the prevalence of this diſguſting ſound. But ſo far have they been from thinking of this, that they have multiplied this letter exceedingly. The plurals of almoſt all our nouns were originally formed by adding the ſyllable *en* to the ſingular, which has given place to the letter *s*; and, inſtead of *houſen* formerly, we now ſay *houſes*. In like manner, many of the variations of our verbs were formed by the ſyllable *eth*, which we have likewiſe changed into the ſame diſagreeable letter; ſo that, inſtead of *loveth*, *moveth*, *writeth*, *walketh*, &c. we have changed into the more modiſh forms of *loves*, *moves*, *writes*, *walks*, &c. Our very auxiliary verbs have ſuffered the ſame change; and inſtead of *hath* and *doth*, we now make uſe of *has* and *does*. From theſe cauſes, notwithſtanding the great improvements which have been made in the language, within theſe few centuries, in other reſpects; yet, with regard to the pleaſingneſs of ſound alone, it was perhaps much more perfect in the days of Chaucer than at preſent; and, although cuſtom may have rendered theſe ſounds ſo familiar to our ear, as not to affect us much; yet to an unprejudiced perſon, unacquainted with our language, we have not the ſmalleſt doubt but the language of Bacon or Sidney would appear more harmonious than that of Johnſon or Hume.

But, notwithſtanding this great and radical defect with regard to pleaſingneſs of ſound, which muſt be ſo ſtrongly perceived by every one who is unacquainted with the meaning of our words; yet to thoſe who underſtand the language, the exceeding copiouſneſs which it allows in the choice of words proper for the occaſion, and the nervous force which the perſpicuity and graceful elegance of the emphaſis beſtow upon it, make this defect be totally overlooked; and we could produce ſuch numerous works of proſe, which excel in almoſt every different ſtyle of compoſition, as would be tireſome to enumerate; every reader of taſte and diſcernment will be able to recollect a ſufficient number of writings which excel in point of ſtyle. But, although we can equal, if not ſurpaſs, every modern language in work of proſe, it is in its poetical powers that our language ſhines forth with the greateſt luſtre. The brevity to which we muſt here neceſſarily confine ourſelves, prevents us from entering into a minute examination of the poetical powers of our own, compared with other languages; otherwiſe it would be eaſy to ſhow, that every other modern language labours under great reſtraints in this reſpect which ours is freed from; that our language admits of a greater variety of poetic movements, and diverſity of cadence, than any of the admired languages of antiquity; that it diſtinguiſhes with the greateſt accuracy between accent and quantity, and is poſſeſſed of every other poetic excellence which their languages were capable of; ſo that we are poſſeſſed of all the ſources of harmony which they could boaſt; and, beſides all theſe, have one ſuperadded, which is the cauſe of great variety and more forcible expreſſion in numbers than all the reſt; that is, the unlimited power given by the emphaſis over quantity and cadence; by means whereof, a neceſſary union between ſound and ſenſe, numbers and meaning, in verſification unknown to the ancients, has been brought about, which gives our language in this reſpect a ſuperiority over all thoſe juſtly-admired languages. Theſe great and diſtinguiſhing excellences far more than counterbalance the inconveniences we have mentioned; and although, in mere pleaſantneſs of ſounds, or harmonious flow of ſyllables,

our language may be inferior to the Greek, the Latin, Italian, and Spaniſh; yet in point of manly dignity, graceful variety, intuitive diſtinctneſs, nervous energy of expreſſion, unconſtrained freedom and harmony of poetic numbers, it will yield the palm to none. Our immortal Milton, ſlowly riſing in graceful majeſty, ſtands up as equal, if not ſuperior, in theſe reſpects, to any poet, in any other language, that ever yet exiſted; while Thomſon, with more humble aim, in melody more ſmooth and flowing, ſoftens the ſoul to harmony and peace: the plaintive moan of Hammond calls forth the tender tear and ſympathetic ſigh; while Gray's more ſoothing melancholy fixes the ſober mind to ſilent contemplation. More tender ſtill than theſe, the amiable Shenſtone comes; and from his Doric reed, ſtill free from courtly affectation, flows a ſtrain ſo pure, ſo ſimple, and of ſuch tender harmony, as even Arcadian ſhepherds would be proud to own. But far before the reſt, the daring Shakeſpeare ſteps forth conſpicuous, clothed in native dignity; and, preſſing forward with unremitting ardour, boldly lays claim to both dramatic crowns held out to him by Thalia and Melpomene: his rivals, far behind, look up, and envy him for theſe unfading glories; and the aſtoniſhed nations round, with diſtant awe, behold and tremble at his daring flight. Thus the language, equally obedient to all, bends with eaſe under their hands, whatever form they would have it aſſume; and, like the yielding wax, readily receives, and faithfully tranſmits to poſterity, thoſe impreſſions which they have ſtamped upon it.

Such are the principal outlines of the language of Great Britain; ſuch are its beauties, and ſuch its moſt capital defects; a language more peculiarly circumſtanced than any that has ever yet appeared. It is the language of a great and powerful nation, whoſe fleets ſurround the globe, and whoſe merchants are in every port; a people admired or revered by all the world: and yet it is leſs known in every foreign country than many of the other languages in Europe. In it are written more perfect treatiſes on every art and ſcience than are to be found in any other language; yet it is leſs ſought after or eſteemed by the literati in any part of the globe than almoſt any of theſe. Its ſuperior powers for every purpoſe of language are ſufficiently obvious from the models of perfection in almoſt every particular which can be produced in it: yet it is neglected, deſpiſed, and vilified, by the people who uſe it; and many of thoſe authors who owe almoſt the whole of their fame to the excellence of the language in which they wrote, look upon that very language with the higheſt contempt. Neglected and deſpiſed, it has been trodden under foot as a thing altogether unworthy of cultivation or attention. Yet, in ſpite of all theſe inconveniences, in ſpite of the many wounds it has thus received, it ſtill holds up its head, and preſerves evident marks of that comelineſs and vigour which are its characteriſtical diſtinction. Like a healthy oak planted in a rich and fertile ſoil, it has ſprung up with vigour: and although neglected, and ſuffered to be overrun with weeds; although expoſed to every blaſt, and unprotected from every violence; it ſtill bears up under all theſe inconveniences, and ſhoots up with a robuſt healthineſs and wild luxuriance of growth. Should this plant, ſo ſound and vigorous, be now cleared from thoſe weeds with which it has been ſo much encumbered; ſhould theſe obſtacles which now bury it under thick ſhades, and hide it from the view of every paſſenger, be cleared away; ſhould the ſoil be cultivated with care, and a ſtrong fence be placed around it, to prevent the idle or the wicked from breaking or diſtorting its branches; who can tell with what additional vigour it would flouriſh, or what amazing magnitude or perfection it might at laſt attain! How would the aſtoniſhed world behold with reverential awe, the majeſtic gracefulneſs of that noble language which they ſo lately deſpiſed!

Of an UNIVERSAL LANGUAGE.

The idea of forming and eſtabliſhing an univerſal language, or ſuch an one as from the ſame character would be underſtood by all nations upon earth, is deemed by many extremely fanciful and abſurd, while the practicability of it is as ſtrenuouſly contended for by others. Hints reſpecting ſuch a ſyſtem of writing as might be underſtood by all mankind, are to be met with in the writings of many eminent philoſophers; but, if ſuch an attempt failed in the hands of a Leibnitz, a Kircher, a Becher, a Wilkins, and ſome others, it is at leaſt to be preſumed, that the execution of paſigraphy, or univerſal language, will always be found to bear a ſtriking analogy to the chimerical ſentiments which were formerly entertained reſpecting the doctrines of the quadrature of the circle, the multiplication of the cube, the philoſopher's ſtone, or the perpetual motion, all of which have been finely ridiculed by Dean Swift in his idea of circular ſhot. Kant is clearly of opinion, however, that ſuch a paſigraphy falls within the limits of poſſibility; nay, he even aſſerts, that it will actually be eſtabliſhed at ſome future period. Yet, while ſcarcely any of its admirers venture to affirm that it will ever be univerſally ſpoken or underſtood, they confidently think, that, by means of it, the valuable labours of erudition and human genius will be effectually prevented from falling into oblivion.

The diverſity of characters uſed by the ſeveral nations to expreſs the ſame idea, is the chief obſtacle to the advancement of learning; to remove this, ſeveral authors have taken occaſion to propoſe plans of characters that ſhould be univerſal, and which each people ſhould read in their own language. The character here is to be real, not nominal: to expreſs things and notions, not, as the common ones, letters or ſounds: yet to be mute, like letters, and arbitrary; not emblematical, like hieroglyphics. Thus, every nation ſhould retain its own language, yet every one underſtand that of each other, without learning it; only by ſeeing a real univerſal character, which ſhould ſignify the ſame things to all people, by what ſounds ſoever each expreſs it in their particular idiom. For inſtance, by ſeeing the character deſtined to ſignify *to drink*, an Engliſhman ſhould read *to drink*; a Frenchman, *boire*; a Latin, *bibere*; a Greek, πινειν; a Jew, שמה; a German, *trincken*; and ſo of the reſt; in the ſame manner as ſeeing a horſe, each people expreſſes it after their own manner; but all mean the ſame animal.

This real character is no chimera; the Chineſe and Japoneſe have already ſomething like it: they have a common character, which each of theſe nations underſtand alike in their ſeveral languages; though they pronounce them with ſuch different ſounds, that they do not underſtand one another in ſpeaking. And we have among ourſelves many characters which form part of an univerſal language throughout all Europe and America: we mean the Roman and Arabic figures, the other mathematical marks, and the muſical and medical characters, with thoſe of aſtronomy and heraldry. Theſe might ſurely be ſufficiently numerous to form an alphabet, or ſet of real characters, for any purpoſe. The latter ſcience, I believe, has never been thought of as applicable to an univerſal language; a hint therefore is merely thrown out, upon which others may improve: for the vaſt number of combinations to be formed by the diviſions of a ſhield, ſee the article HERALDRY, vol. ix. p. 441.

The firſt and moſt conſiderable attempts for a real character, or philoſophical language, in Europe, are thoſe of biſhop Wilkins, and Dalgarne; but theſe, with how much art ſoever they were contrived, have yet proved ineffectual. M. Leibnitz had ſome thoughts the ſame way; he thinks thoſe great men did not hit the right method. It was probable, indeed, that by their means, people, who do not underſtand one another, might eaſily have a commerce together; but they have not hit on true real characters. According to him, the characters ſhould reſemble thoſe uſed in algebra; which in effect, are very ſimple, yet very expreſſive; without any thing ſuperfluous or equivocal, and contain all the varieties required. The real character of biſhop Wilkins has its juſt applauſe. Dr. Hook recommends it, on his own knowledge and experience,

ence, as a moſt excellent ſcheme; and, to engage the world to the ſtudy thereof, publiſhes ſome fine inventions of his own therein.

M. Lodwic, in the Philoſophical Tranſactions, gives us a plan of an univerſal alphabet, or character, of another kind. This was to contain an enumeration of all ſuch ſingle ſounds, or letters, as are uſed in any language; by means whereof people ſhould be enabled to pronounce truly and readily any language; to deſcribe the pronunciation of any language that ſhall be pronounced in their hearing, ſo as others accuſtomed to this language, though they had never heard the language pronounced, ſhall at firſt be able truly to pronounce it; and, laſtly, this character to ſerve as a ſtandard to perpetuate the ſounds of any language.

In the courſe of our reading to obtain materials for the preſent article, we have met with many other eſſays towards an univerſal language; but we have found them in general ſo unſatisfactory, that it is more with a view to gratify the curioſity of our readers, than from an idea of the practicability of the thing, that we preſent them with the following.

The Journal Littéraire for the year 1720 contains an ingenious project for an univerſal character. The author, after obviating the objections that might be made againſt the feaſibleneſs of ſuch ſchemes in the general, propoſes his own; his characters are to be the common Arabic or numeral figures. The combinations of theſe nine are ſufficient to expreſs diſtinctly an incredible quantity of numbers, much more than we ſhall need terms to ſignify our actions, goods, evils, duties, paſſions, &c. Thus is all the trouble of framing and learning any new character at once ſaved; the Arabic figures having already all the univerſality required.

The advantages are immenſe. For, 1ſt, We have here a ſtable faithful interpreter; never to be corrupted or changed, as the popular languages continually are. 2dly, Whereas the difficulty of pronouncing a foreign language is ſuch as uſually gives the learner the greateſt trouble, and there are even ſome ſounds which foreigners never attain to; in the character here propoſed, this difficulty has no place; every nation is to pronounce them according to the particular pronunciation that already obtains among them. All the difficulty is, the accuſtoming the pen and the eye to affix certain notions to characters that do not, at firſt ſight, exhibit them. But this trouble is no more than we find in the ſtudy of any language whatever.

The inflexions of words are here to be expreſſed by the common letters. For inſtance, the ſame character ſhall expreſs a *filly* or a *colt*, a *horſe* or a *mare*, an *old horſe* or an *old mare*, as, accompanied with this or that diſtinctive letter, which ſhall ſhow the ſex, youth, maturity, or old age. A letter alſo to expreſs the bigneſs or ſize of things; thus, a man with this or that letter, to ſignify a *great man*, or a *little man*, &c. The uſe of theſe letters belongs to the *grammar*; which, once well underſtood, would abridge the vocabulary exceedingly. An advantage of this grammar is, that it would only have one declenſion and one conjugation. The numerous anomalies of grammarians are exceedingly troubleſome; and ariſe hence, that the common languages are governed by the populace, who never reaſon on what is beſt; but, in the character here propoſed, men of ſenſe, having the introduction of it, would have a new ground whereon to build regularly.

The laſt attempt we ſhall notice is that by Mr. Thomas Northmore, of Queen-ſtreet, May-fair, London. It bears ſome reſemblance to that which we have given above from the Journal Littéraire, but it is not the ſame; and of the two, Mr. Northmore's is perhaps the moſt ingenious. The ground-work of the ſuperſtructure differs not indeed from that of the journaliſt, being this in both; "That, if the ſame numerical figure be made to repreſent the ſame word in the various languages upon earth, an univerſal character is immediately obtained." The only objection which our author or his friends ſaw to ſuch a plan, originates in the diverſity of idioms; but, as he truly obſerves, every ſchool-boy has this difficulty to encounter as often as he conſtrues Terence.

Such then was Mr. Northmore's original plan; but he ſoon perceived that it was capable of conſiderable improvement; for, inſtead of uſing a figure for every word, it will be neceſſary to apply one only to every uſeful word; and we all know how few words are abſolutely neceſſary to the communication of our thoughts. Even theſe may be much abbreviated by the adoption of certain uniform fixed ſigns (not amounting to above twenty), for the various caſes, numbers, genders, degrees of compariſon, of nouns, tenſes, and moods, of verbs, &c. All words of negation, too, may be expreſſed by a prefixed ſign. A few inſtances will beſt explain the author's meaning.

Suppoſe the number 5 to repreſent the word *ſee*,
6 - - - *a man*,
7 - - - *happy*,
8 - - - *never*,
9 - - - *I*.

"I would then (ſays he) expreſs the tenſes, genders, caſes, &c. *in all languages*, in ſome ſuch uniform manner as following:

(1) 5 = *preſent tenſe*, - - ſee,
(2) .5 = *perfect tenſe*, - - ſaw,
(3) :5 = *perfect participle*, - - ſeen,
(4) 5: = *preſent participle*, - - ſeeing,
(5) 5. = *future*, - - - will ſee,
(6) $\underline{5}$ = *ſubſtantive*, - - ſight,
(7) $\underline{\underline{5}}$ = *perſonal ſubſtantive*, - - ſpectator,
(8) 6 = *nominative caſe*, - - a man,
(9) $\ddot{6}$ = *genitive*, - - - of a man,
(10) $\dddot{6}$ = *dative*, - - - to a man,
(11) $\overset{\frown}{6}$ = *feminine*, - - - a woman,
(12) +6 = *plural*, - - - men,
(13) .7 = *poſitive*, - - - happy,
(14) $\overset{\wedge}{7}$ = *comparative*, - - happier,
(15) $\overset{M}{7}$ = *ſuperlative*, - - happieſt,
$\underline{7}$ = as above, N° 6. - - happineſs,
(16) —7 = *negation*, - - unhappy.

"From the above ſpecimen, I ſhould find no difficulty in comprehending the following ſentence, though it were written in the language of the Hottentots:

9, 8, .5, —$\overset{\wedge}{7}$, $\overset{\frown}{6}$. *I never ſaw a more unhappy woman.*

"Thoſe languages which do not uſe the pronoun prefixed to the verb, as the Greek and Roman, &c. may apply it, in a ſmall character, ſimply to denominate the perſon; thus, inſtead of 9, 8, .5, *I never ſaw*; they may write, 8, 9.5, which will ſignify that the verb is in the firſt perſon, and will ſtill have the ſame meaning."

Our author ſeems confident that, according to this ſcheme of an univerſal character, about twenty ſigns, and leſs than 10,000 *choſen* words (ſynonymes being ſet aſide), would anſwer all the ends propoſed; and that foreigners, by referring to their numerical dictionary, would eaſily comprehend each other. He proceeds next to ſhow how appropriate ſounds may be given to his ſigns, and an univerſal living language formed from the univerſal characters. To attain this end, he propoſes to diſtinguiſh the

ten

ten numerals by ten monosyllabic names of easy pronunciation, and such as may run without difficulty into one another. To illustrate his scheme, however, he calls them, for the present, by their common English names; but would pronounce each number made use of by uttering separately its component parts, after the manner of accountants. Thus let the number 6943 represent the word *horse*, he would not, in the universal language, call a horse *six thousand nine hundred and forty-three*, but *six*, *nine*, *four*, *three*; and so on for all the words of a sentence, making the proper stop at the end of each. In the same manner, a distinct appellation must be appropriated to each of the prefixed signs, to be pronounced immediately after the numeral to which it is an appendage. Thus, if *plu* be the appellation or the sign of the plural number, *six*, *nine*, *four*, *three*, *plu*, will be *horses*.

"Thus (says our author), I hope, it is evident that about thirty or forty distinct syllables are sufficient for the above purpose; but I am much mistaken if *eleven* only will not answer the same end. This is to be done by substituting the first twenty or thirty numerals for the signs, and saying, as in algebra, that a term is in the power of such a number, which may be expressed by the simple word *under*. Ex. Let 6943 represent the word *horse*; and suppose 4 to be the sign of the plural number, I would write the word thus, $\frac{4}{6943}$; and pronounce it, six, nine, four, three, in the power of or *under* four. By these means eleven distinct appellations would be sufficient, and time and use would much abbreviate the pronunciation."

To refuse the praise of ingenuity to this contrivance for an universal language would be very unjust; but elocution in this manner would be so very tedious, that surely the author himself, when he thinks more coolly on the subject, will perceive, that in the living speech its defects would more than balance its advantages. A *pangraph*, as he calls his universal character, would indeed be useful, and is certainly practicable; a *panleg* (if we may form such a word) would not be very useful, unless it were much more perfect than it could be made according to the plan before us.—*Sibly's Hist of Man. Ency. Brit. Magasin Encyclopedique. Asiatic Researches. Adelung's Mithridates. Harris's Hermes. Burney's Hist of Music. Enfor's Independent Man. Pinkerton. Catteau's Voyage en Allemagne. Roujoux on the Revolution of Science and Art. L'Espagne en Mil huit cent huit*; *Paris*, 1811.

LAN'GUAGE-MASTER, *s.* One whose profession is to teach languages.—The third is a sort of *language-master*, who is to instruct them in the style proper for a minister. *Spectator*.

LAN'GUAGED, *adj.* Having various languages:

He wand'ring long a wider circle made,
And many *languag'd* nations has survey'd. *Pope.*

LAN'GUARD, a river of Switzerland, which runs into the Rhine three miles south of Mayenfeld.

LAN'GUED, *adj.* See HERALDRY, vol. ix. p. 422.

LANGUEDOC', before the revolution, a large province of France, divided into Upper and Lower, bounded on the east by the Rhône, which separates it from Dauphiny, the county of Venaissin, and Provence: on the south by Roussillon, and the Mediterranean; on the west by Gascony; and on the north by Forez, Quercy, and Rouergue: its extent was about 270 miles in length, and 120 in breadth. The land is, in general, very fertile in grain, fruits, and wine; and watered by the Rhône, the Garonne, the Tarn, the Allier, and the Gardon. There were in this province three archbishoprics and twenty bishoprics. Toulouse was the capital of Upper, and Montpellier the capital of Lower, Languedoc. It is now divided into seven departments; the Ardèche, Lozere, Gard, Herault, Tarn, Upper Garonne, and Aude.

Languedoc is a very pleasant country; and the inhabitants carry on a considerable trade. There are many curious medicinal plants, with iron-mines, quarries of marble, and turquoise stone: there is also a great deal of kelp, and on the heaths are considerable numbers of the kermes oak. There are also a great number of mineral springs. But it is chiefly famous for the canal, now called the Canal of the South, which runs through it, joining the Mediterranean with the Atlantic Ocean. This canal was undertaken in 1666, and finished in 1680. The following account of the bason of St. Ferréol, the source of the canal, and the reservoir of its waters, is extracted from the Memoirs of Marmontel, written by himself. "This bason, formed, as I have said, by a circle of mountains, is 2222 fathoms in circumference, and 160 in depth. The narrow pass of the mountains that encompass it, is closed by a wall six and thirty fathoms thick. When it is full, its waters flow over in cascades; but in dry seasons these overflowings cease, and the water is then drawn from the bottom of the reservoir; the means employed for that purpose are these: In the side of the mountain two long vaults are constructed, at the distance of forty feet from each other, which run under the reservoir. To one of these vaults three brass tubes are vertically adapted, whose bore equals that of the largest cannon, and by which, when their cocks are opened, the water of the reservoir falls into an aqueduct constructed along the second vault; so that, when you penetrate to these tubes, you have a hundred and sixty feet of water above your head. We advanced thus far, by the glimmering light our conductor carried for us in a chafing-dish; for no ordinary light could have sustained the commotion of the air that the explosion of the waters soon excited under the vault; when, suddenly, with a strong iron lever, our man turned the cock of one of the three tubes, then that of the second, and then that of the third. At the opening of the first, the most dreadful thunder echoed beneath the vault; and twice, peal on peal, this roar redoubled. I thought I saw the bottom of the reservoir burst, and the mountains around shaking from their bases, and falling on our heads. The profound emotion, and, to speak the truth, the affright, this noise had created, did not prevent us from going to see what was passing under the second vault. We penetrated there, amid the sound of this subterraneous thunder; and we saw three torrents rush from the three tubes. I know of no motion in nature, that can be compared to the violence of the column of water, that here escaped from the reservoir in floods of foam. The eye could not follow it; it could not be looked on without giddiness. The border of the aqueduct, in which this torrent flowed, was but four feet wide; it was covered with freestone, polished, wet, and very slippery. There we were, standing, pale, motionless; and, if our foot had slipped, the water of the torrent would have rolled us a thousand paces in the twinkling of an eye. We returned shuddering; and we felt the rocks, which support the bason, tremble at the distance of a hundred paces." General Andreossy, who was ambassador from the French republic to this country during the peace, has written a volume upon the history of this canal.

LAN'GUENBRUCK, a town of Switzerland, in the canton of Soleure: fourteen miles north-east of Soleure.

LANGUEPOU'R, a town of Hindoostan, in Bahar: forty-three miles south-south-west of Bahar.

LAN'GUET, *s.* [*languette*, Fr.] Any thing cut in the form of a tongue. As, the tongue of a jack in a harpsichord or spinnet; or the valve which opens and shuts the wind-chest in an organ, to let the wind into the pipes when a key is pressed down.

LANGUE'T (Hubert), was born at Viteaux in Burgundy, in 1518. After a preliminary course of instruction in his own country, he went to Italy for the study of the civil law, and took a doctor's degree at Pavia. Having met with a book of the reformer Melanchthon, he conceived a great desire of seeing the author, and in 1549 had an interview with him at Wittenberg, which terminated in his conversion to the protestant faith. He

paſſed ſeveral years afterwards in travels through various countries, among which were Livonia and Lapland. In this northern tour he became known to Guſtavus king of Sweden, who gave him a commiſſion to invite perſons ſkilful in the arts and ſciences from France to his dominions. In 1559 he accompanied Adolphus of Naſſau, prince of Orange, into Italy. Auguſtus, elector of Saxony, invited him to his court, in 1565, and nominated him his envoy to the court of France. He was deputed by that prince to the aſſembly of the ſtates of the empire at Augſburg in 1568; and was employed by him in other important negotiations. He was again ſent to France in 1570, when he pronounced a bold and eloquent harangue in the name of the proteſtant princes of Germany, before Charles IX. He was at Paris during the maſſacre of St. Bartholomew, and expoſed his own life to danger by his efforts in ſaving his hoſt, Andrew Wechel, the famous printer, and his friend Dupleſſis Mornai. In the diſputes in Saxony between the Lutherans and Zuinglians reſpecting the euchariſt, he was ſuſpected of favouring the latter, which cauſed him to withdraw from the ſervice of the elector, though he continued to be much connected with him. He then accompanied John Caſimir, count-palatine, to Ghent; and afterwards attached himſelf to William prince of Orange, who employed him on ſeveral occaſions. Falling into an ill ſtate of health, he returned to Antwerp, where he died, in September 1581, at the age of ſixty-three, greatly regretted by the prince, who walked as chief mourner at his funeral. Hubert Languet was a man of pure virtue in corrupt and difficult times. Dupleſſis Mornai ſays of him: "He was ſuch as many would wiſh to appear; he lived as good men would wiſh to die." Yet he was void of moroſeneſs or auſterity, and was agreeable and pleaſant in converſation. He was a rigid obſerver of truth, and never violated it even in jeſt. He had no deſire to become rich; and, after all the great employments he had paſſed through, left to his heirs little property except his medals and books. No man of his time was better acquainted with the political intereſts of princes, and the details of hiſtory. He left ſeveral writings, among which were, 1. Collections of Latin Letters, to the elector of Saxony, to Camerarius, father and ſon, and to ſir Philip Sidney. 2. A Relation of the Expedition of the Elector Auguſtus againſt the Revolters of Saxony; with the Hiſtory of the Proceedings of the Emperor againſt that Prince. 3. Vindiciæ contra Tyrannos. This very ſpirited attack upon tyranny, and defence of the rights of the people, worthy of the freeſt ages of antiquity, appeared ſoon after his death under the name of Stephanus Junius Brutus; it was attributed to various writers, but has been aſcertained to have been the production of Languet. To him is alſo aſcribed, 4. The Apology of William prince of Orange againſt the King of Spain, 1581. *Bayle. Moreri.*

LANGU'ET (John-Baptiſt-Joſeph), the celebrated incumbent of St. Sulpice, at Paris, and, from his extraordinary benevolence, an honour to his country and to human nature, ſon of Dennis Languet, attorney-general to the parliament of Dijon, in which city he was born in the year 1675. He commenced his ſtudies in his native place, and then went to continue them at Paris, where he reſided at the ſeminary of St. Sulpice. In the year 1698, he was admitted a licentiate of the faculty of the Sorbonne, and went through the preparatory exerciſes with great applauſe. He was ordained prieſt at Vienne in Dauphiny, and afterwards returned to Paris, where he took the degree of doctor in 1703. From that time he attached himſelf to the community of St. Sulpice, where, by his profeſſional and benevolent labours, he rendered himſelf ſo uſeful, that M. de la Chetardie, who was then incumbent, fully ſenſible of his merit, choſe him his curate. The duties of this appointment M. Languet diſcharged about ten years, and ſold his patrimonial eſtate, that he might have it in his power to relieve the neceſſities of the poor. In the year 1714 he ſucceeded M. de la Chetardie in the living of St. Sulpice. Finding his pariſh-church out of repair, and ſcarcely capable of containing twelve or fifteen hundred people, while his pariſhioners amounted to more than a hundred and twenty-five thouſand, M. Languet conceived the grand deſign of erecting a church in which they might all aſſemble together. Not many days afterwards he embarked in this bold undertaking, with no other funds than a legacy of a hundred crowns, which had been bequeathed for this deſign by a pious lady. This money he expended on the purchaſe of ſtones, which he cauſed to be carried through all the ſtreets of the city, that the public might be appriſed of his undertaking. No ſooner was it generally known, than donations were ſent him from all quarters; and the duke of Orleans, regent of the kingdom, permitted him to apply to that purpoſe the profits of a lottery. This prince laid the firſt ſtone of the porch, in the year 1618; and M. Languet, during the remainder of his life, ſpared neither pains nor expenſe to render his church one of the moſt magnificent in the world, both in point of architecture and of decoration. It was conſecrated in 1745.

Another work, which reflects no leſs honour on our worthy pariſh-prieſt, is the eſtabliſhment of *la Maiſon de l'Enfant Jéſus*. This eſtabliſhment, which has proved highly beneficial to the community, is, perhaps, the beſt calculated of all his benevolent inſtitutions, to exhibit moſt advantageouſly the talents and merit of M. Languet. It conſiſted of from thirty to thirty-five poor ladies, who could bring proofs of deſcent from noble families from the year 1535 to the preſent time. Preference was to be given to thoſe whoſe anceſtors had been in the king's ſervice. Here they were boarded and educated in a manner ſuitable to their birth: but they were employed, by turns, in ſuperintending the bakehouſe, the poultry-yard, the dairy, the laundry, the garden, the diſpenſary, the repoſitory for linen, the ſpinning-rooms, and the other objects of houſehold-management; by which means they were rendered good houſewives, and enabled to be uſeful to community. Beſides, the habit to which they were accuſtomed of aſſiſting, by a thouſand little charitable offices, the poor women and girls who worked in the houſe, was adapted to make them more affable, humble, obliging, and fitter for ſociety, than if they had aſſociated only with perſons of noble blood. A ſecond object of this eſtabliſhment was, to afford an aſylum to more than eight hundred poor women and girls, deſtitute of the means of ſupport, belonging either to the city or country. They were provided with daily food, and were made to earn their ſupport, chiefly by ſpinning cotton and linen. They were divided into different claſſes, or chambers, over each of which preſided two ladies of the congregation of St. Thomas de Villeneuve, of which M. Languet was ſuperior-general, whoſe buſineſs was to overſee the work, and to give neceſſary inſtructions to the work-women. This eſtabliſhment has proved a moſt happy retreat for numerous unfortunate females, who, after being betrayed into vice and diſſoluteneſs, were abandoned by the world. Here, by example and inſtruction they have been recalled to virtue, and habituated to induſtry; and many have returned from it into the world, uſeful and honourable members of ſociety. For their encouragement, when they quitted the houſe, it was a rule that they ſhould be paid in money the amount of what they had earned by their labour. There were in the houſe in the year 1741, more than fourteen hundred women and girls, chiefly of the deſcription juſt mentioned, in providing for whoſe comfort and convenience, as well as for their moral and religious improvement, M. Languet was indefatigable. Though the land attached to the houſe conſiſted of only fourteen French acres, yet it fed a ſufficient number of cows to give milk for upwards of two thouſand children in the pariſh; and it alſo contained ſties for the breeding of ſwine, which were ſold for the benefit of the inſtitution; poultry, of all kinds; a bakehouſe, furniſhing more than a hundred thouſand pounds of bread monthly, which

was distributed among the poor of the parish; spinning-rooms; an excellent and well-cultivated garden; a noble dispensary, &c. The expense of this establishment was immense. It exhausted his whole revenue; an inheritance which came to him on the death of the baron de Montigni his brother; and the revenue of the abbey of Bernay, to which he had been presented by the king.

M. Languet's benevolent exertions, however, were not confined to the objects hitherto specified, but extended to the poor and wretched of every description. No person was ever more active and successful than himself in obtaining large alms and considerable legacies, which he distributed with admirable prudence and discretion. He took care to be accurately informed, whether the legacies which were left to him were prejudicial to any poor relations of the testator; and, when he found that to be the case, he not only returned the legacies, but, when it appeared to be necessary, added to them out of the funds which he collected. A striking instance of the regard which he paid to equity and propriety in this respect, was evinced in the case of madame de Cavois, as illustrious for her benevolence as for her birth, who left him a legacy of more than six hundred thousand livres. Of this large sum he took only thirty thousand livres for the poor, and returned the remainder to her relations. It is said, on good authority, that he disbursed about a million of livres in charities every year. Noble families reduced to poverty were among the prime objects of his benevolent attention; and it has been related, by a person worthy of credit, that there were some families of distinction in his parish, to each of whom he made annual allowances to the amount of fifty thousand livres. At the time of the great dearth, in 1725, in order that he might relieve the poor, he sold his household furniture, his pictures, and curious and rare pieces of workmanship, which he had with much trouble and difficulty collected; and had afterwards only three pieces of plate, and a plain serge bed, which madame de Camois would only lend him, because he had sold every article of which she had made him a present. His charity was not confined to his own parish. When the plague raged at Marseilles, he sent considerable sums of money into Provence, to assist the sufferers under that dreadful malady; and he was incessantly zealous and active in promoting the arts, and every useful design which could contribute to the glory of the nation. He was among the first to be present at fires, or any other scene of public calamity, where his prudence, self-possession, and universally-respected character, rendered his advice and exertions essentially serviceable. He had a wonderful talent at discovering the different dispositions of mankind; and he knew well how to employ every person according to his ability or capacity. In the most intricate and complicate affairs, on which he was daily consulted, he would give his opinion with uncommon promptness, and with a degree of sagacity and judgment that astonished every one. M. Languet steadily refused the bishopric of Conserans, that of Orleans, and several others which were offered him by Louis XIV. and Louis XV. under the administrations of the duke of Orleans and cardinal Fleury. In the year 1648, he resigned his living of St. Sulpice; but continued to preach in the church every Sunday until his death, which took place at the abbey of Bernay, in 1750, when he was about the age of seventy-five. His piety, and continued application to works of benevolence and charity, did not prevent him from being a lively and cheerful companion. He possessed a fine genius, and would often delight the parties in which he mixed, by his sallies of wit, and his agreeable delicate repartees.

LANGUE'T (John-Joseph), younger brother of the preceding, was born at Dijon in 1667, and rose to considerable rank in the Gallican church. He was educated in the college of Navarre, at Paris, of which he became superior; was appointed abbot of Coëtmaloën in 1709, and of St. Just in 1723; was made almoner to the dauphiness dowager, admitted doctor of the Sorbonne, and, in 1715, nominated bishop of Soissons; was elected a member of the French academy in 1715; and, in 1723, promoted to the archbishopric of Sens. He died at that place in 1753, about seventy-six years of age. He took a distinguished part as a controversialist, in defence of the bull *unigenitus*, and displayed much learning and acuteness in his polemical pieces, which were translated into Latin, and printed at Dijon, in 1753, in two vols. folio; but suppressed by an order of council. He was also the author of A Translation of the Book of Psalms, 12mo. and of several Discourses, published in the collections of the French academy. To him has also been attributed, The Life of Mary Alacoque, 4to. 1729; which, if not really his production, was patronised by him, and affords evidence, that his piety was not unmixed with an abundant portion of credulity and enthusiasm. *Moreri.*

LAN'GUID, *adj.* [*languidus*, Lat.] Faint; weak; feeble.—No space can be assigned so vast, but still a larger may be imagined; no motion so swift or *languid*, but a greater velocity or slowness may still be conceived. *Bentley.* —Dull; heartless:

I'll hasten to my troops,
And fire their *languid* souls with Cato's virtue. *Addison.*

LANGUIDIC', a town of France, in the department of the Morbihan: three miles north-east of Hennebon.

LAN'GUIDLY, *adv.* Weakly; feebly.—The menstruum worked as *languidly* upon the coral as it did before. *Boyle.*

LAN'GUIDNESS, *f.* Weakness; feebleness; want of strength.

LANGUIF'ICAL, *adj.* [from the Lat. *languor*, faintness, and *facio*, to make.] Causing languor. *Cole.*

To LAN'GUISH, *v. n.* [*languir*, French; *langueo*, Lat.] To grow feeble; to pine away; to lose strength.—We and our fathers do *languish* of such diseases. 2 *Esdras.*

His sorrows bore him off; and softly laid
His *languish'd* limbs upon his homely bed. *Dryden.*

To be no longer vigorous in motion; not to be vivid in appearance:

The troops, with hate inspir'd,
Their darts with clamour at a distance drive,
And only keep the *languish'd* war alive. *Dryden.*

To sink or pine under sorrow, or any slow passion.—Let Leonora consider, that, at the very time in which she *languishes* for the loss of her lover, there are persons just perishing in a shipwreck. *Spectator.*

I have been talking with a suitor here,
A man that *languishes* in your displeasure. *Shakespeare.*

To look with softness or tenderness:

What poems think you soft, and to be read
With *languishing* regards, and bending head? *Dryden.*

LAN'GUISH, *f.* Soft appearance.—And the blue *languish* of soft Allia's eye. *Pope.*

Then forth he walks,
Beneath the trembling *languish* of her beam,
With soften'd soul. *Thompson's Spring.*

LAN'GUISHING, *f.* The act or state of growing weaker.

LAN'GUISHINGLY, *adv.* Weakly, feebly; with feeble softness:

Leave such to tune their own dull rhymes, and know
What's roundly smooth, or *languishingly* slow. *Pope.*

Dully; tediously.—Alas! my Dorus, thou seest how long and *languishingly* the weeks are past over since our last talking. *Sidney.*

LAN'GUISHMENT, *f.* State of pining:

By that count which lovers books invent,
The sphere of Cupid forty years contains;
Which I have wasted in long *languishment*,
That seem'd the longer for my greater pains. *Spenser.*

Softness

Softneſs of mien.—Humility it expreſſes, by the ſtoping or bending of the head; *languiſhment*, when we hang it one ſide. *Dryden.*

LAN'GUOR, *ſ.* [*languor*, Lat. *langueur*, Fr.] Faintneſs; wearineſs:

Well hoped I, and fair beginnings had,
That he my captive *languor* ſhould redeem. *Spenſer.*

Liſtleſſneſs; inattention.—Academical diſputation gives vigour and briſkneſs to the mind thus exerciſed, and relieves the *languor* of private ſtudy and meditation. *Watts.*—Softneſs; laxity:

To iſles of fragrance, lily-ſilver'd vales
Diffuſing *languor* in the parting gales. *Dunciad.*

In phyſic.—*Languor* and laſſitude ſignifies a faintneſs, which may ariſe from want or decay of ſpirits, through indigeſtion, or too much exerciſe; or from an additional weight of fluids, from a diminution of ſecretion by the common diſcharges. *Quincy.*

LAN'GUOROUS, *adj.* Tedious; melancholy. *Not in uſe:*

Dear lady, how ſhall I declare thy caſe,
Whom late I left in *languorous* conſtraint. *Spenſer.*

LAN'GUR, a mountain of Thibet: forty miles eaſt of Tankia.

LAN'GUR, a river of Mingrelia, anciently called *Aſtolphus*, which runs into the Black Sea about two miles from Anarghia.

LAN'GUT, a town of Pruſſia, in the province of Oberland: ten miles ſouth-eaſt of Morungen.

LANG'WASSER, a river of Sileſia, which runs into Queis near Friedberg.

LANG'WATHBY, a village in Cumberland, near Kirkland and Edenhall, from which it is divided by the river Eden. The vicar of Edenhall officiates here and at Edenhall alternately.

LANG'WEDEL, a town of Germany, in the county of Verden: four miles north of Verden.

LANGWIE'SE, a town of Bohemia, in Leitmeritz: twenty miles weſt-north-weſt of Leitmeritz.

LAN'HAM. See LAVENHAM.

LANGHAR'N, a village in Cornwall, north-weſt of Columb-Magna, near St. George's Channel. There is a hill near it, with a rampire on the top of it, where the Danes encamped when they preyed upon the Engliſh coaſt.

LANHO'SA, a town of Portugal, in the province of Entre Duero e Minho: ſix miles eaſt of Braga.

LAN'IARD, *ſ.* [from *lanier*, Fr.] A ſhort piece of cord or line faſtened to ſeveral machines in a ſhip, and ſerving to ſecure them in a particular place, or to manage them more conveniently. Such are the laniards of the gunport, the laniard of the buoy, the laniard of the cat-hook, &c. The principal laniards uſed in a ſhip, however, are thoſe employed to extend the ſhrouds and ſtays of the maſts by their communication with the dead eyes, ſo as to form a ſort of mechanical power reſembling that of a tackle. Theſe laniards are fixed in the dead eyes as follows: One end of the laniard is thruſt through one of the holes of the upper dead eye, and then knotted, to prevent it from drawing out; the other is then paſſed through one of the holes in the lower dead eye, whence, returning upward, it is inſerted through the ſecond hole in the upper dead eye, and next through the ſecond in the lower dead eye, and finally through the third holes in both dead eyes. The end of the laniard, being then directed upwards from the loweſt dead eye, is ſtretched as ſtiff as poſſible by the application of tackles; and, that the ſeveral parts of it may ſlide with more facility through the holes of the dead eyes, it is well ſmeared with hog's lard or tallow, ſo that the ſtrain is immediately communicated to all the turns at once.

LANJAR'ON, a town of Spain, in the province of Grenada: fifteen miles ſouth of Grenada.

LA'NIARY, *ſ.* [from the Lat. *lanio*, a butcher.] A butcher-row; a ſlaughter-houſe. *Bailey.*

To LA'NIATE, *v. a.* [*lanio*, Lat.] To tear in pieces; to lacerate.

LANIA'TION, *ſ.* The act of tearing to pieces; the act of ſlaughtering.

LANIE'RE (Nicolo), an Italian who came into England early in the laſt century: there is a fine portrait of him at the Grange, in Hampſhire, by Vandyke. It was the ſight of this portrait that determined Charles I. to employ that excellent painter. Lanier profeſſionally practiſed muſic, painting, and engraving; but his greateſt excellence was in muſic. His own portrait, painted by himſelf, is in the muſic-ſchool at Oxford. He etched a conſiderable number of plates for a drawing-book; was an able connoiſſeur in pictures; and had the art of giving modern paintings an air of antiquity, and putting off copies for originals. *Granger.*

It is recorded in the folio edition of Ben Jonſon's works, printed 1640, that, in 1617, his whole maſque, which was performed at the houſe of lord Hay, for the entertainment of the French ambaſſador, was ſet to muſic after the Italian manner, *ſtilo recitativo*, by Nic. Laniere, who was not only ordered to ſet the muſic, but to paint the ſcenes. This ſhort piece, being wholly in rhyme, though without variation in the meaſure to diſtinguiſh airs from the recitation, as it was all in muſical declamation, may be ſafely pronounced the firſt attempt at an opera in the Italian manner, after the invention of recitative. But in the ſame year, in the maſque, by the ſame author, called "The Viſion of Delight," preſented at court during Chriſtmas, there is a manifeſt diſtinction of air from recitative; in both which ſtyles the whole piece, in verſes of different meaſures, was performed. It is opened by Delight, perſonified, who, *ſtilo recitativo*, "ſpake in ſong." Then Night, likewiſe perſonified, ſang, "Break Fancy, from thy cave of cloud, &c." This air ends in a chorus, or *quire*. After which Fancy ſpake, in *ſtilo recitativo*. Then Peace ſang, "Why look you ſo, &c." After which an air that terminates in a quire. The ſong ended, "Wonder ſpake," in recitative. Then dancing, ſinging, and chorus. Here we have all the characteriſtics of a genuine opera, or muſical drama of modern times, complete: ſplendid ſcenes and machinery; poetry; muſical recitation; air; chorus; and dancing. Though the muſic of this maſque is not to be found, yet of Laniere's *Muſica narrativa* we have ſeveral examples, printed by Playford in the collections of the time; particularly the Ayres and Dialogues, 1653, and the ſecond part of the Muſical Companion, which appeared in 1667; and in which his muſic to the Dialogues is infinitely ſuperior to the reſt. His recitative is more like that of his countrymen at preſent, than any contemporary Engliſhman's. However, theſe Dialogues were compoſed before the laws and phraſeology of recitative were ſettled, even in Italy. His cantata of Hero and Leander was much celebrated during thoſe times, and the recitative regarded as a model of true Italian muſical declamation. *Burney.*

LANIFE'RA AR'BOR. See BOMBAX.

LANIF'EROUS, *adj.* [from the Lat. *lana*, wool, and *fero*, to bear.] Bearing wool.

LANIF'ICAL, *adj.* [from the Lat. *lana*, wool, and *facio*, to make.] Making wool; working in wool. *Cole.*

LANIF'ICE, *ſ.* [*lanificium*, Lat.] Woollen manufacture.—The moth breedeth upon cloth and other *lanifices*, eſpecially if they be laid up dankiſh and wet. *Bacon.*

LANIF'ICOUS, *adj.* [from the Lat. *lana*, wool, and *facio*, to make.] Making wool; working in wool.

LANIG'EROUS, *adj.* [*laniger*, Lat.] Bearing wool.

LANIGI'EN. See LANIGIAN, p. 87.

LANI'NA, a town of Ruſſia, in the government of Irkutſk, near the Baikal Lake; eighty miles north-eaſt of Irkutſk.

LANI'NI (Bernardino), an hiſtorical painter, native of Vercelli, and a pupil of Gaudenzio Ferrari. He imitated the

the ſtyle of that maſter, in his firſt works, to a degree of illuſion. As he advanced in practice he caſt a bolder eye on nature, and, by equal vigour of conception and execution, proved to the firſt artiſts of Milan, that, like Ferrari, he was born for grand ſubjects; ſuch is that of St. Catarini, near S. Celſo; the face and attitude of the heroine anticipate the graces of Guido; the colour of the whole approaches the tones of Titian; the glory of the angels rivals Gaudenzio; a leſs neglected ſtyle of drapery would have left little to wiſh for. Among his copious works at Milan, and in its diſtricts, the dome of Novara claims diſtinguiſhed notice. There he painted thoſe Sybils, and that ſemblance of the eternal Father, ſo much admired by Lomazzo; and near them certain ſubjects from the life of the Virgin, which even now, in a ruined ſtate of colour, enchant by ſpirit and evidence of deſign. His verſatile talent indulged ſometimes in imitations of Leonardo da Vinci; and, at the Baſilica of St. Ambrogio, the figure of Chriſt between two angels, in form, expreſſion, and effect, fully proves with what felicity he penetrated the principles of that genius. *Fuſeli's Pilkington.*

LAN'ISCAT, a town of France, in the department of the North Coaſts: eight miles eaſt of Roſtrenen, and twelve ſouth-weſt of Quintin.

LANIS'CHLE, a town of Iſtria: ſixteen miles ſouth-eaſt of Capo d'Iſtria.

LANIS'TA, *ſ.* in antiquity, is ſometimes uſed to ſignify an executioner, but more frequently for a maſter gladiator, who taught the uſe of arms: theſe had always people under them ready to exhibit ſhows of that kind; for which purpoſe they either purchaſed gladiators, or eduated children that had been expoſed in that art. Laniſta was alſo uſed to denote one who taught gamecocks to fight.

LA'NIUS, *ſ.* in ornithology, the SHRIKE, or BUTCHER-BIRD; the laſt genus of the order of accipitres, or rapacious birds. Generic characters—Bill rather ſtraight, with a tooth, or notch, on each mandible near the end; the baſe naked; and the tongue jagged at the tip. To theſe characters, aſſigned by Gmelin after Linnæus, may be added, that the noſtrils are generally round, and covered with ſtiff briſtles. Dr. Latham farther obſerves, that the birds of this genus are not furniſhed with a cere at the baſe of the bill, and that the middle toe is connected to the next as far as the firſt joint. Laſtly, according to Scopoli, the ſegments of the ſkin are ſeven in number.

Linnæus, in the various editions of his Syſtema Naturæ and other works, has referred this genus of birds to ſeveral diſtinct families, having ſometimes placed it with the chatterers, ſometimes with the titmice, and then again, from its habits of rapacity, with the accipitres, in which laſt-mentioned order it ſtands in the Gmelinian edition of that author's publication. Before the time of Linnæus, our countryman, Ray, had claſſed this tribe among the ſhort-winged hawks: Buffon alſo had arranged it after the falcons; but Briſſon, on the contrary, includes them with the thruſhes and the chatterers, two analogous genera, obviouſly belong to the order paſſeres. Kramer introduces it under the paſſerine order; Scopoli under the pies; and Pennant, in his Genera of Birds, with the accipitres; from which, however, he removes it to the order picæ, in a ſubſequent edition. In Latham's Synopſis, and alſo in his Index Ornithologicus, the example of Scopoli is followed; the ſhrikes are diſpoſed at the head of the order picæ, and this arrangement has obtained the ſanction of the French ornithologiſts. But we think there is great reaſon to concur in the accuracy of Gmelin, who incorporates them with the accipitres; for they are allied to the owls and falcons by the ſtrength and crookedneſs of the bill, and by their predatory life; to the Picæ by the form of their toes, the ſhape of their tail, and their capacity of feeding upon inſects, when there is a deficiency of fleſh. Theſe birds inhabit every climate, the arctic regions excepted. There are ſixty-nine ſpecies, beſides varieties.

Theſe birds are eaſily diſtinguiſhed, even at a diſtance, by their aſſociating together in families, after the young are capable of flight. In this reſpect, they differ remarkably from the other predatory tribes, who generally baniſh from the neſt their young while they are yet incapable of providing for themſelves. The female butcher-bird provides for her young with the moſt affectionate care; ſhe at firſt feeds them with inſects, and afterwards accuſtoms them to ſmall morſels of fleſh, which the male ſupplies with wonderful attention. When the offſpring grows up, the parental regards do not ceaſe; the old aſſociate with the young during the whole autumn and winter, without aſſembling in larger flocks. They make the ſafety of the family a common intereſt; they live together in peace, and chaſe their prey in concert. It is only the powerful call of love that breaks the ties of this family-attachment, and ſeparates the young from their parents to rear families of their own.

Though of a ſmall ſize, and apparently ſlender in the form of their body and limbs, theſe birds have a juſt claim to be ranked among the rapacious tribes, and even among the moſt bold and ſanguinary of that order. Their bills are large, ſtrong, and hooked at the end; their appetite for fleſh is decidedly aſcertained, and they are perhaps the moſt fierce of all birds. One is aſtoniſhed to witneſs the intrepidity with which a ſmall butcher-bird maintains the conflict againſt the pies, crows, hawks, and other animals far beyond it in ſize. Not only does he engage in ſelf-defence, but often alſo attacks, and almoſt always with ſucceſs, eſpecially when the pair unite in driving theſe hoſtile tribes from their young. He waits not till they approach; it ſuffices that they paſs within his view; for, as often as they do, he intercepts them, and falls upon them with loud cries; cruelly wounds, and beats them off with ſuch fury, that they ſeldom venture to return. In this unequal combat, it is ſeldom he ſuccumbs to ſuperior ſtrength, or allows himſelf to be carried off: his own death, or that of his adverſary, puts an end to the conteſt; and they are ſometimes, after their battles, ſeen to fall together upon the ſame field.

The manner in which they deſtroy their prey is almoſt, if not entirely, peculiar to themſelves, and evinces a degree of addreſs and cruelty that has not unaptly obtained them the name of *butcher-birds*. After pouncing upon their deſtined victim, which they uſually ſeize upon in a defenceleſs ſtate, while young, and in the neſt, they bear it away to ſome thorny buſh, and by the dint of dexterity force it upon one of the ſtouteſt and ſharpeſt ſpines; after which they proceed to tear the yet living creature into pieces, ſeparating its mangled remains by the aſſiſtance of their bill and talons, and diſperſing on different ſpines of the buſh ſuch remnants of the fleſh, after being for the preſent ſatisfied, as are reſerved for future meals. In this manner, the ſhrike tribe alſo treat the larger kinds of inſects, as well as birds. In the ſeventh volume of Tranſactions of the Philadelphia Society, the ſhrike's fixing graſshoppers upon thorns is accounted for upon the principle of enticing ſmaller birds to feed upon them, that the ſhrike may then ſurpriſe the birds. The Germans in America call the ſhrike *neun-toedter*, nine-killer. The following is an extract from this curious paper.

"I went to a farm, about eleven miles and a half from this place, to view a young orchard, which had been planted about five weeks ago under my direction; where, on viewing the trees, I found, to my great aſtoniſhment, almoſt on every one of them one, and on ſome two and three, graſshoppers, ſtuck down on the ſharp thorny branches, which were not pruned when the trees were planted. I immediately called the tenant, and aſked the reaſon and his opinion of this. He was much ſurpriſed at my ignorance about the matter, and informed me, that theſe graſshoppers were ſtuck up by a ſmall bird of prey, which the Germans called *neun-toedter*, (in Engliſh, nine-killer;) that this bird had a practice of catching and ſticking up nine graſshoppers a-day; and that, as he well knew they did not devour the graſshoppers, nor any other

inſects, he thought they muſt do it for pleaſure. I aſked him for a deſcription of this bird, and was perfectly ſatisfied that it lived entirely on ſmall animals, ſuch as ſmall birds, mice, &c. for I had paid attention to this bird as early as the year 1761, when, in the winter, one of the ſame ſpecies took a favourite little bird of mine out of my cage at the window; from which time I have watched them more cloſely, and have found them more numerous in the weſtern country than here. Not being ſatisfied with what the tenant had told me reſpecting the intention of the bird's doing all this, (viz. for diverſion's ſake,) and particularly obſerving each and every one of theſe graſshoppers ſtuck up ſo regularly, and in their natural poſition as when on the ground, (ſee Plate I.) not one of them having its back downwards, I began to conjecture what might be the real intention which the bird had in this; and my determined opinion was, that this little bird-hawk, by inſtinct, made uſe of this art, in order to decoy the ſmaller birds, which feed on inſects, and by theſe means have a fair opportunity of catching them. All this I communicated to my friends on my return home, and they were not leſs aſtoniſhed at what I had related to them, than I had been on diſcovering the fact. It being agreed that one or more gentlemen of learning and obſervation ſhould more minutely examine into this matter, the proprietor of this farm, with another gentleman and myſelf, went this day out for the purpoſe; and, viewing the graſshoppers on a number of theſe ſmall trees, (ſome of which we cut off and took home,) we returned to the tenant, who not only himſelf, but alſo his father and ſiſter, gave us the beſt aſſurances, that they had, long ſince, and from time to time, obſerved this bird catching graſshoppers and ſticking them up in the manner already related, and that ſometimes they had obſerved, in places where this ſpecies of bird keeps, numbers of graſshoppers ſtuck up on a thornbuſh in like manner. The reverend Mr. Velck is perfectly ſatisfied that this bird-hawk is the Lanius Canadenſis, and has obligingly communicated the following account of this little bird-hawk to me; it is extracted from a German publication, printed at Gœttingen, in 1778, under the title of "Natural Hiſtory for Children, by M. George-Chriſtian Paff;" who, after giving a deſcription of the different ſpecies of this bird, concludes thus: "Why is this bird of prey called the nine-killer? Becauſe it is ſaid to have the habit of ſticking beetles or other inſects, and perhaps ſometimes nine of them in ſucceſſion, upon thorns, that they may not eſcape until he has leiſure to devour them all at once. And for the ſame reaſon, it is ſometimes called the thorn-ſticker." Now by the above account we ſee, that it is known in Europe that this ſame ſpecies of bird actually does ſtick up inſects of different kinds on thorns, &c. but it is ſuppoſed they eat them immediately after being ſtuck up. Here the caſe is quite otherwiſe. They remain ſtuck up, for we muſt ſuppoſe theſe to have been ſtuck up at leaſt ſome weeks ago, and before the hard froſts ſet in. The very birds (as we ſuppoſe) that had ſtuck them up are now on the ſame ground, watching the ſmaller birds that came out to feed, and have been ſeen catching the latter but a few days ago. If it were true, that this little hawk had ſtuck them up for himſelf, how long would he be feeding on one or two hundred graſshoppers? But, if it be intended to ſeduce the ſmaller birds to feed on theſe inſects, in order to have an opportunity of catching them, that number, or even one half, or leſs, may be a good bait all winter; and all of us, who have conſidered theſe circumſtances, are firmly of opinion, that theſe inſects, thus ſtuck up, are to ſerve as a bait, &c. through the courſe of the winter."

Some of the butcher-birds migrate; thoſe which remain in the country all the year inhabit the woods and high mountains. The larger kinds build upon tall trees, in the fork of a branch; the ſmaller, in the hedges and thickets. They lay from ſix to eight eggs, about the ſize of thoſe of the thruſh. The neſt, upon the outſide, is compoſed of white moſs, interwoven with blades of graſs; the inſide is thickly lined with wool.

Vaillant diſtributes the ſhrikes into three diviſions, which, though not hitherto done by any ornithologiſt, he ſays is abſolutely neceſſary, as they differ ſo much that they might even be made three ſeparate genera. Though we do not adopt his ſyſtem, we ſhall ſtate it.

I. The firſt diviſion includes but five ſpecies, two of which are common to moſt part of Europe, and are found through all France. But the other two diviſions contain no ſpecies known in Europe; the other three quarters of the globe contain a great number, many of which have been confounded with other genera; ſhrikes of the ſecond diviſion have been deſcribed as blackbirds, and blackbirds placed among the ſhrikes; and ſometimes the ſame ſpecies has been given as a blackbird, and afterwards in the ſame work as a ſhrike.

II. The ſhrikes of the ſecond diviſion vary more by their habits and flight than by their ſhape from thoſe of the firſt; yet, even in their outer conformation, there are many differences eaſily to be perceived. The beak is longer, and not ſo much arched; the tarſus is longer; the wings ſhorter, and not ſo full; for, the primary wing-quills not making ſo long an angle, the wing itſelf is more rounded at the end, and they do not fly ſo well; they are in conſequence not ſo often obſerved on the tops of high trees, which is one peculiar mark of difference between this diviſion and the preceding. Indeed ſome of the ſpecies are entirely confined to thickets and low tufts of wood, where they carefully conceal themſelves, and feed moſtly upon caterpillars, worms, and all ſorts of inſects. The weakneſs of their wings hinders them from any flying-chaſe; and, if they catch birds, it is only very young ones, or ſuch as are wounded. The firſt diviſion have the attitudes and port of the larger birds of prey, preſerving an erect poſture, on a bare branch, for hours together, and returning openly day after day to the ſame place: while the ſhrikes of the ſecond diviſion ſhow themſelves but rarely: ever concealed in the thickeſt tufts, they are known only by their warble, which betrays them continually. Being generally in motion, and not fixed to one ſpot in watching their prey, their poſition is generally more inclined; while thoſe birds who remain a long time perched in the ſame place naturally take a more upright poſition, to bring their body into a proper level, and not to tire their feet; for the body of a bird is much heavier towards the breaſt-part than the belly. Thoſe of the firſt ſection watch their prey from the ſummits of trees, and dart ſuddenly upon all they can catch; but theſe are continually ſearching about with the greateſt diligence among the buſhes and coverts for a great extent, without fixing in any particular ſpot, except indeed when they are laying or ſitting.

III. The ſpecies which compoſe the third diviſion of African ſhrikes reſemble thoſe of the ſecond in the ſhape of their bill, which is longer and not ſo arched as thoſe in the firſt diviſion; at the ſame time that they aſſimilate in ſome meaſure to thoſe of the firſt, by having larger and more pointed wings than thoſe of the ſecond, ſo that they can riſe to the tops of the largeſt trees, among the branches of which they ſeek for inſects, which are their only food, as they never attack birds. They are found only in foreſts, where, in ſmall flocks, conſiſting each of a ſingle family, they run over all the trees to a conſiderable extent of territory, not lying in ambuſh for their prey, nor keeping to one favourite ſpot, as remarked of the firſt diviſion. Their ſong is leſs frequent.

1. Lanius forficatus, the fork-tailed creſted ſhrike. Specific character, tail forked; frontal creſt erect; body greeniſh-black. Creſt ſometimes wanting; tail long. Inhabits the Cape, Madagaſcar, and China; ten inches long.

2. Lanius cœruleſcens, the fork-tailed ſhrike: tail forked; body bluiſh black; belly white. Edwards deſcribes this bird in the following terms: The ſhape of its bill, the whiſkers at its baſe, and the ſtrength of its legs, have

induced me to range it with the ſhrikes; though its tail is different, being forked, while that of the ſhrike has the longeſt feathers in the middle. Its bill is ſtrong, thick, and arched, nearly like that of a ſparrow-hawk, but longer in proportion to its thickneſs, leſs hooked, and with wide noſtrils. The baſe of the upper mandible is beſet with ſtiff hairs. The whole of the head, neck, back, and the coverts of the wings, are of a ſhining black, with reflections of blue, purple, and green, varying according to its poſition. The breaſt is of an aſh-colour, duſky, and blackiſh. All the belly, the legs, and the coverts of the under ſide of the tail, are white; the legs, the feet, and the nails, are blackiſh brown. It inhabits Bengal, where it is called *fengah*. It is called alſo by the Indians the king of the crows, from its purſuing theſe birds from place to place with a great noiſe, and pecking them on the back till they eſcape.

3. Lanius Malabaricus, the Malabar ſhrike: body bluiſh-black; quill and tail-feathers black; outer tail-feathers long, without webs, except on the outer ſide near the end. Inhabits Malabar; ſeventeen inches long; head ſometimes creſted.

4. Lanius caſtaneus, the cheſnut ſhrike: tail wedged; middle tail-feathers at the tip, outer ones entirely, ruſty; body above cheſnut, beneath white. Ten inches long. Bill, wings, and legs, black; front black brown; crown, hind-head, nape, and neck, cinereous.

5. Lanius criſtatus, the creſted red ſhrike: tail wedged; head creſted; body reddiſh, beneath waved with tawny and brown. Bill horny; behind the eyes a black creſcent; tail above rufous, beneath grey; legs and claws black; creſt ſometimes wanting. Inhabits Bengal; ſix inches and a half long.

6. Lanius Canadenſis, the creſted ſhrike: ſimilar to the laſt, except that the under parts are whiter. Inhabits Canada; has on the crown of its head a ſoft creſt, with long feathers that fall backwards. It is ſix inches and a half long, and ſometimes wants the creſt.

7. Lanius Ludovicianus, the Louiſiana ſhrike: tail wedged, cinereous; body cinereous, beneath whitiſh. Under the eyes a black band; ſix middle tail-feathers black, the reſt white at the root and tip; ſecondary quill-feathers white at the tip. Inhabits Louiſiana; about eight inches long.

8. Lanius nengeta, the grey ſhrike: tail wedged, white at the tip; body cinereous, beneath whitiſh. Length nine or ten inches. Bill duſky, beſet with briſtles at the baſe; irides ſapphire-coloured; from the angles of the mouth, through the eyes, runs a black ſtreak. The upper parts of the body are of a dark browniſh aſh-colour; the under parts white; in the middle of the wing are a few white feathers; the quills and tail are nearly black; and all the feathers of the laſt, except the two middle ones, are obliquely tipped with white; the legs are of a dark aſh-colour; the claws black. Theſe birds are found at Surinam and Braſil. They are common likewiſe at Guiana, where they frequent watery places, and collect in great numbers together. They are obſerved at frequent intervals to ſet up a great cry all together; which affords a happy and certain preſage to the thirſty traveller, in the immenſe foreſts of Guiana, of water being at hand.

9. Lanius curviroſtris, the hook-billed ſhrike: tail wedge-ſhaped, the body white, the back black, the five firſt quills of the wings marked with a white ſpot. This bird was ſent from Madagaſcar by Poivre under the name of *vanga*. Though conſiderably different from the ſhrikes, it ſeems to be more related to them than any other birds of Europe. It feeds upon fruits; and is ten inches long.

10. Lanius collaris, the collared ſhrike: tail wedged; body black, beneath white, firſt quill-feathers white at the baſe. This ſpecies of butcher-bird is named *fiſcal* by the coloniſts at the Cape, from a ſuppoſed ſimilarity in its habits to thoſe of a petty officer of juſtice in the colony who bears that name. This ſhrike, when it ſees a graſshopper or ſmall bird, darts upon it, and carries it off to impale it upon a thorn; and is ſo adroit, that the point of the thorn generally comes out through the middle of the bird's or inſect's head, and; thus conveniently fixed, he can feed upon it at leiſure. If no thorny buſh is to be found, he jams the head of his prey between the forks of a ſmall branch; and this he does as exactly as it could be done by the human hand. This is his conſtant practice with all the prey he catches. Every hour of the day is marked with blood; for this bird is continually on the hunt, and apparently more from cruelty than want, for he cannot poſſibly devour all he catches in this manner. He is generally perched on the tops of trees, and on a withered branch in preference, whence he darts upon every thing that comes in his way. When preſſed by hunger, he will viſit a gibbet, and feed upon fleſh. The Hottentots ſay, that this bird prefers food in a putrid ſtate, and therefore fixes his prey that he may find it after a certain time; thus much is certain, he ſeldom devours his prey immediately. Happily, however, with ſuch ſanguinary and mercileſs habits, this bird has not received from nature a great degree of ſtrength; had it been of the ſize and ſtrength of the eagle, it would have been the ſcourge of the whole animal creation. This bird is not ſhy, ſo that he may be eaſily watched; his uſual mode is, as ſoon as he has caught any thing, to bear it quickly to a thorn or forked branch, and there to fix it; then away he goes in ſearch of more, leaving the hapleſs animal dead, or writhing in miſery. This bird is bold, vindictive, and very noiſy; he ſuffers no bird of prey within his domain; yet many avail themſelves of the prey he has fixed or impaled, as he cannot watch all at once. Violent battles often take place between the males of the ſame ſpecies, which ſometimes terminate in the death of one of the combatants, eſpecially if a female be the object in diſpute. The notes of this bird are very various; ſometimes it chatters for ſeveral hours together without ceaſing, with ſundry ſtrange geſtures, and flying from tree to tree, eſpecially in the ſeaſon of love. Its flight is low, always ſinking and riſing, never in a ſtraight line. The male and female are generally ſeen together; the male is rather the ſtrongeſt, and his colours are brighteſt. The neſt is placed in a forked branch of a tree; it is made with roots and moſs, lined with wool and feathers. The female lays five eggs, which ſhe and the male ſit on by turns; they are very careful of their young, and do not quit them till they become ſtrong. The fiſcal, while young, has no white but on the edges of the ſcapulars and on the belly; the reſt of the plumage is a browniſh grey with tints or ſtreaks of a darker colour, but without an atom of black, ſo that it appears abſolutely another ſpecies. When full-grown, it is of the ſize of the L. excubitor, though ſomewhat longer. The bill, feet, and nails, are blackiſh; all the head, the back of the neck, and the mantle, are of a dirty black; the ſcapulars are white, the croup greyiſh. The wing-quills are black for the moſt part; there is white in ſome of the middle ones, and the latter ones are edged with white. The four middle quills of the tail are black; the others on each ſide have more and more white upon them, ſo that the laſt on each ſide is quite white on its outer part. The throat, front of the neck, breaſt, and all the under parts of the body, are of a delicate white, but incline to grey in the female. The eyes are dark brown. This ſpecies is very common at the Cape; it is found in all the gardens of the town, on the trees in the ſtreets, and upon the houſes. Vaillant obſerved it alſo in the interior, as far as the Namaquois, where it has not varied in the leaſt, either in its mode of life or in its colours. It keeps conſtantly in the ſame canton, perched in the ſame tree, and ſeems to have a predilection for a particular bough, where it ſits ſinging its ſharp diſcordant notes. In flying it keeps nearly to the ſame ſpot, while watching the inſects it has been obſerved hiding under the graſs; this is the caſe with moſt birds of prey who hunt flying.

11. Lanius Indus, the Indian ſhrike. This ſpecies is called by Vaillant *le pendeur*. It was in the cabinet of the late

late abbé Aubry. Its country and habits are unknown, except from the following ticket affixed to it when ſold: "The Indian ſhrike. It lives on inſects and ſmall birds, which it plucks or ſkins before eating them; when it has eaten enough, it ſticks the remainder on a thorn till wanted." From this ſhort notice, it is plain that this bird belongs to the ſame diviſion as the fiſcal, which is found at the Cape. It is about the ſize of the rutilous ſhrike. Two white ſtripes originate at the corner of the mouth, one of them going over the eye, the other under it; and they unite below on the neck, incloſing a piece of black in ſhape like an ace of clubs cut longitudinally down the middle. The throat and front of the neck are black, which extends along the breaſt, and tapers off towards the middle of the ſternum. The upper part of the head, back of the neck, ſcapulars, and the back in general, are of a bluiſh grey, which grows lighter towards the croup and the upper tail-coverts. The wing-quills are black; the firſt of them are edged with light-grey on their outer barbs, and the ſix laſt only are white at the ends. The four middle feathers of the tail are quite black, and of equal length; the reſt, four on each ſide, go off tapering, partly white in their outer extremities, and blackiſh within or underneath, in ſuch a manner as that the white occupies more ſpace in proportion as the feathers become ſhorter; ſo that, when theſe feathers are cloſed, the tail appears entirely black above, and white underneath, except where the four middle quills run beyond the reſt. The tail, when ſpread out in the act of flying, is ſhaped like the top of a ſpear rounded at the extremity. All the under part is entirely white; the beak, feet, and nails, ſhining black. Vaillant ſuppoſes this to have been the male bird.

12. Lanius Lucionenſis, the Luzonian ſhrike: tail wedged; a black ſpot near each ear; tail feathers reddiſh, barred with brown at the tips. Bill and body above grey-brown, beneath and on the ſides reddiſh with white lines.

13. Lanius excubitor, the great butcher-bird: tail wedged, white at the ſides; back hoary; wings black, with a white ſpot. This bird inhabits the woods and mountains in ſummer, and reſorts to the plains and near dwellings in winter. It breeds among the hills, either on the ground or on the loftieſt trees. Its neſt is compoſed of white moſs, interwoven with long graſs, and well lined with wool, and is commonly faſtened to the triple cleft of a branch. The female, which differs not from the male in point of ſize, and is only diſtinguiſhed by the lighter caſt of its plumage, lays generally five or ſix eggs, ſometimes ſeven, or even eight, as large as thoſe of a thruſh. Length ten inches; breadth acroſs the wings fourteen inches; weighs three ounces. It ſeizes ſmall birds by the throat, and ſtrangles them; then ſpits them on ſome thorn, and tears them to pieces with its bill. Even when confined in a cage, it ſticks its meat againſt the wires, and tears it in the ſame manner. It is frequent in Ruſſia, but ſeems not to have penetrated to Siberia. It inhabits the whole extent of North America. In Hudſon's Bay it breeds in the woods diſtant from the coaſt. It makes its neſt with graſs, which it lines thick with feathers.

In this ſpecies there is a variety in the ſize, and another in the colour. Some are found entirely white on the Alps, which, as well as thoſe with a rufous tinge on the belly, are of the ſame ſize with the great cinereous ſhrike, and it does not exceed the red-wing.—The firſt of theſe is the Lanius albus of Aldrovandus, and the variety β of Linnæus: body white; feet yellowiſh; bill and nails blackiſh.—The ſecond is the Lanius major of Geſner, and the Groeſerer neuntoeder of Friſch; it is the variety γ of Linnæus. It is larger and thicker than the former; the ſcapular feathers, and the ſmall coverts of the upper ſide of the wing, are ruſt-coloured; but theſe differences are too minute to conſtitute a ſeparate ſpecies.

14. Lanius major, the greater ſhrike. This is a new ſpecies, about the ſize of a thruſh, conſequently larger than any of the European ſhrikes. The top of the head and back of the neck are ſlate-colour, lighter in front, but inclining to olive on the back, which, as well as the mantle, rump, and tail, are of an olive-green ſhaded with yellow; the ſmaller wing-coverts are of the ſame colour, but moſtly tipped with brimſtone-yellow, as are the tail-feathers alſo. The wing-feathers are blackiſh, but edged with yellow. The whole of the under part, from the throat to the under tail-coverts, are of an ochre yellow; bill and feet lead-colour. This ſpecies was tranſmitted to Mr. Ray of Amſterdam, from Senegal, by M. Blanchot, governor of that colony, from whom Vaillant named it.

15. Lanius maximus, the greateſt butcher-bird. This ſpecies is larger than any deſcribed by Briſſon, Buffon, or Linnæus. The body, feet, and tail, greatly reſemble the magpies, eſpecially that called Corvus piapiac; while the double notch in the upper mandible places it decidedly among the ſhrikes. This ſpecies is about the ſize of our blackbird, but longer, for the tail is as long as the whole body from the bill to the anus: it is delineated on Plate I. of the natural ſize. The tail is tapering, and ſpear-ſhaped. Its colours have nothing remarkable; an aſh-grey prevails over the whole plumage, except a reddiſh line on each ſide of the head forming a kind of eye-brow. Some red there is alſo on the outer barbs of the large quills of the wings, and on the tips of ſome of thoſe of the tail. The beak is lemon-colour; the feet browniſh, and the nails black. Its native place is not known, as Vaillant purchaſed the ſpecimen of a dealer.

16. Lanius collurio, the common butcher-bird: tail ſomewhat wedge-ſhaped, back grey, four middle quills of the tail of an uniform colour, bill lead-coloured. Length ſeven inches and a half; alar extent eleven inches; the male weighs two ounces, the female two ounces and two grains. The head and back of the neck are of a fine ſlate-colour; acroſs the eyes from the bill runs a broad black ſtroke; the upper part of the back, and coverts of the wings, are of a bright ferruginous colour; the breaſt, belly, and ſides, bloſſom colour: the two middle feathers of the tail are longeſt, and entirely black; the lower part of the others white, and the exterior webs of the outmoſt feather on each ſide wholly ſo. See Plate II. fig. 1. In the female, the ſtroke acroſs the eyes is of a reddiſh brown: the head of a dull ruſt-colour mixed with grey; the breaſt, belly, and ſides, are of a dirty white, marked with ſemicircular duſky lines: the tail is of a deep brown; the outward feather on each ſide excepted, whoſe exterior webs are white. It is rather larger than the male. This ſpecies is found generally throughout Europe; and in Africa very commonly in all the ſouthern part, except for about thirty leagues diſtance from Cape Town. The female has not the head and neck marked with light grey like the male, but of the ſame reddiſh brown as the mantle; nor has her breaſt and ſides ſo ſtrong a tint of that beautiful roſe-colour which ornaments the male. But, when very young, they are exactly alike. They build on trees in the fork of a branch near the body of the tree: they lay from four to ſix eggs, often only three. They appear not to be migratory; for Vaillant obſerved them, both in France and in Africa, at all ſeaſons. It is true, that in ſpring and ſummer they come into the plains, and perch upon ſingle trees; and at the approach of winter get to the borders of woods, eſpecially if any ſpring or rivulet be at hand; but in Africa, as the climate is much hotter, they continue the ſame haunts all the year round. Their principal food, as in Europe, is inſects, eſpecially caterpillars; only ſeizing occaſionally upon young birds that can make no reſiſtance.

β. L. collurio varius, the variegated ſhrike: this variety has the body grey, beneath reddiſh with brown ſtreaks; ſcapulars half white and half black, three outer quill-feathers white at the baſe and tips, the outermoſt reddiſh-white above.

γ. L. collurio rufus, the woodchat, or rutilous ſhrike: body above variegated with reddiſh-white and black, beneath

from Vaillant.

J. Pass Sc.

The Greatest Butcher-bird; natural size.

London, Published as the Act directs Nov.r 8 1812

neath reddiſh-white. This variety may eaſily be diſtinguiſhed by the tinge of its head, which is ſometimes red, and commonly bright ferruginous; its eyes are whitiſh or yellowiſh; and its bill and legs are black. They reſide during ſummer in the plains, and neſtle on the buſhy trees; but in winter they ſhelter themſelves in foreſts. The male and female are almoſt exactly of the ſame ſize, but differ ſo much in their colours as to appear of diſtinct ſpecies. They conſtruct their neſt very neatly; the moſs and wool are ſo well connected with ſmall pliant roots, long fine graſs, and the tender ſhoots of low ſhrubs, that the whole ſeems interwoven. It has generally five or ſix eggs; ſometimes more; theſe are of a whitiſh ground, and either entirely or partly ſpotted with brown or fulvous. We ſhall add Vaillant's remarks upon this variety, as it is found very generally in Africa; and he brought ſpecimens from the interior parts of the Cape of Good Hope, and Adanſon from Senegal. Its manners and habits are the ſame in Africa as in Europe, nor does it vary either in ſize or colour. Buffon ſays they are migratory, which Vaillant doubts, as he has found them in Lorraine in the winter; and has killed ſome in Africa at the very time when, according to Buffon, they muſt have returned to France. If they do remove to a warmer climate, it is not probable that they make ſo long a journey as to the ſouth of Africa. But in general theſe birds are fond of remaining in the ſame place, and never remove, unleſs diſturbed and perſecuted; for, like all birds of prey, they are impatient of diſturbance, and delight to preſerve excluſive poſſeſſion of a certain diſtrict, where they may hunt, lay their eggs, &c. The male is ſomewhat larger than the female; and is eaſily diſtinguiſhed, becauſe the female has not that dark red on the head and back of the neck. This bird, when young, is ſo different from what it afterwards becomes, that hence Vaillant ſays it has come to be deſcribed as a variety of the *collurio*, though he affirms it to be a diſtinct ſpecies.

δ. L. collurio Senegalenſis, the Senegal rutilous ſhrike. Of this variety very little is known. It differs from the preceding merely in having the baſe of the quill-feathers ſpotted with white.

ε. L. collurio melanocephalus, the Senegal black-headed ſhrike: head black; tail long. Vaillant calls this *tchagra*; and, aſſuming the woodchat as a diſtinct ſpecies, he conſiders this as a variety of it. The wings (he obſerves) are ſo ſhort, its feathers ſo thin and weak, that it is almoſt excluded from that portion of the atmoſphere which birds in general inhabit. Confined almoſt to the roots of thoſe trees on the branches of which other birds are conſtantly perched, it can only ſkim the earth with a ſhort, ſlow, and painful, flight, like a bird whoſe wings have been clipped: the wings, indeed, inſtead of being pointed at the end, are nearly ſquare, and when folded up hardly reach the origin of the tail. Hence appears a kind of vicious conformation, as if the bird did not belong to this genus; which is increaſed by the bill being longer and thinner towards the point; the bill is alſo weaker than in the woodchat; ſo that this muſt be regarded as the laſt link in the chain that leads to another diviſion. It is very evident that this ſhrike can by no means ſeek its prey flying; on ſhrubs and low plants it is therefore continually in queſt of caterpillars, ſpiders, and inſects which cannot fly; the gnats and graſshoppers are generally nimble enough to eſcape.

The tchagra is nearly as large as the L. excubitor. The tail tapers but very little, and is juſt rounded at the tip. The top of the head is browniſh black, ſlightly tinged with olive. The hind-head, neck, back, and ſcapulars, are of a brown tan-colonr. The throat is whitiſh. A white ſtripe begins at the corner of the eye, and runs along above a black line which is parallel to it down the ſide of the neck. The front of the neck, and all the under part of the body, are cinereous. The large wing-coverts and the outer barbs of the quills are ferruginous red; the remainder browniſh with a greeniſh tint above; all cinereous underneath. The two middle feathers of the tail are grey imperceptibly ſtreaked with a darker colour; the others are blackiſh, but all white at the tips. The bill and feet are black; the irides brown. This bird ſeeks the thickeſt coverts, and would be found with difficulty were he not betrayed by his ſong, which is a conſtant and loud repetition of *tcha-tcha-tcha-gra*, whence the name is taken. The female is ſomewhat ſmaller than the male, and her colours in general not ſo dark, eſpecially at the top of the head. She lays five eggs. The tchagra, when young, is of a very light grey on the ſurface of the body, and reddiſh in thoſe parts where the full-grown bird is white. The black upon the head of the male does not appear till a certain age. They are found about the river Gamtos, and thence to Caffraria, but not among the Namaquois; alſo at Senegal.

17. Lanius Javanenſis, the red ſhrike: this bird is found in the iſland of Java, whence it was ſent to M. Temminck, who preſented it to Vaillant. It is about the ſize of the rutilous ſhrike, with which however it muſt not be confounded, though it has much red in its plumage. Buffon has a very erroneous remark, which is, that all the ſhrikes which have red in their plumage are varieties of the rutilous ſhrike. A ferruginous red is the prevailing colour in the plumage of this ſpecies, which Vaillant calls *rouſſeau*, to diſtinguiſh it from the L. collurio rufus, deſcribed before; though the preſent has a better title to the denomination of *red* than the former, which has ſome dark red about the head and back of the neck; whereas, in this, the whole upper part of the head, back of the neck, ſcapularies, back, croup, and ſurface of the tail, are of a bright red. The forehead is encircled with a bandeau of white, which, going over the eye, falls down upon the neck, bordering a long black ſpot, which runs from the corner of the mouth, ſurrounds the eye, and ſpreads a little way on the neck. The wings, where they join to the body, are whitiſh; the ſmaller coverts are red; the greater ones have a border of pale red, as have the middle quills, which have a black ground; the large wing-quills are black alſo, with a reddiſh border. The throat, the front of the neck, and all the under parts of the body, are white, more or leſs ſhaded with pale red, which becomes ſtronger on the ſides of the breaſt anſwering to the ſetting-on of the wings, and on the ſides, legs, and middle of the belly. The tail is leſs taper than in the preceding ſpecies, though more than in the rutilous ſhrike: as only the two middle tail-quills and the exterior barbs of the laterals are red, the interior barbs being light grey ſhaded with red; this therefore is the colour of the under part of the tail. The bill, feet, and claws, are lead-colour. Nothing certain is known of the habits, food, neſting, &c. of this bird.

18. Lanius brubru, the brubru: the name is taken from the note, which is a repetition of the ſyllable *bru*, dwelling upon the *r*; indeed his ſong much reſembles that of our greenfinch, when he calls to the female. The colours are an agreeable intermixture of black, red, and white, diſtributed as follows: The male, which is larger than the female, has the top of the head and back of the neck black; the reſt of the upper ſurface, as mantle, ſcapulars, rump, and upper wing-coverts, is black and white. A white line encircles the forehead near the bill, goes above the eye, then grows broader as it runs amidſt the black on the ſides of the neck. There is a large white ſpot upon each wing, belonging in part to the coverts and mid-feathers of the wings, which are moſtly, as well as the large wing-quills, bordered with white. The four middle feathers of the tail are black; the reſt on each ſide have progreſſively a little more white, ſo that the outer one on each ſide is entirely edged with that colour; they are all tipped with white. The tail is rounded at the end by the effect of the lateral feathers. The wings, when folded up, extend above half the length of the tail. The throat, front of the breaſt, and under tail-coverts, are white; a ferruginous red ſtripe runs along the ſides, form-

ing a border to the wings when closed. The eye is brown; the beak black. On the female, the white of the upper surface is tinged with red; the red on the sides is a weaker shade; the black in general is browner. In the young, the white part is all shaded with rufous, even on the under parts of the body.

These birds are sometimes seen in small flocks, except in the pairing season, when the male and female only keep together. The nest is generally in the mimosa-tree, in the fork of a branch; made up of moss and pieces of roots, lined with wool and feathers. The female lays five white eggs spotted with brown. These birds are first seen about the 28th degree of south latitude, near the Rio Grande, where they are very plentiful, and not shy; and hence they are found almost to the tropic; but not on the eastern coast, nor in Caffraria.

19. Lanius cubla, the cubla: this species seems to occupy the space left vacant by the preceding; for it is met with along the whole eastern coast of Africa, from the river Duyven-ocks to Caffraria. Its size is the same as the foregoing. They go in small flocks of six or seven, all of a family, which never separate nor quarrel, but enjoy every thing in common. If one of the party discovers a nest of caterpillars, of which they are very fond, he calls the rest. In an instant they examine every branch of a tree; and they can raise up the bark with their bills to come at the larvæ, chrysalises, and the insects which burrow there. In the season of love, they separate in couples, to form new generations and family-flocks. They seek a quiet place among bushes and thorns to make their nest, which is formed of moss interwoven with flexible roots. Five or six eggs are the extent of the laying. The male is somewhat larger than the female. His head, back of the neck, and mantle, are of a fine black; the lower part of the back is covered with long silky feathers, very thin, and of a bright white. The under parts of the body from the throat to the under tail-coverts, is white, with a slight tint of grey on the sides. The scapulars are mingled with black, white, and grey. The wing-coverts are black, partly edged with white; the quills of the wings are black also, exteriorly edged with white. The tail is black rounded at the end, and each feather is white at the tip, and the outer feather on each side has a white line along its outer edge. The eye is a bright yellow; the bill and nails blackish. In the female the white is more tinged with grey, and the black is lighter. In the young one, a reddish grey appears instead of the white colour described above, and reddish brown instead of black. The cry or song of the male is *cha-cha*, which he utters very distinctly, lengthening out the *a*. Vaillant relates, that these birds are more curious than shy; for, on the approach of man or beast, the bird erects his feathers, and comes towards it, uttering incessantly its cha-cha. Many of the African birds are described by Vaillant as not being shy or difficult of approach; we apprehend that in those extensive regions, so thinly inhabited, the feathered race have not yet been so much disturbed or persecuted by man as to have learnt caution. This species is most common in the forests of Auteniquois.

20. Lanius taciturnus, the silent shrike: this species is thus denominated by Vaillant, because he says he never heard it utter any note or cry whatever, though he has shot them in every season of the year. This bird is very common in the forests of the Auteniquois in Africa, and all along the coast of Natal; also in many of the interior parts, particularly those abounding in wood. The male is somewhat larger than our woodchat. The top of the head, back of the neck, mantle, scapulars, tail, and wings, are black, except a little white on some of the primary wing-quills, and the outer barbs of the two middle ones, which together form a white bar on the wing, but not all along the wing; for in this species all the wing-coverts, small and great, are absolutely black. The tail is tapered, and the lateral quills are white outside. All the under parts of the body, from the throat, are white; the eyes are brown; the nails black, the feet brownish, the beak the colour of horn. The female is somewhat smaller than the male; her upper surface, instead of black, is of a brownish hue; and the white underneath, except the throat and the bar along the wing, inclined to grey. The male and female are generally seen together. They live entirely on insects; for Vaillant killed at different times no less than fifty-eight, and found nothing but the remains of insects in their stomachs. They begin to lay in November; they make their nest in trees in the most curious manner; the outer part is constructed entirely of twigs, and it is lined with hair, or the down furnished by several African plants, especially the Mesembrianthemum, which the colonists and Hottentots of the Cape call *kanæ bossies*. The eggs are three or four in number, of a pale green slightly shaded with red. All the young, whether males or females, perfectly resemble the mother.

21. Lanius oliva, the olive-coloured shrike. Vaillant has given three figures of this African bird, because it varies so much at different periods of growth, that it might be easily mistaken for different species. His first figure represents the male in his perfect state and natural size, that is, at two years old. At that period, the upper surface of the body, from the head to the upper tail-coverts, as well as the wing-coverts, are of an olive-green inclining to yellow; the two mid-quills of the tail are of the same colour; the laterals are partly yellow, which increases on the outer one on each side; their interior barbs are blackish, and their edges olive-green; they are all tapering, so that the tail is rounded at the end. The wing-quills are blackish in their concealed parts when the wing is folded up; in the outer part, of the same green as the mantle; but all edged with yellow. A band of ochre-yellow goes round the forehead. A long black spot or stripe, in the upper part of which is the eye, stretches down the neck, edged with yellow on the upper part. The throat, front of the neck, breast, and as far as the belly, and the feathers on the legs, are of a bright ochre-yellow. The sides, lower belly, and under tail-coverts, are of a faint yellow, shaded with olive. The bill is black, the eyes reddish brown, feet and nails light brown. It is about the size of the rutilous shrike, or woodchat.

His second figure is the male before he has attained his full growth, namely from his third moult, which happens about the beginning of his second year. At this time, a reddish white runs round the forehead; the head and hind part of the neck are grey with a slight tint of olive; and the black stripe on the sides of the neck is edged with white instead of yellow. The green upon the upper part of the body, tail, and wings, is less bright, as well as the yellow edges of some of the quills. The throat, front of the neck, and breast, exhibit a mixture of yellow and of different shades of red, darker however on the breast. The feathers about the sternum, sides, belly, and under the tail, are white tinged with olive. The eyes, feet, and bill, are similar to the full-grown male. Previous to the first moult, the bill and feet are brown; the black spot on the side of the neck is not yet visible; the head is olive-green slightly tinged with grey; neither does the yellow edging to the wings appear as yet; only the last feathers have a faint border of white; the yellow of the tail is as yet only dun-colour, throat and breast the same. A slight shade of olive prevails on the upper surface of the body; which colour also appears in stripes upon the light-grey of the sides, belly, and under part of the tail. In this state it exactly resembles the female; but, after the first moult, it is easy to distinguish the male by the darker colour of the head, and the black spot or stripe which begins to appear on the cheek. He next gives a figure of the female, which it is now unnecessary to describe, as the account just given of the very young male agrees with it in every particular, so that the figure of the female may serve to give an idea of the male previous to his first moult. Thus it is extremely difficult in the young birds to distinguish the males from the females; the female, how-

ever, is generally the ſmalleſt, and never changes her colours.

The full-grown male is about the ſize of the *collurio*, and the female ſomewhat ſmaller; but Vaillant remarks that moſt ſpecies of birds become larger in cultivated ſpots, where there is plenty of food; and that this difference is more manifeſt in Africa, where vaſt tracts of uncultivated country intervene. They conſtruct their neſts in thickets or on trees, laying uſually five eggs. Vaillant obſerved theſe birds in the foreſts about the bay of Lagoa, and on the borders of the Gamtoos, the Sondag, and Swartekop; but not at the Cape.

22. Lanius Antiguanus, the Antigua ſhrike: this ſpecies is about the ſize of a lark. Its bill is large and black; the upper mandible long, and hooked; the head is black; the back, of a yellowiſh rufous colour: the throat and breaſt are white; the quills, and baſtard wing-coverts, black; and the wings reach only to the beginning of the tail, which is very long and wedge-ſhaped; the two middle feathers are wholly black; the legs are duſky black. It inhabits Panay, one of the Philippine iſlands, but principally about Antigua. The hen differs from the cock, in that ſhe has no black mark about her eyes, nor the roſe-coloured tint on her breaſt.

23. Lanius niger, the black ſhrike: body black; tail ſomewhat wedged. Inhabits Jamaica; ſeven inches long; bill an inch.

24. Lanius Leverianus, the Leverian ſhrike: tail long, wedged, black at the tip; bill, head, neck, middle of the breaſt, and legs, black; the other parts white. Greater wing-coverts and ſecondary quill-feathers white at the edge; two middle tail-feathers long again as the reſt, all of them black with white tips. Inhabits South America; ten inches long.

25. Lanius atricapillus, the Surinam ſhrike: tail wedged, and, with the neck, crown, ſhoulders, and wings, black; body above mouſe-colour, beneath bluiſh-aſh. Wings ſhort; wing-coverts and ſecondary quill-feathers edged with white; tail-feathers, except the two middle ones, white at the tip. Inhabits Surinam; five inches long.

26. Lanius Pomeranus, the Pomeranian ſhrike: body above black, beneath white; hind-head and back of the neck dark ruſty, ſurrounded with black; two ſpots on each ſide the wings and rump white. Bill, legs, and wings, black; eight primary quill-feathers white at the baſe; two outer tail-feathers white, next two or three on each ſide whitiſh from the baſe to the middle, and tipped with white. Inhabits Pomerania.

27. Lanius tyrannus, the tyrant ſhrike. About the ſize of a thruſh. Bill blackiſh brown, beſet with briſtles at the baſe: irides brown: the upper parts of the plumage grey-brown; the under, white: the breaſt inclines to aſh-colour: the head is blackiſh on the upper part; the baſe of the feathers on that part in the male is orange, but ſeldom viſible except it erects the feathers, when there appears a ſtreak of orange down the middle of the crown: the tail is brown, marginated with rufous: the legs and claws are black brown. The female ſcarcely differs, except in the head; the baſe of the crown-feathers being yellow inſtead of orange; the colours are not quite ſo deep, and it is a trifle leſs in ſize. It inhabits Virginia. There are three other varieties, which inhabit St. Domingo, Carolina, and Louiſiana. Theſe birds are called by Buffon *titiri*, *pipiri*, or *quiquiri*, from their cry, which reſembles thoſe words.

28. Lanius ſchach, the Chineſe ſhrike: body yellowiſh; front and wings black. Head and neck on the upper part grey, neck beneath dull reddiſh white; back and belly reddiſh; quill-feathers black, the firſt white at the baſe, the ſecondary whitiſh at the tip. Inhabits China; eight inches long.

29. Lanius pitangua, the Braſilian ſhrike: body black, beneath yellow; crown with a tawny ſtreak; band over the eyes white. Behind and beneath the eyes a black ſpot; chin white; feathers of the body above edged with yellow; wings beneath yellow; tail brown with a rufous edge, beneath olive. Inhabits Braſil; nine inches long.

30. Lanius rufus, the rufous ſhrike: rufous, white beneath, the head greeniſh-black. It inhabits Madagaſcar; and is about eight inches long.

31. Lanius Barbarus, the Barbary ſhrike: this bird comes from Senegal, where the negroes, as Adanſon informs us, call it *gonolek*, that is, "feeder on inſects." It is Briſſon's red ſhrike of Senegal; but (ſays Vaillant) the ſpecimen he examined muſt have been much faded; for the top of the head is not fawn-colour, as he deſcribes it, but of a beautiful yellow ſhaded ſlightly with green; at leaſt this is the colour of the male; the ſame part in the female is olive-green. Vaillant compared ſome of theſe birds which he found on the confines of the Great Namaquois with ſeveral of the ſame ſpecies brought from Senegal by Villeneuve; he found them, in colour and ſize, exactly ſimilar. The yellow of the head falls down the back of the neck, and ends in a point on the back. The cheeks, ſides of the neck, ſcapulars, back, wings, and tail, are black, without mixture or ſhade of any other colour. The throat is red, ſhaded with yellow; all the reſt of the plumage, to the belly, is of the brighteſt and moſt beautiful red. The feathers of the legs, of the lower belly, and under the tail, are fawn-colour. The tail tapers a little, conſequently is round at the end. The bill is black; the feet and nails brown; the eyes nearly hazel-colour. The female is ſomewhat leſs than the male, and her colours not ſo bright. Vaillant obſerves that he had but little opportunity of making remarks on the manners of this bird, as he continued but a ſhort time in the canton where they are found; the ſeaſon of love was paſt, ſo that he could not tell if they had any ſong or not. The remains of inſects were found in the ſtomachs of thoſe he killed, which perfectly agrees with the name that has been given it.

32. Lanius ſulphuratus, the yellow-bellied ſhrike: duſky, yellow beneath; the head blackiſh, and encircled by a whitiſh ſtripe. It is near nine inches in length.

33. Lanius Cayanus, the Cayenne ſhrike: cinereous, the head, the quills of the wings, and the primaries of the tail, black. Size of the blackbird; eight inches and a half long.

34. Lanius aurantius, the Orange ſhrike: colour tawny-yellow; chin, throat, and breaſt, reddiſh. Head above the eyes, and nape, black; wings and tail brown; bill black; claws pale. Inhabits Cayenne; ſeven inches long.

35. Lanius Senegalenſis, the Senegal ſhrike: colour above grey, beneath whitiſh; crown and band of the eyes black; tail-feathers black tipped with white. Quill-feathers rufous on the outer ſide; tail-feathers ſix, with ſlight brown bands and uniform tips. Inhabits Senegal; near nine inches long.

36. Lanius Madagaſcarenſis, the Madagaſcar ſhrike: cinereous, beneath whitiſh; lines between the bill and eyes black; quills of the wings tawny. It is five inches long, and about the ſize of a ſparrow.

37. Lanius emeria, the Bengal ſhrike: colour grey, white beneath; temples and rump red. The bill is cinereous brown; the irides whitiſh; the upper part and back of the head, black; below the eyes is a lively orange ſpot terminated with white; and on the tail four black ſpots, making a ſegment of a circle. The upper part of the neck, the back, the rump, the ſuperior coverts of the tail, the inferior coverts of the wings, and the ſcapular feathers, are brown; the throat, the upper part of the neck, the breaſt, the higher part of the belly, and the inferior coverts of the tail, are red; the tail is light brown; the feet and nails are black. Length, five inches and a half.

38. Lanius bicolor, the blue ſhrike: blue, beneath white; frontlet black. This ſpecies has been accurately deſcribed by Briſſon under the name of the *blue ſhrike from Madagaſcar*. Buffon gives it the ſame name; but he ſpeaks of it very ſlightly, conſidering it only as a variety of the

L. excu-

L. excubitor; and his plate of it is very incorrect, neither giving an idea of its beautiful colours nor of its true ſhape. It is indeed one of the moſt beautiful of the African birds. One ſtriking difference, ſays Vaillant, which alone were ſufficient to mark it a ſeparate ſpecies from the excubitor, is the ſhape of the tail, which in the blue ſhrike is ſquare, that is, the feathers are of equal length, whereas, in the other ſpecies, the tail, as we have ſeen, is tapering, the length of the feathers diminiſhing from the middle to the ſides. The bill is very different alſo.

The blue ſhrike is ſomewhat leſs than the *collurio*, or common butcher-bird; and is repreſented on the ſame Plate, at fig. 2. The head, hind part of the neck, ſcapulars, back, and upper tail-coverts, are of the pureſt and brighteſt ultramarine blue; all the wing-coverts, as well as the outer barbs of the wing-quills, the two middle ones of the tail, and the outer edges of the lateral ones, are of the ſame fine blue with the ſurface of the body; but the tips of the wing and tail quills, and their inner barbs, are blackiſh. Between the noſtrils and eyes, and at the top of the throat, the feathers are like black velvet. The reſt of the under part of the plumage is of a ſhining white, except the legs, which are bluiſh. The eyes are brown; feet and nails black. The female is ſomewhat ſmaller than the male: her white is not ſo bright, and the blue aſſumes a ſhade of green upon the rump; there is no white between the eyes and on the throat; the front of the neck is white; the reſt of the under part cinereous grey. The young one is dark green on all thoſe parts which in the adult are blue, and that is cinereous grey which is afterwards to become perfectly white. From a young one of this ſpecies Briſſon ſeems to have taken his deſcription of what he calls the little green ſhrike of Madagaſcar, (L. viridis;) for they agree in general except in the length of the wings, which in this ſpecies really extend only about two-thirds the length, though in Briſſon they reach to the extremity. But Briſſon's meaſures and proportions are oftentimes very incorrect, on account of the ſtuffed ſpecimens he deſcribes having been very badly prepared, the wings ſet on in the wrong place, &c.

This ſpecies lives entirely upon inſects; it is very ſhy, eſpecially the male, who is often ſeen perched on a buſh, but flies away upon the approach of any one. Being found not at Madagaſcar only, it has been thought better to call it ſimply the *blue ſhrike*; for the names of countries to deſignate certain ſpecies of birds are generally incorrect, as a bird has ſeldom been known to dwell in one part of a country excluſively; at leaſt ſucceeding travellers have commonly found the deficiency of ſuch names. Yet in cabinets of natural hiſtory it is very proper to note the country in which each ſpecimen was taken, and even the canton or province if poſſible; and in national collections, deſtined for general ſtudy, care ſhould be taken to collect of each ſpecies, the male, the female, the eggs, the young, the neſt, and all the varieties, if poſſible, from countries the fartheſt apart from each other. Our king-fiſher, for inſtance, is found not only throughout Europe, from the frozen regions of the north even to Italy, but alſo in Egypt, China, Bengal, &c. Had we then an opportunity of comparing ſpecimens from each of theſe different countries, we might be able to judge how far a ſpecies may vary, according to climate and alteration of food.

39. Lanius leucorhynchus, the white-belled ſhrike: body above blackiſh, beneath whitiſh; bill, breaſt, belly, and rump, white. The wings in this ſpecies are very long; they, as well as the tail, legs and claws, are black; tail equal. Inhabits Manilla; length ſeven inches.

40. Lanius ferrugineus, the ferruginous-bellied ſhrike: body above black brown; throat and breaſt dirty-white; belly ferruginous. Bill lead-colour; tail duſky-brown; legs black. Inhabits the Cape; nine inches long.

41. Lanius Tabuenſis, the Tabuan ſhrike: body above olive; chin and breaſt cinereous; belly yellowiſh-brown; tail and legs brown. Bill brown; crown greeniſh; temples olive-brown: wings black on the outer edge; ſecondary quill-feathers black-brown edged with dirty white. Inhabits the Friendly Iſlands; near nine inches long.

42. Lanius Pacificus, the Pacific ſhrike: black; head and neck verging to greeniſh; belly and tail more duſky. Bill duſky, three quarters of an inch long; feathers of the head and neck very narrow; tail three inches long; toes divided to the baſe, the middle one very long. Inhabits the South-Sea Iſlands; eleven inches long.

43. Lanius ſeptentrionalis, the northern ſhrike: bill black; legs lead-colour: body above brown; chin and breaſt cinereous; belly and vent browniſh. Noſtrils rounded, ſmall; at the baſe of the upper mandible five or ſix black briſtles; four middle tail-feathers brown, the reſt within white at the tip, all two inches long; legs ſhort; claws ſtrong, brown. Inhabits North America; near eight inches long.

44. Lanius pileatus, the black-capped ſhrike: head black, creſted; body cinereous; throat and breaſt black; wing-coverts barred with white; tail tipped with white. Female without creſt; crown blackiſh; throat and breaſt cinereous. Inhabits Cayenne; ſix inches long.

45. Lanius viridis, the green ſhrike: upper ſurface dull green, under white; tail black. Wings long, as in the *leucorhynchus*; the two middle tail-feathers duſky green, the reſt black at the outer edge; legs and claws black. Inhabits Madagaſcar: length near ſix inches.

46. Lanius leucocephalus, the white-headed ſhrike: head white; the upper ſide of the body greeniſh-black, beneath black; the bill, feet, and nails, lead-coloured. It is eight inches long.

47. Lanius Dominicanus, the Dominican ſhrike: black; bill and rump white. The Dominican ſhrike is bigger than a ſparrow, and rather longer. The bill is greyiſh, conical, and ſtrong; the baſe beſet with briſtles, pointing forwards; the head, neck, breaſt, back, wings, and tail, are black; the belly and rump white; the wings reach near an inch beyond the middle of the tail; the thighs are black. It inhabits the Philippine iſlands, and is a bold courageous bird; it flies with great rapidity, frequently hovering in the air like a ſwallow. It is a great enemy to the raven; to whom, though much bigger, it bids defiance, and even provokes to combat; the battle often laſts half an hour, and generally ends with the retreat of the raven; rather, perhaps, from being teaſed out than much injured by its little enemy.

48. Lanius Panayenſis, the Panay ſhrike: bill and legs black; head, throat, breaſt, and belly, red; crown, wings, and tail, brown; irides fiery. Inhabits the iſland of Panay; ſeven inches long.

49. Lanius albus, the white ſhrike: white; bill, tail, legs, and greater part of the wings, black. Primary quill-feathers with a white band. Inhabits Panay; nearly twice as large as the laſt.

50. Lanius varius, the white-ſhouldered ſhrike: body above aſhy-brown; chin and breaſt yellow-buff; belly, rump, and vent, dirty browniſh white; inter-ſcapulars white; tail and wings brown; bill and legs black; front and cheeks with paler ſpots. Inhabits Braſil.

51. Lanius nævius, the ſpotted ſhrike: body above black, beneath cinereous; all the wing-coverts with an oblong white ſpot. Bill and legs black; ſome of the feathers on the fore-part of the back tipt with white; quill-feathers edged with white; tail-feathers white at the tip. Inhabits Cayenne; ſix inches long.

52. Lanius obſcurus, the duſky ſhrike: body above duſky-black, beneath white; over each eye a white line. Bill horn-colour; wings and tail more duſky than the body; legs brown. Inhabits America; ſize of the preceding.

53. Lanius fuſcus, the brown ſhrike: body above brown; beneath white; lores, tips of the ſecondary quill-feathers, and edges of the primary, yellowiſh. Bill horn-colour, black at the tip; legs black.

from Vaillant J. Pass Sc.

1. The Common Butcher-bird. 2. The Blue Shrike.

Published as the Act directs Novem.r 24 1812.

from Vaillant

J.Pass Sc

3. The Pied Shrike. 4. The Cayenne Red Shrike.

Both of the natural size.

London Published as the Act directs Dec.r 28. 1812, by G. Jones.

54. Lanius ruber, the argus ſhrike: red; wings and tail with eye-like ſpots, black at the tips. Inhabits Surinam.

55. Lanius Americanus, the black-crowned ſhrike: black; ſpot on the firſt quill-feathers, cheeks and chin, white; breaſt and belly cinereous. Tail long; middle tail-feathers black, the reſt white at the tip; primary quill-feathers with a white ſpot; the ridge of each wing with a white ſpot. Inhabits North America.

56. Lanius minor, the Italian ſhrike: cinereous; chin white; breaſt and belly roſy; front, line over the eyes, and tail, black. Quill-feathers black, the primary with a white ſpot near the baſe, the ſecondary white at the tip; outer tail-feathers white. Inhabits Italy, Spain, and Ruſſia; reſembles the *nengeta*.

57. Lanius Natka, the Nootka ſhrike: tail rounded; body above black, beneath white; crown black; collar white. Bill and legs black; above the eyes a white line reaching to the nape, and a black one beneath the nape; ſmaller wing-coverts black, greater white; firſt quill-feathers duſky edged with yellowiſh-brown, the ſecondary black edged and tipt with white; tail-feathers black, the four outer white at the tips. Inhabits Nootka Sound; ſeven inches long.

58. Lanius melanocephalus, the black-headed ſhrike: bill, head, and chin, black; body olive, beneath paler; tail with a broad black band, yellow at the tip. Legs duſky. Inhabits the Sandwich Iſles; ſix inches long.

59. Lanius brachyurus, the ſhort-tailed ſhrike: top of the head ruſty-grey; eyebrows white; a black band from between the eyes to the ears; body above aſhy-grey, beneath yellowiſh-white; tail rounded. Rump ruſtyiſh; chin and vent nearly white; wings blackiſh, the coverts grey at the tip; tail-feathers ten, brown-grey, and except the middle ones white at the tip. Inhabits Hungary; ſize of L. collurio.

60. Lanius boulboul, the boulboul: black; breaſt and belly tinged with aſh; wings brown, with two white bands. Bill and legs yellow. Inhabits India; ſize of a field-fare.

61. Lanius phœnicurus, the rufous-tailed ſhrike: body above reddiſh-grey, beneath yellowiſh white; tail long, rounded, and with the rump bright red; orbits croſſed with a black band. Inhabits rocky places on the river Onon; ſize of the preceding.

62. Lanius doliatus, the pied ſhrike: tail rounded; body varied with black and white lines. This ſmall ſpecies is from Cayenne. It is about ſix inches and a half long. The top of the head is black, ſo are the wings and tail; the wing-coverts the ſame, with a white ſpot at the tip of each feather. The large quills are bordered exteriorly with a white line, which becomes broader on the outer ones. The two mid-quills are tipped with white; ſo are the reſt, but the ſpot is more apparent as the quills become ſhorter on each ſide; and the two laſt and ſhorteſt on each ſide have another white ſpot in the middle of their exterior barbs; the upper tail-coverts have a white ſpot alſo. The reſt of the plumage is ſlate-colour above, whiter underneath; the ſmall under wing-coverts are white. The bill and feet are blackiſh; the nails yellowiſh brown.

63. Lanius Cayanus ruber, the Cayenne red ſhrike: this bird was alſo imported by Vaillant from Cayenne. It is ſomewhat ſtouter than the preceding, but ſimilar in many reſpects; the bill, feet, and wings, are ſhaped in the ſame manner. But Vaillant decides it to be a young bird, which had not yet moulted; and he is doubtful to what ſpecies it belongs. Therefore the following deſcription may ſerve as a guide for ſome future naturaliſt who may have an opportunity of making farther inquiries on the ſpot where it inhabits. The top of the head is of a bright red. The cheeks and throat are black variegated with reddiſh white, forming ſpots which extend into a kind of necklace. The ſame colours prevail between the eyes and noſtrils, but more obſcurely varied. The mantle, ſcapulars, wing-coverts, and outer barbs of the lateral wing-quills, are of a lighter red than the top of the head; the large primary wing-quills are alſo fainter; and all their inner barbs are black in the middle, edged with red in a zig-zag direction the whole length. The rump and upper tail-coverts are furniſhed with fine ſilky feathers of a pale red, which grows lighter ſtill on the breaſt, ſides, and under tail-coverts. The tail itſelf is dark red; it has a taper form, from the two outer quills on each ſide being ſhorter than the reſt. The wings when at reſt extend about half way down the tail. The bill, feet, and nails, are ſhining black like horn. The colour of the eyes could not be determined from the prepared ſpecimen. This and the preceding are ſhown together on Plate III.

64. Lanius jocoſus, the jocoſe ſhrike: tail rounded; body grey; lower eyelid purple; vent blood-red. The bill is blackiſh, rather ſtraighter than in moſt of the genus, and furniſhed only with a very fine notch near the tip; the crown of the head is black, except ſome long brown feathers, which form a kind of creſt; the ſides of the head, throat, and fore part of the neck, are white; from each corner of the mouth there is a black line, continued backwards; and under each eye is a ſmall ſpot of lively red. The upper parts of the body are brown; the under parts, dirty white; the vent, roſe-colour; on the lower part of the neck and breaſt there is a kind of a brown band; the quills are brown; the tail is greatly wedge-ſhaped, and in colour brown, except the four outer feathers on each ſide, which have white tips; the legs and claws are black. This is a Chineſe bird, and called in thoſe parts by the name of *kowkai-kon*. It feeds upon rice, and inſects, particularly cockroaches. Length ſeven inches and a half.

65. Lanius infauſtus, the rock-ſhrike: tail rounded. The bill is about an inch long, and blackiſh; the head and neck are of a dark aſh-colour, marked with ſmall rufous ſpots; the upper part of the back is dark brown; the lower much paler, inclining to aſh, eſpecially towards the tail; the quills and wing-coverts are duſky, with pale margins; the breaſt, and under parts of the body, are orange, marked with ſmall ſpots, ſome white and others brown; the tail is three inches in length; the two middle feathers are brown, the others rufous; the legs are blackiſh. This is the deſcription of the female. The male is ſaid to differ very little, except in being of a brighter colour. This ſpecies is met with in many parts of Europe, from Italy on the one hand to Ruſſia on the other; and is found in ſome parts of Germany, the Alpine Mountains, thoſe of Tyrol, and ſuch-like places. The manners of this bird ſeem diſputed. Buffon ſays that it perches on a high ſtone, and as ſoon as a marksman appears with his gun removes to a greater diſtance, and ſo on as often as he approaches; which renders this ſpecies difficult to come at. Brunnich and Linnæus, on the contrary, ſay that it is a bold bird, attending the traveller while at his meal, on purpoſe to feed on his ſcraps. It has an agreeable note, approaching to that of a hedge-ſparrow, and will alſo learn to imitate that of others. It makes its neſt among the holes of the rocks, &c. hiding it with great art; and lays three or four eggs, feeding the young with worms and inſects. This bird has been by different authors placed in the genera Corvus, Motacilla, and Turdus. Length eight inches.

66. Lanius fauſtus, the white-wreathed ſhrike: tail and wings rounded; body grey, beneath ruſty; a white line behind the eyes. About the ſize of a common thruſh. The bill is pale; the wing-quills browniſh, with grey edges, which are croſſed with numerous ſlender brown lines; the tail is brown; and croſſed with numerous bars of darker brown; legs pale. This elegant ſpecies inhabits China, where it is known by the name of *whommaj*. It may be obſerved, among others, in Chineſe paper-hangings, where the white line ſeems to encompaſs the back part of the head like a wreath.

67. Lanius picus, the magpie-ſhrike: this is a ſtrong butcher-bird, and one of thoſe which might be regarded as forming the interval between the genera of Corvus and

Lanius. It has the ſame kind of beak with the *excubitor*, but the feet are longer; and the body is ſhorter and thicker than the ſhrikes in general. It would indeed be a pretty little magpie, but for the bill, which is longer, narrower, and very evidently hooked on each ſide, a mark belonging to many birds, but particularly to the ſhrikes. This ſpecies, which Vaillant calls *pie-grieche rouſſe à plaſtron blanc*, the red ſhrike with a white pad, is about the ſize of a blackbird. The head, hind part of the neck, mantle, ſcapulars, back, and wings, are of a dull black without any gloſs; the throat, front of the neck, and ſternum, are covered with feathers of the brighteſt red, relieved by a ſemi-annular broad ſtripe of white which covers the breaſt from wing to wing; this is what Vaillant calls *plaſtron*, as it is placed in the ſituation of that ſtuffed plaſtron or pad which fencers uſe in practiſing to receive the thruſts; a red ſtroke, which is continued along the two middle quills of each wing, runs lengthwiſe upon this white ſpot. However, this ſtroke itſelf was white in two out of four which Vaillant examined, and he ſuppoſes they might have been the females. The lower belly, and under wing-coverts, are of a light fawn-colour. A white ſtripe borders the cheek and lower mandible on each ſide. The tail is very much tapered, (etagée;) it conſiſts of ten feathers, of a bright red on the ſurface, and fainter underneath; but the quills or ſtems are white through the whole of their length. The bill, feet, and nails, are black. This beautiful ſpecies is ſaid to come from the South-Sea iſlands; and is correctly ſhown on Plate IV. fig. 5.

68. Lanius durus, the iron-bill: the beak of this bird is extremely large and thick; hence the name of *bec de fer* given it by Vaillant; the upper mandible is convex; broad at its origin, and ending in a blunt point; the lower mandible is even. The head is round, of a ſize proportioned to the bill; it has a curious long tuft of irregular feathers almoſt upright, but rather bending forward. The neck is thick, the body ſtout and bulky. The feet are ſtrong, armed with crooked claws; the wings, when folded in, reach below the middle of the tail; the tail conſiſts of ten quills a little tapering, ſo as to have ſomewhat of a rounded form. The tongue is ſmall, of a triangular ſhape, and faſtened to the bottom of the throat.

This ſpecies is about the ſize of our blackbird, but ſtouter. The greater part of the plumage is black. The throat is of a bright red, with ſome yellow ſtreaks below; theſe feathers are ſtiff and hard. The middle of the body is croſſed by a broad band of yellow, ſtreaked with red in the middle, and dotted with black on the ſides. The rump and tail-coverts are of a greeniſh-yellow. The mid-quills of the wings are partly white on their outer barbs; ſo that, when the wing is ſpread, the white appears in regular lines. The reſt of the plumage, including the tuft, is black. The longeſt feathers of the tuft riſe near four inches, and are excavated or grooved. The bill is ferruginous grey; the nails are black; feet and legs bluiſh. The habits of this bird are not known; its ſhort tongue would make us ſuppoſe it lives on inſects. It was brought from the South-Sea iſlands. Vaillant is of opinion that it forms a diſtinct genus, of which this ſpecies only is at preſent known, though probably there are many more in the ſame country. If it ſhould hereafter be aſſumed as a genus, it would naturally be placed between the ſhrikes and the barbets.

69. Lanius Geoffroyi, the Geoffroy's ſhrike: this beautiful ſpecies was brought by Geoffroy Villeneuve from Senegal, among other curioſities which that ingenious young naturaliſt collected in Africa. It is called "tufted Senegal ſhrike" in the Muſeum of Natural Hiſtory at Paris. Yet Vaillant aſſerts that it is not a ſhrike, and that it differs very much from that genus of birds in its modes of living. He doubts not but they are gregarious, (which the ſhrikes never are;) and that they ſeek their food in moiſt grounds, which they eaſily penetrate with their bill; as in all theſe birds which he examined he found earth adhering to the bill. Till a new claſſification ſhall be made, we have thought it beſt to place it here. The notch at the end of the upper mandible might occaſion it to be placed among the ſhrikes; but the general ſhape of the bill will not juſtify this, nor will the following deſcription. A broad flaſhed eyelid runs all round the eye. Part of the feathers between the eye and the bill briſtle up, while others ſtretch forward, covering the noſtrils entirely, and great part of the bill. The head is ornamented with a ſoft tuft falling down behind, which no doubt the bird can erect at pleaſure. The tail is ſquare; the wings about half its length. The tuft, bill-feathers, and cheeks, are pure white. The head, and feathers about the ears, are ferruginous grey inclining to black. Below this, the hind and fore part of the neck, the throat, breaſt, ſides, belly, the inner wing-coverts, and the under tail-coverts, are as white as ſnow. The mantle, ſcapulars, and wings, are black, and in certain poſitions appear of a bluiſh gloſs. The two outer quills of the tail on each ſide are entirely white; the third is black at its origin; and the reſt have ſucceſſively more black and leſs white as they approach the middle. The bill is black; eyelids, legs, feet, and nails, yellow. This bird is the ſize of our thruſh. The female is about a ſixth part ſmaller, and the tuft is leſs; the white rather inclining to aſh-colour, and the eyelids not ſo broad. Vaillant has alſo deſcribed and figured the young bird; the tuft is very ſmall; the mantle and ſcapulary feathers are tipped with brown; the white parts were moſtly cinereous; and the eyelids do not appear.

LANK, *adj.* [*lancke*, Dut.] Looſe; not filled up; not ſtiffened out; not fat; not plump; ſlender.—We let down into the receiver a great bladder well tied at the neck, but very *lank*, as not containing above a pint of air, but capable of containing ten times as much. *Boyle.*

Moiſt earth produces corn and graſs, but both
Too rank and too luxuriant in their growth.
Let not my land ſo large a promiſe boaſt,
Leſt the *lank* ears in length of ſtem be loſt. *Dryden.*

Milton ſeems to uſe this word for faint, languid:

He, piteous of her woes, rear'd her *lank* head,
And gave her to his daughters to imbathe
In nectar'd lavers ſtrew'd with aſphodil. *Milton.*

LANKA'YT, a ſmall iſland near the weſt coaſt of Celebes. Lat. 4. 57. S. lon. 119. 12. E.

LANKE, a lake of Thibet, about forty-five miles in circumference: forty miles north of Darmadijira.

LANK'HEIM, a town of Germany, in the principality of Anſpach: five miles north-north-eaſt of Maynbernheim.

LANK'NESS, *ſ.* Want of plumpneſs.

LAN'KU-TOU', a city of China, of the ſecond rank, in Yun-nan: 1102 miles ſouth-weſt of Peking. Lat. 27. 25. N. lon. 100. 45. E.

LANK'WATT, a town of Bavaria, on the Groſs Laber: eight miles ſouth-eaſt of Kelheim, and twenty-ſix eaſt of Ingolſtadt.

LANMEU'R, a town of France, in the department of the Finiſterre: ſix miles north-eaſt of Morlaix, and eleven eaſt-ſouth-eaſt of St. Pol-de-Leon.

LAN'NAS, a town of Sweden, in the province of Angermannland: thirty-five miles north-weſt of Hernoſand.

LAN'NER, *ſ.* [*lanier*, Fr. *lannarius*, Lat.] A ſpecies of hawk. See FALCO, vol. vii. p. 190.

LAN'NILIS, a town of France, in the department of the Finiſterre: ten miles north of Breſt, and eight weſt of Leſneven.

LAN'NION, a town of France, and principal place of a diſtrict, in the department of the North Coaſt: 3½ poſts north-weſt of Guingamp, and 64¼ weſt of Paris. Lat. 48. 44. N. lon. 3. 22. W.

LANNOY', a town of France, in the department of the North. A party of the French were defeated at this place by the duke of York in the year 1794: ſix miles eaſt-north-eaſt of Lille, and eight north-weſt of Tournay.

LANN'STROFF,

5. The Magpie Shrike. 6. The Excoriating Worm.

Jun. Jon Published as the Act directs Jan. 30 1813, by C. Jones

LANN'STROFF, a town of France, in the department of the Moſelle, and chief place of a canton, in the diſtrict of Thionville. The place contains 338, and the canton 13,615, inhabitants, on a territory of 307½ kiliometres, in forty-four communes.

LA'NO, a lake of the iſland of Mindanao; from fifteen to twenty miles broad, and about ſixty miles round.

LANO'CLE, a town of France, in the department of the Nyevre: twelve miles ſouth-eaſt of Decize.

LA'NON, a village in Carmarthenſhire; with a fair on the 10th of December.

LANOUAI'LLE, a town of France, in the department of the Dordogne, and chief place of a canton, in the diſtrict of Nontron. The place contains 458, and the canton 9581, inhabitants, on a territory of 235 kiliometres, in ten communes.

LANPEN'CKEN, a town of Pruſſia, in the palatinate of Culm: fourteen miles north of Straſburg.

LANS, a town of France, in the department of the Iſere: ſeven miles ſouth-weſt of Grenoble.

LANS-LE-BOU'RG, a town of France, in the department of Mont Blanc, and chief place of a canton, in the diſtrict of St. Jean-de-Maurienne. The place contains 874, and the canton 4675, inhabitants, on a territory of 742½ kiliometres, in ſeven communes.

LAN'SARD, a town of Perſia, in the province of Mazanderan, on the coaſt of the Caſpian Sea: ten miles weſt of Fehrabad.

LANSAR'GUES, a town of France, in the department of the Herault: nine miles weſt of Montpellier.

LANSA'WEL, a village in Carmarthenſhire, South Wales, fifteen miles north-north-eaſt of Carmarthen; it has fairs on the firſt Friday after May 12, July 26, and October 23.

LANS'BERG (Philip), a Dutch proteſtant divine and mathematician, was born in Zealand in the year 1561. He officiated as miniſter at Antwerp in the year 1586; and was afterwards, for ſeveral years, ſettled in the ſame capacity at Goes in Zealand. Towards the end of his days, his growing infirmities rendered it neceſſary that he ſhould be diſcharged from the exerciſe of his miniſterial functions; when he retired to Middleburg, where he died in 1632, about the age of ſeventy-one. He was the author of, 1. Chronologiæ Sacræ, Lib. VI. 1626. 2. Progymnaſmata Aſtronomiæ reſtitutæ, 1629. 3. Uranometriæ, Lib. III. 1631. 4. Triangulorum Geometricorum, Lib. IV. 1631. 5. Commentationes in Motum Terræ diurnum et annuum, et in verum Aſpectabilis Cœli Typum. In the work laſt-mentioned, he declares himſelf openly for Copernicus's opinion, and even pretends to improve it. This work was compoſed in Dutch; but it was tranſlated into Latin, and printed in the year 1630. It was attacked by Fromond, a doctor of Louvain, whom Lanſberg did not live to anſwer. That taſk, however, was undertaken by a ſon of his, a phyſician; who, in 1635, publiſhed a defence of his father's work, under the title of "Jacobii Lanſbergii Medicinæ Doctoris Apologia pro Commentationibus, &c." The works of Philip Lanſberg were collected together, and printed in folio, at Middleburg, in 1663. *Bayle. Moreri.*

LANS'DOWN, an extenſive plain of England, in the county of Somerſet. A battle was fought here between the troops of Charles I. under the marquis of Hertford, and the parliament-forces under ſir William Waller, in 1643. A monument was erected on the ſpot by lord Lanſdown, grandſon to ſir Bevil Granville, who fell that day. The plain is now encloſed: four miles north of Bath.

LAN'SERD, a town of Perſia, in the province of Mazanderan, on the coaſt of the Caſpian Sea: ten miles weſt of Fehrabad.

LAN'SINBURGH, a town of the American States, in the province of New York, formerly called New City, ſituated on the eaſt ſide of Hudſon's River, oppoſite the ſouth branch of the Mohawk: 126 miles north of New York. Lat. 42. 46. N. lon. 73. 34. W.

LANS'MANS, a town of Norway: 116 miles north of Bergen.

LAN'SPERG (John), on account of his virtues ſurnamed *the Juſt*, and an author whoſe writings are much eſteemed by pious catholics, was a native of Lanſperg in Bavaria, and flouriſhed in the early part of the ſixteenth century. He purſued his ſtudies at Cologne, where he embraced the religious profeſſion among the Carthuſian monks in the year 1509. Afterwards he was elected prior of a monaſtery in the neighbourhood of Juliers. He diſtinguiſhed himſelf by his zealous endeavours to make converts from the proteſtant perſuaſion to the catholic faith, and to confirm the members of the church of Rome in a ſteady adherence to its doctrine and diſcipline. He was the author of numerous Paraphraſes, Sermons, and devotional treatiſes, which were collected together, and printed at Cologne, in 1693, in 5 volumes 4to. He died in that city in 1539. *Moreri.*

LAN'SQUENET, *ſ.* [*lance* and *knecht*, Dut.] A common foot-ſoldier. A game at cards, which took its name from the *lanſquenets*, or light German troops employed by the kings of France in the fifteenth century. It may be played at by any number of people, though a ſingle pack of cards is uſed during the deal. The dealer, who poſſeſſes an advantage, ſhuffles the cards, and, after they have been cut by another of the party, deals out two cards on his left hand, turning them up, then one for himſelf, and a fourth that he places on the table for the company, which is called the *rejouiſſance*. On this card any or all the company, the dealer excepted, may put their money, which the dealer is compelled to anſwer. The dealer continues turning the cards upwards, one by one, till two of a ſort come up, that is to ſay, two aces, two deuces, &c. which, to prevent miſtakes, or their being conſidered as ſingle cards, he places on each ſide of his own card; and as often as two, three, or the fourth ſort, of a card come up, he invariably places them, as before mentioned, on each ſide of his own card. The company has a right to take and put money upon any ſingle card, unleſs the dealer's card ſhould happen to be double, which is often the caſe, by his card being the ſame as one of the two hand-cards which he firſt dealt out on his left hand: thus he continues dealing till he brings either their cards or his own. Whilſt the dealer's own card remains undrawn, he wins; and whichever card is turned up firſt, loſes. If he deals out the two cards on his left hand, which are ſtyled the *hand-cards*, before his own, he is entitled to deal again. This advantage amounts to no more than his being exempted from loſing when he turns up a ſimilar card to his own immediately after he has turned up one for himſelf. Lanſquenet is often played without the *rejouiſſance*, the dealer giving every one of the party a card to put their money upon. It is alſo often played by dealing only two cards, one for the company and the other for the dealer. It ſhould likewiſe be obſerved, that a limitation is generally fixed for the ſum to be placed upon any card or number of cards, either in gold or ſilver, beyond which the dealer is not obliged to anſwer.

LAN'TA, or LEN'TA, a town of France, in the department of the Upper Garonne: nine miles eaſt of Toulouſe, and ſeventeen weſt-north-weſt of Revel.

LAN'TAB-LEP'TEN, a ſmall iſland on the coaſt of China, near the harbour of Macao.

LANTA'NA, *ſ.* [*à lentore*, Lat. from the pliableneſs of the branches.] AMERICAN VIBURNUM; in botany, a genus of the claſs didynamia, order angioſpermia, natural order of perſonatæ, (vitices, *Juſſ.*) The generic characters are—Calyx: perianthium one-leafed, very ſhort, converging, obſcurely four-toothed, tubular. Corolla: one-petalled, nearly equal; tube cylindric, ſlender, longer than the calyx, rather oblique; border flat, unequally four-cleft, obtuſe. Stamina: filaments four, very ſmall, placed

in the midſt of the tube of the corolla, very ſlender, of which two are a little higher; antheræ roundiſh. Piſtillum: germ roundiſh; ſtyle filiform, ſhort; ſtigma refracted, ſharp downwards like a hook, and as it were obliquely growing to the tip of the ſtyle. Pericarpium: drupe roundiſh, one-celled. Seed: nut round-pyramidal, three-celled; the loweſt cell ſterile; kernels ſolitary oblong.—*Eſſential Character.* Calyx obſcurely four-toothed; ſtigma hook-refracted; drupe with a two-celled nucleus.

Theſe are moſtly ſhrubs, very few being herbaceous. The branches are quadrangular. The leaves oppoſite by pairs, except in a few caſes, where there are three or four together; ovate and wrinkled. Flowers aggregate in axillary and peduncled heads; each flower bracted.

Species. 1. Lantana miſta, various-flowered lantana, or American viburnum: leaves oppoſite, ovate, acute, hairy; ſtem prickly at bottom; flowers in roundiſh heads, bractes lanceolate. This is about five feet in height. Trunk round or roundiſh, with an aſh-coloured bark; branches at top, ſeveral, ſhort, aſh-coloured; and from theſe ſeveral others, a long ſpan or a foot in length, quadrangular, green, hairy. Leaves reſembling thoſe of L. album; above bright green, and ſomewhat ſhining; beneath paler, deeply notched, much wrinkled, and very rugged. Whilſt the flower is yet cloſed, the lower part of the border appears of a pale red; when it opens, the tube and upper part of the border are ſaffron-coloured, but become reddiſh, and finally dark-red; this change of colour begins from the circumference, and finiſhes in the centre. Hence, the flowers in an umbel not being all opened at once, the middle appears of a ſaffron yellow, and the circumference of a red colour. From this change of colour and diverſity in the ſame umbel, this plant has obtained the name of *miſta*, or mixed. It differs from L. aurea in the leaves not being elliptic but acuminate, not ſlightly but deeply crenate, not even but much wrinkled, not dark green and ſhining very much, but pale green. The flowers of that only change from a golden to a ſaffron colour; whereas theſe change from a ſaffron colour to a dark red. Native of America. Cultivated in the Eltham garden before 1732.

2. Lantana trifolia, or three-leaved lantana: leaves tern or quatern, elliptic, ſerrate, wrinkled above, villoſe beneath; ſtem unarmed, ſpikes oblong, imbricated. Stem ſhrubby, branched, round, rugged; branches upright, round, rugged. Linnæus doubts whether this be ſpecifically diſtinct from L. annua, and Medicus does not ſettle the difficulty. It is clear however that this is a ſhrub. Native of the Weſt Indies. Introduced before 1733, by William Houſtoun, M.D. from the Havannah. His ſpecimen is in the Bankſian Herbarium. It flowers from June to September. Miller ſays, there is a variety with white flowers, and leaves not quite ſo round, entire on the edge.

3. Lantana viburnoides: leaves oppoſite, ovate, lanceolate; ſtem unarmed; flowers in headed ſpikes, involucres lanceolate. This is a ſhrub, with hairy rugged branches. Native of Arabia, on Mount Barah.

4. Lantana annua, or annual lantana: leaves oppoſite and tern, cordate rugged; ſtem unarmed, ſpikes oblong. Stem hiſpid, quadrangular, ſtriated, ſomewhat woody. Leaves cordate, rugged, petioled, oppoſite, but ſometimes three together. Corollas fleſh-coloured, with a yellow throat, not changeable; fruits purple. Reichard is of opinion, that the plant deſcribed by Medicus (p. 222.) under the name of L. trifolia, is this ſpecies. It is an annual plant, riſing with a ſtrong upright rough ſtalk, near three feet high, dividing towards the top into two or three erect branches. Leaves ſerrate, by fours at each joint, a little woolly on their under ſide. Peduncles by pairs or three at a joint, from two to three inches long, ſuſtaining a thick ſpike of large purple flowers; which are ſucceeded by large, purple, ſucculent, eatable, berries. Sent by Dr. Houſtoun before 1733 from Vera Cruz, and received ſince from the north ſide of Jamaica. Mr. Miller's ſpecimen is in the Bankſian Herbarium.

5. Lantana ſtricta, or narrow lantana: leaves oppoſite, oblong lanceolate, acute; ſtem unarmed, heads roundiſh, bractes ovate-lanceolate, ſquarroſe. Stem ſquare. Leaves very long and narrow, an inch and a half in length, and one-third of an inch wide in the middle, toothed, of a dark colour above, whitiſh underneath, on their ſurface like thoſe of ſage, on very ſhort petioles. Native of Jamaica, on Mount Diablo. Dr. Houſtoun ſent the ſeeds to Mr. Miller in 1730. The ſpecimen is in the Bankſian Herbarium.

6. Lantana radula, or jagged lantana: leaves oppoſite, ovate, acute, ſerrate, wrinkled, rough; hirſute beneath; ſtem almoſt unarmed, rough, heads oblong, bractes ovate, acute. This is a ſhrub, native of the Weſt Indies. It has its trivial name from the extreme ruggedneſs of the leaves.

7. Lantana camara, or various-coloured lantana: leaves oppoſite, ſtem unarmed, branched; flowers headed-umbelled leaflets. Stem ſhrubby, a fathom in height, angular, ſomewhat rugged. Medicus doubted whether this were different from L. miſta or not; but, after three years ſcrupulous obſervation, he determined in the affirmative, from the difference in the leaves and colour of the flowers. Native of the Weſt Indies; cultivated in 1691, in the royal garden at Hampton Court; flowers from April to September.

8. Lantana odorata, or ſweet-ſcented lantana: leaves oppoſite and tern elliptic, wrinkled; ſtem unarmed, heads ſquarroſe, bractes lanceolate; peduncles ſhorter than the leaf. Leaves very much wrinkled. Native of the Weſt Indies: flowers from May to November.

9. Lantana recta, or upright lantana: leaves oppoſite, oval, wrinkled; ſtem unarmed, heads ſquarroſe, bractes oblong, peduncles longer than the leaf. Native of Jamaica. Cultivated by Mr. Miller in 1758. It flowers from June to Auguſt.

10. Lantana involucrata, or round-leaved lantana: leaves oppoſite and tern, rhomb-ovate, blunt, wrinkled, tomentoſe; ſtem unarmed, heads ſquarroſe, bractes ovate. Stem round, woody, branched, ſcarcely hairy. Flowers of the ſame colour as in L. trifoliata, but the yellow colour of the throat ſoon changes to white; and hence the flower is whitiſh with a pale fleſh-coloured margin. This ſpecies agrees in many reſpects with L. trifolia, as to the flowers; but in other reſpects they differ more eſſentially; for the ſtem of L. trifolia is ſquare; the leaves large, ovate-acuminate or lanceolate and ſerrate; whereas in L. involucrata the ſtem is round; and the leaves ſmall, orbiculate, and ſcarcely crenate. Native of the Weſt Indies. Mr. Miller ſays, it was ſent him from Vera Cruz by Dr. Houſtoun; but his ſpecimen in the Bankſian Herbarium is marked Havannah, 1731. It was cultivated here earlier, viz. in 1690, in the royal garden at Hampton Court. It flowers from May to July.

11. Lantana meliſſæfolia, or baum-leaved lantana: leaves oppoſite, ovate-oblong, villoſe ſoft; ſtem prickly, ſpikes hemiſpherical, bractes ſhorter by half than the tube. This is lower than moſt of the others, being ſeldom more than two feet in height. Native of South America.

12. Lantana ſcabrida, or rough lantana: leaves oppoſite, ovate-elliptic rugged, ſtem prickly, ſpikes hemiſpherical; bractes ſhorter by half than the tube, lanceolate acute. Native of the Weſt Indies; where it was found by Mr. Gilbert Alexander. It flowers in September.

13. Lantana aculeata, or prickly lantana: leaves oppoſite, ovate, ſubcordate, ſoftiſh underneath; ſtem prickly, bractes of the heads linear-wedge-form. Stem ten feet high, an inch and half thick, ſquare from top to bottom, armed with long, ſtrong, reflex, prickles, or rather thorns, for they cannot be torn off without injuring the wood. Native of the Weſt Indies; flowers from April to November. In our ſtoves it grows five or ſix feet high, and ſends out many branches. Leaves about an inch and a half long, and three-quarters of an inch broad, hairy, on ſhort foot-ſtalks. Two peduncles ariſe from the axils, towards the ends

ends of the branches, from each joint, one on each ſide; they are near two inches long, and are terminated by roundiſh heads of flowers; thoſe on the outſide are firſt of a bright red or ſcarlet, and change to a deep purple; thoſe in the centre are of a bright yellow, and change to an orange colour.

14. Lantana aurea, or golden-flowered lantana: leaves ovate-oblong, ſhining; ſtem obſcurely quadrangular, almoſt unarmed, corollas golden, changing to ſaffron-colour. Stem ſeven feet high, at firſt obſcurely quadrangular, but afterwards round, ſtriated, very thinly beſet with prickles, and not hairy. Flower yellow, becoming golden and then ſaffron-coloured. It differs from L. trifolia and involucrata in having oblong deciduous bractes, in the colour of the flowers, the form and ſplendour of the leaves; from L. meliſſæfolia in having the leaves ſhining, and ſcarcely crenate, the flowers of a deeper dye and more changeable. Native of the Bahama Iſlands.

15. Lantana ſanguinea, or bloody-flowered lantana: leaves ovate-acuminate; ſtem quadrangular, prickly; corollas ſaffron, changing to blood-red. Stem ſix feet high; the firſt year quadrangular, and armed with many ſtrong reflex prickles; after a certain time the ſtem becomes round and unarmed, but the branches continue quadrangular and prickly. Leaves wrinkled, dark green. Flowers before they expand of a deep blood-red colour; but afterwards the tube only keeps this hue; the border, eſpecially the upper ſurface, being ſaffron-coloured, then ſcarlet, and finally the ſame colour with the tube; drupe ſmall, black. This may be diſtinguiſhed from all the other ſpecies by the very deep colour of the flower, and the property of loſing its ſpines. Something like this happens to L. miſta and camara, but it is eaſily diſtinguiſhed from theſe by the leaves and colour of the flowers. It is the handſomeſt of all the ſorts, and deſerves to be eſteemed, for the brightneſs of its colour, the pleaſant though powerful ſmell, and its flowering through the whole ſummer. It may perhaps be only a variety of L. aculeata. The ſpecies have certainly been too much multiplied.

16. Lantana inermis, or unarmed lantana: ſtem unarmed; leaves lanceolate, toothed, alternate; flowers in corymbs. This riſes with a ſlender, ſmooth, ſhrubby, ſtalk, about four feet high, dividing into many quadrangular branches which grow erect. Leaves about two inches long, and an inch broad, hoary on their under ſide, on ſhort petioles. Peduncles very ſlender, axillary, alternate, towards the ends of the branches, ſupporting ſmall heads of pale purple flowers, which are ſucceeded by ſmall purple berries, each having one ſeed. The ſeeds were ſent by Dr. Houſtoun from Vera Cruz, and ſince from Jamaica.

17. Lantana urticæfolia, or nettle-leaved lantana: ſtem prickly, leaves oblong-cordate, ſerrate, oppoſite; flowers in corymbs. This riſes with a woody branching ſtem four or five feet high. Flowers yellow, in looſer bunches or heads than the other ſort. Sent from Vera Cruz by Dr. Houſtoun in 1731. His ſpecimen is in the Bankſian Herbarium. Perhaps it may not be different from L. meliſſæfolia.

18. Lantana bullata, or ſtudded lantana: leaves oblong-ovate, acuminate, ſerrate, wrinkled, alternate; flowers in heads. This riſes with a branching ſhrubby ſtalk about four feet high, covered with a dark brown bark. Leaves an inch long, and half an inch broad, very much veined on their upper ſide, pretty cloſe to the branches. Flowers terminating, on ſhort peduncles, in cloſe ſmall heads; theſe are white, and make little appearance.

19. Lantana alba, or white lantana: ſtem unarmed, leaves ovate, ſerrate, flowers in axillary ſeſſile heads. Stalk ſhrubby, ſlender, three or four feet high, dividing into many ſlender ſmooth ſquare branches. Leaves ſmall, oppoſite. Flowers axillary, at every joint, ſmall, white, in cloſe heads; they come out by pairs, and ſit cloſe to the branches. Sent by Dr. Houſtoun from Campeachy.

20. Lantana Africana. See SPIELMANNIA.

21. Lantana ſalvifolia. See BUDLEA ſalvifolia, vol. iii. p. 490.

Propagation and Culture. Theſe plants are all eaſily propagated by cuttings, except the fourth, which, being an annual plant, can only be propagated by ſeeds. They may alſo be propagated by ſeeds, which ſeveral of the ſorts produce in England, and the others may be eaſily procured from the Weſt Indies, where there is a greater variety of theſe plants growing naturally, than is at preſent known in Europe; they are all called *wild ſage* by the inhabitants of the Britiſh iſlands, but they do not diſtinguiſh the ſorts. Theſe ſeeds ſhould be ſown in pots filled with light earth, and plunged into a hot-bed of tan; the reaſon for my adviſing them to be ſown in pots, is, becauſe the ſeeds frequently remain long in the ground before they vegetate; therefore, if the plants ſhould not come up the ſame year, the pots ſhould be placed in the ſtove in winter, and the following ſpring plunged into a new hot-bed, which will bring up the plants. When theſe are fit to remove, they ſhould be each planted in a ſmall pot, and plunged into another hot-bed, obſerving to ſhade them till they have taken new root; then they ſhould have air admitted to them every day, in proportion to the warmth of the ſeaſon, to prevent their being drawn up with weak ſtalks; afterwards they muſt be treated in the ſame manner as other plants from the ſame country, till they have obtained ſtrength; then they may be removed into an airy glaſs-caſe, or a dry ſtove, where they may have a large ſhare of air in warm weather, but protected, from the cold. This is neceſſary for the young plants, which ſhould not the firſt year be expoſed to the open air; but afterwards they may be placed abroad in the warmeſt part of ſummer, and in winter placed upon ſtands in the dry ſtove, where they will continue long in flower, and many of the ſorts will ripen their ſeeds; but in winter they ſhould be ſparingly watered, for much moiſture will rot their roots. If they are propagated by cuttings, the beſt time for planting them is in July, after the plants have been expoſed to the open air for about a month, by which time the ſhoots will be hardened ſo as to be out of danger of rotting with a little moiſture. Theſe cuttings ſhould be planted in ſmall pots filled with light earth, and plunged into a moderate hot-bed; and, if they are ſcreened from the violence of the ſun in the middle of the day, they will be rooted in about ſix weeks, when they muſt be hardened gradually to bear the open air, and afterwards treated as the old plants. See VARRONIA and VIBURNUM.

LANTARGUR', a town of Lamjungh: forty-two miles north of Gorkah. Lat. 29. 5. N. lon. 84. 18. E.

LANTCHANG'. See LAN-JAN, p. 125.

LANTENAY', a town of France, in the department of the Côte d'Or: ſix miles weſt of Dijon.

LAN'TER, a river of Wurtemberg, which riſes a little to the ſouth of Freudenſtatt, and runs into the Glatt three miles north of Dornſtetten.

LAN'TER-LOO. See LOO.

LAN'TERDEN, Salop, a hamlet near the conflux of the rivers Temd and Colun, near Munſlow; where are two burrows, in which were found, not long ago, burnt bones and aſhes; and in the neighbourhood is a perfect Roman camp, called Brandon, and a Britiſh camp, called Coxall.

LANTE'RIUM, *ſ.* in old records, a cupola; the lantern on the top of a building.

LAN'TERN, or LANTHORN, *ſ.* [*lanterne*, Fr. *laterna*, Lat.] A tranſparent caſe for a candle.—A candle laſteth longer in a *lanthorn* than at large. *Bacon.*

God ſhall be my hope,
My ſtay, my guide, a *lanthorn* to my feet. *Shakeſpeare.*

A lighthouſe; a light hung out to guide ſhips:

Caprea, where the *lanthorn* fix'd on high
Shines like a moon through the benighted ſky,
While by its beams the wary ſailor ſteers. *Addiſon.*

Epictetus's lantern is ſaid to have been ſold for three

thouſand drachmas; that of Diogenes was held in great veneration among the ancients; and that of Judas is ſtill preſerved in the treaſury of St. Denys, as a very curious piece of antiquity.

Lanterns are made of glaſs, horn, paper, &c. Formerly they were made of the horn of a wild bull, called *urus*; which, when cut into thin laminæ, Pliny tells us, was very tranſparent. Thoſe of horn were firſt introduced into England by king Alfred, about the year 887, in order to preſerve his candle time-meaſurers from the wind. Sir George Staunton informs us that ſome of the Chineſe lanterns were entirely made of horn, ſo very thin and tranſparent that they were at firſt taken for glaſs, to which they prefer it as being cheaper, leſs liable to accident, and more eaſily repaired. Thoſe which ſir George had the opportunity of examining, conſiſted of one uniform piece of horn, the ſeams being made inviſible by an art found out by the Chineſe. The horns commonly uſed are thoſe of ſheep and goats, which, being bent by immerſing them in boiling water, are cut open and flattened, after which they are eaſily ſeparated into two or three thin plates. To make theſe laminæ or plates join readily, they are expoſed to the penetrating heat of ſteam till they are perfectly ſoft, and the edges that are to lap over each other are ſcraped and ſlanted off, ſo that the joining may be no thicker than any other part of the plate. Such lanterns would be extremely proper for military ſtore-houſes; and Rochou, of the National Inſtitute, was deſired to attempt to make them for the marine ſtore-houſes of France. While he was thus engaged, it occurred to him that he might ſupply the urgent neceſſities of the navy without horn, by filling up the interſtices of wire cloth with fine tranſparent glue. He firſt tinned the iron wires of the ſieve-cloth he made uſe of; but afterwards found it more convenient to give it a coating of oil-paint to preſerve it from ruſt. The glue he made uſe of was procured by boiling the clippings of parchment with the air-bladders and membranes of ſea-fiſh, not from any conviction of their ſuperiority to other articles, but as being the cheapeſt he could procure. To this he added the juice of garlic and cider, in ſuch proportions as he found to communicate great tenacity. Into this tranſparent pure glue he plunged his wire-cloth, which came out with its interſtices filled with the compound. The eaſe with which lanterns made of this ſubſtance are repaired in caſe of accident, by a ſlight coating of glue, is noted by the inventor as a great advantage; and, according to him, they were employed as ſignal-lanterns in the expedition to Ireland. *Rep. of Arts*, vol. x. p. 207.

Dark LANTERN, one with only one opening, which may alſo be cloſed up when the light is to be entirely hid, or opened when there is occaſion for the aſſiſtance of the light to diſcover ſome object. It may be preſented to the perſon one would ſee without being perceived one's ſelf. The ancients had their dark lanterns, but they differed from our's: they were covered with four ſkins, one on each ſide, or light, three of which were black, and only the fourth tranſparent. Caſaubon, who gives us the deſcription, took it from a manuſcript of Julius Frontinus. Theſe were principally uſed in their armies, when they were to march privately off from their enemies in the night-time.

The lanterns uſed at ſieges in the night-time, upon the batteries, muſt be blind or dark lanterns. There is always great proviſion of them in all ſtore-houſes.

Lanterns for ſhips are made of tin and glaſs, to light thoſe parts of a ſhip where naked candles would be dangerous, ſuch as for lighting the magazine and ſtore rooms. Thoſe uſed at the ſtern are called *poop-lanterns*, and thoſe aloft *top-lanterns*.

A lantern to afford light under water has been hinted at in our article DIVING, vol. v. p. 915. but the inventor, M. Klingert of Breſlau, will not reveal the ſecret. He ſays, "I have alſo prepared ſuch lanterns to be held in the hand; but, for particular reaſons, I muſt here abſtain from explaining their conſtruction; and only aſſure the public, on my veracity as an honeſt man, that they anſwer the intended purpoſe. A candle in theſe machines, which are very ſimple, will burn in every kind of air, in mines and pits, where all lights are extinguiſhed. They contain a ſpace equal to a cubic foot; and the candle burns, without any new addition from without, for two or three hours; they endure all concuſſions of the air, and are deranged by no motion or working in mines. Their utility, therefore, in other reſpects may readily be conceived. I ſhall not fail, however, at another time, to make them publicly known, as well as all the previous circumſtances which led me to the diſcovery." This we do not find he has yet done; therefore, whatever light his lanterns may give, we are ſtill in the dark upon that ſubject.

Feaſt of LANTERNS. See the article CHINA, vol. iv. p. 462.

Magic LANTERN. See the article OPTICS.

LANTERN, in architecture, a little dome raiſed over the roof of a building to give light, and ſerve as a crowning to the fabric. The term *lantern* is alſo uſed for a ſquare cage of carpentry, placed over the ridge of a corridor or gallery, between two rows of ſhops, to illumine them, like that of the Royal Exchange, London.

LAN'TERN-FLY, *ſ.* See the article FALGORA, vol. viii. p. 99. and the correſponding engraving.

LAN'TERN-JAWS, A term uſed of a thin viſage, ſuch as, if a candle were burning in the mouth, might tranſmit the light.—Being very lucky in a pair of long *lanthorn-jaws*, he wrung his face into a hideous grimace. *Spectator.*

LAN'TERN-MAKER, *ſ.* A maker of lanterns.—Judge what a ridiculous thing it were, that the continued ſhadow of the earth ſhould be broken by ſudden miraculous eruptions of light, to prevent the art of the *lantern-maker*. *More's Divine Dialogues.*

LAN'TERNISTS, a name aſſumed by the academicians of Toulouſe.

LAN'THONY, a village near Glouceſter, with ſome ruins of a priory, at the diſtance of about half a mile, ſituated in a deep ſolitary valley, encompaſſed with rocks which almoſt exclude the mid-day ſun. It was built by St. David, who there lived the life of a hermit, in the reign of Henry I. The remains of the priory are now converted into a farm-houſe and its proper offices, which are very extenſive. This hamlet is five miles in compaſs, by the Severn.

LAN'THONY, a hamlet in Monmouthſhire, in the northermoſt corner of the county, amongſt the Hatterell-hills. Its ſituation is in a low vale, and encloſed on all ſides with high mountains. It is famous for its monaſtery, built in 1108. The nave is ſtill remaining from eaſt to weſt, the roof excepted; and two ſides of the high tower are ſtill extant, which riſe from nearly the centre of the church. The whole ſtructure is faced with a durable and well-worked ſtone.

LANT'HORN. See LAN'TERN.

LANTIGNA'NO, a town of Etruria: thirteen miles ſouth of Piſa.

LAN'TO, a ſmall iſland in the Baltic, between the iſland of Aland and the coaſt of Finland. Lat. 60. 25. N. lon. 20. 36. E.

LANTOO'R, or BANDA, the chief iſland among thoſe called Banda Iſlands, in the Eaſtern Indian Sea. See BANDA ISLANDS, vol. ii. p. 666; and GONAPI, vol. viii. p. 673. We noticed, in the former article, that this iſland was given up to the Dutch at the peace. In the following year (1802) intelligence was received at the Hague, of a dreadful exploſion from a burning mountain in that iſland; ſo violent an exploſion as had not been known for many years. All the plantations were entirely devaſtated; a great many inhabitants loſt their lives; and the country, to the extent of ſeveral miles, was inundated by the lava. The iſland of Lantoor again ſurrendered to the Engliſh on the 9th of Auguſt, 1810.

LANTOS'CA,

LANTOS'CA, a town of France, in the department of the Maritime Alps: twelve miles north of Nice.

LANT'WIT, or LANTWIT MAJOR, an ancient town about ſix miles from Cowbridge in Glamorganſhire, was formerly in great repute for the ſingularity of its having a large market on Sunday mornings: this has been long ſince aboliſhed, and no market eſtabliſhed in its ſtead. It has, however, a large fair for lambs on the 11th of June.

LANT'ZENDORF, a town of Auſtria: five miles ſouth of Vienna.

LANT'ZENKIRCH, a town of Auſtria: two miles ſouth of Neuſtadt.

LANVEN'EGEN, a town of France, in the department of the Morbihan: three miles ſouth-weſt of Le Faouet, and ſeventeen north of L'Orient.

LANVIHAN'GEL, a village in Carmarthenſhire, with fairs May 12 and Oct. 10.

LANVOL'LON, a town of France, in the department of the North Coaſts: eleven miles north-weſt of St. Brieuc, and eight ſouth-eaſt of Pontrieu.

LANU'GINOUS, *adj.* [*lanuginoſus*, Lat.] Downy; covered with ſoft hair.

LANU'GO, *ſ.* The ſoft down of plants, like that growing on the fruit of the peach-tree.

LANU'VIUM, in ancient geography, a town of Latium, about ſixteen miles from Rome on the Appian road. Juno had there a celebrated temple, which was frequented by the inhabitants of Italy, and particularly by the Romans, whoſe conſuls on firſt entering upon office offered ſacrifices to the goddeſs. The ſtatue of the goddeſs was covered with a goat's ſkin, and armed with a buckler and ſpear, and wore ſhoes which were turned upwards in the form of a cone.

LANU'ZA (Jerome-Baptiſt de Sellan de), a pious Spaniſh prelate, was born at Ixar in Saragoſſa, in the year 1553. Early in life he entered into the Dominican order, and by his abilities and learning, as well as his piety, acquired conſiderable reputation. He taught divinity at Valencia and Saragoſſa; and, after filling different inferior poſts, was choſen provincial of his order. He took an active part in the diſputes on the ſubject of *grace*, and was ſo zealous an opponent of the diſciples of St. Auguſtine, that he obtained the ſurname of *the Dominic of his age*. In the year 1616, he was nominated biſhop of Balbaſtro; and in 1622, was tranſlated to the ſee of Albarazin; where he died in 1625. He was the author of ſeveral practical and devotional works, which are ſpoken of in high terms of commendation; as are, alſo, his Homilies, which were tranſlated into Latin, and publiſhed at Mentz, in 1649, in 4 vols. 4to. and have likewiſe appeared in a French verſion. *Moreri.*

LANWIN'IO, a village in Carmarthenſhire, with a fair Nov. 12.

LAN'ZA, or LAN'SA, a town of Spain, in Navarre: eight miles north of Pamplona.

LAN'ZO, a town of France, in the department of the Po, on the Stura: ſixteen miles eaſt of Suſa, and eleven north-weſt of Turin.

LANZO'NI (Joſeph), a phyſician, was born at Ferrara on the 26th of October, 1663. From his early childhood he exhibited a ſtrong inclination for literature, which his parents indulged, by obtaining for him the beſt maſters. He diſtinguiſhed himſelf particularly in the ſchools of philoſophy and of medicine, and graduated in both theſe ſciences in the year 1683. In the following year, at the age of twenty-one, he was appointed ordinary profeſſor, and diſplayed talents which did honour to the univerſity of Ferrara, during the long period in which he filled that office. He died in February 1730, at the age of 66; having acquired a high reputation by the ſucceſs of his practice, and obtained the confidence and eſteem of many illuſtrious perſonages. He was diſtinguiſhed likewiſe by his genius in Latin and Italian poetry; and he was the reſtorer and ſecretary of the academy of Ferrara, and a member of many of the learned ſocieties of his time. He left a conſiderable number of works, both publiſhed and in manuſcript; and a complete collection of both was printed at Lauſanne, in 1738, in 3 vols. 4to. with an account of his life, under the title of "Joſephi Lanzoni, Philoſophæ et Medicinæ Doctoris, in Patria Univerſitate Lectoris primarii, &c. Opera omnia Medico-phyſica et Philologica." *Eloy. Dict. Hiſt.*

LA'O, a town of the iſland of Cuba: twenty-five miles weſt of Havannah.

LA'O, or LE'AO, a city of China, of the ſecond rank, in Chan-ſi: 230 miles ſouth of Pekin. Lat. 37. 4. N. lon. 112. 57. E.

LA'O-KUN-TIM', a town of Chineſe Tartary: fifty miles ſouth-weſt of Ning-yuen-tcheou.

LA'O-TIM', a town of China, of the third rank, in Pe-tche-li: twenty miles ſouth-ſouth-eaſt of Lan.

LA'O-TING', a city of China, of the ſecond rank, in Quan-tong: 1155 miles ſouth-ſouth-weſt of Pekin. Lat. 22. 54. N. lon. 110. 34. E.

LAOBO'TAS, or LAB'OTAS, a Spartan king, of the family of the Agidæ, who ſucceeded his father Echeſtratus, B. C. 1023. During his reign war was declared againſt Argos by Sparta. He ſat on the throne for thirty-ſeven years, and was ſucceeded by Doryſſus his ſon. *Pauſanias.*

LAOC'OON, in fabulous hiſtory, a ſon of Priam and Hecuba, or according to others of Antenor or of Capys. Being prieſt of Apollo, he was commiſſioned by the Trojans to offer a bullock to Neptune to render him propitious. During the ſacrifice two enormous ſerpents iſſued from the ſea, and attacked Laocoon's two ſons who ſtood next to the altar. The father immediately attempted to defend his ſons; but the ſerpents falling upon him ſqeezed him in their complicated wreaths, and he died in the greateſt agonies. This puniſhment was ſaid to have been inflicted upon him for diſſuading the Trojans from bringing into the city the fatal wooden horſe which the Greeks had conſecrated to Minerva, as alſo for his impiety in hurling a javelin againſt the ſides of the horſe as it entered within the walls. *Virg. Æn.* ii. According to Hyginus, he ſuffered the above puniſhment for his marriage againſt the conſent of Apollo; or, according to others, for his polluting the temple, by his commerce with his wife Antiope before the ſtatue of the god. *Hygin.* fab. 135.

Of this tragical ſtory there is extant a celebrated monument of Greek ſculpture executed in marble by Ageſander, Polydorus, and Athenodorus, the three famous artiſts of Rhodes. Ageſander is ſuppoſed to have been the father of the two latter. This remain of antiquity was found at Rome, in the ruins of the palace of Titus, in the beginning of the ſixteenth century, under the pontificate of Julius II. and afterwards depoſited in the Farneſe palace. Laocoon is here preſented with his two ſons, with two hideous ſerpents clinging round his body, gnawing it, and injecting their poiſon: Virgil has given us the following deſcription of the fact:

———Serpens amplexus uterque
Implicat, et miſeros morſu depaſcitur artus:———
Corripiunt, ſpiriſque ligant ingentibus, et jam.
Bis medium amplexi, bis collo ſquamea circum
Terga dati, ſuperant capite et cervicibus altis. Æn. ii. 201.

The ſerpents firſt in fiery volumes bound
Laocoon's ſons, and wrapt them round and round;
Devour'd the children in the father's view;
Then on the miſerable father flew:
Twice round his waiſt and round his neck they rear
Their winding heads, and hiſs aloft in air. *Pitt.*

This ſtatue exhibits the moſt aſtoniſhing dignity and tranquillity of mind in the midſt of the moſt excruciating torments. Pliny ſays of it, that it is, *opus omnibus picturæ et ſtatuariæ artis, præferendum.*

When Italy was overrun by the French during the late revolution, this wonderful monument of ancient art was removed, along with the celebrated Apollo Belvidere, &c. from the Vatican, where they had been ſeen and admired

for 300 years, and placed in the Muſeum of Arts at Paris; and from the deſcription of this Muſeum, publiſhed by authority at Paris in 1805, we ſhall extract ſome particulars relating to this monument of antiquity; firſt obſerving, that the right arm of the father and two of the arms of the children, which were wanting, have been ſupplied by arms moulded on the groupe in plaſter of Paris.

"Pliny ſays, that the groupe was ſculptured out of a ſingle block. It might have appeared ſuch to him; ſince even Raphael ſaw but three pieces; Mengs counted five; and we add a ſixth, namely, the plinth on which the altar reſts, and to which the other pieces of the block are attached. This plinth might belong to the fifteenth century, but the caſing *(l'encaiſſement)* of pieces of the block does not allow us to ſuppoſe that the ſupport which the plinth furniſhes made one piece with the altar. It muſt have conſtituted, then, a ſixth piece in the antique. The firſt piece comprehends the body of the altar and the trunk of the ſtatue of the father, to the middle of the left leg in the fold of the ſerpent, and a third of the right thigh behind the coil of the ſerpent. The ſecond piece includes the front of the altar covered with drapery, the remainder of the thigh, together with the right leg of the father, and the whole of the youngeſt ſon. The third piece comprehends the eldeſt ſon, with his drapery, of which the lower part is let into the plinth. The fourth piece forms the left leg of the father, the joint of which is viſible under the coil of the ſerpent and the faſtening in the plinth. The fifth piece makes the right arm of the father; and the hole for faſtening the original cramp is viſible in the ſhoulder. Laſtly, The ſixth piece is the plinth, on which reſt the altar, the left leg of the father, and the eldeſt ſon.

"It has been remarked, that the right leg of the eldeſt ſon is ſhorter than the left; but it ſeems not to have been noticed that the ſame inequality prevails in the two legs of the father. The right leg of the eldeſt ſon meaſures 1 foot 6 inches, the left 1 foot 3 inches 4 lines; difference, 2 inches 8 lines. The whole length of the left leg of the father is 2 feet 1 inch 2 lines, that of the right 2 feet 2 lines; difference, 1 inch. It has been ſuppoſed that this diſproportion was intended to correct an error in viſion, which muſt diminiſh in appearance the length of that leg, if this groupe were placed, as it ought to be, conſiderably below the eye; but it ſtrikes us that then the ſame difficulty would occur reſpecting the ſhort leg, which by the ſame optical effect muſt appear ſtill ſhorter. Another reaſon then muſt be given; and, ſince we cannot ſuppoſe that in nature ſo conſiderable a difference would occur, it is more probable that theſe are faults of the artiſts. The tibia of the ſtretched-out leg of the Apollo is an inch longer than the other, and a ſtill greater inequality is obſervable in the Diana. It might be ſtill more difficult to aſſign the reaſon for one particularity which we have noticed in the right hand of the eldeſt of the ſons; the thumb of which has three phalanges, or bones, inſtead of two."

Though the Laocoon is certainly one of the moſt valuable productions of the chiſſel now in exiſtence, the evidence of its antiquity is not in favour of the ſuppoſition that it was executed in ancient Greece. We may alſo remark that the paſſage quoted from the Æneid probably furniſhed the artiſts with the deſign; and that it was executed in or ſubſequent to the time of Virgil. The comments on the ſeveral pieces of which the groupe is now compoſed prove that Pliny had not cloſely obſerved it: but we are not to conclude that it contained as many pieces in its original as in its reſtored ſtate. Before modern amateurs criticize the ancient maſters of the chiſſel by the rule and compaſs, they ſhould carefully inveſtigate the myſteries of their art.

LAOD'AMAS, a ſon of Alcinous, king of the Phæacians, who offered to wreſtle with Ulyſſes, while at his father's court. Ulyſſes, mindful of the hoſpitality of Alcinous, refuſed the challenge of Laodomas. *Homer.*

LAODAMI'A a daughter of Acaſtus and Aſtydamia, who married Proteſilaus, the ſon of Iphiclus king of a part of Theſſaly. The departure of her huſband for the Trojan war was the ſource of grief to her; but, when ſhe heard that he had fallen by the hand of Hector, her ſorrow was increaſed. To keep alive the memory of a huſband whom ſhe had tenderly loved, ſhe ordered a wooden ſtatue to be made, and regularly placed in her bed. This was ſeen by one of her ſervants, who informed Iphiclus, that his daughter's bed was daily defiled by an unknown ſtranger. Iphiclus watched his daughter; and, when he found that the intelligence was falſe, he ordered the wooden image to be burned, in hopes of diſſipating his daughter's grief. He did not ſucceed. Laodamia threw herſelf into the flames with the image, and periſhed. This circumſtance has given occaſion to fabulous traditions related by the poets, which mention, that Proteſilaus was reſtored to life and to Laodamia for three hours, and that, when he was obliged to return to the infernal regions, he perſuaded his wife to accompany him. *Virg. Æn. Ovid.* Her. Ep. xiii. *Hygin.* fab. 104.

LAOD'ICE, a daughter of Priam and Hecuba, who became enamoured of Acamas, ſon of Theſeus, when he came with Diomedes from the Greeks to Troy with an embaſſy to demand the reſtoration of Helen. She obtained an interview and the gratification of her deſires at the houſe of Philebia the wife of a governor of a ſmall town of Troas which the Greek ambaſſador had viſited. She had a ſon by Acamas, whom ſhe called Munitus. She afterwards married Helicaon ſon of Antenor, and Telephus king of Myſia. Some call her *Aſtyoche.* According to the Greek ſcholiaſt of Lycophron, Laodice threw herſelf down from the top of a tower, and was killed, when Troy was ſacked by the Greeks.

LAOD'ICE, a ſiſter of Mithridates, who married Ariarathes king of Cappadocia, and afterwards her own brother Mithridates. During the ſecret abſence of Mithridates, ſhe proſtituted herſelf to her ſervants, in hopes that her huſband was dead; but, when ſhe ſaw her expectations fruſtrated, ſhe attempted to poiſon Mithridates, for which ſhe was put to death.—A queen of Cappadocia, put to death by her ſubjects for poiſoning five of her children. —A ſiſter and wife of Antiochus II. She put to death Berenice, whom her huſband had married. She was murdered by order of Ptolemy Evergetes, B.C. 246.

LAOD'ICE, the mother of Seleucus. Nine months before ſhe brought forth, ſhe dreamt that Apollo had introduced himſelf into her bed, and had preſented her with a precious ſtone, on which was engraved the figure of an anchor, commanding her to deliver it to her ſon as ſoon as born. This dream appeared the more wonderful when in the morning ſhe diſcovered in her bed a ring anſwering the ſame deſcription. Not only the ſon that ſhe brought forth, called Seleucus, but alſo all his ſucceſſors of the houſe of the Seleucidæ, had the mark of an anchor upon their thigh. *Juſtin.*

LAODICE'A, in ancient geography, a town of Aſia, on the confines of Media and Perſia Propria.—A town of Meſopotamia, according to Pliny; being one of the ſix towns built by Seleucus under this name.—A town of the Peloponneſus, in the Megapolitide, according to Polybius and Thucydides; the ſame with the *Ladoncea* of Pauſanias.

LAODICE'A CABIO'SA, a town of Aſia, in Syria, ſituated eaſtward near mountains, weſt of Emeſa and the river Orontes. It was favoured by the emperor Severus, on account of its attachment to the intereſts of the empire. By way of diſtinction, it was called "Laodicea ad Libanum."

LAODICE'A COMBUS'TA, a town of Aſia, in Lycaonia, eaſt of Philomelium; ſuppoſed to have derived its name from traces of ancient volcanos.

LAODICE'A ON THE LY'CUS in ancient geography, a town of Aſia, in Phrygia, at firſt called *Dioſpolis*, then *Rhoas.* It was built by Antiochus ſon of Stratonice, and called

called after his conſort Laodice. It was long an inconſiderable place; but increaſed toward the age of Auguſtus Cæſar, after having ſuffered in a ſiege from Mithridates. The fertility of the ſoil, and the good fortune of ſome of its citizens, raiſed it to greatneſs. Hiero, who adorned it with many offerings, left the people his heir to more than 2000 talents. After that benefactor followed Zeno the rhetorician; and his ſon Polemo, as renowned a ſophiſt as ever lived. This perſon flouriſhed at Smyrna; but was buried here by the Syrian gate, near which were the ſepulchres or coffins of his anceſtors. Laodicæa, though inland, grew more potent than the cities on the coaſt, and became one of the largeſt towns in Phrygia. It was often damaged by earthquakes, and reſtored by its own opulence or by the munificence of the Roman emperors. Theſe reſources failed; and the city, it is probable, became early a ſcene of ruin. About the year 1097 it was poſſeſſed by the Turks, and ſubmitted to Ducas general of the emperor Alexis. In 1120 the Turks ſacked ſome of the cities of Phrygia by the Mæander, but were defeated by the emperor John Comnenus, who took Laodicea, and built anew or repaired the walls. About 1161 it was again unfortified. Many of the inhabitants were then killed with their biſhop, or carried with their cattle into captivity by the Turks. In 1190 the German emperor, Frederic Barbaroſſa, going by Laodicea, with his army, toward Syria, on a croiſade, was received ſo kindly, that he prayed on his knees for the proſperity of the people. About 1196 this region with Caria was dreadfully ravaged by the Turks. The ſultan, on the invaſion of the Tartars in 1255, gave Laodicea to the Romans; but they were unable to defend it, and it ſoon returned to the Turks. It is now called *Ladikieh*, but is ruined and deſerted. Several remains of its ancient grandeur are, however, ſtill to be ſeen; particularly the ruins of two theatres and an amphitheatre. The memory of this place is conſecrated in Scripture, being one of the ſeven churches to which St. John in the Apocalypſe addreſſes himſelf, commended by St. Paul.

LAODICE'A ON THE SEA, according to Strabo, was a town of Seleucis in Syria, extremely well built, with a commodious harbour. The country about it yielded great quantities of wine. The city took its name from *Laodice*, mother of Seleucus the founder of it. Now LATAKEA, which ſee.

LAODICE'AN, *adj.* [from *Laodicea.*] Belonging to Laodicea.

LAODICE'AN, *ſ.* [from the *adj.*] A native of Laodicea.

LAODICE'NE, a province of Syria, which receives its name from Laodicea, its capital.

LAOD'OCHUS, a man's name. The ſon of Antenor.

LAOG'ORAS, a king of the Dryopes, who accuſtomed his ſubjects to become robbers. He plundered the temple of Apollo at Delphos, and was killed by Hercules. *Apollodorus.*

LAOM'EDON, a king of Troy, whoſe hiſtory is involved in fables. He was ſon of Ilus king of Troy; and married Strymo, called by ſome Placia, or Leucippe, by whom he had Podarces, afterwards known by the name of *Priam*, and Heſione. He built the walls of Troy; and was aſſiſted by Apollo and Neptune, whom Jupiter had baniſhed from heaven, and condemned to be ſubſervient to the will of Laomedon for one year. When the walls were finiſhed, Laomedon refuſed to reward the labours of the gods; and ſoon after his territories were laid waſte by the ſea, or Neptune, and his ſubjects were viſited by a peſtilence ſent by Apollo. Sacrifices were offered to the offended divinities; but the calamities of the Trojans increaſed, and nothing could appeaſe the gods, according to the words of the oracle, but annually to expoſe to a ſea-monſter a Trojan virgin. Whenever the monſter appeared, the marriageable maidens were aſſembled, and the lot decided which of them was doomed to death for the good of her country. When this calamity had continued for five or ſix years, the lot fell upon Heſione, Laomedon's daughter. The king was unwilling to part with his daughter, whom he loved with uncommon tenderneſs; but his refuſal would irritate more ſtrongly the wrath of the gods. In the midſt of his fear and heſitation, Hercules came and offered to deliver the Trojans from this public calamity, if Laomedon would promiſe to reward him with a number of fine horſes. The king conſented; but, when the monſter was deſtroyed, he refuſed to fulfil his engagements, and Hercules was obliged to beſiege Troy, and take it by force of arms. Laomedon was put to death after a reign of twenty-nine years; his daughter Heſione was given in marriage to Telamon, one of the conqueror's attendants; and Podarces was ranſomed by the Trojans, and placed upon his father's throne. *Homer. Il.* xxi. According to Hyginus, the wrath of Neptune and Apollo was kindled againſt Laomedon, becauſe he refuſed to offer on their altars as a ſacrifice all the firſt born of his cattle, according to a vow he had made. *Hygin.* 89.

LA'ON, a city of France, and capital of the department of the Aiſne; before the revolution, the capital of a ſmall country called Laonnois, and the ſee of a biſhop, who was a duke, and the ſecond peer of France. It contains about 8000 inhabitants: 5¾ poſts north-weſt of Rheims, and 16½ north of Paris. Lat. 49. 34. N. lon. 3. 42. E.

LA'OS, in ancient geography, a town of Italy, in Lucania, weſt of Brutium, and near it. It was ſituated on a ſmall gulf, diſtant 400 ſtadia from the town of Hyole. It was founded by a colony of Sybarites.

LA'OS, or LA'O, a country of Aſia, bounded on the north by the Chineſe province of Yun-nan, on the eaſt by Ton-quin, on the ſouth by Cambodia, and on the weſt by Siam and Ava. It is ſurrounded on all ſides by mountains, covered with foreſts. The country ſeems to be generally flat, and to have ſcarcely any hills or mountains, but thoſe which encompaſs it on all ſides, and ſerve as barriers againſt the potent kingdoms with which it is encloſed. From theſe mountains deſcend infinite rivulets, into the Mecon, that croſſes the whole region from north to ſouth. Some writers make a diſtinction between the ſouthern part, which they call *Lan-jan*, or *Lan-jang*, or *Lan-tchan*; and the northern, which they call *Laos*, or *Laho*; but more commonly the name of *Lan-jan* (which ſee) is confined to the chief town of the whole county.

The climate is ſomewhat more temperate than that of Ton-quin, and more healthful. The ſoil is generally very good, and a number of canals, cut from the Mecon, ſerves both to water the lands on each ſide, and carry off the great rains which fall at ſtated times. The principal drugs found in this kingdom are benjamin and lac. Honey, wax, and cotton, are abundant. Here are alſo mines of iron, lead, tin, gold, and ſilver; and the rivers ſupply the freſh-water mya, which yields pearls. The religion and manners of the people reſemble thoſe of Siam; but in perſonal appearance they are like the ſouthern Chineſe. Duhalde has given ſome account of this country, the capital of which is denominated Mohang-Lang by the Chineſe. Laos, in his time, was tributary to Ava; but its chief trade was with the Chineſe. The articles exported are tin and ſulphur, (perhaps cinnabar or realgar,) cotton, tea, and ſapan or Braſil wood. The chief river is denominated Meinam-Kong, which paſſes through Cambodia; and its different branches bear different appellations. This grand ſtream, in Mr. Dalrymple's map of Exterior India, is called the Kion-Long, or May-kaung. Mr. Arrowſmith derives it from the Tibetian Alps, where it is called the Satchou, and by D'Anville the Lantſan-kiang.

Of this country, Turpin (cited by Pinkerton) has given the moſt recent account. The name Laos, he ſays, denotes one thouſand elephants, with which animals the country abounds. The climate is ſo temperate, and the air ſo pure, that men are ſaid to retain their health and vigour, in ſome inſtances, to the age of one hundred years. The flat part of the country reſembles Siam, but the ſoil on the eaſt bank of the river is more fertile than that on

the weſt. The rice is preferred to that of other oriental countries. The ivory is beautiful; but the horn of the rhinoceros is particularly eſteemed from a ſuperſtitious notion, that the poſſeſſor, who keeps it, inſures his felicity. The fields, abounding with flowers, afford food for numerous ſwarms of bees, which ſupply excellent wax and honey. In the province of Laos, whence the kingdom derives its name, is a deep mine, which furniſhes rubies and beautiful emeralds, one of which, in the royal treaſury, is ſaid to be as large as a common orange. The inhabitants of this kingdom are celebrated for their honeſty and fidelity; and ſo anxious are they to maintain their reputation in this reſpect, that, if a traveller be robbed, the neareſt town or village is obliged to indemnify him. At the ſame time they are indolent and luxurious, and addicted to the ſtudy and practice of magic. The army of Laos is eſtimated by Turpin at 500,000 combatants; but he adds a circumſtance which ſomewhat affects his credibility, that a numerous army might be raiſed of men who have lived a century. The people of this country are not very diſtinguiſhed for their ſobriety and temperance, as they eat daily four repaſts of rice, fiſh, and the fleſh of the buffalo; the buffalo and veniſon being common in their markets. Marriages are eaſily contracted, and no leſs eaſily diſſolved; and the rich entertain many concubines; but one very impreſſive and curious circumſtance attends their marriages, which muſt not be omitted: they ſelect the oldeſt married couple they can find, who have lived in perfect agreement together, and promiſe before them to follow their example till death. A funeral reſembles a feſtival; and a ſum of money is depoſited in the tomb, which is circulated, after a certain period, by the prieſts. The commerce of this country was chiefly carried on in former times with Siam; but, after the irruption of the Birmas, it paſſed to Pegu; at a later period, the trade of Laos has been transferred to Cambodia. The inhabitants of Laos boaſt that the Siameſe borrowed the art of writing on palm-tree leaves from them. The tongue and characters are the ſame; but it is ſaid, that the Laoſian cannot pronounce the letters L and R.

The ancient worſhip of theſe people is ſaid to have been directed to one God, the creator of all, who was only to be pleaſed by the exerciſe of virtue, and not by ſacrifices, ceremonies, and the obſervance of certain days. But the purity of their faith has been corrupted by their intercourſe with the Chineſe. They believe in regular renovations of the univerſe; and that our earth has attained the age of 18,000 years. Polygamy is one of the promiſed joys of paradiſe, and the women are aſſured, that if they lead a virtuous life they ſhall be changed into men. The prieſts take comfort, under the privations of celibacy, from a perſuaſion which they indulge, that in another world they ſhall be able, by the privilege of their order, to create females at their pleaſure. Some of their ceremonies, like thoſe of Thibet, ſeem to have been derived from the Neſtorian Chriſtians. To the rich they ſell diſpenſations and pardons; while the poor alone are condemned to perpetual miſery. The king of Laos is ſaid to be an abſolute independent prince, and to acknowledge no ſuperior, either in temporal or ſpiritual concerns. In him is veſted the whole property of lands, and he diſpoſes at pleaſure of the effects of his ſubjects; nor can any family in the kingdom inherit or poſſeſs any thing left by will. *Cruttwell's Gaz. Pinkerton's Geogr.*

LAONOME'NE, a daughter of Theſpius, by whom Hercules had two ſons, Teles and Menippides, and two daughters, Lyſidice and Stentedice. *Apollodorus.*

LAOTH'OE, a daughter of Altes, a king of the Leleges, who married Priam, and became mother of Lycaon and Polydorus. *Homer* —One of the daughters of Theſpius, mother of Antidus, by Hercules. *Apollodorus.*

LAOU'R, a town of Hindooſtan, in Bengal: forty miles north-weſt of Silhet. Lat. 25. 7. N. lon. 91. 20. E.

LAP, *ſ.* [læppe, Sax. *lappe*, Ger.] The looſe part of a garment, which may be doubled at pleaſure.—If a joint of meat falls on the ground, take it up gently, wipe it with the *lap* of your coat, and then put it into the diſh. *Swift.*—The part of the clothes that is ſpread horizontally over the knees as one ſits down, ſo as any thing may lie in it.—Men expect that religion ſhould coſt them no pains, and that happineſs ſhould drop into their *laps*. *Tillotſon.*

He ſtruggles into breath, and cries for aid;
Then, helpleſs, in his mother's *lap* is laid.
He creeps, he walks; and, iſſuing into man,
Grudges their life from whence his own began. *Dryden.*

To LAP, *v. a.* To wrap or twiſt round any thing.—He hath a long tail, which, as he deſcends from a tree, he *laps* round about the boughs, to keep himſelf from falling. *Grew.*—To involve in any thing.—Here was the repoſitory of all the wiſe contentions for power between the nobles and commons, *lapt* up ſafely in the boſom of a Nero and a Caligula. *Swift.*

Indulgent fortune does her care employ,
And, ſmiling, broods upon the naked boy;
Her garment ſpreads; and *laps* him in the folds,
And covers with her wings from nightly colds. *Dryden.*

To LAP, *v. a.* To be ſpread or turned over any thing.—The upper wings are opacous; at their hinder ends, where they *lap* over, tranſparent like the wing of a fly. *Grew.*

To LAP, *v. n.* [lappan, Sax. *lappen*, Dut.] To feed by quick reciprocations of the tongue.—The tongue ſerves not only for taſting, but for maſtication and deglutition: in man, by licking; in the dog and cat kind by *lapping*. *Ray on Creation.*

To LAP, *v. a.* To lick up:

For all the reſt
They'll take ſuggeſtion, as a cat *laps* milk. *Shakeſpeare.*

LAP'-DOG, *ſ.* A little dog, fondled by ladies in the lap.—One of them made his court to the *lap-dog*, to improve his intereſt with the lady. *Collier.*

Theſe, if the laws did that exchange afford,
Would ſave their *lap-dog* ſooner than their lord. *Dryden.*

Lap-dogs give themſelves the rouſing ſhake,
And ſleepleſs lovers juſt at twelve awake. *Pope.*

LA'PA, one of the Sooloo Iſlands. Lat. 5. 25. N. lon. 120. 42. E.

LA'PA, a town of Circaſſia, on the Cuban. Lat. 44. 50. N. lon. 58. 34. E.

LAPAC'TICS, *ſ.* [from λαπαζω, Gr. to evacuate.] A term uſed by the old writers in medicine to expreſs ſuch things as gently looſened the belly. It was ſometimes applied to the cathartic medicines, and ſometimes to thoſe foods which were of this tendency.

LAP'ARY, a town of Hindooſtan, in Allahabad: ſeven miles north of Jionpour.

LAP'ATA, a chain of mountains of Africa, called the *Backbone of the World*, extending from north to ſouth about 600 miles. Lat. 12. 30. to 20. S. lon. 27. to 33. E.

LAPA'THIOS, in ancient geography, a town of the iſland of Crete, on the northern coaſt.

LAP'ATHUM, *ſ.* in botany. See CHENOPODIUM, POLYGONUM, POTAMOGETON, RHEUM, RUMEX, and SPINACIA.

LAP'ATHUS. See LAPITHA.

LAPAU', a river of Weſtphalia, which runs into the Luhe eight miles weſt-ſouth-weſt of Luneburg.

LAPEYROU'SIA, *ſ.* [ſo named by the abbé Pourret, of Narbonne, in honour of M. Picot Lapeyrouſe, author of a ſplendid botanical book on the genus Saxifraga, and who paid great attention to the natural hiſtory of the Pyrenées.] In botany, a genus of the claſs triandria, order monogynia, natural order enſatæ, *Linn.* (irides, *Juſſ.*) The generic characters are—Calyx: ſpatha inferior, ſhorter than the corolla; of two, rarely but one, folded valves. Corolla: of one petal, ſuperior, ſalver-ſhaped, nearly or quite equal; tube long, ſlender, triangular; its throat a

little enlarged; limb in six deep segments, shorter than the tube; either quite equal and regular, or slightly irregular; in the former case horizontal, in the latter inclining. Stamina: filaments three; inserted into the mouth of the tube, rather shorter than the limb, various in direction; antheræ oblong, incumbent. Pistillum: germen inferior, roundish; style capillary, as long as the stamens; stigmas three, linear, deeply divided, spreading and recurved, downy. Pericarpium: capsule membranous, three-lobed, or with three compressed dilated angles, of three cells and three valves, with very short partitions. Seeds: numerous, in two rows, nearly globose, or slightly angular from pressure.—*Essential Character.* Spatha of one or two folded valves. Corolla salver-shaped; limb in six deep segments, shorter than the tube. Stigmas three, deeply divided. Capsule membranous, triangular, with many globular seeds.

1. Lapeyrousia corymbosa, or level-topped lapeyrousia: flowers regular, corymbose; tube scarcely longer than the limb; stamens widely spreading; stem two-edged, somewhat branched. Native of the Cape of Good Hope, whence it was introduced by Mr. Masson in 1791. It flowers in the green-house in May and June, and requires to be kept dry when out of blossom. Stem about a foot high, zig-zag, somewhat branched, leafy, corymbose. Leaves vertical, clasping the stem with their broad sheathing base. Flowers numerous, not an inch wide, blue, generally with a white starry central mark, bordered with darker blue; sometimes they vary to white.

2. Lapeyrousia falcata, or falcate lapeyrousia: flowers slightly irregular, racemose; tube twice as long as the limb; stem compressed; leaves nearly radical, falcate, obovato-lanceolate. From the Cape; discovered by Thunberg. The stem is but five or six inches high.

3. Lapeyrousia fasciculata, or fasciculate lapeyrousia: radical leaves sword-shaped, erect; floral ones crowded, recurved, undulated, obtuse, longer than the clustered flowers; corolla regular; tube above twice as long as the limb; spatha of one valve. Native of the Cape of Good Hope. Stem very short; the flowers clustered at its summit, white, with narrow equal segments, and remarkable for being encompassed with crowded floral leaves, which are longer than themselves, recurved, undulated, and obtuse. The foliage is glaucous.

4. Lapeyrousia fissifolia, or split-leaved lapeyrousia: leaves deeply split, and clasping the stem at their base; with a short sword-shaped point; floral ones rounded. Spike leafy; corolla somewhat irregular, drooping; tube thrice as long as the limb. Received from the Cape of Good Hope by Messrs. Lee and Kennedy, with whom it flowered in Sept. 1809. Mr. Masson, however, is recorded as having sent the same to Kew in 1791. The flowers are purplish, fragrant, varying in the size and colours of their limb.

5. Lapeyrousia anceps, or sword-leaved lapeyrousia: leaves sword-shaped, decurrent, toothed at the outer edge; Stem corymbose, spreading; corolla irregular; tube thrice as long as the limb. Native of the Cape. This appears to be the original species on which Pourret founded the genus, in the Memoirs of the Society of Toulouse, vol. iii. It differs from the last in its branching corymbose stem, winged with the narrow, decurrent, toothed, bases of the perfectly sword-shaped and vertical leaves. The flowers vary with different shades of blue, and have a very long tube.

6. Lapeyrousia filenoides, or campion-flowered lapeyrousia: leaves linear-sword-shaped, entire; floral ones as long as the rest; corolla irregular; tube five times as long as the limb, erect. Native of the Cape, and, as it seems, known only to Jacquin, who has named it very happily from the aspect of the flower, which is red, with a spot of yellow at the base of three of the segments, all on one side. The stem is about a span high, branched from the bottom, and clothed with linear, glaucous, grassy, leaves, from several of the uppermost of which the flowers proceed. *Curtis's Mag.* vol. v.

LAPEYROUSIA, a generic term applied by Thunberg to the OSMITES calycina, which see.

LAP'ELA, a town of Portugal, in the province of Entre Duero e Minho, on the Minho: fourteen miles east of Valença, and three west of Monçao.

LAPFIO'RD, a town of Sweden, situated in a bay of the gulf of Bothnia: eight miles south of Christianstadt.

LAP'FUL, *s.* As much as can be contained in the lap. —One found a wild vine, and gathered thereof wild gourds his *lapful*, and shred them into the pot of pottage. 2 *Kings.*

LAPHA'O, a town on the north coast of the island of Timor, in the Eastern Indian Sea, inhabited by Portuguese or descendants of Portuguese, situated at the bottom of a bay; and containing a church and about sixty houses; the inhabitants are of a copper colour, with black hair; some trade is carried on with Batavia; some Chinese junks and vessels from Goa visit this port, which is only safe from March to August; at all other times, frequent hurricanes render the harbour unsafe.

LA'PHRIA, a surname of Diana at Patræ in Achaia, where she had a temple, with a statue of gold and ivory which represented her in the habit of a huntress. This name was given from the goddess of Laphrius, the son of Delphus, who consecrated the statue to her. There was a festival of the goddess there, called also Laphria. *Pausanias.*

LAPHYS'TIUM, a mountain in Bœotia, where Jupiter had a temple, whence he was called *Laphystius.* It was here that Athamas prepared to immolate Phryxus and Helle, whom Jupiter saved by sending them a golden ram. *Pausanias.*

LAP'ICIDE, *s.* [*lapicida*, from *lapis*, Lat.] A stone-cutter.

LAP'IDABLE, *adj.* Worthy of being stoned; fit to be stoned. *Not used.*

LAPIDA'RIOUS, *adj.* Stony; containing stones. *Cole.*

LAP'IDARY, *s.* [*lapidaire*, Fr.] One who deals in stones or gems.—Of all the many sorts of the gem kind reckoned up by the *lapidaries*, there are not above three or four that are original. *Woodward's Nat. Hist.*—An artificer, who cuts precious stones.

The art of cutting precious stones is very ancient; but, like other arts, its original was very imperfect. The French have succeeded in it the best; and the lapidaries of Paris, who have been a corporation since the year 1290, have carried it, especially in cutting of diamonds called brilliants, to a very great perfection, but not superior to that of the English.

There are various machines used in the cutting of precious stones, according to the quality of the matter to be cut. The diamond, which is extremely hard, is cut and formed on a wheel of soft steel, turned by a kind of mill, with diamond-dust tempered in oil of olives; and this serves to polish them as well as to cut them. Oriental rubies, sapphires, and topazes, are cut and formed on a copper wheel, with oil of olives and diamond-dust; they are afterwards polished on another copper wheel with tripoli and water. Emeralds, hyacinths, amethysts, garnets, agates, and other stones less hard, are cut on a leaden wheel, with smalt and water, and polished on a tin wheel with tripoli. Turquois, of the old and new rock, lapis girasol, and opal, are cut and polished on a wooden wheel with tripoli also.

LAP'IDARY, *adj.* [from the *s.*] Done on stone; engraved on stone; monumental; fit for a grave-stone.

To LAP'IDATE, *v. a.* [*lapido*, Lat.] To stone; to kill by stoning.

LAPIDA'TION, *s.* A stoning.

LAPID'EOUS, *adj.* Stony; of the nature of stone.—There might fall down into the *lapideous* matter, before it was concreted into a stone, some small toad, which might remain.

remain there impriſoned, till the matter about it were condenſed. *Ray.*

LAPIDES'CENCE, *ſ.* Stony concretion.—Of lapis ceratites, or cornu foſſile, in ſubterraneous cavities, there are many to be found in Germany, which are but the *lapideſcencies*, and putrefactive mutations, of hard bodies. *Brown.*

LAPIDES'CENT, *adj.* Growing or turning to ſtone.—Hardened by the air, or a certain *lapideſcent* ſuccus or ſpirit, which it meets with. *Evelyn.*

LAPIDE'US, a ſurname of Jupiter among the Romans.

LAPIDIF'IC, *adj.* Forming ſtones.—The atoms of the *lapidific*, as well as ſaline, principle, being regular, do concur in producing regular ſtones. *Grew.*

LAPIDIFICA'TION, *ſ.* The act of forming ſtones.—Induration or *lapidification* of ſubſtances more ſoft is another degree of condenſation. *Bacon.*

LAP'IDIST, *ſ.* A dealer in ſtones or gems.—Hardneſs, wherein ſome ſtones exceed all other bodies, being exalted to that degree, that art in vain endeavours to counterfeit it, the factitious ſtones of chemiſts in imitation being eaſily detected by an ordinary *lapidiſt*. *Ray.*

LAP'IDOTH, [Heb. a lamp.] A man's name.

LAPILLA'TION, *ſ.* [from the Lat. *lapis*, a ſtone.] The faculty by which ſtony concretions are formed in an animal body. *Scott.*

LA'PIS, *ſ.* [Latin.] In general, is uſed to denote a ſtone of any kind.

Lapis, in Roman antiquity, a geographical meaſure denoting a mile; becauſe miles were diſtinguiſhed by erecting a ſtone at the end of each; from the number marked on which, the length of way from Rome might be known. The device is by Plutarch aſcribed to Caius Gracchus. This was more accurately executed by Auguſtus, who erected a gilt pillar in the forum, at which all the public ways of Italy, diſtinguiſhed by ſtones, were terminated. The ſame thing was done in the Roman provinces. Hence the phraſes *tertius lapis*, *centeſimus lapis*, &c. for three, a hundred, &c. miles; and ſometimes the ordinal number without *lapis*, as *ad duodecimum*, &c. at twelve miles diſtance.

LA'PIS ÆRO'SUS, a name given to ſeveral ſorts of ſtones, and other foſſils, which had lain in the neighbourhood of copper-mines, and been impregnated with particles of copper, though not in a ſufficient degree to be thought worthy the name of copper-ores. The ſame ſort of ſtones were alſo ſometimes called *chalcites*, which made ſome confuſion, as it gave occaſion to confound them with the true chalcitis.

LA'PIS ARAB'ICUS, in the natural hiſtory of the ancients, the name of a ſtone of a fine white colour, reſembling the pureſt ivory; and which, though naturally of a firm, ſolid, and compact, texture, yet, when burnt, became light, porous, and ſpongy, and aſſumed the figure and appearance of a pumice; and was uſed like it in the compoſitions of the ancient phyſicians for cleaning the teeth.

LA'PIS AR'MENUS. See Armenian Stone, vol. ii.

LA'PIS AS'SIUS, in the natural hiſtory of the ancients, the name of a ſtone, called alſo ſarcophagus, from its power of conſuming fleſh. See Sarcophagus. It was a ſtone much uſed among the Greeks in their ſepulchres; and is recorded to have always perfectly conſumed the fleſh of human bodies, buried in it, in forty days. This property it was much famed for; and all the ancient naturaliſts mention it. There was another very ſingular quality alſo in it, but whether in all, or only in ſome peculiar pieces, is not known; that is, its turning into ſtone any thing that was put into veſſels made of it. This is recorded only by Mutianus and Theophraſtus, except that Pliny has copied it from theſe authors; and ſome of the later writers on theſe ſubjects from him. This effect might probably be a kind of incruſtation, formed on ſubſtances incloſed in veſſels made of this ſtone, by water paſſing through its pores, diſlodged from the common maſs of the ſtone, and carrying with it particles of ſuch ſpar as it contained; and, afterwards falling in repeated drops on whatever lay in its way, it might again depoſit them in ſuch ſubſtances, in form of incruſtations. The place from whence the ancients tell us they had this ſtone was Aſſos, a city in Lycia, in the neighbourhood of which it was dug; and De Boot informs us, that in that country, and in ſome parts of the eaſt, there are alſo ſtones of this kind, which, if tied to the bodies of living perſons, would, in the ſame manner, conſume their fleſh. *Hill's Notes on Theophraſtus*, p. 14.

LA'PIS BONONIEN'SIS. See Bolonian Stone, vol. iii.

LA'PIS CALAMINA'RIS. See Calamine, vol. iii.

LA'PIS COR'NEUS, or Hornstone. See Petrosilex.

LA'PIS FUN'GIFER, or Mushroom-Stone, a genus of calcareous earth found near Rome, Naples, and Florence. I. I. Ferber may be conſidered as the firſt perſon who gave a deſcription of it, in his Letters from Italy He remarked alſo that a ſpecies of it is in common uſe in the houſes of Naples and Rome; and that he ſaw another ſpecies in the poſſeſſion of M. Fabbroni, at Florence. The firſt kind, which was found in the chalk-hills near Naples, conſiſted of white calcareous ſtalactites, and a number of ſmall roots of vegetables; the latter was a hardened turf, dug up in the neighbourhood of ſome volcanic mountains. P. A. Gadd, of Stockholm, analyzed it in the year 1741, and found the reſult as follows: It burns in an open fire, and emits the ſmell of putrid vegetables. When burnt in a ſtrong fire, the greater part of it becomes dark-grey aſhes. A hundred parts of this hardened turf, loſt about fifteen parts in weight. When fuſed in a ſtronger heat, it is converted into a black opaque ſlag, which, however, is difficult to be fuſed. When a ſmall part only of this earth is fuſed with borax, the glaſs acquires a dark-green colour. If a little water be poured over the calcined earth, the water exhibits traces of diſſolved pot-aſh, but the earth does not appear to have thereby ſenſibly decreaſed in weight. One hundred parts of the earth, previouſly calcined in a crucible, being analyſed, were found to contain about 45 or 46 of ſiliceous earth, 23 argil, 7 calcareous earth, 20 calx of iron, together with traces of magneſian earth and pot-aſh. This earth, when kept in a cellar, and moiſtened with water, produces abundance of eatable muſhrooms, which in Italy are ſerved up at the table of the great as delicacies. It needs excite no wonder (ſays our account) that muſhrooms ſhould grow on the Lapis fungifer, ſince a multitude of fruitful muſhroom-ſeeds are intermixed in this ſoft ſtalactites, as well as with the hardened turf found near volcanoes. For the information of thoſe who may be deſirous of raiſing muſhrooms in this way, and of increaſing the quantity, it may be neceſſary to remark, that this effect will be produced, if, according to the experiment of M. Gleditſch, the muſhroom-ſtones kept in cellars be moiſtened with water in which muſhrooms have been waſhed. Might not this furniſh a hint to thoſe who rear muſhrooms in gardens on beds of horſe-dung?

LA'PIS HEPAT'ICUS. See the article Mineralogy.

LA'PIS INFERNA'LIS. See the article Chemistry, vol. iv. p. 311.

LA'PIS LAZ'ULI, a rock ſurrounded and almoſt covered by the ſea, on the coaſt of Nova-Scotia. It is about two miles from Monano Iſland, and ſhows the paſſage into St. John's River.

LA'PIS LAZ'ULI, in mineralogy. See Lazuli, in this volume.

LA'PIS LYD'IUS, or Touchstone. See Lydius.

LA'PIS MARMO'REUS, a marble ſtone about twelve feet long and three feet broad, placed at the upper end of Weſtminſter-hall; where was likewiſe a marble chair erected on the middle thereof, in which our kings anciently ſat at their coronation dinner, and at other times

the lord-chancellor. Over this marble table are now erected the courts of chancery and king's bench. *Orig. Jurid.* 37.

LA'PIS NEPHRIT'ICUS, or JADE-STONE. See SERPENTINUS.

LA'PIS OBSIDIA'NUS. See OBSIDIAN.

LA'PIS OLLA'RIS. See TALCUM.

LAP'ITHA, LAPATHUS, LAPETHUS, or LAPITO, in ancient geography, a town of Cyprus, about the middle of its north ſide, with a port or ſtation for ſhips, and a cognominal river. It was built by a colony of Phœnicians, according to Scylax; by Belus king of Tyre, according to Alexander Epheſius. According to Strabo, it was built by a colony of Spartans; and one of the nine kings reſided here, the laſt of whom was Piſiſtratus, who commanded the naval army of Alexander the Great. There was a temple here dedicated to Venus. The territory round it is called *Lapithia* by Diodorus and Ptolemy; *Lapithii*, the people, tainted with a degree of fatuity; hence *lapathius* denotes fooliſh. *Heſychius*. Now a village called *Lapitha*; but, according to the abbé Mariti, the longeſt and moſt extenſive in the iſland. Beſides the advantage of a fine ſituation, it furniſhes the beſt productions in the country; and, though Cyprus is in general not very abundant in fruits, Lapitha ſeems a favoured ſpot in this reſpect, and may be called *the garden of the iſland.*

LAP'ITHÆ, in ancient geography, a people of Theſſaly. See LAPITHUS.

LAPITHÆ'UM, a mountain of Laconia. *Steph. Byz.* Pauſanias (l. iii. c. 20.) mentions a town of this name in the Peloponneſus, on Mount Taygetus, in the ſame canton.

LAP'ITHUS, in fabulous hiſtory, a ſon of Apollo by Stilbe. He was brother to Centaurus; and married Orſinome, daughter of Euronymus, by whom he had Phorbas and Periphas. The name of Lapithæ was given to the numerous children of Phorbas and Periphas, or rather to the inhabitants of the country of which they had obtained the ſovereignty. The chief of the Lapithæ aſſembled to celebrate the nuptials of Perithous, one of their number. Among them were Theſeus, Dryas, Hopleus, Mopſus, Phalerus, Exadius, Prolochus, Titareſius, &c. The Centaurs were alſo invited to partake the common feſtivity; and the amuſements would have been harmleſs and innocent, had not one of the intoxicated Centaurs offered violence to Hippodamia the wife of Perithous. The Lapithæ reſented the injury, and the Centaurs ſupported their companions; upon which the quarrel became univerſal, and ended in blows and ſlaughter. Many of the Centaurs were ſlain, and they at laſt were obliged to retire. Theſeus among the Lapithæ ſhowed himſelf brave and intrepid in ſupporting the cauſe of his friends; and Neſtor alſo was not leſs active in the protection of chaſtity and innocence. Heſiod has deſcribed the battle of the Centaurs and Lapithæ; as has alſo Ovid, in a more copious manner. The invention of bits and bridles for horſes is attributed to the Lapithæ.

LAP'LAND, the moſt northerly country in Europe, extending from the North Cape, latitude 71½ N. to the White Sea, under the Arctic circle, is inhabited by the ſame people, though the country is ſubject to different powers. When the name Lapland was firſt given to the country, and that of Laplanders to the people, is uncertain. Saxo Grammaticus, in his commentaries; Adam of Bremen, in his account of the Danes; and Sturleſton of Iceland; have been cited on this ſubject, as having named the people in queſtion Scrittfinnar, or Finnar; and at preſent they are generally called *Finns* by the Norwegians. The name of Laplanders has been ſuppoſed to originate from their attachment to ſorcery; *lapp*, in their language, ſignifying a wizard.

Lapland is bounded on the north by the North Sea and Frozen Ocean; on the eaſt by the White Sea; on the ſouth by Sweden and the gulf of Bothnia; and on the weſt by Norway. On the northernmoſt ſide, are what have been denominated the Frozen Alps, or Alps of Snow, which compoſe that chain of mountains called Sevarnoi, the declivity of which, towards the eaſt and ſouth, conſiſts of lower mountains, deſerts, foreſts, fens, and lakes. The ſurface is ſuppoſed to contain from ſeventy to eighty thouſand ſquare miles, but its population cannot be aſcertained with any degree of preciſion.

Lapland is divided into three parts, viz. 1. That which is ſubject to Denmark, and is called Norwegian Lapland; this part lies between the Northern Sea, the river Pais, and the lake Enarak. 2. Swediſh Lapland, which includes all the country from the Baltic to the mountains that ſeparate Norway from Sweden. It is divided into ſix diſtricts, denominated *marcks*, or territories, which are diſtinguiſhed by the names of rivers, as Aungnerland, Elma, Peta, Lula, Torna, and Kimi. 3. The eaſtern part is ſubject to the czar of Muſcovy, ſituated between the lake Enarak and the White Sea; this part of Lapland is divided into three prefectures; namely, that of the ſea-coaſt to the north, called Mourmankoi Leporie; that upon the coaſt of the White Sea, denominated Jerſkoi Leporie; and the inland part, known by the name of Bellamoreſkoi Leporie. In Swediſh Lapland, the provinces or marcks are ſubdivided into ſmaller diſtricts called *biars*, conſiſting each of a number of families, among which the land is parcelled out by government, or the prefect of the diſtrict appointed by the king of Sweden.

Lapland may be termed a huge congeries of frightful rocks and ſtupendous mountains; interſperſed, however, with many pleaſant valleys, watered by an infinite number of rivulets that run into the rivers and lakes, which diſcharge themſelves into the gulf of Bothnia. The names of the principal lakes in Lapland are the Great Uma, the Great Windel, the Oreavan, the Stor-avan, the Great Lula; the lakes of Kartom, Kali, Torno, Enara, and Kimi. Some of theſe extend ſixty leagues in length, and contain a great number of iſlands. Stor-avan is ſaid to contain 365; and Enara contains an archipelago of iſlands ſo large, that no Laplander has lived long enough to viſit each particular iſland.

The natives believe this country to be the terreſtrial paradiſe; and indeed nothing could be more enchanting than ſuch vaſt proſpects of mountains, hills, foreſts, lakes, rivers, &c. if the country was in a moderate climate; though even here, in ſummer, the roſes are ſeen blowing wild on the bank of the lakes and rivers, with all the beautiful glow of colour which appears in thoſe cultivated in our gardens. But all the intervals between the mountains are not engroſſed by theſe agreeable proſpects; great part of the flat country is covered with brown duſky foreſts of fir and pine-trees; and theſe are often ſkirted by wide extended moraſſes, the ſtagnating waters of which in ſummer produce myriads of miſchievous inſects, that are more intolerable than even the cold of winter.

The cold of Lapland is very intenſe during the ſeaſon, freezing even brandy and the watery part of ſpirit of wine, if the latter is not highly rectified. All the lakes and rivers are frozen to a prodigious thickneſs; and the whole face of the country is covered with ſnow to the depth of four or five feet. While this continues looſe, it is impoſſible to travel; for a man's eyes are not only blinded with it, but if a ſtrong wind ſhould riſe he will be buried in the drifts of ſnow; yet, ſhould a partial thaw take place for a few hours, the ſurface of this ſnow is formed by the ſucceeding froſt into a hard impenetrable cruſt, over which the Laplander travels in his ſledge with great celerity. While the thaw prevails, the air is ſurcharged with vapours, and the climate is rainy; but, while the north wind blows, the ſky is beautifully ſerene, and the air very clear.

The North Cape is an enormous rock, which, projecting far into the ocean, and being expoſed to all the fury of the waves and the outrage of tempeſts, crumbles every year more and more into ruins. Here every thing is ſolitary, every thing is ſteril, every thing ſad and deſpondent. The ſhadowy foreſt no longer adorns the brow of the mountain; the ſinging of the birds, which enlivens

even the woods of Lapland, is no longer heard in this ſcene of deſolation; the ruggedneſs of the dark grey rock is not covered by a ſingle ſhrub; the only muſic is the hoarſe murmuring of the waves, ever and anon renewing their aſſaults on the huge maſſes that oppoſe them. The northern ſun, creeping at midnight at the diſtance of five diameters along the horizon, and the immeaſurable ocean in apparent contact with the ſkies, form the grand outlines in the ſublime picture preſented to the aſtoniſhed ſpectator. The inceſſant cares and purſuits of anxious mortals are recollected as a dream; the various forms and energies of animated nature are forgotten; the earth is contemplated only in its elements, and as conſtituting a part of the ſolar ſyſtem. Here the ſun never ſets for three months in ſummer, and in winter there is an uninterrupted night of the ſame duration; but this is qualified in ſuch a manner by a conſtant revolution of dawn and twilight, by a ſerene ſky, moon-light, and aurora borealis, reflected from the white ſurface of the earth covered with ſnow, that the inhabitants are enabled to hunt, fiſh, and proceed with their ordinary occupations. The country abounds with excellent ſprings; and is remarkable for ſome ſurpriſing cataracts, in which the water tumbles over frightful precipices, and daſhes among rocks with amazing impetuoſity and noiſe.

The heat of ſummer is almoſt as intolerable as the cold of winter. M. Acerbi found the degree of heat 84 (of Fahrenheit) in the ſhade, and 113 in the ſun. "The ground burned our feet; and the few ſhrubs we met with in our way afforded us little or no ſhelter. We were almoſt ſuffocated with heat; and to add to our ſufferings, we were under the neceſſity of wearing a dreſs of thick woollen cloth, as a ſecurity from the inſects, and to cover our faces with a veil, which in a great meaſure prevented our drawing breath." The ſummer, however, is ſhort, and the ſoil in general is ſo chilled and barren, that it produces little or no grain or fruit-trees of any kind. This ſterility, however, is not entirely owing to the ſoil, which is in many places of a rich mould, but to want of induſtry; for in ſome diſtricts the Swedes have tilled and manured pieces of ground that bear plentiful crops of rye. There is alſo great plenty of berries; ſuch as black currants; what is called the Norwegian mulberry, growing upon a creeping plant, and much eſteemed as an antiſcorbutic; raſpberries, cranberries, juniper-berries, and billberries. The tops of the mountains are ſo much expoſed to intenſe cold, and tempeſts of ſnow and hail, that no tree will grow near the ſummit; but in parts that are more ſheltered, we ſee fine woods of birch, pine, and fir, diſpoſed by nature as if they had been planted by art in rows at regular diſtances, without any undergrowth or encumbrance below. Beſides theſe trees, ſome parts of Lapland produce the ſervice-tree, the willow, the poplar, the alder, and the cornel. Among the plants of this country, the principal is the angelica; which is greatly eſteemed by the natives, who uſe it in their food. Here is likewiſe the *acetoſa*, or ſorrel, which grows in great plenty, and is of much ſervice on account of its antiſcorbutic properties. They have alſo other kinds of herbs peculiar to the country, different kinds of graſs, heath, fern, and moſs; which are all enumerated by Linnæus in his Flora Lapponica. But the vegetable which is in greateſt plenty, and of the moſt extenſive uſe among them, is the Lichen rangiferus. The rein-deer is wholly ſuſtained in winter by this vegetable; and the Laplanders themſelves boil it in broth as a cordial and reſtorative. They likewiſe uſe one ſort of it as a ſoft, eaſy, and wholeſome, bed for their new-born children.

Some ſilver and lead mines have been diſcovered in the provinces of Pitha and Lula; and two of copper, together with excellent veins of iron, in the diſtrict of Torno; but they are not at preſent worked with any conſiderable advantage. In ſome places there are veins of ſilver and gold mixed; but theſe mines are worked only for a few months in the ſummer, becauſe the froſt hinders the engines from playing. Here are found beautiful cryſtals, of a ſurpriſing magnitude, ſo hard and fine, that when poliſhed they reſemble real diamonds. In ſome places amethyſts and topazes are alſo found, but pale and cloudy; alſo a great quantity of very curious ſtones, which are too hard to be worked by the tool of the maſon. The province of Tornea affords ſome curious ſtones of an octagonal ſhape, regular, ſhining, and poliſhed by the hand of nature. In ſome rivers they fiſh for pearls, which are generally pale; but ſome of them are as bright as the oriental pearls, and much larger and rounder. Theſe pearls are found in muſſel-ſhells; and the fiſhery is not in the ſea, but in rivers.

Lapland, as well as Norway, is infeſted with a great number of grey wolves and bears, with whom the inhabitants wage perpetual war. The moſt honourable exploit among the Laplanders is that of killing a bear; and the heroes adorn their caps with a ſmall plate of lead or pewter for every bear they have ſlain. We are informed by Linnæus, that hunting the bear is often undertaken by a ſingle man, who, having diſcovered the retreat of the animal, takes his dog along with him, and advances towards the ſpot. The jaws of the dog are tied round with a cord, to prevent his barking; and the man holds the other end of this cord in his hand. As ſoon as the dog ſmells the bear, he begins to ſhow ſigns of uneaſineſs, and by dragging at the cord informs his maſter that the object of his purſuit is at no great diſtance. When the Laplander by this means diſcovers on which ſide the bear is ſtationed, he advances in ſuch a direction that the wind may blow from the bear to him, and not the contrary; for otherwiſe the animal would, by the ſcent, be aware of his approach, though not able to ſee an enemy at any conſiderable diſtance, being half blinded by the ſunſhine. When he has gradually advanced to within gunſhot of the bear, he fires upon him; and this is the more eaſily accompliſhed in autumn, as the bear is then more fearleſs, and is continually prowling about for berries of different kinds, on which he feeds at that ſeaſon of the year. Should the man chance to miſs his aim, the furious beaſt will directly turn upon him in a rage, and the little Laplander is obliged to take to his heels with all poſſible ſpeed, leaving his knapſack behind him. The bear, coming up with this, ſeizes upon it, biting and tearing it into a thouſand pieces. While he is thus venting his fury, and beſtowing all his attention upon the knapſack, the Laplander takes the opportunity of loading his gun, and firing a ſecond time; when he is generally ſure of hitting the mark; and the bear either falls upon the ſpot, or runs away.

Another remarkable animal of theſe regions is the Urſus gulo, or glutton. Linnæus aſſerts, without quoting his authority, that it never meddles with the rein-deer; by which he alludes, we preſume, to the tame flocks near dwellings; for Thraſcheninnikow, if we rightly recollect, in his deſcription of Kamtſchatka, poſitively ſtates, that, to compenſate for the ſlowneſs of its motions in the purſuit of prey, it lurks in the branches of trees, to ſurpriſe the horſe, elk, or rein-deer, that may accidentally come within its reach; and that it darts on them from its hiding-place with unerring certainty, fixing itſelf between the ſhoulders with its teeth and claws, maintaining its poſition, and ſucking the blood of its enraged victim, till the latter falls down, exhauſted with pain and fatigue. The ſame author, we believe, alludes to the ſtratagem to which it has been known to have recourſe in order to allure the rein-deer, namely, by throwing down ſome of that animal's beloved moſs, ſo as to divert its attention. But the accounts of the glutton's eating till its ſkin is ready to give way, and of its being obliged to unload itſelf, by ſqueezing its body between two trees, are quite fabulous, and might with more plauſibility be referred to ſome Roman emperor or city corporation. Though the glutton has his name from his voracity, his appetite, it ſhould ſeem, is not always of that inſatiable nature which has been aſcribed

Costume of the Laplanders.

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cribed to him. The individual, indeed, which was kept at Dreſden, would eaſily diſpatch thirteen pounds of fleſh in a day; but that which Buffon poſſeſſed, though it fed with great greedineſs, conſumed only four pounds; and another, belonging to the Hudſon's-Bay Company, was uſually ſatisfied with the ordinary allowance of a maſtiff dog. In fact, the more cloſely that we inveſtigate the hiſtory of any ſpecies of animal, the greater diverſities, both of phyſical and intellectual temperament, we ſhall probably find to obtain among the individuals of which that ſpecies is compoſed. Gmelin, we believe, is ſolitary in the opinion that this animal inhabits the warmer regions of the globe, equally with the latitudes of the north. But, even the weight of his name is inſufficient to eſtabliſh ſuch a curious fact, unleſs it can be proved by the diſtinct and reſpectable teſtimony of ſome ocular witneſs.

This country abounds alſo with elks, beavers, and otters, which live here unmoleſted, and find plenty of fiſh for their ſubſiſtence. The foreſts of this country furniſh haunts to a great number of beautiful martens and ſquirrels; which laſt change their colour every winter from brown to grey. Lapland is alſo the native country of the zibeling, or ſable, whoſe ſkin is extremely valuable. Here are likewiſe ermines, weaſels, hares, large black cats which attend the Laplanders in hunting, and little prick-eared curs trained to the game. But the moſt remarkable animal of Lapland is the rein-deer, for an account of which, ſee CERVUS tarandus, vol. iv. p. 51. Theſe animals, ſo uſeful in various reſpects to the natives, are kept at no expenſe. In ſummer they feed upon graſſes and alpine plants; in winter, as already mentioned, upon the Lichen rangiferus, or rein-deer lichen, and its varieties, which are ſo abundant as in many parts almoſt totally to cover the ground for the ſpace of ſeveral miles, and which the ſagacious animal diſcovers under the ſnow by the peculiar acuteneſs of its ſmell. Moſt of thoſe uſed for draught are caſtrated when very young, and are larger and fatter than the bucks. The woods, mountains, and rivers, are well ſtocked with wild fowl; ſuch as buſtard, partridge, groufe, heathcock, pheaſants, lapwings, ſwans, wild geeſe, wild ducks, and all ſorts of aquatic birds that build and breed in northern climates. In the beginning of the ſpring the ſwans go thither in numerous flights from the German ocean; the lapwings follow in ſuch ſwarms that they darken the ſky as they paſs along, and ſcream ſo loud that they may be heard at a great diſtance. The rocks and mountains are likewiſe frequented by eagles, hawks, falcons, kites, and other birds of prey. The rivers abound with delicious ſalmon from the Gulf of Bothnia, trout, bream, and perch of exquiſite flavour and amazing magnitude; and the inhabitants of Wardhus, or Daniſh Lapland, are well ſupplied with fiſh from the northern ocean. With reſpect to inſects, the flies hatched in the moraſſes and woods in ſummer are ſo numerous, that they often obſcure the face of day; and ſo venomous, troubleſome, and intolerable, that the rein-deer fly to the tops of the higheſt mountains for ſhelter, and the Laplanders betake themſelves to the ſea ſide, which is the leaſt infeſted by theſe peſtilent vermin. M. de Maupertuis, in his account of the voyage he made to Lapland, in company with the other French mathematicians ſent thither by the king to meaſure a degree of the meridian, gives us to underſtand, that on the tops of the mountains in Torno the flies were ſo troubleſome, that even the Finland ſoldiers, who are accounted the moſt hardy troops in the ſervice of Sweden, were obliged to cover their faces with the ſkirts of their coats from the attacks of theſe animals, which ſwarmed to ſuch a degree, that the moment a piece of fleſh appeared it was blackened all over. Some of theſe flies are very large, with green heads, and fetch blood from the ſkin wherever they ſtrike. The Laplanders ſhroud themſelves in the ſmoke of a large fire kindled for that purpoſe; yet even this diſagreeable expedient was not ſufficient to defend the French philoſophers; they were obliged, notwithſtanding the exceſſive heat, to wrap up their heads in garments made of the ſkins of the rein-deer, called in that country *lapmudes*; and to cover themſelves with a thick rampart of fir boughs; yet all theſe precautions proved ineffectual. M. de Maupertuis obſerved a lake quite covered with little yellowiſh grains, reſembling millet-ſeed, which he ſuppoſed to be the chryſaliſes of ſome of theſe inſects.

The Laplanders are low in ſtature, and are remarkable for having large heads. They are alſo ill-ſhaped, and their features harſh. They are, however, ſtrong, hardy, and robuſt, inſomuch that they will bear incredible fatigue; and it is remarked that the ſtouteſt Norwegian is not able to bend the bow of a Laplander. The women are much leſs homely than the men, and many of them are noted for a delicate and florid complexion. Theſe people are ſimple, honeſt, hoſpitable, and timorous; their timidity, however, reſpects war alone; for to many other ſpecies of dangers they expoſe themſelves with ſurpriſing intrepidity, whether in aſcending and deſcending mountains and precipices with their ſnow-ſhoes and in ſledges, or in venturing amidſt whirlpools and cataracts in little ſlender boats made of thin fir boards, faſtened together with thongs of leather, ſinews of wild beaſts, or tough and flexible twigs of willow and oſier. Theſe boats are of different ſizes, from two to ſix yards in length, managed with oars, and caulked with moſs ſo tight as to keep out the water. The Laplanders are partly ſettled, and in part wild and roving; the latter live in tents made of coarſe cloth; the former are fixed in ſmall villages near the lakes, and chiefly follow fiſhing. They build their cottages ſomewhat in the ſhape of a cone, by placing a circle of large trees or poles aſlant in the earth, and cloſe to each other, ſo that their tops meet, and form a ſmall vent for the iſſue of the ſmoke; they cover the ground within with branches of trees. In ſpring their food conſiſts principally of the eggs of water-fowl, which are extremely plentiful in thoſe parts; in ſummer and autumn, of the birds themſelves, and of various others of the partridge tribe; and in winter of the milk and fleſh of the rein-deer, and dried fiſh. They had till lately no bread; but in lieu thereof uſed the inner rind of the pine-tree dried and ground, and dried fiſh reduced to powder. They make confections and decoctions of berries, angelica, and ſorrel, which they juſtly reckon to be preſervatives againſt the ſcurvy. The Laplander is ſecured in the poſſeſſion of uninterrupted health by temperance and exerciſe, which, together with the ſeverity of the climate, brace his nerves to a very unuſual pitch of ſtrength, and fortify his conſtitution in ſuch a manner, that he often lives to the age of 100; and it is not uncommon to ſee a Laplander, in extreme old age, hunting, fowling, ſkating, and performing all the ſevereſt exerciſes with undiminiſhed agility.

The ſummer garb of the men conſiſts of a long coat of coarſe cloth, reaching down the middle of the leg, and girded round the waiſt with a belt or girdle; from which hang a Norway knife, and a pouch containing flints, matches, tobacco, and other neceſſaries; the girdle itſelf being decorated with braſs rings and chains. Their caps are made of the ſkin of the northern diver, with the feathers on; and their ſhoes of the rein-deer ſkin, with the hair outwards. They wear no linen; but the garments of the better ſort are of a finer cloth, and they delight in a variety of colours, though red, as the moſt glaring, is the moſt agreeable. In winter they are totally caſed up in coats, caps, boots, and gloves, made of the rein-deer ſkins. In the Flora Lapponica, Linnæus ſays, "Perhaps the curious reader will wonder how the people in Lapland, during the terrible cold that reigns there in winter, can preſerve their lives; ſince almoſt all birds, and even ſome wild beaſts, deſert it at that time. The Laplander, not only in the day, but through the whole winter nights, is obliged to wander about in the woods with his herds of rein-deer. For the rein-deer never come under cover, nor eat any kind of fodder but a particular kind of liverwort. On this account, the herdſmen

men are under the neceſſity of living continually in the woods, in order to take care of their cattle, leſt they ſhould be devoured by wild beaſts. The Laplander eaſily does without more light, as the ſnow reflects the rays that come from the ſtars, and as the aurora borealis illuminates the air every night with a great variety of figures. No part of our body is more eaſily deſtroyed by cold than the extremities of the limbs which are moſt remote from the ſun of this microcoſm, the heart. The kibes that happen to our hands and feet, ſo common in the northern parts of Sweden, prove this. In Lapland, you will never ſee ſuch a thing; although, were we to judge by the ſituation of the country, we ſhould imagine juſt the contrary, eſpecially as the people wear no ſtockings. The Laplander guards himſelf againſt the cold in the following manner: He wears breeches made of rein-deer ſkins with the hair on, reaching down to his heels, and ſhoes made of the ſame materials, the hairy part turned outwards. He puts into his ſhoes ſlender-eared broad-leafed cyperus graſs, (Carex veſicaria, or bladder-ſedge,) that is cut in ſummer and dried. This he firſt combs and rubs in his hands, and then places it in ſuch a manner, that it not only covers his feet quite round, but his legs alſo; and, being thus guarded, he is quite ſecured againſt the intenſe cold. With this graſs they ſtuff their gloves likewiſe, in order to preſerve their hands. As this graſs keeps off the cold in winter, ſo in ſummer it hinders the feet from ſweating, and at the ſame time preſerves them from being annoyed by ſtriking againſt ſtones, &c. for their ſhoes are very thin, being made, not of tanned leather, but the raw hide."

The women's apparel differs very little from that of the other ſex; only their girdles are more ornamented with rings, chains, needle-caſes, and toys, that ſometimes weigh twenty pounds. In winter, both men and women lie in their furs; in ſummer they cover themſelves entirely with coarſe blankets, to defend them from the gnats, which are intolerable. The Laplanders are not only well diſpoſed, but naturally ingenious. They make all their own furniture, their boats, ſledges, bows, and arrows. They form neat boxes of thin birch boards, and inlay them with the horn of the rein-deer. The Swedes are very fond of the Lapland baſkets made of the roots of trees, ſlit in three long thin pieces, and twiſted together ſo nicely that they will hold water; of which there is a curious ſpecimen in Bullock's Muſeum. Among the manufactures of this country we likewiſe number curious horn ſpoons, and moulds in which they caſt the trinkets of tin which adorn their girdles. Over and above theſe domeſtic occupations, the men within doors perform the office of cooks in dreſſing victuals for the family. The women act as tailors and embroiderers; they make clothes, ſhoes, and boots, and harneſs for the rein-deer; they ſpin thread of fur, and knit it into caps and gloves that are very ſoft and warm. They draw tin into wire through a horn; and with this they cover the thread which they uſe in embroidering the figures of beaſts, flowers, trees, and ſtars, upon their caps and girdles.

The Laplanders make ſurpriſing excurſions upon the ſnow in their hunting expeditions. They provide themſelves each with a pair of ſkates, or ſnow-ſhoes, which are no other than fir boards covered with the rough ſkin of the rein-deer, turned in ſuch a manner that the hair riſes againſt the ſnow, otherwiſe they would be too ſlippery. One of theſe ſhoes is uſually as long as the perſon who wears it; the other is about a foot ſhorter. The feet ſtand in the middle, and to them the ſhoes are faſtened by thongs or withes. The Laplander, thus equipped, wields a long pole in his hand, near the end of which there is a round ball of wood to prevent its piercing too deep in the ſnow; and with this he ſtops himſelf occaſionally. By means of theſe accoutrements he will travel at the rate of ſixty miles a-day without being fatigued; aſcending ſteep mountains, and ſliding down again with amazing ſwiftneſs. The Laplander not only travels on-foot, but is provided with a carriage drawn by the rein-deer, in which he journeys with ſtill greater rapidity. The ſledge, called *pulka*, is made in the form of a ſmall boat, with a convex bottom, that it may ſlide the more eaſily over the ſnow; the prow is ſharp and pointed; but the ſledge is flat behind. The traveller is ſwathed in this carriage like an infant in a cradle, with a ſtick in his hand to ſteer the veſſel, and diſengage it from pieces of rock or ſtumps of trees that may chance to encounter it in the route. He muſt alſo balance the ſledge with his body, otherwiſe he will be in danger of being overturned. The traces, by which this carriage is faſtened to the rein-deer, are fixed to a collar about the animal's neck, and run down over the breaſt between the fore and hind legs, to be connected with the prow of the ſledge; the reins, managed by the traveller, are tied to the horns; and the trappings are furniſhed with little bells, the ſound of which is agreeable to the animal. With this draught at his tail, it has been reported that the rein-deer will fly like lightning over hill and dale at the rate of two hundred miles a-day. But this repreſentation is greatly exaggerated. It however frequently happens, that he will perſevere in his journey to fifty miles without intermiſſion, and without taking any refreſhment, except occaſionally moiſtening his mouth with the ſnow. Before he ſets out, the Laplander whiſpers in his ear, the way he is to follow, and the place at which he is to halt, firmly perſuaded that the beaſt underſtands his meaning; but, in ſpite of this intimation, he frequently ſtops ſhort before he has reached the journey's end; and ſometimes he overſhoots the mark by ſeveral leagues. In the beginning of winter the Laplanders mark the moſt frequented roads, by ſtrewing them with fir boughs; and indeed theſe roads are no other than pathways made through the ſnow by the rein-deer and the pulkas; their being frequently covered with new ſnow, and alternately beaten by the carriage, conſolidates them into a kind of cauſeway; which is the harder if the ſurface has felt a partial thaw, and been cruſted by a ſubſequent froſt. It requires great caution to follow theſe tracks; for, if the carriage deviates to the right or left, the traveller is plunged into an abyſs of ſnow. In leſs frequented parts, where there is no ſuch beaten road, the Laplander directs his courſe by certain marks which he has made on the trees.

The chief occupation of the Laplanders is hunting, and this exerciſe they perform in various ways. In ſummer they hunt the wild beaſts with ſmall dogs, trained to the diverſion. In winter they purſue them by their tracks upon the ſnow, ſkating with great velocity, that they very often run down the prey. They catch ermines in traps, and ſometimes with dogs. They kill ſquirrels, martens, and ſables, with blunt darts, to avoid injuring the ſkin. Foxes and beavers are ſlain with ſharp-pointed darts and arrows; in ſhooting which, they are accounted the beſt marksmen in the world. The larger beaſts, ſuch as bears, wolves, elks, and wild rein-deer, they either kill with fire-arms as explained above, or take in ſnares and pits dug in the foreſts. Their particular laws relating to the chaſe are obſerved with great punctuality. The beaſt becomes the property of the man in whoſe ſnare or pit he is caught; and he who diſcovers a bear's den has the excluſive privilege of hunting him to death. The death of a bear is celebrated by the Laplander as a ſignal victory. The carcaſs is drawn to the cabin or hut of the victor by a rein-deer, which is kept ſacred from any other work for a whole year after this ſervice. The bear is ſurrounded by a great number of men, women, and children, reciting a particular hymn or ſong of triumph, in which they thank the vanquiſhed enemy for having allowed himſelf to be overcome without doing any miſchief to his conqueror, and welcome his arrival; then they make an apoſtrophe to heaven, expreſſing their acknowledgment to God, that he has created beaſts for the uſe of men, and endued mankind with ſtrength and courage to overcome and attack the fierceſt of the brute creation. The hero is ſaluted by the women, who

ſpit

ſpit chewed elder-bark in his face. He is feaſted three days ſucceſſively, and his cap is decorated with an additional figure wrought in tin-wire.

The manner in which the young Laplander chooſes a wife is equally remarkable and ludicrous. When he has pitched upon a female, he employs ſome friends as mediators with the father; and, theſe being provided with ſome bottles of brandy, the ſuitor accompanies them to the hut of his future father-in-law, who invites the mediators to enter; but the lover is left without until the liquor be drunk, and the propoſal diſcuſſed; then he is called in, and entertained with ſuch fare as the hut affords; yet without ſeeing his miſtreſs, who retires and goes out on this occaſion. Having obtained leave of her parents to make his addreſſes in perſon, he puts on his beſt apparel, and is admitted to the lady, whom he ſalutes with a kiſs; then he preſents her with the tongue of a rein-deer, a piece of beaver's fleſh, or ſome other ſort of proviſion. She declines the offer, which is made in preſence of her ſiſters and relations; but makes a ſignal to the lover to follow her into the fields, where ſhe accepts the preſents. Thus encouraged, he begs her permiſſion to ſleep with her in the hut; if ſhe conſents, there is no further difficulty; if ſhe diſapproves of the propoſal, ſhe drops her preſents on the ground. When the lovers are agreed, the youth is permitted to viſit his inamorata as often as he ſhall think proper; but every time he comes, he muſt purchaſe this pleaſure with a freſh bottle of brandy; a perquiſite ſo agreeable to the father, that he often poſtpones the celebration of the nuptials for two or three years. At length the ceremony is performed at church by the prieſt of the pariſh. Even after this event, the huſband is obliged to ſerve his father-in-law a whole year; at the expiration of which he retires to his own habitation with his wife and her patrimony of rein-deer, and receives preſents from all his friends and relations. From this period he ſequeſters his wife from the company of all ſtrangers, eſpecially of the male ſex, and watches over her conduct with the moſt jealous vigilance.

Many of the Lapland women are barren, and none of them are very fruitful. A woman, immediately after delivery, ſwallows a draught of whale fat; the child is waſhed with ſnow or cold water, and wrapped up in a hare-ſkin. The mother is ſeldom above five days in the ſtraw, and in fourteen is generally quite recovered; then ſhe carries the child to church to be baptized. Before ſhe can reach the reſidence of the prieſt, ſhe is often obliged to traverſe large foreſts, mountains, lakes, and wide-extended waſtes of ſnow. The infant is faſtened in a hollowed piece of wood, ſtretched naked on a bed of fine moſs, covered with the ſoft ſkin of a young rein-deer, and ſlung by two ſtraps to the back of the mother, who always ſuckles her own child. At home this little cradle is hung to the roof of the hut, and the child lulled aſleep by ſwinging it from one ſide to the other. The boys from their infancy practiſe the bow; and are not allowed to break their faſt until they have hit the mark. The female children are as early initiated in the buſineſs peculiar to their ſex.

Theſe people, though for the moſt part vigorous and healthy, are not altogether exempted from diſtempers. They are ſubject to ſore eyes, and even to blindneſs, from the ſmoke of their huts, and the fire to which they are almoſt continually expoſed. Some waſte away in conſumptions; others are afflicted with rheumatic pains and the ſcurvy; and a few are ſubject to vertigo and apoplexy. For the cure of all their internal diſorders, they uſe no other medicine than the decoction of a certain ſpecies of moſs; and, when this cannot be procured, they boil the ſtalk of angelica in the milk of the rein-deer. In order to remove a fixed pain, they apply a large muſhroom, burning hot, to the part affected; and this produces a bliſter, which is ſuppoſed to draw off the pecant humour. To their wounds they apply nothing but the turpentine that drops from the fir-tree. When they are froſt bitten, (though, according to the above extract from Linnæus, this ſeldom or never happens,) we are told that they thruſt a red-hot iron into a cheeſe made of rein-deer's milk, and with the fat that drops from it anoint the frozen member, which generally recovers. When a Laplander is ſuppoſed to be on his death-bed, his friends exhort him to die in the faith of Chriſt, and bear his ſufferings with reſignation, by remembering the paſſion of our Saviour. They are not, however, very ready to attend him in his laſt moments; and, as ſoon as he expires, quit the place with precipitation, apprehending ſome injury from his ſpirit or ghoſt, which they believe remains with the corpſe, and takes all opportunities of doing miſchief to the living. The deceaſed is wrapped up in woollen or linen, according to his circumſtances, and depoſited in a coffin by a perſon ſelected for that purpoſe; but this office he will not perform, unleſs he is firſt ſecured from the ill offices of the manes, by a conſecrated braſs ring fixed on his left arm. The Chriſtian religion in this country has not yet diſpelled all the rites of heatheniſh ſuperſtition: together with the body they put into the coffin an axe, a flint and ſteel, a flaſk of brandy, ſome dried fiſh and veniſon. With the axe the deceaſed is ſuppoſed to hew down the buſhes or boughs that may obſtruct his paſſage in the other world; the ſteel and flint are deſigned for ſtriking a light, ſhould he find himſelf in the dark at the day of judgment; and on the proviſion they think he may ſubſiſt during his journey. The Muſcovite Laplanders obſerve other ceremonies, that bear an affinity to the ſuperſtitions of the Greek church. They not only ſupply the defunct with money, but likewiſe provide him with money for the porter of paradiſe, and a certificate ſigned by the prieſt, and directed to St. Peter, ſpecifying that the bearer had lived like a good Chriſtian, and ought to be admitted into heaven. At the head of the coffin they place a little image of St. Nicholas, who is greatly reverenced in all parts of Muſcovy as a friend to the dead. Before the interment, the friends of the deceaſed kindle a fire of fir boughs near the coffin, and expreſs their ſorrow in tears and lamentations. They walk in proceſſion ſeveral times round the body, demanding, in a whining tone, the reaſon of his leaving them on earth. They aſk whether he was out of humour with his wife; whether he was in want of meat, drink, clothing, or other neceſſaries; and whether he had not ſucceeded in hunting and fiſhing? Theſe and other ſuch interrogations, to which the defunct makes no reply, are intermingled with groans and hideous howlings; and, between whiles, the prieſt ſprinkles the corpſe and the mourners alternately with holy water. Finally, the body is conveyed to the place of interment on a ſledge drawn by a rein-deer; and this, together with the clothes of the deceaſed, are left as the prieſt's perquiſite. Three days after the burial, the kinſmen and friends of the defunct are invited to an entertainment, where they eat the fleſh of the rein-deer which conveyed the corpſe to the burying-ground. This being a ſacrifice to the manes, the bones are collected into a baſket, and interred. Two thirds of the effects of the deceaſed are inherited by his brothers, and the remainder divided among his ſiſters; but the lands, lakes, and rivers, are held in coparcency by all the children of both ſexes, according to the diviſion made by Charles IX. of Sweden, when he aſſigned a certain tract of land to each family.

The commerce of the Laplanders is more conſiderable than one would expect in a deſert country, inhabited by a ſavage ignorant people. They export great quantities of fiſh to the northern parts of Bothnia and White Ruſſia. They likewiſe trade with the neighbouring countries of Norway, Sweden, Muſcovy, and Finland, by ſelling rein-deer, fine furs, baſkets and toys of their own manufacture, dried pikes, and cheeſe made of the rein-deer's milk. In return for theſe commodities, they receive rix-dollars, woollen cloths, linen, copper, tin, flour, oil, hides, needles, knives, ſpirituous liquors, tobacco, and other neceſſaries. The Laplanders march in caravans to the fairs in Finland and Norway: theſe are compoſed of a long ſtring

of thirty or forty rein-deer and ſledges tied to one another, the foremoſt being led by a Laplander on foot. When they have choſen a ſpot for the encampment, they form a large circle of their rein-deer and ſledges ready yoked; and the animals, lying down quietly on the ſnow, are fed with moſs by their maſters. The people kindle great fires, around which, men, women, and children, ſit, and ſup on dried fiſh; but the more voluptuous ſpread out bear-ſkins under their tents, where they lie at their eaſe and ſmoke tobacco.

The revenue ariſing from this country is of no great conſequence; it is paid partly in rix-dollars, but chiefly in furs; nay, ſome, that can procure neither, pay the tribute in dried pikes. The produce of the mines forms likewiſe a conſiderable article. Fifty ſquirrel-ſkins, or one fox-ſkin, with a pair of Lapland ſhoes, are valued at one rix-dollar. Part of the taxes is allotted for the maintenance of the Lapland clergy. The frightful aſpect of this country has been deemed a more effectual defence than artificial bulwarks and garriſons, of which here are none; or than the arms and courage of the natives, who are neither warlike in themſelves, nor in the leaſt tinctured with diſcipline.

The Laplanders call themſelves *Salme-Same*, and *Samen-Almatjeh*. Their country they denominate *Same-Landa*, or *Same-aednam*; the Swedes ſtyle it *Lapland*, or *Lappmarken*, and the inhabitants *Lappar*. The natives of thoſe diſtricts under the dominion of Sweden and Denmark are Lutherans; while many of thoſe who are ſubject to Ruſſia are ſtill Pagans. Swediſh Lapland contains about eight churches, which in ſome parts lie at ſo great a diſtance from each other, that a native is frequently obliged to travel three days in order to attend divine ſervice. The Laplanders, before their converſion to Chriſtianity, which was not till lately introduced amongſt them, poſſeſſed no books or manuſcripts, though they knew many traditional hiſtories and ſongs of ancient heroes and princes who once reigned over them; but involved in great uncertainty, and mixed with the moſt fabulous accounts. They have now a tranſlation of the New Teſtament in their language; and many of the natives are able to read and write. *Acerbi's Travels. Conſett's Tour. Linnæus's Lacheſis Lapponica.*

There has been publiſhed lately at Stockholm, in Swediſh, a very intereſting "Account of a Journey," undertaken in 1807, by M. Valenberg, under the auſpices of the Academy of Sciences of Sweden, "for the purpoſe of determining the Height of the Mountains of Lapland, and obſerving their Temperature." The mountains viſited by M. Valenburg make a part of the great chain which runs through Sweden and Norway, and ſtretches in ſome of its branches even to Finland and Ruſſia. They are ſituated between 67 and 68 degrees north latitude, and belong to the polar regions. On ſeveral points their baſes are waſhed by the ſea, and from their ſummits the immenſe plain of the Northern Ocean is diſcoverable. Theſe mountains had been only hitherto viewed in all their majeſtic grandeur by the Lapland nomade, following his flocks of deer and his game. A few travellers had contemplated them at a diſtance; and M. de Bruck, a learned German, during his travels in Norway, approached within a ſhort ſpace of them; but no perſon had ever yet penetrated into this aſylum of nature, and attempted to ſtruggle with the difficulties of aſcending theſe ſummits eternally covered with ſnow and ice.

The undertaking was difficult in many reſpects. The aſcents were moſtly exceſſively ſteep, and in climbing them the traveller was by turns ſuſpended over deep excavations, lakes, torrents, bottomleſs marſhes, and gulfs. He had no intelligent guide; there was no habitation on his route, and no aſſiſtance to be expected. He frequently was obliged to make circuits of many leagues to reach a ſummit; and he croſſed not only ſnow and ice full of crevices, but alſo marſhes, where he ran a continual riſk of being buried in the mud and ſtagnant water. He paſſed the nights on naked rocks, without a tent or the ſmalleſt ſhelter; and he was frequently reduced to quench his devouring thirſt by ſwallowing ſnow, which occaſioned inflammations and painful ſuppurations in the mouth.

M. de Valenberg's meaſurements give the Lapland mountains an elevation of from 5 to 6000 feet above the level of the ſea. Although this elevation is leſs than that of the mountains of Swiſſerland and the Pyrenees, all the phenomena of the alpine regions, and particularly glaciers, are obſervable. At ſuch a proximity to the polar circle, the region of eternal ſnow commences at nearly 4000 feet above the ocean, while in the Alps it begins at from 7 to 8000, and in the Pyrenees at 8000 feet. On the 14th July, M. de Valenberg aſcended the moſt conſiderable glacier, called *Sulitelma*, a Lapland word, which ſignifies Solemn Mountain, becauſe formerly the Laplanders adored on one of its ſummits their principal idol. This mountain, which is the Mont Blanc of the north, is compoſed of a ſucceſſion of ſummits, of which the baſe has an extent of ſeveral leagues. Its greateſt elevation is 5700 feet above the ſea. To reach this elevation our traveller was obliged to make his way over enormous crevices, where recently before ſome hunters had been engulfed with their deer and their dogs. Seas of ice have deſcended into the valleys ſeven hundred feet below the line of ſnow. A border of earth ſurrounds the ice, conſiſting of ſlime and ſtones. The ice of Sulitelma is very clear and almoſt tranſparent; it is as hard as ſtone, but not ſo heavy as the ice of the ſea. The ſnow is ſometimes a hundred feet in depth, and ſo hard that the footſtep leaves no mark on it: that which is detached from the ſummits, or crevices, roll to immenſe diſtances. Fortunately theſe avalanches in their deſcent act only on inanimate nature; whatever direction they take, they ſeldom encounter living beings, or the abodes of men. All is deſert in theſe regions for vaſt extents, where induſtry has gained no conqueſt over the ſolitary domain of the primitive creation. In proportion as the line of ſnow is approached, the productive force of nature diminiſhes; and men, brute animals, and plants, yield to the rigour of the cold. At 2600 feet below the line, the pines diſappear, as well as the cattle and habitations. At 2000 feet, the only tree is the birch; and its degraded form and indigent verdure atteſt the inclemency of the climate; at the ſame time the greateſt number of wild animals diſappear, and the lakes contain no fiſh. At 800 feet below the ſame line of ſnow, the Laplander's progreſs is ſtopped for want of moſs to his rein-deer. The Lachefis Lapponica tells us, that in ſome parts of theſe inhoſpitable mountains, the ſnow was frozen to the depth of a fathom on the 9th of July. Above the line every thing preſents the picture of agony and death. The moſt robuſt lichens are only to be found at 1000 and 2000 feet in the crevices of perpendicular rocks; and the bird named Emberiza nivalis, or ſnow-bunting, is the only living creature to be ſeen. The heat does not riſe to one degree of Reaumur in the region which is 5000 feet above the ſea.

LAP'LAND, *adj.* Belonging to Lapland, produced in Lapland.

LAP'LAN'DER, *ſ.* A native of Lapland.

LAP'LANDISH, *adj.* Belonging to Lapland.

LAPLIS'IA, or LAPLY'SIA, *ſ.* in helminthology, the SEA HARE; a genus of *vermes mollusca*, or gelatinous worms. Generic characters—Body creeping, covered with reflected membranes, with a membranaceous ſhield on the back covering of the lungs: aperture on the right ſide: vent above the extremity of the back: feelers four, reſembling ears.

Species. 1. Lapliſia depilans, the excoriating worm: body pale lead-colour, immaculate. This animal is an apparently mis-ſhapen maſs enveloped in a looſe ſkin, which folds over and nearly meets on the back: the ſhield is nearly in the middle of the back, and circular; the two fore-feelers thick and placed forwards, the hind-ones at a little diſtance backwards, and reſembling ears; and

behind theſe are the eyes, which ſeem nothing but two black points. It inhabits the European and Indian ſeas, and grows to the length of five inches. This harmleſs worm has the character of being extremely nauſeous and fetid, and is ſaid to cauſe the hair to fall off the hands of thoſe who touch, and to do other injury to the ſkin. This is an accuſation of very old ſtanding; for the name of *ſea-hare* is derived from the ancients; and the animal to which it is given appears to have been known at a very early period, and perhaps on that account its hiſtory is obſcured with many fabulous narrations. Fiſhermen ſeem in all ages to have attributed ſome noxious properties to thoſe marine animals which do not ſerve for the nouriſhment of man; and the writings of naturaliſts are ſtill filled with the reports of theſe ignorant men reſpecting ſeveral productions of the ſea, as the ſea-nettle, ſtar-fiſh, and in particular the ſea-hare. Theſe relations have been multiplied and prodigiouſly increaſed with reſpect to the marvellous, whenever the figure, the colour, or ſmell, of the animal have any thing extraordinary or forbidding in them, as is the caſe with the ſea-hare. Hence we find a long liſt of noxious and aſtoniſhing properties attributed to this animal. Not only are its fleſh, and the water in which it has been ſteeped, of a poiſonous nature, but even its very aſpect is deadly. A woman who would wiſh to conceal her pregnancy cannot reſiſt the ſight of a female ſea-hare, which produces nauſea and vomiting, and finally miſcarriage, unleſs a male of the ſame ſpecies, dried and ſalted, is given her to eat; for it is one of the ſuperſtitious ideas entertained by the common people in moſt countries, that every noxious ſpecies of animal carries within itſelf a remedy for the ill effects which it may occaſion. It happens, indeed, unfortunately for the preſent ſtory, that in the ſea-hare there is no diſtinction of ſex. If theſe animals in Italy (for the above ſtories are taken from Pliny) are ſo deadly to mankind, it is quite otherwiſe in the Indian ſeas; for there it is man who is ſuch a deadly foe to the ſea-hare, that he cannot take it alive, ſince it is deſtroyed by his very touch! Theſe ridiculous fables reſpecting an innocent animal, are ſtill believed by many people, and others as ridiculous have been added to them. Mr. Barbut relates that, a ſailor happening to take a lapliſia in the Mediterranean, it gave him ſuch inſtantaneous and excruciating pain as to cauſe an inflammation, and the poor man loſt his arm! and ſo ſenſible are the fiſhermen of the poiſonous quality of the mucus which oozes from its body, that they will not on any account touch it. Mr. Montague (Linn. Tranſ. vol. vii.) "cannot help remarking how ſtrange it is that the poiſonous touch and offenſive ſmell which appear to have been the origin of its name, ſhould be without reaſon handed down to poſterity, and that ſuch an opprobrium ſhould have ſo long been fixed upon one of the moſt harmleſs and inoffenſive of creatures. On the coaſt of Devonſhire (he adds) we have had frequent opportunities of handling theſe animals with impunity; for they neither affect the hand nor the olfactory nerves, but are as deſtitute of ſmell as of any depilatory power." We have given an accurate delineation of this uncouth animal at fig. 6 of the LANIUS Plate IV. p. 218.

2. Lapliſia faſciata, the barred lapliſia: black; the edges of the membranaceous covering and of the feelers ſcarlet. Inhabits the ſhores of Barbary, among rocks: when touched it diſcharges a black and red ſanies, but not fetid or hurtful.

Beſides the above, Cuvier enumerates and figures three others; viz. the camelus, punctata, and alba. To theſe Mr. Montague, in the Linn. Tranſ. quoted above, adds one more, the *viridis*, which, though deſtitute of any membranaceous plate or ſhield under the ſkin on the back, approaches ſo nearly to the L. depilans in its external form, that Mr. M. heſitates not to claſs it with that animal.

LAP'MARK. See FINMARK, vol. vii.

LAPON'TI, a mountain of Aſia, between Caſhgar and Little Thibet.

LAP'PA, *ſ.* in botany, the Latin name for any kind of bur, or ſeed, that ſticks to the coats of animals. See ARCTIUM, APARINE, and XANTHIUM.

LAPPACE'AN, *adj.* [from *lappa.*] Belonging to the bur.

LAPPA'GO, *ſ.* in botany. See CENCHRUS racemoſus; ſee alſo TRIUMFETTA and URENA.

LAPPAJAR'VI, a town of Sweden, in the government of Waſa: thirty-eight miles ſouth-eaſt of Jacobſtadt.

LAPPA'NO, a town of Naples, in Calabria Citra: four miles north of Coſenza.

LAP'PER, *ſ.* [from *lap.*] One who wraps up.—They may be *lappers* of linen, and bailiffs of the manor. *Swift.*—One who laps or licks.

LAP'PET, *ſ.* [diminutive of *lap.*] The part of a headdreſs that hangs looſe.—How naturally do you apply your hands to each others *lappets*, and ruffles, and mantuas? *Swift.*

LAP'PICE, *ſ.* [a hunting term.] The opening of a dog at the game. *Bailey.*

To LAP'PICE, *v. n.* To open in the leaſh or ſtring, to open as a grey-hound in the courſe.

LAPPI'NEN, a town of Pruſſian Lithuania: fourteen miles weſt of Tilſit.

LAP'PING, *ſ.* The act of licking up with the tongue.

LAP'PO, a ſmall iſland in the Baltic, between the coaſt of Finland and the iſland of Aland. Lat. 60. 20. N. lon. 20. 48. E.

LAP'PO, a town of Sweden, in the government of Abo: twenty-three miles ſouth of Abo.

LAP'PO, a town of Sweden, in Eaſt Bothnia, and government of Waſa: thirty-ſeven miles eaſt-north-eaſt of Waſa.

LAP'PO JER'FOI, a town of Sweden, in Eaſt Bothnia: ſixty miles ſouth-eaſt of Waſa.

LAP'PO JOCK', a river of Eaſt Bothnia, which runs into the ſea, five miles below Ny Karleby.

LAP'POREN, a ſmall iſland on the eaſt ſide of the gulf of Bothnia. Lat. 63. 23. N. lon. 20. 59. E.

LAPP'TRASK, a town of Sweden, in the province of Nyland: twelve miles north-eaſt of Borgo. Lat. 60. 37. N. lon. 26. 12. E.

LAP'PULA, *ſ.* in botany. See CAUCALIS, DAUCUS, MYOSOTIS, and TRIUMFETTA.

LAP'SANA, *ſ.* [from λαπτω, Gr. to purge, on account of its ſuppoſed efficacy as a purge.] NIPPLEWORT; in botany, a genus of the claſs ſyngeneſia, order polygamia æqualis, natural order of compoſitæ ſemifloſculoſi, (cichoracea, *Juſſ.*) The generic characters are—Calyx: common calyculated, ovate, cornered: ſcales of the tube eight, equal, linear, hollow-calyculated, keeled, ſharp; of the baſe ſix, imbricated, ſmall, the alternate one ſmalleſt. Corolla: compound imbricated, uniform; corollules hermaphrodite, about ſixteen, equal: proper one-petalled, ligulate, truncated, five-toothed. Stamina: filaments five, capillary, very ſhort; antheræ cylindric, tubular. Piſtillum: germ ſomewhat oblong; ſtyle filiform, length of the ſtamens; ſtigma bifid, reflex. Pericarpium none; calyx ovate, converging. Seeds ſolitary, oblong, cylindric-three-ſided, ſtriated. Down none; receptacle naked, flat.—*Eſſential Character.* Calyx calycled; each of the inner ſcales channelled; receptacle naked.

Authors are by no means agreed reſpecting this genus. Some would unite it with Hyoſeris, others with Crepis, Haller and Gærtner regard Hyoſeris foetida as a ſpecies of Lapſana. The latter places the ſecond ſpecies under the name of Zacintha; the third and fifth under that of Rhagadiolus: Pallas made a new genus of the fourth ſpecies under the name of KÖLPINIA; ſee that word, vol. xi. p. 849.

Species. 1. Lapſana communis, or common nipplewort: calyxes of the fruit angular; peduncles ſlender, very much branched. Root annual. Stem upright, ſtiff; from two to four feet high, hollow, cylindrical or nearly ſo, ſtriated, hairy, the hairs terminated by minute globules. Branches ſmooth. Leaves alternate, toothed, rough with hair,

hair. Florets yellow, from fifteen to eighteen; ſtyles purpliſh, with a dark purpliſh green ſtigma. Seeds acuminate downwards, obſcurely angular, bald, yellowiſh, dropping ſpontaneouſly from the receptacle. Common all over Europe in hedges, ſhady and waſte places, and all cultivated ground; flowering during moſt of the ſummer-months. It derives the Engliſh name from its ſuppoſed efficacy in curing ſore nipples. Dr. Withering gives it the name of *dock-creſſes*. At Conſtantinople it is ſaid to be eaten raw, juſt before it comes into flower.

2. Lapſana zacintha, or warted nipplewort: calyxes of the fruit toruloſe, depreſſed, blunt, ſeſſile. Native of the South of Europe.

3. Lapſana ſtellata, or ſtarry nipplewort: calyxes of the fruit ſpreading all round; rays awl-ſhaped, ſtem-leaves lanceolate, undivided. This is an annual plant; the ſtems are inclined and branched; the leaves are toothed and ſinuated; the flowers ſmall. Native of the ſouth of France, Italy, and Spain. Cultivated here before 1633, according to Johnſon in Gerarde's Herbal. It flowers in June and July.

4. Lapſana kölpinia, or ſmall nipplewort: calyxes of the fruit ſpreading; rays ſpreading in a bow, and muricated; leaves linear. Reſembles the preceding. Native of Siberia and the Levant. Found in the deſert of Aſtrachan by Pallas, and in Syria near Aleppo by Patrick Ruſſell, M.D. It flowers in July, and is annual.

5. Lapſana rhagadiolus, or heart-leaved nipplewort: calyxes of the fruit ſpreading all round; rays awl-ſhaped; leaves lyrate. Stem herbaceous, annual, a foot and a half high, upright, round, ſtriated. Flowers ſaffron-coloured. on ſubdivided, ſmooth, terminating, peduncles. Some of the ſeeds have a hairy down, others none. Scopoli obſerves that the fruit is ſingular, there being three or four roundiſh hard attenuated rays bent down, which are the calycine ſcales involving the ſeed; and theſe adhere ſo firmly to the receptacle, as not to fall off even in dried ſpecimens. Native of Iſtria, the Levant, and Cochinchina. It flowers in June and July. Miller received the ſeeds from Portugal.

Propagation and Culture. The firſt ſpecies is a common weed. If the ſeeds of the other ſorts be permitted to ſcatter, the plants will come up better than if ſown in the ſpring. They require no culture. See CREPIS and HYOSERIS.

LAPSA'RIAN, *ſ.* See INFRALAPSARIAN, vol. xi. and SUPRALAPSARIAN.

LAP'SE, *ſ.* [*lapſus*, Lat.] Flow; fall; glide; ſmooth courſe.—Notions of the mind are preſerved in the memory, notwithſtanding *lapſe* of time. *Hale.*

Round I ſaw
Hill, dale, and ſhady woods, and ſunny plains,
And liquid *lapſe* of murm'ring ſtreams. *Milton.*

Petty error; ſmall miſtake; ſlight offence; little fault.—The weakneſs of human underſtanding all will confeſs; yet the confidence of moſt practically diſowns it; and it is eaſier to perſuade them of it from others *lapſes* than their own. *Glanville.*—This ſcripture may be uſefully applied as a caution to guard againſt thoſe *lapſes* and failings, to which our infirmities daily expoſe us. *Rogers.*

LAPSE, in law, is a title given to the ordinary to collate to a church, by the neglect of the patron to preſent to it within ſix months after avoidance. Or a lapſe is a devolution of a right of preſenting from the patron to the biſhop; from the biſhop to the archbiſhop; from the archbiſhop to the king. The term in which the title by lapſe commences from one to the other ſucceſſively is ſix months, or half a year according to the calendar, not accounting twenty-eight days to the month, as in other caſes, becauſe this computation is by the eccleſiaſtical law; and becauſe *tempus ſemeſtre* in the ſtat. Weſt. 2. ch. 5, is intended of half a year, the whole year containing 365 days; which being divided, the half year for the patron to preſent is 182 days. The day in which the church becomes void is not to be reckoned as part of the ſix months. *Wood's Inſt.* 160. *Hob.* 30. 4 *Rep.* 17. 6 *Rep.* 62.

Where a patron preſents his clerk before the biſhop hath collated, the preſentation is good, notwithſtanding the ſix months are paſt, and ſhall bar the biſhop, who cannot take any advantage of the lapſe; and ſo if the patron makes his preſentation before the archbiſhop hath collated, although *twelve* months are paſt; but, if the biſhop collates after twelve months, this bars not the archbiſhop. 2 *Inſt.* 273. If a biſhop doth not collate to benefices of his own gift, they lapſe at the end of ſix months to the archbiſhop; and, if the archbiſhop neglects to collate within ſix months to a benefice of his gift, the king ſhall have it by lapſe. And, if a church continues void ſeveral years by lapſe, the ſucceſſor of the king may preſent. *Cro. Car.* 258. But, if the king hath a title to preſent by lapſe, the patron ſhall never recover his right till the king has ſatisfied his turn by preſentation; for *nullum tempus occurrit regi.* But, to prevent the inconvenience of the church's continuing void for ever, unleſs the king ſhall be pleaſed to preſent, the law has lodged a power in the patron's hands of, as it were, compelling the king to preſent. For if, during the delay of the crown to preſent, the patron himſelf preſents, and his clerk is inſtituted, the king indeed, by preſenting another, may turn out the patron's clerk, or, after induction, may remove him by *quare impedit*; but if he does not, and the patron's clerk dies incumbent, or is canonically deprived, the king hath loſt his right, which was only to the next or firſt preſentation. 7 *Rep.* 28. *Cro. Eliz.* 44.

If two or more joint-tenants be ſeized of an advowſon, and they preſent different clerks, the biſhop may refuſe to admit either; becauſe neither joint-tenant hath a ſeveral right of patronage, but each is ſeized of the whole; and, if they do not both agree within ſix months, the right of preſentation ſhall lapſe. But the ordinary may, if he pleaſes, admit a clerk preſented by either, for the good of the church, that divine ſervice may be regularly performed; which is no more than he otherwiſe would be entitled to do, in caſe their diſagreement continued, ſo as to incur a lapſe; and, if the clerk of one joint-tenant be ſo admitted, this ſhall keep up the title in both of them; in reſpect of the privity and union of their ſtate. *Co. Lit.* 185. *Blackſt.* vol ii.

The right of lapſe was firſt eſtabliſhed in the reign of Henry II. when the biſhops firſt began to exerciſe univerſally the right of inſtitution to churches; and therefore, when there is no right of inſtitution, there is no right of lapſe; ſo that no donative can lapſe to the ordinary, unleſs it hath been augmented by the king's bounty. But no right of lapſe can accrue when the original preſentation is in the crown. In caſe the benefice becomes void by death, or ceſſion through plurality of benefices, there the patron is bound to take notice of the vacancy at his own peril; but in caſe of a vacancy by reſignation, or canonical deprivation, or if a clerk preſented be refuſed for inſufficiency, theſe being matters of which the biſhop alone is preſumed to be cognizant, here the law requires him to give notice thereof to the patron; otherwiſe he can take no advantage by way of lapſe. 4 *Rep.* 75. 2 *Inſt.* 632. If the biſhop refuſe or neglect to examine and admit the patron's clerk, without good reaſon aſſigned or notice given, he ſhall have no title to preſent by lapſe; and, if the right of preſentation be litigious or conteſted, and an action be brought againſt the biſhop to try the title, no lapſe ſhall occur till the queſtion of right be decided. If the biſhop be both patron and ordinary, he ſhall not have a double time allowed him to collate in. *Gibſ. Cod.* 769.

To LAP'SE, *v. n.* To glide ſlowly; to fall by degrees.—This diſpoſition to ſhorten our words, by retrenching the vowels, is nothing elſe but a tendency to *lapſe* into the barbarity of thoſe northern nations from whom we are deſcended, and whoſe languages labour under the ſame defect. *Swift.*—To fail in any thing; to ſlip; to commit a fault.

To

To *lapſe* in fulneſs
Is ſorer than to lie for need; and falſhood
Is worſe in kings than beggars. *Shakeſpeare.*

To ſlip, as by inadvertency or miſtake.—Homer, in his characters of Vulcan and Therſites, has *lapſed* into the burleſque character, and departed from that ſerious air eſſential to an epic poem. *Addiſon.*—To loſe the proper time.—As an appeal may be deſerted by the appellant's *lapſing* the term of law, ſo it may alſo be deſerted by a lapſe of the term of a judge. *Ayliffe.*

Myſelf ſtood out:
For which if I be *lapſed* in this place,
I ſhall pay dear. *Shakeſpeare's Twelfth Night.*

To fall by the negligence of one proprietor to another.—If the archbiſhop ſhall not fill it up within ſix months enſuing, it *lapſes* to the king. *Ayliffe.*—To fall by death, as in the caſe of legacies.—If the legatee dies before the teſtator, the legacy is a loſt, or *lapſed*, legacy. *Blackſtone.*—To fall from perfection, truth, or faith.—A ſprout of that fig-tree which was to hide the nakedneſs of *lapſed* Adam. *Decay of Piety:*

Once more I will renew
His *lapſed* pow'rs, though forfeit, and inthrall'd
By ſin to foul exorbitant deſires. *Milton.*

LAPSI'DED, *adj.* A ſea term; having one ſide heavier than the other.

LAP'SING, *ſ.* The act of returning to a former ſtate; the act of falling.

LAPTA'NA, or LAPTAW', a town of Pruſſia, in the province of Samland: ten miles north of Königſberg.

LAP'TCHOUT HO'TUN, a town of Aſia, in the country of Hami: thirty miles weſt of Hami-Hotun. Lat. 43. N. lon. 92. 48. E.

LAPUS'ZNA, a town of European Turkey, in Moldavia, near a river of the ſame name: fifty miles eaſt-ſouth-eaſt of Jaſſi.

LAPUS'ZNA, a river of European Turkey, which runs into the Pruth near Huſ.

LAP'WING, *ſ.* A clamorous bird with long wings. See TRINGA.

And now in fields the *lapwing* Tereus reigns,
The warbling nightingale in woods complains. *Dryden.*

LAP'WORK, *ſ.* [*lap* and *work.*] Work in which one part is interchangeably lapped or wrapped over the other.—A baſket made of porcupine quills; the ground is a packthread caul woven, into which, by the Indian women, are wrought, by a kind of *lapwork*, the quills of porcupines, not ſplit, but of the young ones intire; mixed with white and black in even and indented waves. *Grew's Muſæum.*

LAQUEAR', *ſ.* in architecture, the inward roof; a ceiling channelled and done with fretwork. *Phillips.*

LAQUEA'RIUS, *ſ.* A kind of athleta among the ancients, who in one hand held a *laqueus*, i. e. a ſort of ſnare, wherewith to embarraſs and entangle his antagoniſt, and in the other a poniard to ſtab him.

LAQUELT', a river of France, which runs into Lys two miles below Aire.

LAQUE'US, *ſ.* [Latin.] The navel-ſtring. In ſurgery, a kind of ligature ſo contrived, that, when ſtretched by any weight, or the like, it draws up cloſe. Its uſe is to extend broken or disjointed bones, to keep them in their places while they are ſet, and to bind the parts cloſe together.

LAQUILO, a ſmall iſland in the Mediterranean, near the coaſt of Murcia, about three miles ſouth-eaſt of Almaçaran.

LAR, *ſ.* [Latin.] A houſehold god:

In conſecrated earth,
And on the holy hearth,
The *lars* and lemures moan with midnight plaint. *Milton.*

The Lares were diſtinguiſhed from the Penates: as the former were ſuppoſed to preſide over houſekeeping, the ſervants in families, and domeſtic affairs; and the latter were the protectors of the maſters of families, their wives and children. Accordingly the Lares were dreſſed in ſhort ſuccinct habits, to ſhow their readineſs to ſerve; and they held a ſort of cornucopia in their hands, as a ſignal of hoſpitality and good houſekeeping. According to Ovid, there were generally two of them, who were ſometimes repreſented with a dog at their feet. Plutarch diſtinguiſhes good and evil Lares, as he had before done good and evil Genii. There are alſo ſome public, others private, Lares.

Apuleius tells us the domeſtic Lares were no more than the ſouls of departed perſons, who had lived well, and diſcharged the duties of their ſtation; whereas thoſe who had done otherwiſe were vagabonds, wandering about and frightening people, called *Larvæ* and *Lemures.* The public Lares were alſo called *Compitales*, from *compitum*, a croſs-way; and *Viales*, from *via*, a way or public road; as being placed at the meetings of roads and in the highways, and eſteemed the patrons and protectors of travellers. The private Lares took care of particular houſes and families: theſe they alſo called *Præſtites*, from *præſto*; *Quod præſtant oculis omnia tuta ſuis.* (Ovid. Faſt.) They gave the name *Urbani*, i. e. Lares of cities, to thoſe who had cities under their care; and *Hoſtilii* to thoſe who were to keep their enemies off. There were alſo Lares of the country, called *Rurales*, as appears by ſeveral antique inſcriptions.

The Lares were alſo genial gods, and were ſuppoſed to take care of children from their birth. It is for this reaſon that, when Macrobius tells us the Egyptians had four gods who preſided over the births of children, viz. the Genius, Fortune, Love, and Neceſſity, called *Præſtites*, ſome interpret him as if he had ſaid the Egyptians had Lares; but they have mentioned that there was a great difference between the Lares of the Romans and the Præſtites of the Egyptians. However, the learned Mr. Bryant affirms that they were the ſame.

The ancients differ extremely about the origin of the Lares. Varro and Macrobius ſay that they were the children of Mania; Ovid makes them the iſſue of Mercury, and the naiad Lara or Laranda; (ſee LARA.) Apuleius aſſures us they were the poſterity of the Lemures; Nigridius, according to Arnobius, made them ſometimes the guardians and protectors of houſes, and ſometimes the ſame with the Curetes of Samothracia, which the Greeks call *Idæi dactyli.* Nor was Varro more conſiſtent in his opinion of theſe gods; ſometimes making them the manes of heroes, and ſometimes gods of the air. T. Tatius king of the Sabines was the firſt who built a temple to the Lares. The chimney and fire-place in the houſe were particularly conſecrated to them. Tertullian tells us the cuſtom of worſhipping the Lares aroſe from this, that they anciently interred their dead in their houſes; whence the credulous people took occaſion to imagine their ſouls continued there alſo, and proceeded to pay them divine honours. To this may be added, that, the cuſtom being afterwards introduced of burying in the highways, they might hence take occaſion to regard them as gods of the highways. The victim offered to the Lares in the public ſacrifices was a hog; in private, they offered them wine, incenſe, a crown of wool, and a little of what was left at the table. They alſo crowned them with flowers, particularly the violet, myrtle, and roſemary. Their ſymbol was a dog, which was uſually repreſented by their ſide, on account of its fidelity, and the ſervice it does to a man in watching his houſe. They were ſometimes alſo repreſented as clothed in a dog's ſkin.

The term *Lares*, according to Mr. Bryant, was formed from *laren*, an ancient word by which the ark was repreſented; and he ſuppoſes that the Lares and Manes were the ſame domeſtic deities under different names; and that by theſe terms the Hetrurians and Latins denoted the *dii arkitæ*, who were no other than their arkite anceſtors, or

the perſons preſerved in the laren, or ark; the genius of which was Iſis, the reputed parent of the world. He obſerves farther, that they are deſcribed as dæmons and genii, who once lived on earth, and were gifted with immortality.

LAR, a river of Aſia, which runs into the Behat ten miles north-weſt of Cachemire.

LAR, or LA'AR, a city of Perſia, and capital of Lariſtan, ſituated between mountains in a ſandy ſoil. The houſes are low, and each accompanied with a garden; it contains ſome bazars, ſeveral moſques, a caſtle on a rock, and a palace where the governor reſides. The Jews reſide in a quarter by themſelves, and carry on a manufacture of ſilk; and the Dutch have a factory here. In the environs are plantations of oranges, tamarinds, and dates; and not far from the city, at the foot of a mountain, is found the ſubſtance called *mummy*, which ſee deſcribed under MINERALOGY. Lar is 159 miles ſouth-ſouth-eaſt of Schiras, and 120 weſt of Ormus. Lat. 27. 20. N. lon. 54. 10. E.

LA'RA, a town of Spain, in Old Caſtile, on the Arlanza: thirteen miles ſouth-ſouth-eaſt of Burgos.

LA'RA, or LARAN'DA, one of the Naiads, daughter of the river Almon in Latium, famous for her beauty and her loquacity, which her parents long endeavoured to correct, but in vain. She revealed to Juno the amours of her huſband Jupiter with Juturna, for which the god cut off her tongue, and ordered Mercury to conduct her to the infernal regions. The meſſenger of the gods fell in love with her by the way, and gratified his paſſion. Lara became mother of two children, to whom the Romans have paid divine honours, according to the opinion of ſome, under the name of Lares. *Ovid. Faſt.*

LARA'CHA, LARA'CHE, or LARASH', a ſeaport of Africa, in the empire of Morocco, on the river of Luccos, near the Atlantic Ocean. The environs are interſected by woods and ſome marſhes. Laracha was fortified at the end of the ſixteenth century. In the year 1610, it was given up to the Spaniards, and retaken in the year 1689. A fort built by the Spaniards, on the land ſide, yet remains; and the caſtle on the ſide of the road is defended by batteries cloſe to the water's edge. In the year 1765, the French purſued two corſairs into the river, and bombarded the town. Europeans formerly carried on ſome commerce here, and the river is of good depth: but in the year 1780, all the merchants were, by the command of the emperor, compelled to retire from the place. The large veſſels of the emperor uſually winter here, as there are magazines for the refitting of ſhips, but no docks for building; the wood proper for which is too diſtant, and the ſoil, which is merely ſand, not being ſufficiently firm for the erecting of ſtocks. The road of Laracha is inſecure in winter, when the winds freſhen from the weſt and ſouth-weſt; but there is no danger between the beginning of April and the end of September: thirty-three miles ſouth of Tangiers. Lat. 34. 58. N. lon. 6. 2. W.

LARA'DA, a town of Tripoli: thirty miles ſouth-eaſt of Meſurada.

LARA'GNE, a town of France, in the department of the Higher Alps: nine miles ſouth-ſouth-eaſt of Serres, and nine north-north-weſt of Sifteron.

LARAN'DA, in ancient geography, a town of Aſia, in Cappadocia, belonging to Antiochiana, according to Ptolemy, who joins this canton to Lycaonia; but by other authors it is united with Piſidia and Iſauria.

LARA'RIUM, *ſ.* A chapel which the Romans frequently had in their houſes for the houſehold-gods, called *lares*. Spartian ſays, that Alexander the ſon of Mammeus kept in his lararium the figure of our Saviour, together with his other idols.

LARAS'SA, a town of Aſia, in Media, not far from Ecbatana. *Ptolemy.*

LAR'BOARD, *ſ.* The left-hand ſide of a ſhip, when you ſtand with your face to the head: oppoſed to the *ſtarboard*. *Harris.*

Tack to the *larboard*, and ſtand off to ſea,
Veer ſtarboard ſea and land. *Dryden.*

LAR'BORUM, in ancient geography, an epiſcopal town of Aſia, in Caria.

LAR'BRICH, a hamlet in Lancaſhire, near Preſton. Here is a chalybeate ſpring, whoſe water is extremely cold: the hand, when put into it, grows immediately red, and is exceſſively painful. Fiſh of ſeveral ſorts, that have been put in, expired almoſt inſtantly.

LAR'CENY, *ſ.* [*larcin*, Fr. from *latrocinium*, Lat.] Petty theft.—Thoſe laws would be very unjuſt, that ſhould chaſtiſe murder and petty *larceny* with the ſame puniſhment. *Spectator.*

It is divided into grand larceny, and petty larceny. *Grand larceny* is a felonious taking and carrying away the perſonal goods of another, above the value of 12d. not from the perſon, or by night, in the houſe of the owner. *Petit larceny* is when the goods ſtolen do not exceed the value of 12d. It agrees with grand larceny in all things except only the value of goods; ſo that wherever any offence would be grand larceny if the thing ſtolen was above 12d. value; it is petit larceny if it be but of that value, or under. *H. P. C.* 60, 69. Blackſtone diſtinguiſhes the offence into *ſimple larceny*, or plain theft unaccompanied with any other atrocious circumſtance; and *mixed compound larceny*, which alſo includes in it the aggravation of a taking from the houſe or perſon. 4 *Comm. c.* 17. And this diviſion is now moſt generally followed in law-books.

I. *Simple larceny* is, "the felonious taking and carrying away of the perſonal goods of another."

1. It muſt be a *taking*. This implies the conſent of the owner to be wanting. Therefore no delivery of the goods from the owner to the offender, upon truſt, can ground a larceny. As if A lends B a horſe, and he rides away with him; or if one ſends goods by a carrier, and he carries them away; theſe are no larcenies. 1 *Hal. P. C.* 504. But, if the carrier opens a bale or pack of goods, or pierces a veſſel of wine, and takes away part thereof, or if he carries it to the place appointed, and afterwards takes away the whole, theſe are larcenies; for here the *animus furandi* is manifeſt, ſince in the firſt caſe he had otherwiſe no inducement to open the goods, and in the ſecond the truſt was determined, the delivery having taken its effect. 3 *Inſt.* 107. But bare non-delivery ſhall not of courſe be intended to ariſe from a felonious deſign; ſince that may happen from a variety of other accidents. Neither by the common law was it larceny in any ſervant to run away with the goods committed to him to keep, but only a breach of civil truſt. But, by ſtatute 33 Hen. VI. c. 1, the ſervants of perſons deceaſed, accuſed of embezzling their maſter's goods, may, by writ out of Chancery, (iſſued by the advice of the two chief juſtices and chief baron, or any two of them,) and proclamation made thereupon, be ſummoned to appear perſonally in the court of King's Bench, to anſwer their maſter's executors in any civil ſuit for ſuch goods; and ſhall, on default of appearance, be attainted of felony. And, by ſtat. 21 Hen. VIII. c. 7, if any ſervant embezzle his maſter's goods to the value of 40s. it is made felony; except in apprentices and ſervants under eighteen years old. But, if he had not the poſſeſſion, but only the care and overſight of the goods, as the butler of plate, the ſhepherd of ſheep, and the like, the embezzling of them is felony and larceny at common law. 1 *Hal. P. C.* 506. 3 *Inſt.* 108. By the declaratory act of 39 Geo. III. c. 85, entitled "An act to protect maſters againſt embezzlements by their clerks or ſervants," it is enacted and declared, that if any ſervant or clerk, or any perſon employed for the purpoſe in the capacity of a ſervant or clerk, to any perſon or perſons whomſoever, or to any body corporate or politic, ſhall, by virtue of ſuch employment, receive or take into his poſſeſſion any money, goods, bond, bill, note, banker's draft, or other valuable ſecurity, or effects, for, or in the name, or on the account, of his maſter or maſters, or employer

or employers, and ſhall fraudulently embezzle, ſecrete, or make away with, the ſame, or any part thereof; every ſuch offender ſhall be deemed to have feloniouſly ſtolen the ſame, although ſuch money, goods, &c. was or were not otherwiſe received into the poſſeſſion of ſuch maſter or maſters, &c. than by the actual poſſeſſion of his or their ſervant, clerk, or other perſon ſo employed. And every ſuch offender, his adviſer, procurer, aider, or abettor, being thereby lawfully convicted or attainted, ſhall be liable to be tranſported to ſuch parts, &c. for any term not exceeding fourteen years, in the diſcretion of the court before whom he ſhall be convicted or adjudged. Several ſtatutes have alſo, at various times, paſſed to protect public companies from depredations by their officers and ſervants; as 15 Geo. II. c. 13. § 12. with reſpect to thoſe of the Bank of England, rendering embezzlement a capital felony; and 24 Geo. II. c. 11. § 3. reſpecting the officers and ſervants of the South-Sea houſe.

If a gueſt robs his inn or tavern of a piece of plate, it is larceny; for he hath not the poſſeſſion delivered to him, but merely the uſe. 1 *Hawk. P. C. c.* 33. § 6. And ſo it is declared to be by ſtat. 3 & 4 W. & M. c. 9, if a lodger runs away with the goods from his ready-furniſhed lodgings. A wife cannot be guilty with her huſband upon this ſtatute, for ſhe is under his coercion; nor without her huſband, if it ſhould appear the lodgings were let to *him*; nor even if it ſhould appear that the lodgings were let jointly to both the huſband and wife; for it ſhall be conſtrued to be the act of the huſband only. *O. B.* 1758. No. 105. The offender muſt be a lodger at the time the larceny is committed. *O. B.* 1785. No. 74. The indictment muſt alſo ſet forth the name of the perſon by whom the lodgings were let. *O. B.* 1784. No. 747. And the property ſtolen muſt be ſuch as may reaſonably be conſtrued the furniture of the ſort of lodging taken. *Leach's Hawk. P. C.* 1. c. 33. § 13. in n.

Under ſome circumſtances alſo a man may be guilty of felony in taking his own goods; as if he ſteals them from a pawnbroker, or any one to whom he hath delivered and entruſted them, with intent to charge ſuch bailee with the value; or if he robs his own meſſenger on the road, with intent to charge the hundred with the loſs according to the ſtatute of Wincheſter. *Foſt.* 123, 4. So where the owner delivers goods to a carrier, and afterwards ſecretly ſteals them from him with an intent to charge him for them, &c. becauſe the carrier had a ſpecial property, and the poſſeſſion for a time. 3 *Inſt.* 110. *Dalt.* 373. *Pult.* 126.

In further explanation of this part of the ſubject, the following is deſerving of attention: To make the crime of larceny, there muſt be a felonious taking; or an intent of ſtealing the thing, when it comes firſt to the hands of the offender, at the very time of the receiving. 3 *Inſt.* 107. *Dalt.* 367. And, if one intending to ſteal goods, gets poſſeſſion of them by ejectment, replevin, or other proceſs at law unduly obtained, by falſe oath, &c. it is a felonious taking. 3 *Inſt.* 64. If a man hath poſſeſſion of goods once lawfully, though he afterwards carry them away with an ill attention, it is no larceny; where a tailor embezzles cloth delivered to him, to make a ſuit of clothes, &c. it is not felony. *H. P. C.* 61. And if I lend a perſon my horſe to go to a certain place, and he goes there, and then rides away with him, it is not larceny; but remedy is to be had by action for the damage; though, if one comes on pretence to buy a horſe, and the owner gives the ſtranger leave to ride him, if he rides away with the horſe, it is felony; for here an intention is implied. *Wood's Inſt.* 264. In the above caſes, there is a lawful poſſeſſion by delivery, to extenuate the offence; but perſons having the poſſeſſion of goods by delivery, may in ſome inſtances be guilty of felony, by taking away part thereof; as if a carrier open a pack, and take out a part of the goods; a miller, who has corn to grind, takes out part of the ſame, with an intent to ſteal it, &c. in which caſes, the poſſeſſion of part, diſtinct from the whole, was gained by wrong, and not delivered by the owner, &c. 1 *Hawk. P. C. c.* 33. § 5.

2. There muſt not only be a taking, but *a carrying away*; *cepit et aſportavit* was the old law Latin. But a bare removal from the place in which he found the goods, though the thief does not quite make off with them, is a ſufficient aſportation, or carrying away. As if a man be leading another's horſe out of a cloſe, and be apprehended in the fact; or if a gueſt, ſtealing goods out of an inn, has removed them from his chamber down ſtairs; theſe have been adjudged ſufficient carryings away to conſtitute a larceny. 3 *Inſt.* 108, 9. Or if a thief, intending to ſteal plate, takes it out of a cheſt in which it was, and lays it down upon the floor, but is ſurpriſed before he can make his eſcape with it, this is larceny. 1 *Hawk. P. C. c.* 33. § 18. A man was detected in taking the contents of a bale of goods in a waggon. It appeared that the bale lay horizontally, and that he had ſet it on its end; but, as it had not been removed from the *ſpot*, this was held, upon a caſe reſerved, not to be ſufficient carrying away. But, where a man with a felonious intention had removed goods from the head to the tail of a waggon, it was held a ſufficient removal to conſtitute a carrying away. *O. B.* 1784. 734. So a diamond ear-ring ſnatched from a lady's ear, but lodging in the curls of her hair, and not taken by the thief, was held to be a ſufficient aſportation. *Leach's Hawk. P. C. c.* 33. § 18, in n.

3. This taking and carrying away, muſt alſo be *felonious*; that is, done *animo furandi*. This requiſite, beſides excuſing thoſe who labour under incapacities of mind or will, indemnifies alſo mere treſpaſſers, and other petty offenders. As if a ſervant takes his maſter's horſe without his knowledge, and brings him home again; if a neighbour takes another's plough that is left in the field, and uſes it upon his own land, and then returns it; if, under colour of arrear of rent where none is due, one diſtrain another's cattle or ſeize them; all theſe are miſdemeanors and treſpaſſes, but no felonies. 1 *Hal. P. C.* 509. The ordinary diſcovery of a felonious intent, is where the party doth it clandeſtinely; or, being charged with the fact, denies it; but this is by no means the only criterion of criminality; for, in caſes that may amount to larceny, the variety of circumſtances is ſo great, and the complications thereof ſo mingled, that it is impoſſible to recount all thoſe which may evidence a felonious intent, or *animum furandi*; wherefore they muſt be left to the due and attentive conſideration of the court and jury.

4. This felonious taking and carrying away muſt be *of the perſonal goods of another*; for if they are things *real*, or ſavour of the realty, larceny at the common law cannot be committed of them. Lands, tenements, and hereditaments (either corporeal or incorporeal) cannot, in their nature, be taken and carried away. And of things likewiſe that adhere to the freehold, as corn, graſs, trees, and the like, or lead upon a houſe, no larceny could be committed by the rules of the common law; but the ſeverance of them was, and in many things is ſtill, merely a treſpaſs; which depended on a ſubtlety in the legal notions of our anceſtors. Theſe things were parcel of the real eſtate; and therefore, while they continued ſo, could not by any poſſibility be the ſubject of theft, being abſolutely fixed and immovable. And, if they were ſevered by violence ſo as to be changed into moveables, and at the ſame time, by one and the ſame continued act, carried off by the perſon who ſevered them; they could never be ſaid to be taken *from the proprietor* in this their newly-acquired ſtate of mobility, (which is eſſential to the nature of larceny,) being never, as ſuch, in the actual or conſtructive poſſeſſion of any one but of him who committed the treſpaſs. He could not, in ſtrictneſs, be ſaid to have taken what at that time were the perſonal goods of another, ſince the very act of taking was what turned them into perſonal goods. But if the thief ſever them at *one* time, whereby the treſpaſs is completed, and they are converted into perſonal chattels, in the conſtructive

tive poſſeſſion of him on whoſe ſoil they are left or laid; and come again at *another* time, when they are ſo turned into perſonalty, and take them away, it is larceny; and ſo it is, if the owner, or any one elſe, has ſevered them. 3 *Inſt.* 109. This queſtion is now, however, very much put at reſt: by the ſtat. 4 Geo. II. c. 32, to ſteal or rip, cut or break, with intent to ſteal any lead or iron bar, rail, gate, or paliſado, fixed to a dwelling-houſe or out-houſe, or in any court or garden thereunto belonging, or to any other building, is made felony, liable to tranſportation for ſeven years; to ſteal, damage, or deſtroy, underwood or hedges, and the like; to rob orchards or gardens of fruit growing therein; to ſteal or otherwiſe deſtroy any turnips, potatoes, cabbages, parſnips, peaſe, or carrots, or the roots of madder when growing, are all puniſhable criminally by whipping, ſmall fines, impriſonment, and ſatisfaction to the party wronged according to the nature of the offence. Moreover, the ſtealing by night of any trees, or of any roots, ſhrubs, or plants, to the value of 5s. is, by ſtat. 6 Geo. III. c. 36, made felony in the principals, aiders, and abettors, and in the purchaſers thereof, knowing the ſame to be ſtolen. Stealing *ore* alſo out of mines is no larceny, upon the principle of adherence to the freehold, with an exception only to mines of *black lead*; the ſtealing of ore out of which, or entering the ſame with intent to ſteal, is felony, puniſhable with impriſonment and whipping, or tranſportation not exceeding ſeven years; and to eſcape from ſuch impriſonment, or return from ſuch tranſportation, is felony without benefit of clergy, by ſtat. 25 Geo. II. c. 10. Upon nearly the ſame principles, the ſtealing of writings relating to a real eſtate is no felony, but a treſpaſs, becauſe they concern the land; or (according to the technical language of the law) *ſavour of the realty*; and are conſidered as part of it, ſo that they deſcend to the heir, together with the land which they concern. 1 *Hal. P. C.* 510. Bonds, bills, and notes, which concern mere *choſes in action*, were held at the common law not to be ſuch goods whereof larceny might be committed; being of no intrinſic value, and not importing any property in *poſſeſſion* of the perſon from whom they are taken. 8 *Rep.* 33. But, by ſtat. 2 Geo. II. c. 25, they are now put upon the ſame footing with reſpect to larcenies, as the money they were meant to ſecure.

Larceny alſo could not at common law be committed of treaſure-trove, or wrecks, waifs, eſtrays, &c. till ſeized by the king, or him who hath the franchiſe; for, till ſuch ſeizure, no one hath a determinate property therein. See *Dalt.* 370. 3 *Inſt.* 208. *H. P. C.* 67. But, by ſtat. 26 Geo. II. c. 19, plundering or ſtealing from any ſhip in diſtreſs (whether wreck or no wreck) is felony without benefit of clergy.

Larceny cannot alſo be committed of ſuch animals in which there is no property either abſolute or qualified, as of beaſts that are *feræ naturæ*, and unreclaimed, ſuch as deer, hares, and conies, in a foreſt, chace, or warren; fiſh in an open river or pond; or wild fowls at their natural liberty. But, if they are reclaimed and confined, and may ſerve for food, it is otherwiſe, even at common law; for of deer ſo incloſed in a park that they may be taken at pleaſure, fiſh in a trunk, and pheaſants or partridges in a mew, larceny may be committed. See the article FISHERY, vol. vii. p. 419. and GAME, vol. viii. Stealing hawks, in diſobedience to the rules deſcribed by the ſtat. 37 Edw. III. c. 19, is alſo felony. 3 *Inſt.* 98. It is alſo ſaid that, if ſwans be lawfully marked, it is felony to ſteal them, though at large in a public river; and that it is likewiſe felony to ſteal them, though unmarked, if in any private river or pond; otherwiſe it is only a treſpaſs. *Dalt. Juſ. c.* 156. But, of all valuable domeſtic animals, as horſes and other beaſts of draught, and of all animals *domitæ naturæ*, which ſerve for food, as neat or other cattle, ſwine, poultry, and the like, and of their fruit or produce, taken from them while living, as milk or wool, larceny may be committed. And alſo of the fleſh of ſuch as are either *domitæ* or *feræ naturæ*, when killed. 1 *Hal. P. C.* 511. As to thoſe animals which do not ſerve for food, and which therefore the law holds to have no intrinſic value, as *dogs* of all ſorts, and other creatures kept for whim and pleaſure, though a man may have a baſe property therein, and maintain a civil action for the loſs of them, yet they are not of ſuch eſtimation, as that the crime of ſtealing them amounts to larceny. But by ſtat. 10 Geo. III. c. 18, very high pecuniary penalties, or a long impriſonment and whipping in their ſtead, may be inflicted by two juſtices of the peace, on ſuch as ſteal, or knowingly harbour, a ſtolen dog, or have in their cuſtody the ſkin of a dog that has been ſtolen.

Notwithſtanding, however, that no larceny can be committed unleſs there be ſome property in the thing taken, and an *owner*, yet, if the owner be unknown, provided there be a property, it is larceny to ſteal it; and an indictment will lie for the larceny of the *goods of a perſon unknown*. This is the caſe of ſtealing a ſhroud out of a grave, which is the property of thoſe, whoever they were, that buried the deceaſed; but ſtealing the corpſe itſelf, which has no owner, (though a matter of great indecency,) was no felony, unleſs ſome of the grave-clothes were ſtolen with it. It was however puniſhable by indictment as a miſdemeanor, even though the body were taken for the improvement of the ſcience of anatomy; it being a practice contrary to common decency, and ſhocking to the general ſentiments and feelings of mankind. See 1 *Term Rep.* 733. and the article ROBBERY.

Many learned and ſcrupulous men have queſtioned the propriety, if not lawfulneſs, of inflicting capital puniſhment for ſimple theft. The natural puniſhment for injuries to property ſeems to be the loſs of the offender's own property; and might be univerſally the caſe, were all men's fortunes equal. But, as thoſe who have no property themſelves are generally the moſt ready to attack the property of others, it has been found neceſſary, inſtead of a pecuniary, to ſubſtitute a corporeal, puniſhment. Our ancient Saxon laws nominally puniſhed theft with death, if above the value of twelvepence; but the criminal was permitted to redeem his life by a pecuniary ranſom; but in the ninth year of Henry I. this power of redemption was taken away, and all perſons guilty of larceny above the value of 12d. were directed to be hanged; which law continues in force to this day. 1 *Hal. P. C.* 12. 3 *Inſt.* 53. For, though the inferior ſpecies of theft, or *petit larceny*, is only puniſhed by impriſonment or whipping at common law, (3 Inſt. 218.) or, by ſtat. 4 Geo. I. c. 11, with tranſportation for ſeven years, (as was alſo expreſsly directed in the caſe of the Plate-glaſs Company, ſtat. 13 Geo. III. c. 38.) yet the puniſhment of *grand larceny*, or the ſtealing above the value of 12d. (which ſum was the ſtandard in the time of king Athelſtan, eight hundred years ago,) is at common law regularly death; which, conſidering the great intermediate alteration in the price or denomination of money, ſeems at preſent a very rigorous conſtitution.

It has been held, that, if two perſons ſteal goods to the amount of 13*d.* it is *grand larceny* in both; and, if one, at different times, ſteals divers parcels of goods from the ſame perſon, which together exceed the value of 12d. they *may* be put together in one indictment, and the offender found guilty of grand larceny. *H. P. C.* 70. 3 *Inſt.* 109. But this is very ſeldom done; on the contrary, the mercy of juries will often make them bring in larceny to be under the value of 12d. when it is really of much greater value; but this, though evidently juſtifiable and proper when it only reduces the preſent nominal value of money to the ancient ſtandard, is otherwiſe a kind of pious perjury. 2 *Inſt.* 189. And it is now ſettled, that the value of the property ſtolen muſt not only be in the whole of ſuch an amount as the law requires to conſtitute a capital offence, but the ſtealing muſt be to that amount at one and the ſame particular time; for the law will not permit things ſtolen at different times, which are, in fact, different

ent acts of ſtealing, to be added together; and, as no number of petit larcenies will amount to a grand larceny, ſo no number of grand larcenies will amount to a capital offence. It is likewiſe true, that, by the merciful extenſions of the benefit of clergy by our modern ſtatute-law, a perſon who commits a ſimple larceny to the value of 13d. (or thirteen hundred pounds,) though guilty of a capital offence, ſhall be excuſed the pains of death; but this is only for the firſt offence. And, in many caſes of ſimple larceny, the benefit of clergy is taken away by ſtatute; as from horſe-ſtealing, in the principals and acceſſories, both before and after the fact. 1 *Eliz.* 6. *c.* 12; 2 & 3 *Eliz.* 6. *c.* 33; 31 *Eliz. c.* 12. Theft by great and notorious thieves in Northumberland and Cumberland. 18 *Car.* II. *c.* 3. Taking woollen cloth from off the tenters; or linens, fuſtians, callicoes, or cotton-goods, from the place of manufacture; which extends, in the laſt caſe, to aiders, aſſiſters, procurers, buyers, and receivers. 22 *Car.* II. *c.* 5; 13 *Geo.* II. *c.* 27. 18 *Geo.* II. *c.* 27. Feloniouſly driving away, or otherwiſe ſtealing, one or more ſheep or other cattle ſpecified, or killing them with intent to ſteal the whole or any part of the carcaſe, or aiding or aſſiſting therein. 14 *Geo.* II. *c.* 6; 15 *Geo.* II. *c.* 34. Thefts on navigable rivers above the value of 40s. or being preſent, aiding, or aſſiſting, thereat. 24 *Geo.* II. *c.* 45. Stealing letters ſent by the poſt. 7 *Geo.* III. *c.* 50. Alſo ſtealing deer, fiſh, hares, and conies, under the peculiar circumſtances mentioned in the Waltham Black Act. 9 *Geo.* I. *c.* 22. Which additional ſeverity is owing to the great malice and miſchief of the theft in ſome of theſe inſtances; and, in others, to the difficulties men would otherwiſe be under to preſerve thoſe goods, which are ſo eaſily carried off. But in all theſe caſes, where benefit of clergy is excluded, it ſeems that the larceny muſt exceed the value of 12d. See 4 *Comm. c.* 17. p. 241. in n.

An acquittal of larceny in one county may be pleaded in bar of a ſubſequent proſecution for the ſame ſtealing in another county: and an averment that the offences in both indictments are the ſame, may be made out by witneſſes, or inqueſt of office, without putting it to trial by jury; though that of later years hath been the uſual method. 2 *Hawk. P. C. c.* 35. § 4. But it is no plea in appeal of larceny, that the defendant hath been found not guilty in an action of treſpaſs brought againſt him by the ſame plaintiff for the ſame goods; for larceny and treſpaſs are entirely different; and a bar in an action of an inferior nature will not bar another of a ſuperior. 2 *Hawk. P. C. c.* 35. § 5.

There are no acceſſories in petit larceny; therefore, if two be indicted, one for privately ſtealing from the perſon a handkerchief value 12d. and another for receiving it, and the principal be found guilty value 10d. only, the acceſſory ought to be diſcharged. *Foſt.* 73.

II. *Mixed or compound larceny*, is ſuch as has all the properties of ſimple larceny; but is accompanied with either one or both of the aggravations of a taking from one's houſe or perſon.

1. *Larceny from the houſe*, though it might ſeem to have a higher degree of guilt than ſimple larceny, yet is not at all diſtinguiſhed from the other at common law; unleſs where it is accompanied with the circumſtance of breaking the houſe by night; and then it falls under another deſcription, viz that of burglary. But now, by ſeveral acts of parliament, the benefit of clergy is taken from larcenies committed in a houſe in almoſt every inſtance. The multiplicity of the general acts is apt to create ſome confuſion; but upon comparing them diligently, we may collect, that the benefit of clergy is denied upon the following domeſtic aggravations of larceny; viz. Firſt, in larcenies *above the value of twelve-pence*, committed, 1. In a church or chapel, with or without violence, or breaking the ſame. 2. In a booth or tent in a market or fair, in the day-time or in the night, by violence or breaking the ſame, the owner or ſome of his family being therein. 3. By robbing a dwelling houſe in the day-time (which *robbing* implies a breaking), any perſon being therein. 4. In a dwelling houſe by day or by night, without breaking the ſame, any perſon being therein and put in fear; which amounts in law to a robbery; and in both theſe laſt caſes the acceſſory before the fact is alſo excluded from his clergy. Secondly, In larcenies *to the value of five ſhillings*, committed, 1. By breaking any dwelling-houſe, or any out-houſe, ſhop, or warehouſe, thereunto belonging, in the day-time, although no perſon be therein; which alſo now extends to aiders, abettors, and acceſſories before the fact. 2. By privately ſtealing goods, wares, or merchandiſe, in any ſhop, warehouſe, coach-houſe, or ſtable, by day or by night; though the ſame be not broken open, and though no perſon be therein; which likewiſe extends to ſuch as aſſiſt, hire, or command the offence to be committed. Laſtly, In larcenies *to the value of forty ſhillings* in a dwelling-houſe, or its out-houſes, although the ſame be not broken, and whether any perſon be therein or not; unleſs committed againſt their maſters by apprentices under the age of fifteen. This alſo extends to thoſe who aid by aſſiſting in the commiſſion of any ſuch offence.

2. *Larceny from the perſon*, is either by *privately ſtealing*, or by open and violent aſſault, which is uſually called *robbery*. The offence of privately ſtealing from a man's *perſon*, as by picking his pocket or the like, privily, without his knowledge, was debarred of the benefit of clergy ſo early as by the ſtatute 8 Eliz. c. 4. But then it muſt be ſuch a larceny as ſtands in need of the benefit of clergy, viz. of above the value of 12d. elſe the offender ſhall not have judgment of death. For the ſtatute created no new offence; but only took away the benefit of clergy, which was a matter of grace, and left the thief to the regular judgment of the ancient law. This ſeverity ſeems to be owing to the eaſe with which ſuch offences are committed, the difficulty of guarding againſt them, and the boldneſs with which they were practiſed (even in the queen's court and preſence) at the time when this ſtatute was made. Beſides that this is an infringement of property in the manual occupation or corporal poſſeſſion of the owner, which was an offence even in a ſtate of nature; and therefore the *ſaccularii*, or cutpurſes, were more ſeverely puniſhed than common thieves by the Roman and Athenian laws. As to open and violent larceny from the perſon, ſee the article ROBBERY.

The latitude which juries allow themſelves in eſtimating the value of property ſtolen, with a view to the puniſhment which is to be the conſequence of their verdict, is an evil of very great magnitude. Nothing can be more pernicious, than that jurymen ſhould think lightly of the important duties they are called upon to diſcharge, or ſhould acquire a habit of trifling with the ſolemn oaths they take. And yet, ever ſince the paſſing of the acts which puniſh with death the ſtealing in ſhops or houſes, or on-board ſhips, property of the different values which are there mentioned, juries have, from motives of humanity, been in the habit of frequently finding by their verdicts, that the things ſtolen were worth much leſs than was clearly proved to be their value. It is held, indeed, by ſome of the judges, that juries, in favour of life, may fairly, in fixing the value of the property, take into their conſideration the depreciation of money which has taken place ſince the ſtatutes paſſed; or, in the words of Mr. Juſtice Blackſtone, "may reduce the preſent nominal value of money to its ancient ſtandard." *Comm.* iv. 239. To ſhow, however, to what an extent juries have aſſumed to themſelves a power of diſpenſing with the law in this reſpect, it will be proper to refer to a few caſes which are of ſuch a kind, that it is difficult to imagine by what caſuiſtry the jury could have been reconciled to their verdict. Elizabeth Hobbs was tried in September 1732, (which was only thirty-three years after the act of king William, and only ſeventeen after the act of queen Anne, a period during which there had ſcarcely been any ſenſible diminution in the value of money,) for ſtealing in a dwelling-houſe one broad piece, two guineas, two half-guineas, and forty-four ſhillings, in money. She confeſſed the fact, and the jury found her guilty; but found that the

money ſtolen was worth only thirty-nine ſhillings. Mary Bradley, in May 1732, was indicted for ſtealing in a dwelling-houſe, lace which ſhe had offered to ſell for twelve guineas, and for which ſhe had refuſed to take eight guineas; the jury, however, who found her guilty, found the lace to be worth no more than thirty-nine ſhillings. Wm. Sherrington, in Oct. 1732, was indicted for ſtealing privately in a ſhop, goods which he had actually ſold for 1l. 5s. and the jury found that they were worth only 4s. 10d. In the caſe of Michael Allom, indicted in February 1733, for privately ſtealing in a ſhop forty-three dozen pairs of ſtockings, value 3l. 10s. it was proved that the priſoner had ſold them for a guinea and a half to a witneſs who was produced on the trial; and yet the jury found him guilty of ſtealing what was only of the value of 4s. 10d. In another caſe, that of Geo. Dawſon and Joſeph Hitch, alſo indicted in February 1733, it appeared that the two priſoners, in company together at the ſame time, ſtole the ſame goods privately in a ſhop, and the jury found one guilty to the amount of 4s. 10d. and the other to the amount of 5s. that is, that the ſame goods were at one and the ſame moment of different values. This monſtrous proceeding is accounted for by finding that Dawſon, who was capitally convicted, had been tried before at the ſame ſeſſions for a ſimilar offence, and had been convicted of ſtealing to the amount only of 4s. 10d. The jury ſeem to have thought, that, having had the benefit of their indulgence once, he was not entitled to it a ſecond time; or, in other words, that, having once had a pardon at their hands, he had no further claims upon their mercy. *Romilly on the Criminal Law of England*, note A.

To correct theſe anomalies, and for the repeal of laws not intended to be executed, ſir Samuel Romilly propoſed ſeveral bills to the parliament, in ſome of which he ſucceeded, in others not. Since the reign of Elizabeth, (8 Eliz. c. 4.) the picking of pockets had been puniſhable as a capital felony, (ſee p. 241.) though, for a long time paſt, this penalty never had been inflicted, unleſs ſomething elſe came out againſt the culprit. By the 48 Geo. III. c. 129, this offence is now made within clergy, and puniſhable with tranſportation or impriſonment. It ſeems ſtrange that the legiſlature, which repealed the ſtatute of Elizabeth, ſhould, immediately afterwards, have made ſuch a ſtand againſt the repeal of the ſtatutes of Anne, William III. and George II. ſo often above referred to. The argument is the very ſame in all theſe caſes; and it was treated in the ſame way when broached in parliament. Nevertheleſs ſir Samuel, having attempted twice to carry theſe laſt bills, was defeated, ſometimes in the one houſe, and ſometimes in the other, ſo that the objectionable laws remain on our ſtatute-book, and the evil practice ſtill ſubſiſts in full force. With a diſcrimination, however, which we muſt rejoice in, without pretending to comprehend the grounds of it, the ſame perſons who ſo vehemently and ſucceſsfully reſiſted the innovations attempted upon the ſtatutes of king William and queen Anne, have ſuffered ſir Samuel to carry a bill repealing the capital part of the felony created by the more recent act, 18 Geo. II. c. 27, againſt ſtealing from bleaching-grounds; and we may juſt mention, though it does not concern exactly the article we are upon, that he has been permitted to carry a repeal of that moſt ſanguinary and diſgraceful law, the 39 Eliz. c. 17. which inflicted the puniſhment of death on ſoldiers and ſailors who ſhall be found begging without teſtimonials of their diſcharge; a law which was far too barbarous to be executed later than a very few years after it was made.

The charges of proſecution and conviction, in reſpect of any grand or petit larceny, may, by order of court, and at the prayer of the proſecutor, be paid by the county-treaſurer, with a reaſonable allowance for his time and trouble. 25 *Geo.* II. *c.* 36. And, by 18 *Geo.* III. *c.* 19. the ſame charges ſhall be allowed to the proſecutor, whether the perſon tried be convicted or acquitted; provided that in this latter caſe it ſhall appear to the court that there was reaſonable ground of proſecution, and that the proſecutor had *bonâ fide* proſecuted. By 27 Geo. II. c. 3; 18 Geo. III. c. 19; reaſonable charges may be allowed and paid in the ſame manner, to a poor perſon who is required to give evidence; in Middleſex theſe charges ſhall be paid by the overſeers of the poor where the perſon was apprehended. It is provided by ſtatute, that every perſon who ſhall apprehend any one guilty of houſe-breaking or private ſtealing, to the value of 5s. and proſecute him to conviction, and all the executors or adminiſtrators of a perſon ſlain in endeavouring to apprehend a houſe-breaker or felon, ſhall have a certificate without fee, under the hand of the judge, certifying ſuch conviction, &c. which certificate ſhall be inrolled by the clerk of the peace of the county where it is granted, and may be once aſſigned over and no more: by virtue of this certificate, the original proprietor, or aſſignee of the ſame, ſhall be diſcharged from all pariſh and ward offices, within the pariſh or ward where the felony was committed. 10 & 11 *Will. c.* 23. Every ſuch perſon, and alſo the executors and adminiſtrators of a perſon killed as before, ſhall alſo have another certificate, which, on being tendered to the ſheriff, and demand made, ſhall entitle him to the ſum of 40l. without fee, in one month after the tender and demand; on pain of forfeiting double with treble coſts. 5 *Anne, c.* 31.

LARCH, *ſ.* [*larix*, Lat.] A tree.—Some botanical critics tell us, the poets have not rightly followed the traditions of antiquity, in metamorphoſing the ſiſters of Phaëton into poplars, who ought to have been turned into *larch*-trees; for that it is this kind of tree which ſheds a gum, and is commonly found on the banks of the Po. *Addiſon on Italy.*—See PINUS.

LAR'CHE, a town of France, in the department of Corrèze, and chief place of a canton, in the diſtrict of Brives. The place contains 569, and the canton 6679, inhabitants, on a territory of 135 kiliometres, in nine communes.

LARCIA'NO, a town of Etruria: five miles ſouth of Piſtoia.

LARD, *ſ.* [*lardum*, Lat. *lard*, Fr.] The greaſe of ſwine:

So may thy paſtures with their flow'ry feaſts,
As ſuddenly as *lard*, fat thy lean beaſts. *Donne.*

Bacon; the fleſh of ſwine:

By this the boiling kettle had prepar'd,
And to the table ſent, the ſmoaking *lard*;
On which with eager appetite they dine,
A ſav'ry bit, that ſerv'd to reliſh wine. *Dryden.*

To LARD, *v. a.* To ſtuff with bacon.—The *larded* thighs on loaded altars laid. *Dryden.*

For no man *lards* ſalt pork with orange peel,
Or garniſhes his lamb with ſpitch-cockt eel. *King.*

To fatten:

Now Falſtaff ſweats to death,
And *lards* the lean earth as he walks along. *Shakeſpeare.*

To mix with ſomething elſe by way of improvement.—Swearing by heaven; the poets think this nothing, their plays are ſo much *larded* with it. *Collier's View of the Stage.*

He *lards* with flouriſhes his long harangue.
'Tis fine, ſay'ſt thou. *Dryden.*

LARDA'RIUM, *ſ.* in old records, the larder.

LARDA'RIUS, *ſ.* The ſuperintendent of the larder.

LAR'DER, *ſ.* [*lardier*, old French; from *lard.*] The room where meat is kept or ſalted.—Fleſh is ill kept in a room that is not cool; whereas in a cold and wet *larder* it will keep longer. *Bacon.*

Moroſe, perverſe in humour, diffident
The more he ſtill abounds, the leſs content:
His *larder* and his kitchen too obſerves,
And now, leſt he ſhould want hereafter, ſtarves. *King.*

LAR'DERER, *ſ.* One who has the charge of the larder.

LARD'ING, *ſ.* The act of ſtuffing with bits of bacon; the fat with which any thing is larded.

LARD'ING-MONEY. In the manor of Bradford, in the county of Wilts, the tenants pay to their lord a ſmall yearly rent by this name; which is ſaid to be for liberty to feed their hogs with the maſt of the lord's woods, the fat of a hog being called *lard*. Or it may be a commutation for ſome cuſtomary ſervice of carrying ſalt or meat to the lord's larder.

LARDIZABA'LA, *ſ.* in botany, a genus of plants belonging to the claſs diœcia, order hexandria. There is but one ſpecies, which is a native of Chili, and is thus deſcribed from the drawings of La Martiniere, the naturaliſt who accompanied La Perouſe in his voyage of diſcovery. I. Male flower. Calyx formed of ſix expanding leaves, oblong, oval, and obtuſe; the three outermoſt being largeſt. Corolla compoſed of ſix ſharp petals, ſhorter than the leaves of the calyx. II. Female flower. Calyx ſimilar to that of the male, but larger. Corolla compoſed of ſix petals, rarely entire, but commonly trifid at their top. Stamina ſix; filaments diſtinct; antheræ ſix, oblong, barren. Seed-bud: cells from three to ſix, oblong, nearly the length of the corolla; ſtyles none; ſtigmata ſitting, permanent. Berries equal in number to the cells, oblong, acuminated, divided into ſix cells, containing ſeveral angular ſeeds.

LARD'NER (Nathaniel), a very learned Engliſh nonconformiſt divine, was born at Hawkherſt, near Wye, in Kent, on the 6th of June, 1684. He probably received his grammatical learning at Deal, which was his father's reſidence, and where he was paſtor of a congregation of proteſtant diſſenters; and from ſchool he was removed to a diſſenting academy in London, under the care of the Rev. Dr. Oldfield; but, after ſtaying here a ſhort time, he was ſent, in the year 1699, and when he was only in his ſixteenth year, to proſecute his ſtudies at Utrecht, under profeſſors d'Uries, Grævius, and Burman. After ſpending ſomewhat more than three years at Utrecht, Mr. Lardner removed to Leyden, where he ſtudied about ſix months. In 1703 he returned to England; and from this time to 1709 we have no memorials concerning him. In the laſt-mentioned year he preached, for the firſt time, at Stoke Newington, from the words of the apoſtle Paul, *For I am not aſhamed of the goſpel of Chriſt*. "There could not," ſays Dr. Kippis, "have been a more proper text, for a man who was deſtined, in the order of divine Providence, to be one of the ableſt advocates for the authenticity and truth of the Chriſtian revelation that ever exiſted." In 1713, Mr. Lardner went to reſide at the houſe of lady Treby, the widow of lord-chief-juſtice Treby, in the capacity of domeſtic chaplain, and tutor to her ladyſhip's youngeſt ſon; and, after having conducted this young gentleman's ſtudies three years, Mr. Lardner accompanied him in an excurſion into France, the Auſtrian Netherlands, and the United Provinces. From a journal which Mr. Lardner kept of this tour, it was evident that he did not loſe the opportunity which it afforded him of making exact and judicious obſervations on the manners and cuſtoms of the inhabitants whom he ſaw and viſited, and on the edifices and curioſities of the countries through which he paſſed. It does not appear how long his connection, in lady Treby's family, as tutor, laſted, but he continued to reſide in the houſe till ſhe died, in 1721.

In 1723, Mr. Lardner was engaged with a number of miniſters, in carrying on a courſe of lectures, on a Tueſday evening, at the Old Jewry. The gentlemen who conducted theſe lectures preached a courſe of ſermons on the evidences of natural and revealed religion. The proof of the credibility of the goſpel-hiſtory was aſſigned to Mr. Lardner; and he delivered three ſermons on this ſubject, which probably laid the foundation of his great work, as from that period he was diligently engaged in writing the firſt part of the Credibility. In 1727, he publiſhed, in two volumes octavo, the firſt part of "The Credibility of the Goſpel Hiſtory; or the facts occaſionally mentioned in the New Teſtament, confirmed by paſſages of ancient authors who were contemporary with our Saviour, or his Apoſtles, or lived near their time." This has been eſteemed by perſons of all parties an invaluable performance, that has rendered the moſt eſſential ſervice to the cauſe of Chriſtianity. With all his great merit, Mr. Lardner, deſirous of a ſettlement as a diſſenting miniſter, did not receive an invitation for this purpoſe till he was forty-five years of age. It was in 1729 he became aſſiſtant to Dr. Harris, miniſter at Crutched Friars. About this period he publiſhed "A Vindication of three of our bleſſed Saviour's Miracles; viz. the Raiſing of Jairus's Daughter, the Widow of Nairn's Son, and Lazarus," in anſwer to Mr. Woolſton's attack on the ſcripture-account of Chriſt's miracles. In 1733 appeared the firſt volume of the ſecond part of The Credibility of the Goſpel Hiſtory; this volume comes down to the year 178, and is prefaced by an introduction, giving a clear and very luminous hiſtory of the New Teſtament. It was immediately tranſlated into the Low-Dutch and Latin languages. The ſecond volume was publiſhed in 1735, and concludes the author's remarks out of Chriſtian writers of the ſecond century. In 1738, Mr. Lardner publiſhed the third volume of the ſecond part of the Credibility, ending with the year 233; in 1740, the fourth volume, which comes down to the year 248; and, in 1743, he publiſhed the fifth volume, which concludes with the year 306. About the ſame period he ſent into the world another performance, entitled "The Circumſtances of the Jewiſh People, an Argument for the Truth of the Chriſtian Religion, in three Diſcourſes." He brought out the remaining volumes of the Credibility, at intervals between this period and the year 1755, and in the next two years he added to this great and valuable work a ſupplement, in three volumes, compriſing a hiſtory of the apoſtles and evangeliſts, with remarks and obſervations upon every book of the New Teſtament. Our author, on account of his very high merit as a writer, had, in 1745, received a diploma, conferring upon him the degree of doctor of divinity. In the year 1751, he reſigned the office of preacher at Crutched Friars, (where his auditory had always been very ſmall,) having, during the preceding year, publiſhed a volume of Sermons, the ſubjects of which are entirely of a practical nature; and, in 1760, he gave to the world a ſecond volume of theſe Sermons. He had alſo publiſhed many other ſmaller pieces, which were well received by the public; ſuch was a ſermon entitled, The Counſels of Prudence, for the Uſe of young People; for which he was thanked by Dr. Secker, at that time biſhop of Oxford. The diſcourſe has been very frequently printed, and has at the preſent moment a large ſale. Lardner had alſo publiſhed A Diſſertation upon the two Epiſtles aſcribed to Clement of Rome, &c. An Eſſay on the Moſaic Account of the Creation and Fall of Man; The Caſe of the Demoniacs mentioned in the New Teſtament; and A Letter to Jonas Hanway, eſq. to ſhow that Mary Magdalen was not the ſinner mentioned in the ſeventh chapter of St. Luke's goſpel, but a woman of diſtinction and excellent character, who for a while laboured under bodily indiſpoſition, which our Lord miraculouſly healed; and that, therefore, houſes intended for the reception of penitent proſtitutes ought not to be denominated Magdalen-houſes. In 1762, he publiſhed Remarks on the late Dr. Ward's Diſſertations on ſeveral Paſſages of the ſacred Scriptures; to which ſucceeded, in 1764, Obſervations upon Dr. Macknight's Harmony, ſo far as related to our Saviour's Reſurrection. Amidſt theſe various productions of a ſmaller nature, Dr. Lardner continued the proſecution of his grand object, and in the laſt-mentioned year he gave the world the firſt volume of "A large Collection of ancient Jewiſh and Heathen Teſtimonies to the Truth of the Chriſtian Religion," compriſing the Jewiſh and Heathen authors of the firſt century. The remaining three volumes were publiſhed in intervals between this and the cloſe of the year 1767, and in them the biblical ſtudent is preſented with a noble treaſure of curious and valuable information, and of able and judicious criticiſm, for which the Chriſtian world

is deeply indebted to the author. They complete the grand deſign which had occupied a large portion of forty-three years of Dr. Lardner's valuable life; and by them (though far from profitable in a pecuniary view) he has raiſed a monument to his fame, which can never periſh. Dr. Lardner lived to a very advanced age, and, with the exception of his hearing, retained the uſe of his faculties to the laſt, in a remarkably perfect degree. In the year 1768, he fell into a gradual decline, which carried him off in a few weeks, at Hawkherſt, his native place, at the age of eighty-five. He had, previouſly to his laſt illneſs, parted with the copy-right of his great work, together with all the remaining printed copies, for the trifling ſum of one hundred and fifty pounds. Such a ſum was by no means an equivalent for the expenſes which he had incurred; but he conſented to the agreement, in the hope that the work would be rendered more extenſively uſeful, when it became the immediate intereſt of the bookſellers to promote its ſale.

Soon after the doctor's death, his poſthumous pieces began to appear. In the year 1769, were printed Memoirs of the Life and Writings of Dr. Lardner; to which were annexed, Eight Sermons upon various Subjects. Of theſe ſermons, the fifth and ſixth are on the internal marks of credibility in the New Teſtament. They were preached by him in 1723 and 1724, at the Tueſday-evening lecture, and contain, in ſome degree, the outlines of his great work. In 1776 was publiſhed, a ſhort letter, which our author had written in 1762, Upon the Perſonality of the Spirit. It had been a part of Dr. Lardner's original deſign, with regard to the Credibility of the Goſpel Hiſtory, to give an account of the heretics of the two firſt centuries. To the arrangement, therefore, of his collections upon this ſubject, he applied himſelf, after he had finiſhed his Jewiſh and Heathen teſtimonies; but he did not live to complete his intentions. After mature deliberation, it was judged proper that the progreſs which he had made ſhould be communicated to the public; and his papers were put into the hands of the Rev. Mr. Hogg, a learned and judicious diſſenting miniſter, at Exeter, for that purpoſe. In conſequence of this gentleman's reviſal and aſſiſtance, there appeared in 1780, in one volume quarto, "The Hiſtory of the Heretics of the two firſt Centuries after Chriſt; containing an Account of their Time, Opinions, and Teſtimonies to the Books of the New Teſtament; to which are prefixed, General Obſervations concerning Heretics." This volume, though not, upon the whole, ſo valuable and important as ſome of the former labours of the author, poſſeſſes, nevertheleſs, very conſiderable merit. It recites the teſtimonies of heretics, rectifies a variety of miſtakes concerning them, and refutes many groundleſs charges to which they were expoſed, from the ignorance, falſe zeal, and bigotry, of their adverſaries. The laſt poſthumous publication written by Dr. Lardner appeared in 1784, and is entitled Two Schemes of a Trinity conſidered, and the Divine Unity aſſerted. It conſiſts of four diſcourſes upon Philip. ii. 5–11. The firſt repreſents the commonly-received opinion of the Trinity; the ſecond deſcribes the Arian ſcheme; the third treats on the Nazarean doctrine; and the fourth explains the text according to that doctrine. They are chiefly eſtimable for the temper and ſpirit with which they were compoſed; and even thoſe who are far from agreeing in ſentiment with the author, have applauded the candour, the ſimplicity, and the love of truth, which they evidently diſcover. This work may perhaps be regarded as ſupplementary to a piece which he wrote in early life, and which he publiſhed in the year 1759, without his name, entitled "A Letter written in the Year 1730, concerning the Queſtion, Whether the Logos ſupplied the Place of the Human Soul in the Perſon of Jeſus Chriſt." In this piece his aim was to prove that Jeſus Chriſt was, in the proper and natural meaning of the word, a man, appointed, anointed, beloved, honoured, and exalted, by God, above all other beings. At the time of its publication, this treatiſe does not appear to have made any great impreſſion; but of late years, when the queſtion relating to the true doctrine of the New Teſtament concerning the perſon of Chriſt has been warmly agitated, it has been much read and quoted, and has undergone repeated impreſſions.

The piety of Dr. Lardner was ſincere and ardent; it was the governing principle of all his actions, and founded on juſt and enlarged views concerning the nature of religion. The love of truth appears manifeſtly in all his works; and no one ever ſeems to have preſerved a greater impartiality in his inquiries, or to have been more free from any undue bias. He followed truth wherever it led him; and for the attainment of it he was admirably qualified, both by the turn of his diſpoſition and his underſtanding. The candour and moderation with which he maintained his own ſentiments, conſtituted a prominent feature of his character. Benevolence, as well as piety, entered deeply into Dr. Lardner's character; he was ready to promote every good work; and to perſons in diſtreſs he was ever willing to contribute, to the higheſt degree which his fortune would admit. His manners were polite, gentle, and obliging; and he was attentive in every reſpect to the laws of decorum.

We may obſerve, that to Dr. Lardner's great works we are unqueſtionably indebted for Dr. Paley's View of the Evidences of Chriſtianity; nor is it too much to ſay, that, if the former had not been publiſhed, the latter, probably, would never have appeared; and juſtice requires us to add, that ſufficient acknowledgments were not made for the aſſiſtance which was derived from the labours of the excellent Lardner. It muſt, however, be admitted, that the deficiencies of the amiable Paley have been ſupplied by his biographer Mr. Meadley; who, in ſpeaking of his View of the Evidences of Chriſtianity, which appeared in 1794, in three volumes 12mo. but which have in all ſubſequent editions been printed in two volumes 8vo. Mr. Meadley ſays, "the direct hiſtorical teſtimony for the authenticity of the Chriſtian revelation, already adduced by the indefatigable Lardner, is admirably ſelected and arranged in this important work; and the general argument drawn up with great clearneſs and felicity. The moſt ſtriking of thoſe collateral proofs of the credibility of the goſpel-hiſtory, produced by the ſame writer, are alſo here again preſented, in a novel and impreſſive manner, and eſtabliſhed by auxiliaries of a different kind." Of Dr. Paley's works, and of his motives in the publication, too high encomiums cannot be paid; and it is to be regretted that in his preface he had not acknowledged his obligations to our author. Paley's View is capital as an abridgment of Lardner, Douglas, &c. and his work has been twice, at leaſt, abridged or analyſed: one of theſe abridgments was publiſhed at Cambridge in 1795, and another in London in 1810. *Lardner's Life by Kippis; Meadley's Life of Paley.*

LAR'DON, *ſ.* [French.] A bit of bacon.

LARE, *ſ.* A lathe, a turner's bench. *Scott.*

LA'RE, a town of the principality of Georgia, in the province of Carduel: eighty miles ſouth of Teflis.

LA'RE POI'NT, a cape on the eaſt coaſt of Madagaſcar. Lat. 16. 40. S.

LARE'DO, a ſeaport town of Spain, in the province of Biſcay, with a good harbour, in a gulf to which it gives name: twenty miles eaſt of Santander. Lat. 43. 25. N. lon. 3. 21. W.

LA'REK, LA'RAK, or LARED'SJ, a ſmall iſland in the Perſian Gulf. The ſoil is bad, and the water brackiſh. The Dutch attempted to ſettle a factory here, but were prevented by the Perſians. It is twelve miles ſouth-ſouth-eaſt of Gambron. Lat. 26. 50. N. lon. 56. 38. E.

LA'REMBERG, a town of Auſtria: ſeven miles ſouth of Vienna.

LA'REN, a town of Holland: five miles ſouth-eaſt of Naerden.

LARENDE'HA, a town of Aſiatic Turkey, in Caramania: forty miles ſouth-ſouth-eaſt of Cogni.

LAREN'SIS, in ancient geography, an epiſcopal ſee of Africa, in the proconſular province.

LAREN'TIA, or LAURENTIA, a courtezan in the firſt ages of Rome. See ACCA, vol. i.

LARENTINA'LIA, in antiquity, a feaſt held among the Romans on the 23d of December, but ordered to be obſerved twice a-year by Auguſtus; by ſome ſuppoſed to have been in honour of the Lares, but by others, with more probability, in honour of Acca Laurentia; and to have been the ſame with the Laurentalia.

LA'RES, *ſ.* See LAR.

LA'RES, or LA'RIS, in ancient geography, a town of Africa Propria, according to Ptolemy, who places it in the territory of Cirtha.

LARG, a river of France, which runs into the Ill, between Altkirck and Mulhauſen, in the department of the Upper Rhine.

LARG, a ſmall iſland near the weſt coaſt of Sumatra. Lat. 3. 30. S. lon. 100. 3. E.

LARG FELL, a mountain of Scotland, in the county of Kirkudbright: thirteen miles weſt of New Galloway.

LARG KIRK, a town of Scotland, in the county of Sutherland: eighteen miles north-weſt of Dornoch.

LAR'GA, a ſmall iſland in the Spaniſh Main, near the coaſt of South America. Lat. 10. 1. N. lon. 76. 6. N.

LAR'GA, a ſmall iſland in the Florida Stream. Lat. 24. 36. N. lon. 82. 25. W.

LARGE, *adj.* [*large*, Fr. *largus*, Lat.] Big; bulky.—Charles II. aſked me, What could be the reaſon, that in mountainous countries the men were commonly *larger*, and yet the cattle of all ſorts ſmaller? *Temple.*—Wide; extenſive; broad.—Their former *large* peopling was an effect of the countries impoveriſhing. *Carew's Survey.*—Let them dwell in the land and trade therein; for it is *large* enough for them. *Gen.* xxxiv. 21.—There he conquered a thouſand miles wide and *large*. *Abbot's Deſcription of the World.*—Liberal; abundant; plentiful.—Thou ſhalt drink of thy ſiſter's cup deep and *large*. *Ezekiel.*

Vernal ſuns and ſhowers
Diffuſe their warmeſt, *largeſt*, influence. *Thomſon.*

Copious; diffuſive.—I might be very *large* upon the importance and advantages of education, and ſay a great many things which have been ſaid before. *Felton on the Claſſics.*

At LARGE. Without reſtraint; without confinement.—If you divide a cane into two, and one ſpeak at the one end, and you lay your ear at the other, it will carry the voice farther than in the air *at large*. *Bacon.*

Thus incorporeal ſpirits to ſmalleſt forms
Reduc'd their ſhapes immenſe; and were *at large*,
Though without number ſtill. *Milton.*

Diffuſely; in the full extent.—It does not belong to this place to have that point debated *at large*. *Watts.*

Diſcover more *at large* what cauſe that was,
For I am ignorant, and cannot gueſs. *Shakeſpeare.*

LARGE, *ſ.* The longeſt note in the ancient time-table, equal to two longs, four breves, or eight ſemibreves. Its form is an oblong ſquare, with a tail on the right ſide. It is now diſuſed. See the article MUSIC.

LARGE, *adv.* A ſea-term applied to the wind when it croſſes the line of a ſhip's courſe in a favourable direction, particularly on the beam or quarter. Thus, if a ſhip ſteer weſt, then the wind in any point of the compaſs to the eaſtward of the ſouth or north may be called *large*, unleſs when it is directly eaſt, and then it is ſaid to be right aft. *Sailing large* is, therefore, advancing with a large wind, ſo that the ſheets are ſlackened and flowing, and the bow-lines entirely diſuſed. This phraſe is generally oppoſed to ſailing cloſe-hauled.

LARGE, in the manege. A horſe is ſaid to go large, or wide, when he gains or takes in more ground in going wider from the centre of the volt, and deſcribing a greater circumference. To make a horſe go large, you muſt give him the aid of your inner heel.

LAR'GE-BONED, *adj.* Big; bulky in reſpect of bone.—Warwick, Leiceſter, and Buckingham, bear a *large-boned* ſheep of the beſt ſhape and deepeſt ſtaple. *Mortimer.*

LAR'GE-HANDED, *adj.* Rapacious:

Large-handed robbers your grave maſters are,
And pill by law. *Shakeſpeare's Timon.*

LARGE I'SLAND, one of the largeſt iſlands on the Labrador Coaſt, due weſt of the mouth of Shecatica-bay.

LARGE RIV'ER, a river of Louiſiania, which runs into the Miſſiſſippi in lat. 38. 25. N. lon. 95. 7. W.

LAR'GELY, *adv.* Widely; extenſively. Copiouſly; diffuſely; amply.—Where the author treats more *largely*, it will explain the ſhorter hints and brief intimations. *Watts on the Mind.*—Liberally; bounteouſly:

Thoſe, who in warmer climes complain
From Phœbus' rays they ſuffer pain,
Muſt own, that pain is *largely* paid
By gen'rous wines beneath the ſhade. *Swift.*

Abundantly; without ſparing:

They their fill of love, and love's diſport,
Took *largely*; of their mutual guilt the ſeal. *Milton.*

LAR'GENESS, *ſ.* Bigneſs; bulk.—London excels any other city in the whole world, either in *largeneſs*, or number of inhabitants. *Spratt.*

Nor muſt Bumaſtus his old honours loſe,
In length and *largeneſs* like the dugs of cows. *Dryden.*

Greatneſs; comprehenſion.—There will be occaſion for *largeneſs* of mind and agreeableneſs of temper. *Collier of Friendſhip.*—Extenſion; amplitude.—If the *largeneſs* of a man's heart carry him beyond prudence, we may reckon it illuſtrious weakneſs. *L'Eſtrange.*

Shall grief contract the *largeneſs* of that heart,
In which nor fear nor anger has a part? *Waller.*

Wideneſs.—Suppoſing that the multitude and *largeneſs* of rivers ought to continue as great as now; we can eaſily prove, that the extent of the ocean could be no leſs. *Bentley.*

LARGENTIE'RE, a town of France, and ſeat of a tribunal, in the department of the Ardêche: eighteen miles weſt of Privas, and four north of Joyeuſe. Lat. 44. 32. N. lon. 4. 42. E.

LARGENTIE'RE, a town of France, in the department of the Higher Alps, and chief place of a canton, in the diſtrict of Briançon. The place contains 978, and the canton 5871, inhabitants, on a territory of 462½ kiliometres, in 7 communes.

LAR'GESS, *ſ.* [*largeſſe*, Fr.] A preſent; a gift; a bounty.—He aſſigned two thouſand ducats, for a bounty to me and my fellows; for they give great *largeſſes* where they come. *Bacon's New Atlantis.*

Our coffers with too great a court,
And liberal *largeſſes*, are grown ſomewhat light. *Shakeſp.*

LARGET'TO, *adv.* in muſic, a mode of time ſomething quicker than largo.

LARGIF'ICAL, *adj.* [from the Lat. *largus*, large, and *facio*, to make.] Bounteous; beſtowing largely. *Cole.*

LARGIF'LUOUS, *adj.* Flowing copiouſly. *Scott.*

LARGILLIE'RE (Nicholas de), an eminent French portrait-painter, was born at Paris in 1656. His father, whom mercantile concerns induced to ſettle at Antwerp, complied with the natural turn he diſplayed for the arts of deſign, by placing him at the age of twelve with Antony Gobeau, a Flemiſh painter, eminent for landſcapes and ſubjects of common life. Largilliere roſe by his genus above the taſte of the ſchool in which he was educated; and, going at the age of eighteen to England, was employed by ſir Peter Lely about the pictures at Windſor, where he attracted the notice of Charles II. for whom he painted

painted ſome pictures. After a ſtay of four years in England, he returned to Paris, where Vander Meulen and Le Brun perſuaded him to remain, and he preſently acquired great fame in the walk of portrait. He was admitted into the academy as a hiſtory-painter, which branch he did not abandon, though he chiefly practiſed in the other. At the acceſſion of James II. he was ſent over to England to take the portraits of him and his queen; he did not, however, make a long ſtay, but returned to Paris, where he was employed in two great pictures for the hall of the Hotel-de-ville. Theſe repreſented the feſtival given by the city of Paris to Louis XIV. and his court, on occaſion of his recovery, and the marriage of the duke of Burgundy to the princeſs of Savoy. He acquitted himſelf with great reputation in theſe works; and afterwards painted a votive picture placed in the church of St. Genevieve at the end of two years of ſcarcity. Largilliere was not much employed at court, of which honour he was little ambitious, preferring the prompt payment of the public at large. He, however, painted ſeveral of the princes; but obtained no penſion. One of his greateſt honours was that of being deſired to place his own portrait in the gallery of artiſts of the duke of Tuſcany, where it is diſtinguiſhed for beauty of execution. He paſſed through all the offices of the Academy of Painting, and died its chancellor. This artiſt poſſeſſed great fertility of invention and readineſs of execution, a light and free touch, correctneſs of deſign, and ſkill in compoſition. He particularly excelled in colouring, his tints being clear and freſh, which character they long preſerved. In his portraits, the heads and hands are executed with peculiar delicacy. He acquired wealth by his art, and built a fine houſe at Paris, adorned with the works of his own pencil. His private character procured him many friends, and he preſerved his gaiety of temper to a very advanced age. He died in 1746, in his ninetieth year. Sixty of his pieces have been engraved, among which are portraits of ſome of the moſt diſtinguiſhed perſons of his time. *D'Argenville.*

LARGIL'OQUENT, *adj.* Speaking largely; full of words. *Bailey.*

LARGI'TIO, *ſ.* [Latin.] In Roman antiquity, was a diſtribution of corn, proviſion, clothes, money, &c. to the people. Gracchus, when tribune, to make himſelf popular, paſſed a law for ſupplying the Roman citizens with corn at a very low rate, out of the public granaries. Claudius, another tribune, with the ſame views to popular applauſe, procured it to be diſtributed *gratis.* Cato, to win the common people from Cæſar, perſuaded the ſenate to do the ſame; and 300,000 citizens ſhared in the diſtribution. Cæſar, after his triumph, extended his bounty to 150,000, giving them each a *mina.* The Roman emperors enlarged ſtill farther the liſt of thoſe who were to partake of their diſtributions. *Largitio* is frequently taken in a bad ſenſe, to ſignify a maſked bribery; whereby candidates purchaſed votes, when they ſtood for places of honour or truſt in the ſtate.

LARGI'TION, *ſ.* [*largitio*, Lat.] The act of giving.

LARGI'TIONAL, *ſ.* An officer who had the diſpoſing of gifts. *Cole.*

LAR'GO, *adv.* in muſic, a mode of time two degrees quicker than adagio.

LAR'GO, a ſeaport town of Scotland, in the county of Fife, ſituated on the north coaſt of the Frith of Forth, in a large bay, to which it gives name, which is a good and ſafe road for veſſels of every deſcription. Population 1867. It is ſix miles ſouth of Cupar, and fourteen eaſt of Kirkcaldy. Lat. 56. 14. N. lon. 2. 57. W.

LAR'GO GULF, a bay on the coaſt of Iſtria, near Pirano.

LAR'GO LAW, a hill about 800 feet high, about a mile north of Largo.

LARGS, a ſeaport town of Scotland, in the county of Ayr, ſituated in a bay of the Clyde, with a weekly market, and about 1360 inhabitants. This place is rendered memorable by the defeat of the Norwegians here in their laſt invaſion of this country. This invaſion was made in the year 1263, with a fleet of 160 ſail and an army of 20,000 men, commanded by Haquin king of Norway; news of whoſe ravages on the coaſt of Ayr, Bute, and Arran, reaching the Scottiſh court, an army was immediately aſſembled by Alexander III. and a bloody engagement enſued at this village, when 16,000 of the invaders were ſlain in the battle and flight, with 5000 Scots. Haquin eſcaped to the Orkneys, where he ſoon after died of grief. The entrenchments of the Norwegian camp may ſtill be traced along the ſhore of this place. The Scottiſh commanders who fell in battle were buried in a riſing field near the village; three or four perſons were interred in one grave, on each ſide of which was a large ſtone, a third was placed acroſs the grave, ſupported at the extremities by the ſide-ſtones; and in this rude manner the warriors lay entombed. Some years ago the proprietor of the field demoliſhed theſe repoſitories of the dead, leaving only one (a ſpecial favour!), which ſerves to give an idea of the whole. It is fourteen miles ſouth of Greenock, and thirty-two north of Ayr.

LAR'GUS, a Latin poet who wrote a poem on the arrival of Antenor in Italy, where he built the town of Padua. He compoſed with eaſe and elegance. *Ovid. ex Pont.*

LA'RI, a town of Etruria: ten miles eaſt of Leghorn.

LAR'IBUS COLO'NIA, in ancient geography, a Roman colony in Africa, ſituated on an eminence, five leagues north-eaſt from Sicca.

LARICAX'AS, a province of South America, in the country of Buenos Ayres, about 240 miles from eaſt to weſt, and 75 from north to ſouth. The temperature of the air is different in different parts, and ſome of its products are the ſame with thoſe of Carabaya, by which it is terminated to the northward. This whole province abounds in gold-mines, whoſe metal is of ſo fine a quality, that its ſtandard is 23 carats 3 grains. In this province is the celebrated mountain of Sunchuli, in which about fifty years ſince, was diſcovered a gold-mine, remarkably rich, and of the ſtandard above-mentioned; but, when in its higheſt proſperity, it was unfortunately overflowed; and, notwithſtanding prodigious ſums were expended in endeavours to drain it, all the labour and expence, from the works being injudiciouſly conducted, were thrown away.

LAR'ICE, in ancient geography, the name given by Ptolemy to the province of India now called *Guzerat.*

LARICI'NA, *ſ.* [Latin.] The gum of the larch-tree; turpentine.

LARIGO'T, *ſ.* [French.] An acute ſtop in the organs of France, a 3d above the major 17th, and an octave above the 12th in our organs, which would be a 19th above the diapaſon.

LA'RIK, a town of Aſiatic Turkey, in the government of Sivas: eight miles north-north-eaſt of Amaſieh.

LA'RIN, *ſ.* An Indian and Arabian weight, equal to $10\frac{1}{8}$ drams.

LA'RING, a town of the duchy of Stiria: four miles north-eaſt of Marburg.

LARI'NO, a town of Naples, in the Moliſe, the ſee of a biſhop, ſuffragan of Benevento: twenty-five miles north-eaſt of Moliſe, and forty-two north of Benevento. Lat. 41. 47. N. lon. 14. 50. E.

LA'RIO, a department of Italy, occupying the whole of the weſt coaſt of the weſt bank of the lake of Como, anciently *Larius Lacus.* It contains a population of 137,264 inhabitants, who elect twelve deputies. Como is the capital.

LARIO'ZO, a town of the iſland of Cuba: forty-eight miles eaſt of Spirito Santo.

LARIS'SA, a town of European Turkey, and capital of Theſſaly, on the river Peneus, near the celebrated mountain Olympus, inhabited by Chriſtians, Turks, and Jews, the former of whom have an archbiſhop and ſeveral churches. The Turks have ſeveral moſques. In the year 1669,

1669, the grand ſignior held his court here during the ſiege of Candy. The ſituation is pleaſant, on a riſing ground: the Turks call it *Geniſahar*, or *Jengiſchahir*. It is 308 miles weſt-ſouth-weſt of Conſtantinople: and 220 ſouth-weſt of Adrianople. Lat. 39. 45. N. lon. 22. 29. E.

LARIS'SUS, a river of Peloponneſus, flowing between Elis and Achaia. *Strabo.*

LARISTAN', a province of Perſia, at one time an independent kingdom under the deſcendants of Koſroes; bounded on the north and eaſt by Kerman, on the ſouth by the Perſian Gulf, and on the weſt by Farſiſtan. The air is unwholeſome, and varies often from extreme heat to ſudden cold: water fit for uſe is very rare; that in general found in the country is ſaid to breed worms in the legs and thighs of thoſe who drink it. The principal trade of the inhabitants is in camels. Lariſtan was reduced to the ſubjection of Perſia in 1612, by Abbas the Great. Lar is the capital.

LA'RIUS, a large lake of Ciſalpine Gaul, through which the Addua runs in its way into the Po, above Cremona.

LA'RIX, *ſ.* [Latin.] In botany, the larch; the tree that produces turpentine. See PINUS.

LARK, *ſ.* [laþepce, Sax. *lerk*, Dan. *lavrach*, Scot.] A ſmall ſinging-bird. See ALAUDA.—It was the *lark*, the herald of the morn. *Shakeſpeare.*

Mark how the *lark* and linnet ſing;
With rival notes
They ſtrain their warbling throats,
To welcome in the ſpring. *Dryden.*

LAR'K's HEEL, or INDIAN CRESS. See TROPÆOLUM.

The Indian creſs our climate now does bear,
Call'd *lark's heel*, 'cauſe he wears a horſeman's ſpur. *Tate.*

LARK's POI'NT, a cape on the coaſt of Canada, in the river St. Laurence, at the mouth of the Saguenay River.

LARK'-SPUR, *ſ.* A plant. See DELPHINIUM, vol. v.

With the ſame weapon, *lark-ſpur*, thou doſt mount
Amongſt the flowers, a knight of high account. *Tate.*

LAR'KENTING, a town of Thibet: fifty-five miles eaſt-north-eaſt of Tchiatam.

LAR'KER, *ſ.* A catcher of larks.

LAR'LINGFORD, a village in Norfolk, north of Eaſtling, in the great poſt-road from London to Norwich, has its name from its ford over the river. The dwelling-houſes are about 22, and the inhabitants 150. The church and chancel are thatched, and there are but three bells in its tower.

LAR'MIER, *ſ.* [from *larme*, Fr. a tear.] In architecture, the eaves of a houſe; the flat ſquare member that forms the utmoſt projection of a cornice; being ſo called from its uſe, which is to diſperſe the water, and cauſe it to fall at a diſtance from the wall, drop by drop, or as if by *tears*, as the word imports.

LAR'NAGE, a town of France, in the department of the Drôme: ten miles north of Valence.

LAR'NE, a town of Ireland, in the county of Antrim, ſituated at the mouth of a river of the ſame name, near the north channel of the Iriſh Sea: eight miles north of Carrickfergus, and ſixteen north-eaſt of Antrim. Lat. 54. 51. N. lon. 5. 43. W.

LAR'NE LO'UGH, a bay on the eaſt coaſt of the county of Antrim, Ireland, called Oldfleet haven by Boate, and Wolderfrith in the enumeration of the havens by Stanihurſt. It is formed by the peninſula called Iſland Magee, and is ſaid by M'Kenzie to be a ſmall but ſafe harbour, where veſſels that draw not above ten feet water may ride on clean good-holding ground. It is about ſix miles long and one wide.

LAR'NIC, or LAR'NICA, a ſeaport town on the coaſt of the iſland of Cyprus, the ſee of a Greek biſhop, and the reſidence of ſeveral European conſuls. The Turks have a moſque, and the Greeks three churches. In Larnic, or rather in the whole iſland of Cyprus, there are people belonging to ſix European nations: French, Engliſh, Tuſcans, Neapolitans, Venetians, and Raguſans, each have their reſpective conſul, except the Tuſcans; theſe are under the protection of the Engliſh conſul, who is honoured even with the title of vice-conſul of Tuſcany. There are here alſo ſome Imperialiſts, Danes, Swiſs, Dutch, and Genoeſe; but, as all theſe have long ceaſed to carry on commerce by themſelves, they entruſt their commiſſions to correſpondents, whom they have amongſt the other nations eſtabliſhed in this iſland. Larnica is now a poor place, though the roadſted is good. It is thirty miles ſouth-weſt of Famagoſta.

LAR'NOS, a ſmall deſolate iſland on the coaſt of Thrace.

LARNTU'KA, LAR'RENTUKA, or LAR'UNTUKA, a ſeaport town on the ſouth ſide of Ende, one of the Molucca Iſlands, with a good harbour. Lat. 8. 15. S. lon. 122. 57. E.

LARO'AH, a town of Hindooſtan, in Guzerat: ten miles eaſt of Baroach.

LARO'CHE. See ROCHE.

LAROO'T, a river which runs into the Strait of Malacca in lat. 4. 47. N. lon. 100. 42. E.

LA'ROS, a town of Turkiſh Armenia, on the coaſt of the Black Sea: eighteen miles ſouth-weſt of Gonieh.

LAROTA'VA, a town of the Iſle of Teneriffe.

LARO'W, a town of Hindooſtan, in Bahar: ten miles ſouth of Gayah.

LARRA'GA, a town of Spain, in Navarre: eleven miles eaſt of Eſtella.

LARRASOAN'NA, a town of Spain, in Navarre: twelve miles north-eaſt of Pamplona.

LARRE'A, *ſ.* [named by Cavanilles in honour of Don John Anthony Hernandez de Larrea, dean of Saragoſſa, a liberal encourager of chemiſtry, botany, and agriculture. The author had, in his fourth volume of *Icones*, p. 63, ſuppreſſed this name, given by his countryman Ortega to another genus, and had changed it to *Hoffmanſeggia*, being then, as it ſeems, not ſo ſenſible of the dean of Saragoſſa's botanical merits as he afterwards became.] In botany, a genus of the claſs decandria, order monogynia, natural order gruinales, *Linn.* rutaceæ, *Juſſ.* The generic characters are—Calyx: perianthium inferior, of five ovate, concave, rather unequal, deciduous leaves. Corolla: petals five, equal, ovate, with claws. Stamina: filaments ten, rather ſhorter than the corolla, awl-ſhaped, equal, each furniſhed at its baſe, on the inſide, with a cloven ſcale, applied cloſe to the germen; antheræ heart-ſhaped, erect, ſimple. Piſtillum: germen ſuperior, globoſe, with five deep furrows; ſtyle awl-ſhaped, with five angles, nearly equal to the ſtamens; ſtigma ſimple. Pericarpium: drupes five, dry, cohering by their acute inner margin, externally convex, of one cell. Nuts: ſolitary, ovate-oblong.—*Eſſential Character.* Calyx of five leaves; petals five; nectary of the five cloven leaves, covering the germen; drupes five, ſingle-ſeeded.

1. Larrea nitida, or ſhining-leaved larrea: leaves pinnate; fruit ſmooth. Gathered at Buenos Ayres by Louis Née, flowering in April. It has been raiſed with good ſucceſs in the garden of Madrid. The ſtem is ſhrubby, nine feet high in its native country, hard, knotty, very much branched; the branches round, rather zig-zag, repeatedly ſubdivided, ſpreading, two-ranked, leafy, rough, viſcid. Leaves oppoſite, ſeſſile, twice as long as broad, about half an inch in length, ſhining, glutinous, ſmoothiſh, minutely dotted, each compoſed of about ſeven or eight pair of crowded, two-ranked, oblique, ſeſſile, oblong, obtuſe, entire, leaflets, of which the two uppermoſt are unequal and very ſmall, looking as if there were an odd one at the end. Flowers axillary, ſolitary, alternate, deep yellow, on roughiſh ſtalks, ſhorter than the leaves. The germen is hairy, though the fruit is naked, or only clothed with fine ſhort down. Its outer coat is coriaceous and rugged. Nuts without valves or ſutures. The whole plant exudes a copious glutinous reſin, of a ſtrong ſcent,

ſtill

ſtill very powerful in the dried ſpecimens, and intolerably ſo on their being moiſtened with proof-ſpirit, which extracts from them abundance of a yellow fetid ſolution.

2. Larrea divaricata, or ſpreading-lobed larrea: leaves ſimple, with two deep ſpreading lobes; fruit hairy. Found with the former, flowering at the ſame ſeaſon. The ſtem is ſix feet high, with much of the habit of the foregoing; but the leaves are ſimple, very deeply cloven into two ſpreading acute lobes. The flowers are larger than thoſe of L. nitida, with obtuſe petals; and the fruit is beſet externally with long prominent hairs.

3. Larrea cuneifolia, or wedge-leaved larrea: leaves wedge-ſhaped, cloven at the end, with an intermediate briſtle. This appears to differ in foliage only from the laſt, along with which it was found. Theſe plants promiſe to be not unworthy of attention for their dyeing qualities. Cavanilles ſays, ten leaves of the *divaricata*, boiled in a quart of water, with the little branch on which they grew, tinged the whole liquid of a deep ſaffron-colour. *Cavanilles*, v. 639.

LAR'REY (Iſaac de), born of a noble family of the reformed religion in the Pays de Caux, in 1638, was brought up to the law, and acted as an advocate in his native province, till the repeal of the edict of Nantes made him a refugee. He retired to Holland, where he obtained the title of hiſtoriographer to the ſtates-general. An invitation from the elector of Brandenburgh drew him to Berlin, at which capital he died in 1719, at the age of eighty-one. He was a man of great integrity, zealous for his religion, and warm both in praiſe and cenſure. He poſſeſſed an excellent memory, to which he confided too much in his writings, ſo as to be betrayed into inaccuracies. His works were, 1. Hiſtoire d'Auguſte, 1690, 8vo. 2. Hiſtoire d'Angleterre, 4 vols. folio, 1697, 1713: this hiſtory of England was in conſiderable eſteem on the continent till the appearance of that of Rapin. 3. L'Heritiere de Guienne. 4. Hiſtoire des Sept Sages, 2 vols. 8vo. 1713. 5. Hiſtoire de Louis XIV. 3 vols. 4to. 9 vols. 12mo. 1718. He alſo engaged in controverſy, and was one of the anſwerers of Bayle's Avis aux Refugiés. *Moreri.*

LARRISOU'N, a town of Perſia, in the province of Mazanderan: ſixty-five miles ſouth-weſt of Fehrabad.

LARRO'QUE (Matthew de), an eminent French proteſtant miniſter, was born at Leirac, a ſmall city of Guienne, near Agen, in the year 1619. He was ſcarcely paſt his youth when he loſt his parents, who by their condition and virtue were the principal perſons in their city; and this heavy misfortune was ſoon followed by the loſs of his entire patrimony. Under theſe afflictive circumſtances he ſought for conſolation in ſtudy; and, as he was already a proficient in polite literature, he applied to the ſtudy of philoſophy, and above all that of divinity. Having made a conſiderable progreſs in theſe branches of knowledge, he was admitted a miniſter with great applauſe, and was fixed by the ſynod of Guienne in a little church named Poujols. Two years after his ſettlement in this place, he was obliged to go to Paris, to clear himſelf from ſome charges brought againſt him by the catholics, who intended to ruin his church; and, though he did not ſucceed in preventing their artifices from producing their deſigned effect, he met with other favourable circumſtances at that city. As he ſometimes preached at Charenton, he was heard there by the ducheſs de la Trémouille, who liked him ſo well, that ſhe appointed him miniſter of the church of Vitré in Britany, and afterwards gave him many proofs of her eſteem; as did alſo her ſon and daughter, the prince of Tarente and the ducheſs of Weimar. In this church he officiated about twenty-ſeven years, and during that time applied moſt aſſiduouſly to the ſtudy of the fathers, and Chriſtian antiquities. Of the progreſs which he made in that ſtudy, he ſoon afforded public proofs in an anſwer which he publiſhed to the reaſons aſſigned by a miniſter of the name of Martin, for his converſion to popery, which abounded with paſſages from the fathers. The works which he afterwards publiſhed, and which are mentioned below, procured him a very high reputation, and led to his acquaintance and correſpondence with ſeveral illuſtrious men of letters, not only in the proteſtant, but alſo in the catholic, communion. In the year 1669, the church of Charenton had determined to invite him to become their paſtor; but ſome falſe brethren, who were filled with envy, by their artifices excited ſuch prepoſſeſſions againſt him at court, that his majeſty prohibited that church from inviting him, notwithſtanding that the marquis de Ruvigny, the deputy-general of the reformed, offered to become reſponſible for his good behaviour. Afterwards he was invited to become both miniſter and profeſſor of divinity at Saumur. He ſignified his acceptance of the former office, but declined the latter, not thinking it to be conſiſtent with the courſe of ſtudy in church-hiſtory, to which he had a prevalent inclination. While he was preparing himſelf to remove to Saumur, the intendant of the province forbade him to go thither. The church of Saumur complained of this unjuſt prohibition before the higher powers, and, by their petitions, obtained permiſſion for his ſettlement with them. M. de Larroque, however, did not think proper to avail himſelf of it, or to enter upon an employment in ſpite of the intendant. He therefore continued ſtill at Vitré, where he did not ſuffer his pen to be idle. Some time after this, he received three invitations at once, from three of the moſt conſiderable churches in the kingdom, thoſe of Montauban, Bourdeaux, and Rouen. He gave the preference to that of Rouen; at which place he died in 1684, at the age of ſixty-five, not only with a high reputation for literature, but with the character of an honeſt man, and of a good paſtor. His works were, 1. The Office of the holy Sacrament, or the Tradition of the Church concerning the Lord's Supper, collected from the holy Fathers and other eccleſiaſtical Authors, 8vo. 1665. 2. The Hiſtory of Euchariſt, 4to. 1669, which is full of curious reſearches. 3. De Photino et Liberio, diſſert. ii. 1670. 4. Obſervationes in Ignatianas Pearſonii Vindicias, necnon in Beverigii Annotationes, 8vo. 1674; in defence of M. Daillé. 5. The Agreement between the Diſcipline of the reformed Church in France and that of the primitive Church, 4to. 1678. 6. On receiving the Sacrament in both Kinds; in anſwer to the work of the biſhop of Meaux. 7. Conſiderations on the Nature of the Church, 12mo. 1673. 8. A treatiſe on the Regale. 9. A poſthumous work, entitled, Matthæi Larroquani Adverſariorum Sacrorum Lib. iii. acceſſit Diatriba de Legione Fulminatrice, in quo expenduntur Veterum Teſtimonia, &c. 8vo. 1688; and ſeveral controverſial tracts. The Diatriba in the poſthumous piece above mentioned, was the production of the author's ſon, Daniel de Larroque. *Bayle.*

LAR'RY BUNDAR', a ſeaport of Hindooſtan, in the province of Sindy, on a branch of the Indus, called Pitti, about twenty miles from the ſea. There is a good road for ſhipping, and the river is navigable for ſmall veſſels. The town contains about one hundred houſes, and is defended by a fort. It is forty-eight miles weſt-ſouth-weſt of Tatta. Lat. 24. 45. N. lon. 66. 42. E.

LARS, a town of Ruſſia, in the government of Caucaſus: fifty-ſix miles ſouth-eaſt of Ekaterinograd.

LARS TOLUM'NIUS, a king of the Veientes conquered by the Romans, and put to death, A. U. C. 329. *Livy.*

LARS'MO, a ſmall iſland on the eaſt ſide of the gulf of Bothnia. Lat. 63. 46. N. lon. 22. 39. E.

LAR'TA. See ARTA, vol. i. p. 220.

LAR'TIUS FLO'RUS, a conſul, who appeaſed a ſedition raiſed by the poorer citizens; and was the firſt dictator ever choſen at Rome. B. C. 498.

LAR'TIUS SPU'RIUS, one of the three Romans who alone withſtood the fury of Porſenna's army at the head of a bridge, while the communication was cutting down behind them. His companions were Cocles and Herminius.

See COCLES, vol. iv.—The name of Lartius has been common to many Romans.

LAR'VA, *ſ.* [Lat. a maſk.] The grub or caterpillar ſtate of an inſect. See the article ENTOMOLOGY, vol. vi. p. 834.

In the New Tranſactions of the Academy of Sciences at Stockholm, we have a curious account of the cure of a young woman, effected by expelling from the ſtomach, &c. the larvæ of certain inſects. The account of this ſingular caſe was tranſmitted to M. Odhelius, at Stockholm, together with ſome of the larvæ, by M. Flank, ſurgeon of Carlſtadt, who, during the courſe of forty years' practice never ſaw any of the like kind diſcharged from the human body. The patient, who was ſeventeen years of age, and who for three years had been quite regular, became indiſpoſed in the year 1786, and complained of a violent pain and griping in her ſtomach, with a head-ache and confuſion in the morning, a burning in the throat, and great laſſitude. Theſe ſymptoms were leſſened after repeated eructation; but the diſorder ſtill increaſed. Mineral-water with jalap-powder was preſcribed, and the larvæ began gradually to be diſcharged; but, as the patient did not find much relief, aloe-pills, with jalap-reſin, and mercurius dulcis, were adminiſtered, and about a quart of mineral-water each time; by which means theſe troubleſome gueſts were gradually ſo completely expelled, that the patient, in the courſe of a few weeks, was perfectly cured. The larvæ were tranſmitted to the Cabinet of Curioſities belonging to the Academy of Sciences. Profeſſor Wilke found, on examining them, that they were of the ſpecies deſcribed by Reaumur under the name of *vers à queue de rat*, (rat-tailed worms,) and which belong to a kind of two-winged fly, called the pendulous fly, *Muſca pendula* Linn. becauſe the larvæ are ſuſpended, as it were, by a long thread, which is their organ of reſpiration. See the article MUSCA. Theſe larvæ, which the profeſſor examined, were of a yellowiſh-brown colour, from four to ſix lines in length, with a tail of about the ſame extent; a cylindrical body, from half a line to a line in thickneſs, cut acroſs ſomewhat obliquely before, and conical towards the tail. As the patient, before ſhe fell ill, had uſed a great deal of milk and cheeſe, M. Wilke was of opinion, that ſome of the eggs of theſe flies had been conveyed into her ſtomach in the rind of the cheeſe. *New Tranſ.* vol. x.

LAR'VÆ, *ſ.* [from the Etruſcan *lar*, a prince or lord.] In antiquity, denoted the ghoſts of the deceaſed, conſidered as wicked and miſchievous. Hence is formed the term *larvatus*, i. e. *larvâ indutus*, or demoniac. The ingenious Mr. Farmer urges the etymology and uſe of this term to prove, that the heathen demons were human ghoſts. The larvæ were alſo called *lemures*.

LAR'VATED, *adj.* [*larvatus*, Lat.] Maſked.

LARUCA'CHI, a town of Peru, in the dioceſe of La Paz: 110 miles north of Chucuito.

LAR'UM, *ſ.* [from *alarum*, or *alarm*.] Alarm; noiſe denoting danger.—The peaking cornute, her huſband, dwelling in a continual *larum* of jealouſy, comes to me in the inſtant of our encounter. *Shakeſpeare.*

His *larum* bell might loud and wide be heard,
When cauſe requir'd, but never out of time. *Spenſer.*

An inſtrument that makes a noiſe at a certain hour.—Of this nature was that *larum*, which, though it were but three inches big, yet would both wake a man, and of itſelf light a candle for him at any ſet hour. *Wilkins.*—I ſee men as luſty and ſtrong that eat but two meals a-day, as others, that have ſet their ſtomachs, like *larums*, to call on them for four or five. *Locke.*

The young Æneas, all at once let down,
Stunn'd with his giddy *larum* half the town. *Dunciad.*

LAR'VIGEN, or LAUR'WIG, a ſeaport town of Norway, in the dioceſe of Chriſtiania, and capital of a county to which it gives name; ſituated at the conflux of two rivers near the ſea. It is a place of conſiderable trade, and its iron-works are reckoned ſome of the moſt valuable in Norway. It is fifty-ſix miles ſouth-ſouth-weſt of Chriſtiania. Lat. 59. 3. N. lon. 10. 15. E.

LA'RUNS, a town of France, in the department of the Lower Pyrenées: eighteen miles ſouth of Pau.

LA'RUS, *ſ.* in ornithology, a genus of birds of the order of anſeres, including the GULLS and MEWS. Generic characters: Bill plain, ſtraight, knife-ſhaped, and ſomewhat hooked at the tip; the under mandible ſwelled below the tip. Noſtrils ſlits, broader before, and ſeated in the middle of the bill.

Theſe birds are natives of the northern climates; their body light, their wings long, tongue ſomewhat cleft, bill ſtrong, legs ſhort, and naked above the knees. All the gulls and mews are alike voracious and clamorous; they might be ſtyled the vultures of the ſea: they devour carrion of every kind which floats on the ſurface, or is caſt on-ſhore. As cowardly as they are gluttonous, they attack only weak animals, and vent their fury on dead bodies. Their ignoble port, their importunate cries, their edged and hooked bill, preſent the true picture of birds ſanguinary and cruel. They fight rancorouſly together on the ſcene of carnage; and when they are ſhut up, and their ferocious humour is ſoured by captivity, they wound each other without apparent motive, and the firſt from which blood is drawn falls a prey to the reſt; for they no ſooner taſte the blood, than they tear in pieces the victim which they had wounded without cauſe. This exceſs of cruelty is moſtly ſeen in the large ſpecies; but all of them continually watch an opportunity to ſteal the food or prey of their companions. Every thing is acceptable to their voracity: fiſh, whether freſh or putrid; bloody fleſh, recent or tainted; ſhell-fiſh, and even bones; all digeſt in their ſtomach. They ſwallow the bait and the hook; they dart with ſuch violence as to transfix themſelves on the point where the fiſherman places the herring or pilchard as a ſnare. Nor is this the only way to allure them; Oppian aſſerts, that, if a board be painted with figures of fiſh, theſe birds will daſh againſt it. All the gulls and mews have three toes connected by an entire membrane, and the hind toe detached, but very ſmall; their head is large, and its carriage ungraceful, being ſunk almoſt between the ſhoulders, whether they walk or ſleep. They run ſwiftly on the beach, and fly ſtill better above the waves: their long wings, which when cloſed exceed the tail, and the quantity of feathers with which their body is clothed, make them very light. They have alſo a very thick down, which is of a bluiſh colour, eſpecially on the ſtomach. They are hatched with that down, but the other feathers are late in growing; and they acquire not completely their colours, to wit, the fine white of the body, and the black or bluiſh grey on the mantle, till after ſeveral moultings, and in their third year, which makes the diſcrimination of the ſpecies very difficult. Oppian ſeems to have known this progreſs of their colours; for he ſays that theſe birds, as they grow old, become blue. They keep in flocks on the ſea-ſhores; ſome running, ſome flying, and others alighting; the beach and the downs ſeem quickened by their numbers and their confuſed motions, and reſound with their noiſy cries. In general, no birds are more common on our coaſts, and they are found a hundred leagues at ſea. They frequent the iſlands and maritime countries of every climate. Navigators meet with them in all parts of the globe. The larger ſpecies ſeem attached to the ſhores of the northern ſeas. It is reported that the gulls of the Ferro iſlands are ſo ſtrong and voracious, that they often tear lambs in pieces, and tranſport the fragments to their neſts. In the icy ocean, they often gather in multitudes about the carcaſes of whales; and with ſuch repaſts they eaſily ſatiate their rapacity, and procure ample proviſion for the innate gluttony of their young. Theſe birds ſtrew their eggs and neſts by thouſands, even on the frozen lands of the two polar zones; nor do they quit thoſe regions in the gloom of winter, but ſeem attached to their

native climates, ſcarcely affected by the change of temperature. Ariſtotle, who lived under a ſky infinitely milder indeed, remarked that the gulls and mews never diſappear, but remain the whole year in the places of their nativity. The ſame obſervation holds with reſpect to Great Britain: for many ſpecies of this bird are ſeen on our coaſts, both in ſummer and in winter. Every-where they are noted for their voracity and their diſagreeable cries. Sometimes they keep on the low ſhores; ſometimes they retire into the cavities of the rocks, expecting the waves to caſt out their prey; often they attend the fiſhers, to pick up the refuſe and garbage; and this habit is doubtleſs the only ground of the affection towards man, which the ancients aſcribed to theſe birds. As their fleſh is unfit for eating, and their plumage of no value, they are neglected by the fowler, and ſuffered to approach without being fired upon. Their eggs, however, are eſteemed good food.

I. *Noſtrils without a cere.*

1. Larus riſſa, the kittiwake. Specific character, whitiſh, back hoary; quill-feathers white; hind toe without a claw. Length fourteen inches: breadth three feet two inches. The bill yellow, tinged with green: inſide of the mouth orange: head, neck, belly, and tail, ſnow white: back and wings grey: the outer edge of the firſt quill-feather, and the tips of the four or five next, black: legs duſky, with only a knob inſtead of a back toe. It inhabits the cliffs about Flamborough Head; the Baſs Iſle; the vaſt rocks near the caſtle of Slains, in the county of Aberdeen; and Prieſtholm Iſle. It is likewiſe met with at Newfoundland; and in Greenland, Spitzbergen, Iceland, and the north of Europe; the arctic coaſt of Aſia; and Kamtſchatka. By the Icelanders it is called *riſſa*. Some conſider this as the young or the female of the following.

2. Larus tridactylus, the tarrock, or ſpotted mew: whitiſh; back ſomewhat hoary; tail-quills, except the outermoſt, tipt with black; feet three-toed. Length fourteen inches; breadth thirty-ſix; weight ſeven ounces. Bill ſhort, thick, and black; head, neck, and under parts, white; near each ear, and under the throat, a black ſpot; at the hind part of the neck a creſcent of black; the back and ſcapulars bluiſh grey; the wing-coverts duſky, edged with grey; ſome of the larger wholly grey; the exterior ſides and ends of the firſt four quills black; tips of the two next black; all the reſt white; the ten middle feathers of the tail white, tipped with black; the two outermoſt wholly white; legs duſky aſh-colour; in lieu of the back toe, it has only a protuberance. This breeds in Scotland, and inhabits other parts of northern Europe, quite to Iceland and Spitzbergen, the Baltic, and White Sea, as alſo Kamtſchatka. It is common in Greenland in ſummer; comes in ſpring, and frequents the ſea ſhores: it builds in the rocky crags of the bays; in June lays two eggs, of a greeniſh aſh-colour, ſpotted with brown; and retires from the ſhores in autumn. It is obſerved frequently to attend the whales and ſeals, for the ſake of the fiſh which the laſt drive before them into the ſhallows, when theſe birds dart into the water ſuddenly, and make them their prey. They are very noiſy birds, eſpecially during the time of incubation. They ſwim well, and fly equally, and for a long time together; and are often obſerved on portions of ice ſwimming in the ſea. Both the fleſh and eggs are eſteemed by the Greenlanders, and the ſkins are uſed as garments.

β. L. major. This variety is nineteen inches in length; bill two inches and a quarter long, colour black; head and neck white; on each ear a ſpot of black; at the lower part of the neck behind, each feather has a duſky black bar juſt at the tip; the back and wing-coverts of a fine pale aſh-colour; from the bend of the wing to the tip of the ſecond quills is a bar of black, appearing oblique when the wing is cloſed; this bar is cauſed by moſt of the feathers in the direction being tipped with that colour; the four firſt quills are black, but the inner webs are white; the two next white, with a black mark cloſe to the tips; the reſt white; ſecondaries white, with a ſtripe of black near the ſhaft, and parallel to it; tail white; all but the outer feathers tipped for one inch with black; legs duſky; the hind claw wanting. It inhabits Kamtſchatka. This ſeems to be the tarrock in the higheſt ſtate of markings, and of a larger ſize than uſual.—There is a ſecond variety, in which the markings are much leſs diſtinct, with the addition of ſome clouds of black below the nape. Both are in the poſſeſſion of ſir Joſeph Banks.

3. Larus minutus, the little gull: ſnowy; bill reddiſh brown; irides bluiſh; head and beginning of the neck black; the reſt of the neck and body white; back and wings grey; tail even, and white; legs red. It inhabits the ſouthern parts of Ruſſia and Siberia; and is found about the ſhores of the Caſpian Sea, and the rivers which fall into it; migrating in ſummer northward up the Wolga, in order to breed. Size of a thruſh.

4. Larus hybernus, the winter-mew: cinereous, beneath ſnowy, back of the head, and the ſides of the neck, ſpotted with brown, back cinereous; the firſt of the wing-quills black; the tail marked with a black bar near the tip. Length eighteen inches, breadth three feet ſix inches; weight ſeventeen ounces. The bill is ſlender, two inches long, horn-colour, with a black tip, and bends at the end; irides hazel. This ſpecies is very common in England, and is obſerved to be met with farther inland than any of the others. It is conſidered by ſome as a variety of the common gull. See the annexed engraving, fig. 1.

5. Larus eburneus, the ivory gull: entirely white; bill and legs lead-colour. Length ſixteen inches; breadth thirty-ſeven. Bill two inches long, and lead-coloured, with a pale tip; orbits ſaffron-colour; the wings very long, exceeding the tail greatly, and even the legs, when at length. The young are marked with oblong black ſpots, eſpecially on the back and wings, with the bill black. This ſpecies ſeems to prefer the moſt northern ſituations, inhabiting both coaſts of Greenland; and are met with far at ſea, ſeldom approaching the land, except in the time of incubation; but are then ſufficiently tame, ſo as to be ſhot without difficulty, whereas at ſea they are very ſhy. They frequent the Frozen Sea, between Aſia and America, and Cape Denbigh; and were met with by our late voyagers at Oonalaſhka. It was ſaid likewiſe to inhabit Hudſon's Bay; but, if ſo, it muſt vary conſiderably in ſize; one deſcribed by Mr. Hutchins meaſured twenty-ſeven inches and a half in length, and was five feet in breadth: the bill and legs fleſh-colour; irides ſtraw-colour; the plumage of a beautiful ſnowy white, except a few of the tail-coverts, which were barred with duſky. This, he obſerves, is ſcarce along the coaſts, but more plenty in the iſlands and inland lakes, where it makes a ſlight neſt on the ground, of dry graſs, and lays four white eggs. The young are blackiſh, and the old ones do not become perfectly white under three years.

6. Larus canus, the common gull, or ſea-mew: white; back hoary. This is in length ſixteen or ſeventeen inches; thirty-ſix inches broad; and weighs one pound. The bill yellow; irides hazel; eye-lids brown; head, neck, under parts of the body, and tail, white; back and wings pale grey; the outer edge of the four firſt quills, and tips of the firſt five, black; but the fourth and fifth have a white ſpot at the tips; the reſt, except the three neareſt the body, have the ends white. This ſeems to be the moſt common of all the gulls, being found in vaſt numbers on our ſhores and rivers which are contiguous to the ſea. Its diſagreeable cry gave it the name of *mew*, from *miauler*, Fr. to ſquall like a cat; whence the Engliſh verb *to mewl*, and the name of theſe birds *mall*, in many places. It occurs north as far as Iceland and the Ruſſian lakes: is likewiſe met with in the neighbourhood of the Caſpian Sea, on various ſhores of the Mediterranean, and as far ſouth as Greece: it is found alſo in America, on the coaſt of Newfoundland. It breeds on the rocks and cliffs, like

others

others of the genus; and the eggs are two inches and a half in length, of a deep olive-brown, marked with irregular deep reddiſh blotches. It is a tame ſpecies, and may be ſeen by hundreds on the ſhores of the Thames and other rivers, in the winter and ſpring, at low water, picking up the various worms and ſmall fiſh left by the tide; and will often follow the plough in the fields contiguous, for worms and inſects which are turned up, particularly the cockchafer, or dorbeetle, in its larva ſtate, which it joins with the rooks in devouring moſt greedily.

7. Larus cinerarius, the red-legged cinereous gull: white; back hoary; a white ſpot behind the eyes. This anſwers, in moſt reſpects, to the black-cap, or pewit, of which it may perhaps be a variety, or elſe the young bird. The fore part of the head is white; the ſpace round the eyes duſky; from the corner of each eye a broad duſky bar, ſurrounding the hind part of the head; behind that another, reaching from ear to ear; the ends and exterior edges of the three firſt quill-feathers are black; the ends and interior ſides only of the two next black, but the ſhafts and middle part white; the tips of the next two white, beneath a black bar; the reſt, as well as the ſecondaries, aſh-colour; in other things reſembling the pewit. Length fifteen inches.

Of this, though itſelf probably only a variety, two varieties are noted, upon which therefore we ſhall not enlarge.

8. Larus erythropus, the brown-headed gull: whitiſh; head brown with white ſpots; back hoary; the ten middle tail-feathers tipped with black. This is alſo conſidered to be a variety of the *ridibundus*. Length fourteen inches; breadth two feet eleven inches: weight ſeven ounces. Bill red; eye-lids ſcarlet; neck and belly white; back and ſcapulars aſh-colour; wing-coverts duſky brown, edged with dirty white; the exterior ſides, and part of the interior of the firſt four quills, black; the tail conſiſts of twelve white feathers; the ten middle ones tipped with black, near an inch broad; the outer ones plain; legs red. This was killed on the banks of the Eſk, at Netherby, the ſeat of ſir James Graham.

9. Larus nævius, the wagel gull: white; back cinereous; tail tipped with black. This is a large ſpecies, being near two feet in length, and in breadth about five; weight near three pounds. The bill is black, two inches and a half long; irides duſky; the whole plumage compoſed of a mixed brown aſh-colour, and white; the middle of each feather is brown; the under parts of the body the ſame, but paler; quills black; the lower part of the tail mottled black and white; near the end a bar of black; beyond this the end is white; legs fleſh-colour, in ſome white. This ſpecies frequents the ſea-ſhores of many parts of England, though not in any conſiderable numbers; at times it is ſeen on the banks of the Thames, along with other gulls; and an opinion is there held, that it is the female of the *marinus*: but this has not been determined ſufficiently by authors. Pennant thinks the contrary; and indeed the different markings of the quills and tail do not juſtify the ſuppoſition. Others take it to be a variety of the *fuſcus*; and others again of the *tridactylus*. —Of this alſo three other varieties are noted in Gmelin's Linnæus.

10. Larus marinus, the black-backed gull: white; back black. Length twenty-nine inches; breadth five feet nine inches; weight near five pounds. The bill is ſtrong and thick, and almoſt four inches long; the colour a pale yellow; but the lower mandible is marked with a red ſpot, with a black one in the middle; irides yellow; edges of the eye-lids orange; head, neck, whole under ſide, tail, and lower part of the back, white; upper part of the back and wings black; quills tipped with white; legs of a pale fleſh-colour. This ſpecies inhabits ſeveral of the ſhores of England, and breeds on the higheſt cliffs. The egg is blunt at each end, of a duſky olive-colour, quite black at the greater end, and the reſt of it thinly marked with duſky ſpots. It is alſo common on moſt of the northern coaſts of Europe; frequents Greenland; but chiefly inhabits the diſtant rocks. Lays three eggs in May, placing them on the heaps of dung which the birds leave there from time to time. Cackles like a gooſe. It is ſaid to attack other birds, and to be particularly an enemy to the eider-duck, though its moſt general food is fiſh. It is common in America, as low as South Carolina, where it is called the *old wife*. Alſo found at the Cape of Good Hope; but ſmaller: it is ſaid to breed in the bays of that promontory, eſpecially on the rocks and ſmall iſles in Falſe Bay. The young are ſpotted with brown. Parkinſon met with it off the coaſt of New Holland; the length not mentioned, but deſcribes it as having a high yellow beak, a ſpot of ſcarlet on the gibbous part; corner of the mouth, and irides, bright ſcarlet; and the legs greeniſh-yellow.

Mr. Pennant obſerves, that he has met with, on the coaſt of Angleſea, a bird that agrees in all reſpects with this, except in ſize, in wanting the black ſpot on the bill, and in the colour of the legs, which were of bright yellow; the extent of the wings only four feet five inches; length twenty-two inches; weight half a pound; and that the ſame has been ſhot at Bulſtrode in Buckinghamſhire.

11. Larus ichthyætus, the great gull: body ſnowy; head, and as far as the middle of the neck, black; eye-lids white. This ſpecies is about the ſize of the barnacle-gooſe. The bill is of a duſky yellow at the baſe, towards the end crimſon; the tip yellow, croſſed with a duſky brown ſpot; inſide of the mouth red, irides brown; tail even and white; legs reddiſh brown. It inhabits the borders of the Caſpian Sea, and lays its eggs on the bare ſand, without the leaſt preparation of a neſt; they are in ſhape of an oblong oval, marked with frequent brown ſpots, with ſome paler ones intermixed. In flying it has a hoarſe cry, ſomewhat like that of a raven.

12. Larus fuſcus, the herring-gull: white; back brown; legs yellow. In length twenty-three inches, breadth fifty-two. The bill is yellow; on the lower mandible an orange ſpot; irides ſtraw-colour; edges of the eye-lids red. The herring-gull is common in this kingdom, and frequents the ſame places as the black-backed. It is ſaid to make a neſt of dead graſs, and lays three white eggs ſpotted with black. It feeds on fiſh; and is a great enemy to herrings, whence its name; it is a conſtant attendant on the nets, and ſo bold as to ſeize its prey before the fiſhermen's faces. It is found in moſt of the northern parts of Europe, as well as about the Caſpian and Black Seas, and the rivers which fall into them; alſo about the great lakes of Siberia, in Iceland, Greenland, and Hudſon's Bay. In winter it migrates ſouth, being found in Jamaica, and is ſaid to breed on ſome of the iſlands on the coaſt of South Carolina. Bullock's Muſeum, Piccadilly, contains a ſtuffed individual of this ſpecies, preſented by the queen: it had lived in her majeſty's park at Frogmore nearly two years.

13. Larus glaucus, the glaucous gull: white; back and wings hoary, wing-quills tipped with white; bill yellow, ſaffron at the corner. This ſpecies is larger than the herring-gull. It inhabits Norway, Lapmark, Greenland, and Spitzbergen; and is called by the Dutch *burgmeiſter*, as being maſter of all the ſpecies. It builds its neſt high on the cliffs; preys on dead whales; attends the walruſſes, in order to feed on their dung; and will deſtroy and eat the young of the razor-bill. It is almoſt continually on the wing, and makes a hoarſe noiſe like a raven. Feeds alſo on fiſh and on the berries of the black-berried heath. Dr. Foſter mentioned that he met with this ſpecies both at Terra del Fuego and New Zealand. It is alſo found at Hudſon's Bay, twenty-three inches in length, and four feet in breadth; but this differs from the deſcription of Briſſon, in having ſix of the quills black at the ends.

14. Larus argentatus, the ſilvery gull: bill yellow, with an orange ſpot; head and neck white, ſtreaked downwards with cinereous lines; back and under parts of

the body as in the glaucous gull; lower part of the primaries greyiſh, upper black, tips white. Inhabits Norway. In the Britiſh Muſeum, there is one very much like the above; length near ſixteen inches; bill one inch and a half long; quills marked as in the other, but the two firſt have the ends tipped with white for near an inch, the others only juſt a ſpot; but only ſix of the prime quills had the ends black. This is ſuppreſſed by Dr. Turton, being probably the ſame as the preceding.

15. Larus atricilla, the laughing gull: whitiſh; head blackiſh; bill red; legs black. Length eighteen inches; breadth three feet. The male and female are alike in an adult ſtate; therefore that mentioned by Briſſon as the female, having a cinereous head, and the forehead and throat ſpotted with white; as alſo that in the Peterſburgh Tranſactions, of a leſs ſize, with the head ſpotted black and white; are without doubt young birds. This ſpecies is found in Ruſſia, on the river Don, particularly about Tſchercaſk. The note reſembles a coarſe laugh, whence the name of the bird. It is met with alſo on the continent of America; and is very numerous in the Bahama Iſlands and Cayenne. It likewiſe frequents Hudſon's Bay; it comes there in May, and makes the neſt in the pine-trees; lays four lead-coloured eggs, and departs ſouth in September; it feeds on fiſh and worms.

16. Larus atricilloides, the Siberian gull: body reddiſh-white; head, orbits, and neck, black; back and wings cinereous; legs ſcarlet. Inhabits the ſalt lakes of Siberia; ſixteen inches long.

17. Larus ridibundus, the black-cap, or pewit: whitiſh; head blackiſh; bill and legs pale red. The names of this and the *atricapillus* have been ſtrangely confounded; they differ chiefly in the colour of the legs, which in the preſent ſpecies are red, in the other black. Length fifteen inches; breadth three feet; weight ten ounces. The black-cap, or pewit, breeds on the ſhores of many of our rivers, and in the inland fens of Lincolnſhire, Cambridgeſhire, and other parts of England. They make their neſt on the ground, with ruſhes and dead graſs; and lay three eggs, of a greeniſh brown, marked with red-brown blotches. After the breeding-ſeaſon, they again diſperſe to the ſea-coaſts. They breed alſo in Northumberland and Scotland, and are found throughout Ruſſia and Siberia, as far as Kamtſchatka, but not farther to the north. They winter at Aleppo in great numbers, and are there ſo tame, that the women are ſaid to call them from the terraces of their houſes, throwing up pieces of bread, which theſe birds catch in the air. They alſo inhabit North America, coming into New England in May, and departing in Auguſt. The young birds, in the neighbourhood of the river Thames, are thought good eating, and are called *red-legs*.

We ſhall tranſcribe Dr. Plott's account of the manner of catching the pewits in the 17th century in Staffordſhire. After relating ſome marvellous ſtories reſpecting their attachment to the lord of the manor, he thus proceeds: "Being of the migratory kind, their firſt appearance is not till the latter end of February, and then in number ſcarcely above ſix, which come as harbingers to the reſt, to ſee whether the hafts, or iſlands, in the pools, (upon which they build their neſts,) be prepared for them; but theſe never ſo much as alight, but fly over the pool, ſcarcely ſtaying an hour: about the 6th of March following, there comes a pretty conſiderable flight of an hundred, or more, and then they alight on the hafts, and ſtay all day, but are gone again at night. About our Lady-day, or ſooner in a forward ſpring, they come to ſtay for good, otherwiſe not till the beginning of April, when they build their neſts, which they make not of ſticks, but heath and ruſhes, making them but ſhallow, and laying generally but four eggs, three and five more rarely, which are about the bigneſs of a ſmall hen-egg. The hafts, or iſlands, are prepared for them between Michaelmas and Chriſtmas, by cutting down the reeds and ruſhes, and putting them aſide in the nooks and corners of the hafts, and in the valleys, to make them level; for, ſhould they be permitted to rot on the iſlands, the pewits would not endure them. After three weeks ſitting, the young ones are hatched, and, about a month after, they are almoſt ready to fly, which uſually happens on the 3d of June, when the proprietor of the pool orders them to be driven and caught, the gentry coming from all parts to ſee the ſport. The manner is thus: They pitch a rabbet-net on the bank-ſide, in the moſt convenient place over-againſt the hafts, the net in the middle being about ten yards from the ſide, but cloſe at the ends, in the manner of a bow; then ſix or ſeven men wade into the pool, beyond the pewits, over-againſt the net, with long ſtaves, and drive them from the hafts, whence they all ſwim to the bank-ſide, and, landing, run like lapwings into the net, where people are ſtanding ready to take them up, and put them into two pens, made within the bow of the net, which are built round, about three yards diameter, and a yard high, or ſomewhat better, with ſmall ſtakes driven into the ground in a circle, and interwoven with broom and other raddles. In this manner there have been taken in one morning fifty dozens at a driving, which, at five ſhillings a dozen, (the ancient price of them,) comes to 12l. 10s. but at ſeveral drifts that have been anciently made in the ſame morning, there have been as many taken as have ſold for 30l. ſo that ſome years the profit of them has amounted to 50l. or 60l. beſides what the generous proprietor uſually preſents his relations and the nobility and gentry of the county withal, which he conſtantly does in a plentiful manner, ſending them to their houſes in crates alive; ſo that, feeding them with livers and other entrails of beaſts, they may kill them at what diſtance of time they pleaſe, according as occaſions preſent themſelves, they being accounted a good diſh at the moſt plentiful tables. But they commonly appoint three days of driving them, within fourteen days, or thereabouts, of the 2d or 3d of June; which while they are doing, ſome have obſerved a certain old one that ſeems to be ſomewhat more concerned than the reſt, being clamorous, and ſtriking down upon the heads of the men; which has given ground of ſuſpicion, that they have ſome government among them, and that this is their prince that is ſo much concerned for its ſubjects. And it is further obſerved, that, when there is great plenty of them, the Lent-corn of the country is much the better, and the cow-paſtures too, by reaſon they pick up all the worms and the fern-flies, which, though bred in the fern, yet nip and feed on the young corn and graſs, and hinder their growth." The pools of Staffordſhire, which the pewits frequented, were Pewit Pool in the pariſh of Norbury, and Sebben Pool in the pariſh of High Offley. *Plott's Nat. Hiſt. of Staffordſhire*, p. 232.

II. *Noſtrils covered with a cere.*

18. Larus paraſiticus, the arctic gull: two middle tail-feathers very long. Bill an inch and a half long, pretty much hooked, and of a duſky colour. The top of the head is black; the ſides of it, forehead, neck, and all beneath, white: acroſs the breaſt a pale duſky bar: the upper parts of the body, wings, and tail, black: the baſe of the quills white on the inner webs; the two middle feathers of the tail are near four inches longer than the reſt: legs ſcaly, and black. This is a northern ſpecies: is very common in the Hebrides, and breeds on heath; comes in May, and retires in Auguſt: if diſturbed, it flies about, like the lapwing, but ſoon alights. Is alſo found in the Orkneys, and on the coaſts of Yorkſhire, where it is called the *feaſer*. It inhabits the northern coaſts of Sweden, Denmark, and Ruſſia, as far as Kamtſchatka; and is common in Greenland, where it frequents the open ſea, as far as the bays. The female makes an artleſs neſt of graſs and moſs, on a hillock in ſome marſhy place, and lays two aſh-coloured eggs, ſpotted with black, the ſize of thoſe of a hen. It does not often ſwim, and flies generally in a ſlow manner, except it be in purſuit of other birds; which

it

it often attacks, in order to make them diſgorge the fiſh or other food, which this common plunderer greedily catches up. Moſt authors have told us, that it is the dung of the birds which it ſearches after in the purſuit; but later obſervations inform us that the circumſtance is not true; though, from that ſuppoſition, the bird has obtained the name of *ſtrunt-jager*, or dung-bird. Edwards received both his birds of this ſpecies from Hudſon's Bay, where he informs us that it is called the *man of war*.

19. Larus crepidatus, the black-toed gull: two middle tail-feathers a little longer than the reſt. This is fifteen inches in length; thirty-nine in breadth; and weighs eleven ounces. The bill is an inch and a half long; the head and neck are white; the ſides of the laſt marked with duſky; breaſt and belly white, croſſed with numerous duſky and yellowiſh lines; ſides and vent barred tranſverſely with black and white; the back, ſcapulars, wing-coverts, and tail, black, beautifully edged with white or pale ruſt-colour; the ſhafts and tips of the quills white; the exterior web, and upper half of the interior, black; but the lower part of the latter white; tail black, tipped with white; the two middle feathers about one inch longer than the others; the ſhafts white; the exterior webs of the outmoſt ſpotted with ruſt-colour; the legs of a bluiſh lead-colour; lower part of the toes and webs black. A bird of this kind was taken near Oxford; and another was met with between the iſlands of Teneriffe and Bonaviſta.

In the Leverian Muſeum was one of this ſpecies, but much ſmaller than the above-deſcribed; the general colour brown; the head and neck croſſed with numerous tranſverſe darker lines; breaſt and belly mottled with duſky white; ſides barred with the ſame; baſe of the tail white; the reſt of its length duſky black; ſhape rounded; the two middle feathers not particularly longer than the others; legs, and half the toes, and webs, yellowiſh brown; the end half black.

20. Larus cataractes, the ſkua-gull: greyiſh; quill and tail-feathers white at the baſe; tail nearly equal. This ſpecies is about the ſize of a raven; length two feet; breadth four feet ſix inches; weight three pounds. The bill is an inch and three quarters in length, and black; it is much curved at the end, and covered, for three parts of its length, with a black cere, at the end of which the noſtrils are placed, which are pervious. The plumage on the upper parts of the head, neck, back, and wings, is very deep brown, the feathers margined with ferruginous brown; the head and neck incline to aſh-colour, eſpecially the forehead and chin; the breaſt, belly, thighs, and vent, pale duſky ferruginous; legs black, rough, and warty; claws very hooked; the hind toe very ſhort, but the claw crooked and ſharp. This is a very voracious and fierce ſpecies, and inhabits the northern parts of theſe kingdoms, for the moſt part; we however now and then meet with it towards the ſouth. It moſtly frequents the Shetland Iſles, and thoſe of Ferro. Is alſo common in Norway, and as far as Iceland. On the rocky iſland of Foula it is much eſteemed, as it is ſaid to defend the flocks from the eagle, which it beats and purſues with great fury; the natives denying that it ever injures or attacks the poultry. Dr. Forſter informs us, that it often tears lambs to pieces in the Ferro Iſles, and carries them to the neſt. It alſo preys on the ſmall gulls, and other birds, in the ſame manner as the hawk; and is ſeen to attack the firſt on the wing, in order to make them diſgorge the fiſh they may have taken, and then quickly gobbles it up. The rapidity and violence with which it darts down to attack its prey, induced Linnæus to give it the name of *cataractes*. During incubation, it is courageous to an alarming degree, in regard to its young; as it will then attack ſeveral perſons in company, without fear, ſhould they approach its haunts. Theſe birds are frequent in the high latitudes of the ſouthern hemiſphere; our circumnavigators met with them in the Falkland Iſles, particularly about Port Egmont, where they are called *Port-Egmont hens*. In that place, and at Terra del Fuego, they were obſerved to make their neſts among the dry graſs. After breeding-time, they diſperſe over the ocean, and, for the moſt part, are ſeen in pairs. They are found in Kerguelen's Land, and off the Cape of Good Hope. In all places its manners are the ſame in reſpect to its ferocity; it is frequently ſeen to attack the largeſt albatroſs, beating it with great violence ſo long as it remains on the wing; at which time this cowardly giant finds no other reſource than to ſettle on the water; on which the gull flies away.

21. Larus keeaſk, the Equimaux gull: brown; wing-coverts variegated with white; tail black, ſpotted and tipt with white. This is a native of Hudſon's Bay; diſcovered by Mr. Hutchins. Length twenty-two inches. It comes in April, makes a ſlight neſt of graſs, and lays two pale ferruginous eggs ſpotted with black: as the winter approaches, it retreats to open water, and is there known by the name of Eſquimaux keeaſk. This ſpecies is ſaid to be ſometimes found in Denmark, ſkulking among cattle, and may then be taken by the hand; appearing by this as if it were tired after a long flight, or reſting for a while, in order to purſue its route.

LAR'WICK. See LERWICK.

LARYM'NA, a town of Bœotia, where Bacchus had a temple and a ſtatue.—Another in Caria.

LARYN'GEAL, *adj.* in anatomy, an epithet applied to parts belonging to the larynx. The laryngeal arteries are the veſſels more commonly deſcribed under the name of *thyroid arteries*. The laryngeal nerves, ſuperior and inferior, are branches of the *par vagum*.

LARYNGOT'OMY, *ſ.* [from the Gr. λαρυγξ, the upper part of the windpipe, and τεμνω, to cut.] An operation which conſiſts in making an artificial opening into the larynx with a knife, a meaſure ſometimes neceſſary in certain caſes of diſeaſe to prevent ſuffocation, as well as to enable the practitioner to inflate the lungs in inſtances of ſuſpended animation. The inciſion is now generally made in the windpipe itſelf, and the operation called *tracheotomy*. See the article SURGERY.

LA'RYNX, *ſ.* [Greek.] The upper part of the trachea, which lies below the root of the tongue, before the pharynx.—There are thirteen muſcles for the motion of the five cartilages of the *larynx*. *Derham*.—See the article ANATOMY, vol. i. p. 603, 4.

LARYS'IUM, a mountain of Laconia.

LARZICOU'R, a town of France, in the department of the Marne, on the Marne: nine miles ſouth-eaſt of Vitry le François.

LAS CA'SAS. See CASAS, vol. iii. p. 863.

LASA'IA, a town of Naples, in Principato Citra: twenty-one miles ſouth-ſouth-weſt of Cangiano.

LAS'BERG, a town of Auſtria: three miles eaſt-ſouth-eaſt of Freyſtatt.

LAS'BOROUGH, Glouceſterſhire, five miles from Tetbury, and nineteen from Glouceſter, is a ſmall village; its church is a free chapel. A few years ſince a monumental ſtone was turned up by the plough, in Bowldown-field in this pariſh; and, by the inſcription, it appears to have been there before Chriſtianity was eſtabliſhed in this country.

LASCAR', *ſ.* A native Indian ſailor.

LAS'CARIS, Emperor of the Eaſt. See the article ROME.

LAS'CARIS (Conſtantine), a learned deſcendant of the imperial family of that name, was a native of Conſtantinople. Quitting his country at the capture of the city by the Turks, in 1454, he came to Italy, where he was amicably received by duke Francis Sforza, of Milan. Such were the ideas then prevailing of the education proper for a female of rank, that the duke placed his daughter Hippolita, then about ten years of age, under the care of Laſcaris for inſtruction in the Greek language. It was for her uſe that he compoſed his Greek Grammar. From Milan it is ſuppoſed that Conſtantine went to Rome, and paſſed ſome time in the court of his countryman cardinal Beſſarion. Thence, upon the invitation of king Ferdinand, he repaired to Naples, where he opened a public

ſchool for Greek and rhetoric. He appears to have taught in other cities of Italy, but which they were is not ſpecified. At length, deſirous of repoſe, he embarked with the intention of ſettling in ſome town of Greece; but, having touched at Meſſina, he was urged by ſuch advantageous offers to make it his reſidence, that he complied, and paſſed there the reſt of his days. He was treated with great reſpect, and received the honour of citizenſhip, which he merited by his virtues as well as by his learning, and by the influx of ſcholars which his reputation drew thither, among whom was the celebrated Bembo. He lived to an advanced age, certainly to the year 1493, but how much longer is not known. He bequeathed his copious library to the city of Meſſina. The Greek Grammar of Conſtantine Laſcaris was printed in Milan in 1476, and was the firſt Greek book that iſſued from an Italian preſs. Aldus Manutius gave a more complete edition of it in 1494. This work was much applauded by the learned; and Eraſmus preferred it to every other Greek grammar, except that of Theodore Gaza. He compoſed ſome other works, among which were two tracts on the Sicilian and Calabrian Greek writers. *Hodii Græc. Illuſtr.*

LAS'CARIS (John-Andrew, or Janus), a learned Greek of the ſame noble family with the former, came over to Italy with his father Theodore, on the ruin of his country, and was kindly received by cardinal Beſſarion. He was ſent to ſtudy at Padua, where he acquired a great proficiency in claſſical literature, and a thorough knowledge of the two learned languages. Thence he went into the ſervice of that illuſtrious patron of letters, Lorenzo de Medici, by whom he was twice ſent into Grecce with recommendatory letters to ſultan Bajazet, in order to collect ancient manuſcripts. After the expulſion of the Medici family from Florence, in 1494, Laſcaris repaired to Charles VIII. king of France, then in Italy, who gave him a favourable reception, and carried him to France. He was equally patronized by Louis XII. who ſent him, in 1503, as his ambaſſador to Venice, in which office he remained till 1508. With this public employment he joined the purſuit of literature, and held correſpondence with many learned men, by whom he was highly eſteemed. He probably remained at Venice for ſome years after the termination of his embaſſy, in the capacity of an inſtructor in the Greek language. On the election of Leo X. to the pontificate, in 1513, he ſet out for Rome, in the certainty of being well received by that great favourer of learning, whom he had known in his youth at Florence. At the inſtigation of Laſcaris, Leo founded a college for noble Grecian youths at Rome, at the head of which he placed the author of the plan. From this inſtitution proceeded editions of the Greek ſcholiaſts on Homer and Sophocles, and other learned works. In 1518, he quitted Rome for France, whither he was invited by Francis I. and finally complied with the urgent invitation of pope Paul III. to Rome, in which city he died in 1535, at a very advanced age. Janus Laſcaris was greatly eſteemed and praiſed by all the learned of the time, on account of the ſervices he rendered to letters, although his own writings were few. He compoſed epigrams both in Greek and Latin, ſome of which were printed at Baſil. He tranſlated into Latin a work extracted from Polybius on the military conſtitution of the Romans; and printed at Florence a magnificent edition of the Greek Anthologia in capital letters, to which he prefixed a learned epiſtle, addreſſed to Peter de Medici. *Hodii Græc. Illuſt.*

LASCHE, *adj.* [Fr.] Unmanly, baſe, cowardly. *Not uſed.*—Inexorable rigour is worſe than a *laſche* demiſſion of ſovereign authority. *L'Eſtrange.*

LAS'CHE, a town of Bohemia, in Chrudim: eight miles eaſt of Chrudim.

LAS'CHEN. See LASSEN.

LASCH'NITZ, or LADZIDZA, a town of Sileſia, in the principality of Oels: two miles ſouth-eaſt of Trachenberg.

LASCI'GO, a town of Naples, in Principato Citra; eighteen miles weſt of Policaſtro.

To LASCIV'IATE, *v. n.* [from the Lat. *laſcivio.*] To wanton. *Cole.*

LASCIV'IENT, *adj.* [*laſciviens*, Lat.] Frolicſome; wantoning.

LASCIV'IOUS, *adj.* [*laſcivus*, Lat.] Lewd; luſtful.—Notwithſtanding all their talk of reaſon and philoſophy, and thoſe unanſwerable difficulties which, over their cups, they pretend to have againſt Chriſtianity; perſuade but the covetous man not to deify his money, the *laſcivious* man to throw off his lewd amours, and all their giant-like objections againſt Chriſtianity ſhall preſently vaniſh. *South.*

On Eve he caſt *laſcivious* eyes; ſhe him
As wantonly repaid; in luſt they burn. *Milton.*

Wanton; ſoft; luxurious:

Grim-viſag'd war hath ſmooth'd his wrinkled front;
And now, inſtead of mounting barbed ſteeds,
To fright the ſouls of fearful adverſaries,
He capers nimbly in a lady's chamber,
To the *laſcivious* pleaſing of a lute. *Shakeſpeare.*

LASCIV'IOUSLY, *adv.* Lewdly; wantonly.—I would deſire her love *laſciviouſly*. *Beaumont and Fletcher's King and no King.*

LASCIV'IOUSNESS, *ſ.* Wantonneſs; looſeneſs.—The reaſon pretended by Auguſtus was the *laſciviouſneſs* of his Elegies, and his Art of Love. *Dryden's Preface to Ovid.*

LAS'CO, or LASKI (John à), one of the early ornaments and zealous promoters of the reformation, was a native of Poland, and of noble deſcent. After receiving a liberal education in the Poliſh ſchools, he went abroad for further improvement; and in the courſe of his travels came to Zurich in Switzerland. Here he formed an intimate acquaintance with the celebrated Zuinglius, by whom he was perſuaded to apply himſelf to the ſtudy of divinity, and who alſo proved inſtrumental in engaging him to embrace the reformed religion. Having returned home, he was made provoſt of Gneſna and Lencziez; and afterwards nominated biſhop of Veſprim in Hungary. Notwithſtanding his eccleſiaſtical promotions, he openly avowed his approbation of the reformed doctrines; and, by ſo doing, drew down on his head the vengeance of the catholic biſhops, who paſſed on him the ſentence of hereſy. Of this he complained to the king of Poland, alleging that he had been condemned without a ſufficient hearing; but the influence of his enemies prevailed, and he was obliged to quit Hungary, in the year 1540. To what place he retired at this time, we are not informed; but, in 1542, we find that he had taken refuge in Eaſt Frieſland, where he was choſen miniſter of a church at Embden. In the following year, at the deſire of Anne, widow of the count of Eaſt Frieſland, he went to Oldenburgh, to eſtabliſh the doctrines and diſcipline of the reformation in that diſtrict; and in 1644 he was invited into Pruſſia, by duke Albert, for the ſame purpoſe. As, however, he had embraced the opinion of Zuinglius on the ſubject of the Lord's ſupper, and could not ſubſcribe to the Lutheran tenet, he was obliged to relinquiſh this miſſion, and to return to Frieſland. After he had reſided in that country nearly ten years, the publication of the *Interim* by the emperor Charles V. compelled him to ſeek another aſylum; and in this exigence, by the advice of archbiſhop Cranmer, he was invited into England by king Edward VI. At this time many of the German proteſtants, driven from their own country by perſecution, had ſettled in London, where they were favoured by the Engliſh government. A church of them was eſtabliſhed at Auſtin-Friars, in that city, and erected into a corporation under the direction of John à Laſco, who was made a ſuperintendant of all the foreign churches in London, with whom were joined four other miniſters. As a mark of favour, three hundred and eighty of the congregation were made denizens of England. It is rather an extraordinary circumſtance in the eccleſiaſtical hiſtory of this country, that while many of the natu-

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ral-born ſubjects were harraſſed and perſecuted, by the council and hierarchy, on account of the conſcientious ſcruples which they avowed relating to rites and ceremonies, and popiſh garments, theſe foreigners were allowed to worſhip God after the manner of their own country; and that the patent of their incorporation, after ſetting forth in the preamble, that the German church made profeſſion of pure and uncorrupted religion, and was inſtructed in truly Chriſtian and apoſtolical opinions and rites, permitted them to enjoy and exerciſe their own proper rites and ceremonies, and their own proper and peculiar eccleſiaſtical diſcipline, though differing from the rites and ceremonies uſed in this kingdom.

Upon the acceſſion of queen Mary, in 1553, the foreign proteſtants were deprived of their churches as well as their privileges; and John à Laſco, with his congregation, were ordered to leave the kingdom. A conſiderable number of them having embarked with him, together with their families and property, in the month of September, and arrived on the coaſt of Denmark, at the commencement of a ſevere winter, were not permitted to land, on account of their being known to entertain the doctrine of the reformed church in Swiſſerland, on the ſubject of the Lord's ſupper. For the ſame reaſon they were refuſed a ſettlement at Lubec, Hamburg, and ſome of the cities of Saxony; till at length, after being cruelly driven from place to place, they were hoſpitably received at Embden, where they did not arrive before March 1554. Here they were permitted to ſettle under the protection of the counteſs Anne of Oldenburgh, and met with every friendly aſſiſtance from the inhabitants of the city. In the year 1555, Laſco went to Frankfort upon the Maine, and obtained leave from the ſenate to build a church for foreign proteſtants, and particularly thoſe of the Low Countries. In the year 1557, he publiſhed an apology for the church of the reformed proteſtants at Frankfort, on the ſubject of the variation in their creed from that of the Confeſſion of Augſburg, with reſpect to the euchariſt. This piece was attempted to be anſwered in a moſt intemperate reply by Weſtphalus, addreſſed to the ſenate, in which he called upon them to withdraw their protection from thoſe Zuinglians; and maintained, that the ſufferers for the proteſtant cauſe in England, the Low Countries, France, and elſewhere, who had imbibed their heretical notion, were the devil's martyrs.

At length, after a long abſence, Laſco returned to his native country; where he died in the year 1560. He is highly commended for his virtues, and his piety, by the hiſtorians of the time; and was greatly eſteemed by Eraſmus, who ſays that, though an old man, he had profited much by his converſation. And Peter Martyr calls him his moſt learned patron. He was alſo a favourite with Sigiſmund king of Poland, who had great confidence in his talents and integrity, and on more than one occaſion employed him in the moſt important affairs. He was the author of, 1. De Cœna Domini Liber. 2. Epiſtola ad Bremenſis Eccleſiæ Miniſtros. 3. De recta Eccleſiarum Inſtituendarum Ratione, Epiſt. III. 4. Forma et Ratio totius Eccleſiaſtici Miniſterii Edwardi VI. in Peregrinorum maxime Germanorum Eccleſia; and numerous controverſial treatiſes. *Melch. Adam. Vit. Theolog. Exter. Fuller's Abel Redivivus.*

LASCO'RIA, in ancient geography, a town of Aſia, in Galatia, belonging to the Trocmi. *Ptolemy.*

LASDIPE'LEN, a town of Pruſſian Lithuania: nine miles north of Pilkallen.

LASE'A, the name of a city mentioned in the Acts of the Apoſtles.

LA'SER-WORT. See LASERPITIUM.

LASERPI'TIUM, *ſ.* [*q. lac ſerpitium*, Lat. juice expreſſed from the root of ſilphium.] LASER-WORT; in botany, a genus of the claſs pentandria, order digynia, natural order of umbellatæ or umbelliferæ. The generic characters are—Calyx: umbel univerſal, very large, with from twenty to forty rays; partial with a great many rays, flat. Involucre: univerſal, many-leaved, ſmall; partial, many-leaved, ſmall. Perianth proper, five-toothed, obſcure. Corolla: univerſal, uniform; floſcules all fertile. Proper of five petals, which are inflex-emarginated, almoſt equal, ſpreading. Stamina: filaments five, briſtly, the length of the corolla; antheræ ſimple. Piſtillum: germ roundiſh, inferior; ſtyles two, thickiſh, acuminated, diſtant; ſtigmas obtuſe, ſpreading. Pericarpium: none; fruit oblong, angulated with eight longitudinal membranes, bipartile. Seeds two, very large, oblong, ſemicylindric, flat on one ſide, on the other furniſhed at the back and margins with membranes, four in all: (the ſeed of *L. ſiler* is furrowed, and without membranes.)—*Eſſential Character.* Petals bent in, emarginate, ſpreading; fruit oblong, with eight membranaceous angles.

Species. 1. Laſerpitium latifolium, or broad-leaved laſer-wort: leaflets cordate, gaſh-ſerrate. Root the thickneſs of the finger or more, ſtriking two feet into the ground, pale brown on the outſide, white within, ſomewhat fleſhy, ſcarcely fibrous, perennial, having a very bitter ſubacrid unpleaſant taſte, and crowned with briſtles. Stem round, ſtriated, green, with a glaucous bloom on it, ſmooth, filled with white pith. Leaves twice-pinnate; leaflets entire or with few lobes, tooth-ſerrate, obtuſe or acute, the lower petioled, the upper often ſeſſile, very ſmooth on both ſides or rough on the back only, firm, deep green on the upper ſurface, more glaucous and veined on the lower. Umbel upright, flat or ſomewhat convex, in the largeſt half a foot in diameter, compoſed of very many round ſtriated rays; leaflets of the involucre acuminate, ſpreading very much or reflex, pale green with ſometimes a purple edge, from five to ten in number. Partial umbel convex and cloſer, with a ſimilar involucre or none. Flowers white; petals inflex, obcordate, almoſt equal. Seeds ſmooth, flat on one ſide, having four membranaceous, thin, ſubpellucid wings on the other, the outermoſt on each ſide broader; they have but little ſmell, and an unpleaſant ſubacrid taſte. It flowers in July, and the ſeeds are ripe in September. It varies ſo much from ſituation, that it might be miſtaken for different ſpecies; and ſeveral varieties are mentioned by authors. In the Alps it is only a foot or two in height, and ſometimes even ſhorter, with a ſtem entirely ſimple, terminated by a ſingle umbel; it is alſo extremely ſmooth; more or leſs aſperity may however be obſerved on the leaflets, and eſpecially on the ribs of ſome individuals; which is ſo remarkable in the large, lofty, branched, plants of the lower regions. Theſe however become ſmooth when tranſplanted into a garden; and ſome leaves of the ſmooth alpine plants become hairy. Native of many parts of Europe. Cultivated here in 1640, according to Parkinſon. This acrid aromatic plant with ſomething of bitterneſs, ſeems to merit a place among the aromatic ſtimulants, emmenagogues, and aperient ſudorifics. It is uſed by the peaſants for themſelves, and by farriers for horſes, in ſome countries; but not by regular practitioners. The root is the hotteſt part of the plant. Miller has made ſeveral ſpecies out of this, but has not deſcribed any.

2. Laſerpitium trilobum, or columbine-leaved laſer-wort: leaflets three-lobed, gaſhed. The L. trilobum is diſtinguiſhed from L. aquilegiæfolium by Murray and Jacquin. The leaflets of the former are cordate at the baſe, acute, and acutely ſerrate; whereas in the latter they are blunt. Haller's ſynonyms of N° 793 belong to this ſpecies; but he has deſcribed a variety of L. latifolium.

Jacquin thus deſcribes his plant. The whole of it is very ſmooth. Root perennial, round, a foot or more in length, with abundance of fibres at top, blackiſh on the outſide, white within, with a yellowiſh pith in the middle, ſmelling when bruiſed, and having a bitter unpleaſant taſte. Stem round, from four to ſix feet in height, marked with lines but not grooved, firm, upright, ſhining, glaucous-green, becoming dark purple with age, having brachiate branches, and an aromatic ſweetiſh taſte. Sheath of the leaves long,

concave,

concave, converging, ſtriated, and embracing. Root and lower ſtem-leaves very large and alternate, on long, ſubſtriated, ſolid, round or ſlightly-compreſſed, petioles. Upper ſtem-leaves ſeſſile and ſubternate; with the leaflets uſually three-lobed and gaſhed, ſharp with reddiſh teeth; ſometimes a ſingle three-lobed leaf is placed on the ſheath: theſe leaflets, however, are all wide, and none of them linear. The middle ſtem-leaves are ſub-biternate, without any common petiole; and each either has its proper petiole, or the ſide ones alſo are ſeſſile. The pinnas both of theſe and the root-leaves are wide, blunt, lobed, gaſhed, glaucous and netted-veined on the back, ſmelling when rubbed. Univerſal involucre either wholly wanting, or conſiſting of one or two lanceolate, acuminate, concave, membranaceous, leaflets, green edged with red. Partial alſo either none, or compoſed of few ſmall leaflets. Umbel wide, thin, flat, compoſed of ſtiff ſtriated round rays, from two to three inches in length, and from ten to twenty in number. Some of the central florets, having no piſtils, are abortive. Fruit ovate-oblong, compreſſed, blunt. Seeds plano-convex with five ſhort pale membranaceous wings, and four others ſtill narrower between them. Gærtner, who gives all the ſynonyms of Linnæus, Jacquin, Haller, Moriſon, and Rivinus, and unites the ſecond and third ſpecies of Murray, as we have done, ſeparates this plant from Laſerpitium, on account of the number of grooves in the ſeeds, and there being no wings. He deſcribes the fruit as elliptic, turgidly lens-ſhaped, many-ſtreaked, conſiſting of two oblong-elliptic ſeeds, of a middling ſize; on the back are nine ſtreaks, alternately ſtanding more out, all rounded, without any veſtige of a wing; the belly flat or ſlightly concave. Native of the Levant and Auſtria; flowers from May to July.

3. Laſerpitium Gallicum, or French laſer-wort: leaflets wedge-form, forked. Root perennial. Stem not much branched, and having only one or two, ſeldom three, leaves at the lower part; at the top are commonly two very large umbels. The wings of the ſeeds are very large, and frequently curled or waved. It varies with entire rounded leaflets, agreeing in every other reſpect; and there are few plants that vary more. Fruit ovate, ſomewhat gibbous, white or pale ſtraw-colour. Seeds plano-convex, with two dorſal and two marginal wings on the convex ſide, all membranaceous, fringed, and ſometimes entire, ſometimes gnawn at the edge; the flat ſide having a raiſed line along the middle. Native of the ſouth of Europe. Cultivated in 1683 by Mr. James Sutherland. It flowers in June and July.

4. Laſerpitium ſilaifolium, or ſmallage-leaved laſer-wort: root many-forked; ſtem ſmooth; leaflets pinnatifid, with lanceolate ſegments. Root perennial, white within and without, but growing brown with age; ſeldom fuſiform and ſtriking downwards, but commonly tranſverſe and branched, unequal, a finger thick, fibrous, of a ſubacrid taſte and aromatic ſmell. Stem, on open rocky hills, perennial, one or two lines thick, and ſometimes not more than a ſpan high; in a lower ſituation, among buſhes and on the borders of woods, it grows to the height of four feet, with a ſtem the thickneſs of a pen. From one to three ſtems and more come out from the ſame root; they are upright, ſtriated, ſmooth, flexuoſe, branched. All the flowers fertile; petals white or yellowiſh. Native of Carniola and Italy.

5. Laſerpitium anguſtifolium, or narrow-leaved laſer-wort: leaflets lanceolate, quite entire, ſeſſile. This is a lower plant than the firſt, not more than a foot and half or two feet in height; the leaves are much narrower; and the petioles are hairy. Flowers white; ſeeds winged, curled. Native of the ſouthern parts of Europe. Cultivated in 1759, by Mr. Miller. It flowers in June and July.

6. Laſerpitium prutenicum, or rough laſer-wort: leaflets lanceolate, quite entire; the outermoſt united. Root perennial. Native of Pruſſia, Leipſic, Auſtria, Carniola, Dauphiné, Italy.

7. Laſerpitium Dauricum, or Daurian laſer-wort: ſtem ſpotted, leaflets pinnatifid, acuminate. The whole plant is ſmooth, has ſome ſmell when bruiſed, and a ſlightly-aromatic acrid taſte.

8. Laſerpitium peucedanoides, or white laſer-wort: leaflets linear-lanceolate, veined-ſtriated, diſtinct. From a thick oblong root, blackiſh on the outſide, two or three leaves come out on long petioles, with a three-fold diviſion, each again divided into three or five very narrow leaflets, almoſt two inches in length, and reſembling graſs-leaves. Stem about a foot high, dividing into two or three branches, with a leaf at the baſe of each. Flowers white. Seeds ſtriated and four-winged on one ſide, flat on the other. Native of Monte Baldo.

9. Laſerpitium ſiler, or mountain laſer-wort: leaflets oval-lanceolate, quite entire, petioled. Root perennial, with a thick head which is crowned with abundant briſtly remains of former leaves, a foot and half in length, the thickneſs of the human thumb, round, with an irregular brown bark, fleſhy and white within, with a yellowiſh pith. The whole plant ſmooth. Stem brachiate, round, marked with lines but not grooved, pale green or purpliſh; in ſubalpine meadows from one to two feet high, but in the lower mountains ſix feet in height. Fruit oblong, ſubcylindric, ſhining, browniſh. Seeds flat and ſtriated on one ſide, convex on the other with four narrow membranaceous wings, with raiſed lines between, having a ſtrong ſmell of cumin, and an aromatic, ſubacrid, bitter, taſte. Native of Auſtria, Swiſſerland, and France. It flowers in July and Auguſt, and the ſeeds ripen in September. Our old authors name it *ſermountain*, from the French. It differs from the varieties of L. Gallicum in being loftier, in having leaves all along the ſtem, and the ſeed longer, with very ſmall membranes, often concealed within the ſtreaks. The root is extremely bitter, and might be uſeful in fevers, cachexies, loſs of appetite, &c. An infuſion of it in wine has been given with ſucceſs in diſorders of the ſtomach. It yields an aromatic reſinous juice on being wounded; and, being made into a ſyrup, is recommended in diſorders of the breaſt.

10. Laſerpitium diffuſum, or ſcattered laſer-wort: leaves ſuperdecompound; leaflets linear-awl-ſhaped, ſomewhat hairy; univerſal involucres lanceolate, membranaceous. Root perennial, ſtriking very deep, and but little branched. Stem a foot and a half high, terminated by one or two umbels, ſolid, ſmooth, ſlightly ſtriated. Leaves two or three at the baſe of the ſtem; and, when the ſtem divides, there is one ſmaller under the lateral branch, otherwiſe it is naked; they are four times pinnate, triangular. Leaflets ſhort, lanceolate, a little hard, and loaded with ſmall hairs. Fruit oblong, with four wings, which are very narrow. It differs from the ſeventh ſpecies in having the leaves four times divided, with the ſegments of the pinnules ſhorter and cloſer, converging upwards, roughiſh, and finely hairy on the rib and back of the leaves; the ſtems commonly ſimple; the umbel very cloſe; the leaflets of each involucre ſimple, and wider; the petioles round, and marked with green and white ſtreaks. Native of Swiſſerland, France, and Italy.

11. Laſerpitium lucidum, or ſhining laſer-wort: leaves ſuperdecompound, linear-awl-ſhaped, ſmooth; univerſal involucres pinnate. Root woody, large, with ſeveral forks, crowned with briſtles and ſcales of fallen leaves. Stem ſtraight, grooved, half a foot high. Flower often purple; the petals a little unequal, inflex-cordate. Seed large, ovate, four-winged; often purple, or almoſt black. Native of Swiſſerland. Introduced in 1775 by Drs. Pitcain and Fothergill. It flowers in July.

12. Laſerpitium Chironium, or healing laſer-wort: leaflets obliquely cordate; petioles hirſute. Leaves entire, cordate, with the upper lobe ſhorter, crenate, blunt. Petioles very hirſute. Both involucres ſmall. Hence it is different from Paſtinaca opopanax, with which Gouan joins it. Native of Montpelier, where however Gouan could not find any ſuch plant, diſtinct from P. opopanax.

13. Laſerpitium ferulaceum, or fennel-leaved laſer-wort: leaflets linear. Native of the Levant; flowers in June.

14. Laſerpitium ſimplex, or ſimple laſer-wort: ſcape naked, leaflets ſimple; leaves pinnate, multifid, acute, linear, umbel ſemi-globular. Root perennial, knobbed, and often multiplied at top, ſo as to produce ſeveral ſtems. Leaves deep green, bipinnate like thoſe of Carui, but leſs fine. Stem only two or three inches high, ſlender, upright, ſtriated; terminated by a ſolid, rounded, reddiſh umbel. Native of the mountains of Swiſſerland, Auſtria, and Dauphiné.

15. Laſerpitium aciphylla, or ſharp-leaved laſer-wort: ſtem ſheathed; petioles dilated; leaves digitate, linear, elongated, mucronate. Forſter made of this ſpecies a new genus, which he named *Aciphylla*, from the ſharpneſs of the leaves like needles. Native of New Zealand: found in Queen Charlotte's Sound, November 6th, 1774.

Propagation and Culture. Theſe plants, having no great beauty, and taking up much room, are ſeldom cultivated except in botanic gardens. The roots extend widely, and the leaves of ſome ſorts ſpread three feet, when the plants are ſtrong; the flower-ſtalks riſe four or five feet high, and the umbels of flowers are very large. Moſt of them are very hardy, and will thrive in any ſoil or ſituation. Sow the ſeeds in autumn, and the plants will come up in the ſpring; but, when they are ſown in ſpring, the ſeeds commonly remain in the ground a whole year. Tranſplant them the following autumn where they are deſigned to remain; for they ſend out long deep roots, which are frequently broken by tranſplanting when large. Place them three feet aſunder. The plants decay to the ground every autumn, but the roots continue many years, and require no other culture but to clear them from weeds, and to dig between the roots every ſpring. The thirteenth ſort requires a warmer ſituation, otherwiſe it will be killed in ſharp winters. See FERULA and SELINUM.

LASER'RA, a town of the iſland of Corſica: ten miles north-eaſt of Sarcene.

LASGRUF'VA, a town of Sweden, in Helſingland: fifty-eight miles eaſt of Hudwickſwal.

LASH, *ſ.* [The moſt probable etymology of this word ſeems to be that of Skinner, from *ſchlagen*, Dut. to ſtrike; whence *flaſh* and *laſh*.] A ſtroke with any thing pliant and tough:

Rous'd by the *laſh* of his own ſtubborn tail,
Our lion now will foreign foes aſſail. *Dryden.*

The thong or point of the whip which gives the cut or blow.—I obſerved that your whip wanted a *laſh* to it. *Addiſon.*

Her whip of cricket's bone, her *laſh* of film,
Her waggoner a ſmall grey-coated gnat. *Shakeſpeare.*

A leaſh, or ſtring in which an animal is held; a ſnare: *Out of uſe:*

The farmer they leave in the *laſh*,
With loſſes on every ſide. *Tuſſer's Huſbandry.*

A ſtroke of ſatire; a ſarcaſm.—The moral is a *laſh* at the vanity of arrogating that to ourſelves which ſucceeds well. *L'Eſtrange.*

To LASH, *v. a.* To ſtrike with any thing pliant; to ſcourge:

And limping death, *laſh'd* on by fate,
Comes up to ſhorten half our date. *Dryden.*

To move with a ſudden ſpring or jerk:

The club hung round his ears, and batter'd brows;
He falls; and, *laſhing* up his heels, his rider throws. *Dryd.*

To beat; to ſtrike with a ſharp ſound:

The winds grow high,
Impending tempeſts charge the ſky;
The lightning flies, the thunder roars,
And big waves *laſh* the frighted ſhores. *Prior.*

To ſcourge with ſatire:

Could penſion'd Boileau *laſh*, in honeſt ſtrain,
Flatt'rers and bigots even in Louis' reign. *Pope.*

To tie any thing down to the ſide or maſt of a ſhip: properly to *lace.*

To LASH, *v. n.* To ply the whip.—Let men out of their way *laſh* on ever ſo faſt, they are not at all the nearer their journey's end. *South.*

Wheels claſh with wheels, and bar the narrow ſtreet;
The *laſhing* whip reſounds. *Gay's Trivia.*

To ſtrike with any weapon held in the hand:

He through long ſufferance growing now more great,
Roſe in his ſtrength, and gan her freſh aſſayle
Heaping huge ſtrokes as thicke as ſhowre of hayle,
And *laſhing* dreadfully at ev'ry part,
As if he thought her ſoule to diſentrayle. *Spenſer.*

LASH'A, [Hebrew.] The name of a place.

LASH'ARON, [Hebrew.] The name of a place. *Joſh.* xii.

LASH'ER, *ſ.* One that whips or laſhes.

LASH'ING, *ſ.* The act of beating with a whip; the act of ſcourging with ſatire; the act of tying down with ropes; the rope with which any thing is laſhed.

LASH'ITE, or LASH'LITE, *ſ.* A kind of forfeiture during the government of the Danes in England.

LASH'OM JAM'NAS, a town of Egypt, on the coaſt of the Mediterranean: twelve miles north-weſt of Damietta.

LA'SIA, in ancient geography, an iſland ſituated on the coaſt of Lycias.—An iſland on the coaſt of the Peloponneſus, over-againſt Troëzené.—One of the names of the iſle of Andros.

LA'SIA, *ſ.* [from λασιος, Gr. hairy or briſtly; becauſe the plant is beſet with numerous little briſtles or prickles.] In botany, a genus of the claſs tetrandria, order monogynia, natural order piperitæ, *Linn.* (aroideæ, *Juſſ.*) The generic characters are—Calyx: ſpathe awl-ſhaped, twiſted, coloured, very long. Spadix ſhorter than the ſpathe, entirely covered with florets. Corolla: petals four, fleſhy, obtuſe, concave, cloſely embracing the organs of impregnation. Stamina: filaments four, ſhort, flat, hidden by the petals; antheræ two to each filament, rounded, concave, protruding beyond the corolla. Piſtillum: germen ſuperior, roundiſh; ſtyle none; ſtigma rather abrupt. Pericarpium: berry ſmall; roundiſh, unequal. Seed ſolitary, roundiſh.—*Eſſential Character.* Spadix covered with florets; petals four, fleſhy, inferior; antheræ two to each filament; berry with one ſeed.

Laſia aculeata, a ſingle ſpecies; the *cu chaoc gai*, of the Cochin-chineſe. A ſtemleſs plant, ſix feet high, with large pinnatifid leaves, on long, round, upright, ſtalks. Native of the moiſt plains of Cochin-china.

LASIAN'THUS, *ſ.* in botany. See GORDONIA.

LA'SIO, in ancient geography, a town of the Peloponneſus, or Triphyſia.—Alſo, a mountain in the iſland of Crete, on which was the tomb of Jupiter.

LASIOPET'ALUM, *ſ.* [from the Gr. λασιος, hairy, and πεταλον, a petal; alluding to the hairineſs of the flower.] WOOLLY BLOSSOM; in botany, a genus of the claſs pentandria, order monogynia, natural order of rhamni, *Juſſ.* The generic characters are—Calyx: perianthium inferior, of one leaf, wheel-ſhaped, hairy, in five deep, equal, ovate, folded, at length expanded, ſegments, permanent, often coloured. Corolla: petals five, minute, roundiſh, inſerted into the baſe of the calyx between its ſegments. Stamina: filaments five, very ſhort, oppoſite to the petals; antheræ terminal, ovate, two-lobed behind, opening by two pores at the top. Piſtillum: germen ſuperior, globoſe, with three furrows, very hairy; ſtyle ſhort, ſtraight, ſmooth; ſtigma ſimple, acute. Pericarpium: capſule inveſted with the calyx, nearly globoſe, with three angles, downy, of three cells, and three valves; partitions from the centre of each valve. Seeds: few, roundiſh, inſerted

into the inner heads of the partitions.—*Eſſential Character.* Calyx wheel-ſhaped, in five deep folded ſegments. Petals five, minute, oppoſite to the ſtamens. Antheræ opening by two terminal pores. Capſule ſuperior, of three cells, and three valves, with the partitions from their centre.

Species. 1. Laſiopetalum ferrugineum, or ruſty woolly bloſſom: leaves alternate, linear-oblong, dependent; flowers racemoſe. Native of marſhes in New South Wales, from whence the ſeeds were received, in 1791, by Meſſrs. Lee and Kennedy. It flowers during moſt part of the ſummer, being ſheltered in winter in the green-houſe, and allowed but a ſmall ſupply of moiſture. Stem ſhrubby, upright, ſlender, round, leafy, clothed with denſe, ruſty, ſtarry, pubeſcence; and in its native ſituation throwing out long, ſlender, extremely-tough, branches, to the extent, as it is reported, of many yards, amongſt other ſhrubs. Leaves alternate, ſtalked, dependent, linear-oblong, bluntiſh, entire or ſlightly wavy, from two to four inches in length, and half an inch broad; heart-ſhaped, rather dilated, and often ſomewhat angular at the baſe; deep-green and ſmoothiſh above; white and downy, with a ruſty rib, beneath. Flowers in ſhort, lateral, deflexed, cluſters, nearly oppoſite to the leaves, with three or more linear ruſty bractes cloſe to each flower; calyx half an inch broad, light green, beſprinkled on both ſides with denſe, ſtarry, rather-ruſty, down; petals and antheræ brown. The whole ſhrub is more remarkable for ſingularity than beauty. Sometimes, according to Ventenat, the flowers are four-cleft and tetrandous only.

2. Laſiopetalum ledifolium, or roſemany-leaved woolly bloſſom: leaves oppoſite, linear-lanceolate, ſpreading; ſtalks ſingle-flowered; bractes remote from the flower. Seen by M. Ventenat in the Herbarium of M. Thibaud, profeſſor of botany of Straſburgh. We preſume it muſt be, like the former, and all the known ſpecies beſides, a native of New Holland.

3. Laſiopetalum purpureum, or purple woolly bloſſom: leaves oval, entire. Found in New Holland by Mr. Brown. Sent to Kew in 1803 by Mr. Good. It is a green-houſe ſhrub, flowering from April to July.

4. Laſiopetalum arboreſcens, or nettle-tree-leaved woolly bloſſom: leaves heart-ſhaped, deeply toothed. Native of New South Wales, from whence it was ſent by Mr. George Caley in 1802, through ſir Joſeph Banks, to Kew. It flowers from May to July; and is ſheltered in the green-houſe.

5. Laſiopetalum triphyllum, or three-leaved woolly bloſſom: leaves three together; the middle one largeſt, and lobed; ſtamens ten, the intermediate ones abortive; petals wanting. Gathered by M. La Billardiere in Van Lewin's Land; by Mr. Menzies at King George's Sound, on the weſt coaſt of New Holland. It is a ſhrub, kept, like others of its genus, in the green-houſe. The whole plant is clothed with rather ſoft ſtarry pubeſcence, like ſome of the mallow tribe, which aſſumes a ruſty hue on the ſtalks, and on the veins of the leaves. The foliage is remarkable. Three leaves grow on ſtalks from one ſpot, (at the ſides of the branches,) of which the middlemoſt is much the largeſt; from one to two inches long, and nearly as wide; heart-ſhaped at the baſe, more or leſs diſtinctly five-angled, or five-lobed, and ſomewhat ſinuated; its footſtalk nearly its own length; the ſide ones are unequally heart-ſhaped and entire, on very ſhort ſtalks, and reſemble ſtipulas. Long ſimple cluſters, of ſeveral flowers, grow ſolitarily, oppoſite to the large leaves, between the ſmall ones; the calyx is bluſh-coloured, hairy, with pointed ſegments; antheræ dark brown, with yellow tips; the barren ones ſmaller and paler.

6. Laſiopetalum querciſolium, or oak-leaved woolly-bloſſom: leaves three together, all ſinuated; the middle one largeſt and three-lobed, ſomewhat pinnatifid; ſtamens five; petals wanting. Gathered by Mr. Menzies, at King George's Sound, on the weſt coaſt of New Holland; Mr. Brown alſo obſerved it in that country. Seeds were ſent to Kew, by Mr. Peter Good, in 1803. This is moſt akin to the laſt, but abundantly diſtinct. The leaves are ſmaller, ſomewhat glaucous, and much more harſh, owing to the more rigid and prominent ſtarry briſtles on their upper ſurface; the three which grow together are more ſimilar in ſize and figure, being all ſinuated, though the middle one is much the moſt deeply lobed; the edges are ſlightly revolute. The flowers have their calyx of a deeper roſe-colour, with leſs pointed ſegments; no barren ſtamens, nor any petals are viſible.

7. Laſiopetalum corniculatum, or horned woolly-bloſſom: leaves three together, cut and crenate; the lateral ones very ſmall. Petals with linear points as long as the calyx. Gathered by Mr. Menzies, at King George's Sound. The leaves are more denſely and uniformly hairy than in the laſt, as well as ſofter to the touch. The flowers are racemoſe, as in that, but much ſmaller; and are eſſentially diſtinguiſhed by the long prominent linear appendages, or horns, of their petals, which equal the calyx in length, and in its dry ſhrivelled ſtate extend much beyond it. *Smith in Linn. Tranſ.* iv. 216.

LASIOS'TOMA, *ſ.* [from the Gr. λασιος, hairy, ſhaggy, and στομα, a mouth.] In botany, a genus of the claſs tetrandria, order monogynia, natural order of apocineæ, *Juſſ.* The generic characters are—Calyx: perianthium one-leafed, very ſhort, five-parted, diviſions acute; at its baſe two oppoſite ſcales. Corolla: one-petalled, funnel-form; tube cylindric; border four-cleft; diviſions acute, villoſe. Stamina: filaments four, capillary; villoſe at the baſe, inſerted into the tube of the corolla; antheræ oblong. Piſtillum: germ ovate, ſuperior; ſtyle longer than the corolla; ſtigma obtuſe. Pericarpium: capſule orbiculate, one celled, with a brittle bark. Seeds: two, hemiſpherical.—*Eſſential Character.* Calyx very ſhort, five-petalled, with two acute ſcales; corolla funnel-form, four-cleft; capſule orbiculate, one-celled, two-ſeeded.

Laſioſtoma rouhamon, a ſingle ſpecies; the Rouhamon Guianenſis of Aublet. It is a ſhrub with a trunk ſeven or eight feet in height, and ſix or ſeven inches in diameter, with a greyiſh, irregular, rugged, bark, and a whitiſh wood. Branches and branchlets oppoſite, covered with a ruſſet down, and ſpreading over the neighbouring trees. The branchlets are knobbed, and at each joint have a pair of leaves, which are entire, ſmooth, oval, ending in a point, and three-nerved underneath; they are of a very pale green, and on very ſhort petioles; the largeſt are two inches long, and an inch and four lines in breadth. Flowers in ſmall axillary corymbs, on a ſmall peduncle, which has two ſcales at the baſe; they are oppoſite in pairs, and almoſt ſeſſile; corolla white; capſule yellow. From the axil of the leaves there ſpring at intervals ſimple tendrils, two inches and a half long, curved back in form of a croſs at top, where they become thicker. By means of theſe tendrils the branches ſupport themſelves on the neighbouring trees. This ſhrub is called *rouhahamon* by the Caribs. It is in flower and fruit during the months of October and November; and is found on the banks of the river Sinemari in Guiana, forty leagues from its mouth.

A variety occurs with ſmooth branches, larger leaves, and ſmaller flowers and fruits. It has no tendrils, but the branches are ſtraight.

LASK, *ſ.* An immoderate looſeneſs of the belly.

LASK, or Las'ko, a town of Warſaw: thirty miles north-eaſt of Siradia.

LAS'KET. See Latche.

LASK'ING, *ſ.* Veering, going with a quarterly wind.

LAS'NEBOURG, a town of France, in the department of Mont Blanc, on the Arc, at the foot of Mount Cenis, the paſſage of which is the principal ſupport of the inhabitants. The ſun is hidden from the inhabitants of this town by the mountain during two months of the year: twenty miles north-north-weſt of Suſa, and twenty-three eaſt of St. Jean de Maurienne.

LASOY', a town of Thibet: forty miles north-north-weſt of Tacpoy.

LAS'PE. See LAAS'PHE, p. 2.

LASS, *ſ.* [from *lad* is formed *laddeſs*, by contraction *laſs*. *Hickes.*] A girl; a maid; a young woman: uſed now moſtly of mean girls.—A girl was worth forty of our widows; and an honeſt, downright, plain-dealing, *laſs* it was. *L'Eſtrange.*

Now was the time for vig'rous lads to ſhow
What love or honour could invite them to;
A goodly theatre, where rocks are round
With reverend age, and lovely *laſſes* crown'd. *Waller.*

LASS'-LORN, *adj.* Forſaken by his miſtreſs. *Not uſed:*

Brown groves,
Whoſe ſhadow the diſmiſſed batchelor loves,
Being *laſs-lorn.* *Shakeſpeare's Tempeſt.*

LAS'SA, the capital of Thibet, is called by different names, which has occaſioned no ſmall degree of confuſion. Its proper name, in the language of Thibet, is ſaid to be *Baronthala*; but the Tartars call it Laſſa, or Lahaſſa. Others call it *Tonker*, and apply the names Laſſa and Baronthala to the diſtrict which contains Laſſa and Putala. Others again give the name of Putala, inſtead of Laſſa, to the capital of Thibet. Rennell ſays that we ought to apply the name Laſſa, or Lahaſſa, to the capital; and to conſider Putala as the caſtle and palace of the lama, and his ordinary place of reſidence. Laſſa, which is not conſidered as a large city, is ſituated on an extenſive plain; the houſes are of ſtone, and are ſpacious and lofty. The mountain of Putala, on the ſummit of which ſtands the palace of the grand lama, the high prieſt and ſovereign of Thibet, is about ſeven miles eaſt of the city. On the north of Laſſa ſtands another range of mountains, covered with ſnow, which are clearly ſeen from Kambala, a very high mountain on the north of the lake of Palté. Laſſa is in the province of Ou, and almoſt in the centre of Thibet. The river Sanpooa Burrampooter runs at the diſtance of twenty-four miles from the city. The royal palace at Laſſa is called Laprang, where, among other ornaments, are maps of the various provinces, painted about 1665, by the orders of the king Tiſri, on ſixteen walls. Laprang is alſo one of the celebrated academies or ſchools of Thibet, which are frequented by the youth of many ſurrounding countries, as far as Caſhgar, Yarkend, Camul, Turfan, and ſome from Koko Nor, Amdoa, and China. The courſe of ſtudies employs twelve years, occupied in logic, aſtronomy, philoſophy, medicine, and, above all, the theology of Boud, or Xaca. In the city of Laſſa are many foreign merchants; and the women have been recently poliſhed by their converſation with the Chineſe. A beneficial traffic is carried on with Laſſa, by exchanging gold-duſt for ſilver bullion. Lat. 30. 30. N. lon. 91. 40. E.

LAS'SAN, or LES'SAN, a town of Anterior Pomerania, on a lake formed by the Peene: forty-four miles north-weſt of Old Stettin, and thirty-eight ſouth-ſouth-eaſt of Stralſund. Lat. 53. 58. N. lon. 13. 52. E.

LASSAY', a town of France, and ſeat of a tribunal, in the department of the Mayenne: eleven miles north-weſt of Villaine, and nine north-north-eaſt of Mayenne. Lat. 48. 27. N. lon. 0. 24. W.

LASSE', a town of France, in the department of the Mayne and Loire: five miles eaſt of Baugé, and ſeventeen north of Saumur.

LAS'SEM, or AS'SEM, a town on the north coaſt of the iſland of Java. Lat. 6. 42. S. lon. 111. 21. E.

LASSEU'BE, a town of France, in the department of the Lower Pyrenées: ſix miles eaſt of Oleron.

LAS'SIA, an ancient name of Andros.

LASSIA'LI, a town on the eaſt coaſt of the iſland of Bouro. Lat. 3. 30. N. lon. 127. 34. E.

LASSIGNY', a town of France, in the department of the Oiſe: ſix miles weſt of Noyon.

LAS'SINGTON, a village near Glouceſter. On a hill near it are found thoſe ſtones called *aſtroites*, or ſtar-ſtones; they are as broad as a ſilver penny, as thick as a half-crown; and, when put into vinegar, have a peculiar quality of motion.

LASSI'RA, in ancient geography, a town of Spain, in the Tarragonenſis, in the interior of the country of the Edetani. *Ptolemy.*

LASSI'TI, a town of the iſland of Candia: twenty-two miles ſouth-eaſt of Candia.

LASS'ITUDE, *ſ.* [*laſſitudo*, Lat. *laſſitude*, Fr.] Wearineſs; fatigue; the pain ariſing from hard labour.—*Laſſitude* of body is remedied by bathing, or anointing with oil and warm water; for all *laſſitude* is a kind of contuſion and compreſſion of the parts; and bathing and anointing give a relaxation or emollition. *Bacon's Natural Hiſtory.*—Do not over-fatigue the ſpirits, leſt the mind be ſeized with a *laſſitude*, and thereby be tempted to nauſeate, and grow tired. *Watts.*

From mouth and noſe the briny torrent ran,
And loſt in *laſſitude* lay all the man. *Pope's Odyſſey.*

LASSO'NE (Joſeph Maria Francis de), an eminent French phyſician, was born at Carpentras, on the 3d of July, 1717. His parents quitted their native province, to procure him the advantages of education afforded by the capital; and the ultimate ſucceſs of the plan evinced their wiſdom and prudence. In his early years, however, young Laſſone was not remarkable for his perſeverance in ſtudy: on the contrary, his family were frequently alarmed by the propenſity which he ſhowed for the gay pleaſures of youth; but he as often raiſed their hopes by ſome ingenious performances, which merited academic honours, as well as the eſteem of his preceptors. He wrote a comedy, which his parents inſiſted that he ſhould ſuppreſs, and ſacrifice the imprudent production; he ſubmitted, and was never afterwards willing to declare the title of the piece, which had nevertheleſs been acted with much ſucceſs, under a different name, and ſtill remains on the theatre. This juvenile work, foreign as it was to his ſtudies, was a proof of the facility and flexibility of his genius, which afterwards enabled him to acquire in the different ſciences a juſt and elevated reputation. Determining upon a ſtrict attention to ſtudy, he devoted himſelf wholly to the purſuits of anatomy, in which he made ſuch rapid progreſs, that, at the age of twenty-five, he was received into the Academy of Sciences as aſſociate-anatomiſt. He examined, with great care and perſeverance, the ſtructure of the bones, and of the arteries, and demonſtrated the muſcular coat of the latter. He alſo inveſtigated the ſtructure, and inquired into the economy and uſe, of the ſpleen, attempting to reconcile the different accounts given of that viſcus by Ruyſch and Malpighi. He had ſtrong hopes of diſcovering the office of this viſcus, when an extraordinary event put a period to his anatomical purſuits. In ſelecting among ſome dead bodies a proper ſubject for diſſection, he fancied he perceived in one of them ſome very doubtful ſigns of death, and endeavoured to reanimate it: his efforts were for a long time vain; but his firſt perſuaſion induced him to perſiſt, and he ultimately ſucceeded in bringing his patient to life, who proved to be a poor peaſant. This circumſtance impreſſed ſo deep a ſenſe of horror on the mind of the anatomiſt, reflecting on the conſequences of his having ſelected this unhappy object for diſſection, that he declined theſe purſuits in future. Natural hiſtory ſucceeded the ſtudy of anatomy, and mineralogy became a favourite object of his purſuit; he publiſhed his obſervations on the cryſtallized free-ſtones of Fontainebleau. But chemiſtry, a ſcience to which he was thus led, finally became the beloved occupation of M. de Laſſone. His numerous memoirs, which were read before the Royal Academy of Sciences, preſented a valuable train of new obſervations, uſeful both to the progreſs of that ſtudy, and to the art of compounding remedies; and in every part of theſe he evinced the ſagacity of an attentive obſerver, and of an ingenious experimentaliſt.

M. Laſſone, although he had, by the number of his

works, given every one reaſon to ſuppoſe that he had devoted himſelf excluſively to the ſciences, had not neglected the practice of medicine. After having exerciſed it for a long time in the hoſpitals and cloiſters, he was ſent for to court; and he was the only example, except the celebrated Fernel, of one individual holding the office of firſt phyſician at Verſailles, ſucceſſively to two queens, and afterwards to the king; the miniſters and the courtiers had been all changed, but he preſerved the friendſhip of his ſovereigns. He lived in friendſhip with Fontenelle, Winſlow, d'Alembert, Buffon, and other ſcientific characters; and the affability of his manners, and his ardent zeal for the advancement of knowledge among the young ſcholars, whoſe induſtry he encouraged, and whoſe reputation was become one of his moſt ſatisfactory enjoyments, gained him general reſpect. When, from a natural delicacy of conſtitution, M. de Laſſone began to experience the inconveniences of a premature old age, he became ſorrowful and fond of ſolitude; yet, reconciled to his ſituation, he calmly obſerved his death approaching, and expired on the 8th of December, 1788. Laſſone, at the time of his death, held the appointment of firſt phyſician to Louis XVI. and his queen; he was counſellor of ſtate, doctor-regent of the faculty of medicine at Paris, and penſionary-veteran of the academy of ſciences, member of the academy of medicine at Madrid, and honorary aſſociate of the college of medicine at Nancy. *Hiſt. de l'Acad. Roy. des Sciences*, 1788.

LASSOU'R, a town of Hindooſtan, in the circar of Aurungabad: thirty-two miles north-weſt of Aurungabad.

LAS'SUS (Orlandus), or, as he is called by the Italians, *Orlando di Laſſo*, was a native of Mons, in Hainault, born in 1520; and who not only ſpent many years of his life in Italy, but had his muſical education there, having been carried thither ſurreptitiouſly, when a child, on account of his fine voice. The hiſtorian Thuanus, who has given Orlando a place among the illuſtrious men of his time, tells us that it was a common practice for young ſingers to be forced away from their parents, and detained in the ſervice of princes; and that Orlando was carried to Milan, Naples, and Sicily, by Ferdinand Gonzago. Afterwards, when he was grown up, and had probably loſt his voice, he went to Rome, where he taught muſic during two years; at the expiration of which, he travelled through different parts of Italy and France; and at length, returning to Flanders, reſided many years at Antwerp, till, being invited by Albert duke of Bavaria to Munich, he ſettled at that court, married, and continued there till his death, in the year 1593, at upwards of ſeventy years of age. He was accounted one of the moſt excellent compoſers of his time, and has left a great number of works of different kinds, conſiſting of motets, maſſes, magnificats, &c. with Latin, Italian, German, and French, ſongs. He excelled in modulation, of which he gave many new ſpecimens, and was a great maſter of harmony. His ſtyle of church-muſic was lighter and more ſecular than that of Paleſtrina, and he ſeems to have poſſeſſed more elegance and ſweetneſs than grandeur and ſolemnity.

Two of Orlando di Laſſo's ſons, Ferdinand and Rodolph, were able muſicians, and both in the ſervice of Maximilian duke of Bavaria; the eldeſt as chapel-maſter, and the other as organiſt to that prince. Theſe collected their father's motets, as well thoſe which had been publiſhed during his life as thoſe which remained unpubliſhed at his deceaſe, and printed them in a very ſplendid and ſumptuous manner at Munich, in ſeven volumes, large folio, 1604, with a dedication to their patron, the ſovereign of Bavaria. The general reception, however, of theſe compoſitions, ſeems not to have equalled the expectations of the editors. *Burney.*

LASS'OTH, a town of Sileſia, in the principality of Neiſſe: ten miles north of Neiſſe.

LASS'WITZ, a town of Sileſia, in the principality of Neiſſe: four miles north-weſt of Patſchkau.

LAST, *adj.* [lꝫeꝛꝫ, Sax. *laetſte*, Dut.] Lateſt; that which follows all the reſt in time.—Why are ye the *laſt* to bring the king back? *Samuel.*

Oh! may ſome ſpark of your celeſtial fire
The *laſt*, the meaneſt, of your ſons inſpire! *Pope.*

Hindmoſt; which follows in order of place:

Merion purſu'd at greater diſtance ſtill,
Laſt came Admetus, thy unhappy ſon. *Pope.*

Beyond which there is no more.—I will ſlay the *laſt* of them with the ſword. *Amos.*

Wit not alone has ſhone on ages paſt,
But lights the preſent, and ſhall warm the *laſt*. *Pope.*

The loweſt; the meaneſt:

Antilochus
Takes the *laſt* prize, and takes it with a jeſt. *Pope.*

Next before the preſent; as, *laſt* week. Utmoſt:

Fools ambitiouſly contend
For wit and pow'r; their *laſt* endeavours bend
T' outſhine each other. *Dryden's Lucretius.*

At LAST. In concluſion; at the end.—Gad, a troop ſhall overcome him; but he ſhall overcome *at* the *laſt*. *Gen.* xlix. 19.

Thus weather-cocks, that for a while
Have turn'd about with ev'ry blaſt,
Grown old, and deſtitute of oil,
Ruſt to a point, and fix at *laſt*. *Freind.*

The LAST; the end:

All politicians chew on wiſdom paſt,
And blunder on in buſineſs to *the laſt*. *Pope.*

LAST, *adv.* The laſt time; the time next before the preſent:

When *laſt* I dy'd, and, dear! I die
As often as from thee I go,
I can remember yet that I
Something did ſay, and ſomething did beſtow. *Donne.*

In concluſion:

Pleas'd with his idol, he commends, admires,
Adores; and, *laſt*, the thing ador'd deſires. *Dryden.*

To LAST, *v. n.* [læꝫtan, Sax.] To endure; to continue; to perſevere.—Theſe are ſtanding marks of facts delivered by thoſe who were eye-witneſſes to them, and which were contrived with great wiſdom to *laſt* till time ſhould be no more. *Addiſon.*

LAST, *ſ.* [læꝫꝫ, Sax.] The mould on which ſhoes are formed.—The cobler is not to go beyond his *laſt*. *L'Eſtrange.*

Should the big *laſt* extend the ſhoe too wide,
Each ſtone would wrench th' unwary ſtep aſide. *Gay.*

[From hlæꝫtan, Sax. a load.] A burden in general; and particularly a certain weight or meaſure of fiſh, corn, wool, leather, pitch, &c. A laſt of white herrings is twelve barrels, of red herrings twenty cades or thouſand, and of pilchards ten thouſand; of corn ten quarters, and in ſome parts of England twenty-one quarters; of wool twelve ſacks; of leather, twenty dickers, or ten ſcore; of hides or ſkins, twelve dozen; of pitch, tar, or aſhes, fourteen barrels; of gunpowder, twenty-four firkins, weighing a hundred pounds each, &c.

LAST-COURT, *ſ.* In the marſhes of Kent, a court held by the twenty-four jurats, and ſummoned by the bailifs; wherein orders are made to lay and levy taxes, impoſe penalties, &c. for the preſervation of the ſaid marſhes. *Hiſt. of Imbanking and Draining*, § 54.

LAST-HEIR, *ſ.* He to whom land comes by eſcheat for want of lawful heirs; that is, in ſome caſes the lord of whom they held, but in others the king. *Bract. lib.* 7. *c.* 17.

LAST'AGE,

LAST'AGE, *f.* [*laſtagium*, Lat.] A cuſtom exacted in ſome fairs and markets, to carry things bought where one will, by the interpretation of Raſtal. But it is more accurately taken for the ballaſt or lading of a ſhip. Laſtage is alſo defined to be that cuſtom which is paid for wares ſold by the laſt; as herrings, pitch, &c.

LAS'TEIN, a town of Pruſſia, in the province of Samland: fifteen miles ſouth-eaſt of Ragnitz.

LAS'TERY, *f.* A red colour. *Obſolete:*

The baſhful blood her ſnowy cheeks did ſpread,
That her became as poliſh'd ivory,
Which cunning craftſman's hand hath overlaid
With fair vermilion, or pure *laſtery*. *Spenſer.*

LASTHE'MIA, a woman's name; ſhe was a diſciple of Plato.

LAST'ING, *adj.* Continuing; durable.—Every violence offered weakens and impairs, and renders the body leſs durable and *laſting*. *Ray.*—Of long continuance; perpetual.—A ſinew cracked ſeldom recovers its former ſtrength, and the memory of it leaves a *laſting* caution in the man, not to put the part quickly again to any robuſt employment. *Locke.*

The grateful work is done,
The ſeeds of diſcord ſow'd, the war begun;
Frauds, fears, and fury, have poſſeſs'd the ſtate,
And fix'd the cauſes of a *laſting* hate. *Dryden.*

LAS'TING, *f.* The act or ſtate of enduring.

LA'STINGLY, *adv.* Perpetually; durably.

LA'STINGNESS, *f.* Durableneſs; continuance.—All more laſting than beautiful, but that the conſideration of the exceeding *laſtingneſs* made the eye believe it was exceeding beautiful. *Sidney.*

LASTISA'NA, a town of Italy, in the country of Friuli: ſeven miles eaſt of Concordia.

LAST'LY, *adv.* In the laſt place.—I will juſtify the quarrel; ſecondly balance the forces; and, *laſtly*, propound variety of deſigns for choice, but not adviſe the choice. *Bacon.*—In the concluſion; at laſt; finally.

LAST'MAN (Peter), born at Haerlem in the year 1581, was an hiſtorical painter of merit, and is reported to have been one of the inſtructors of Rembrandt. Laſtman etched ſeveral plates after his own compoſitions, in a very good taſte, which are at preſent very rare; of theſe we can only ſpecify two, the ſubjects of which are, Judah and Tamar, introduced into a landſcape, in ſmall folio; and a female veiled, reclining in a bower, in 4to.

LAST'MAN (Nicholas), ſon of the preceding, born at Haerlem in 1619, was inſtructed in the elements of painting, and the general rudiments of art, by John Pinas; and it is probable he learned engraving from Saenredam. His engraving of the Good Samaritan, from a picture by himſelf, is probably his chef-d'œuvre. The ſtory is introduced in a very pictureſque landſcape, towards the right ſide of which appears a ſtone-bridge over a river, along which the uncharitable prieſt and Levite are walking.

LAS'TRES, a ſeaport town and cape of Spain, on the north coaſt of Aſturia: thirty miles north-eaſt of Oviedo. Lat. 43. 33. N. lon. 5. 19. W.

LAS'TRINGE, a town of Sweden, in Sudermanland: twelve miles north of Nykoping.

LAS'VA, a river of Boſnia, which runs into the Miſna near Pſenitza.

LAS'ULA, a ſmall iſland near the eaſt coaſt of Luçon. Lat. 13. 27. N. lon. 123. 57. E.

LA'SUS, was born at Hermione, a city of Achaia, in the time of Darius Hyſtaſpes, in the 58th Olympiad, 538 years B. C. Diogenes Laertius ſays, that he deſerves to be ranked among the ſeven ſages. He was generally allowed to be the firſt among the Greeks who wrote about muſic; and was not only a theoriſt and great practitioner, but a dithyrambic poet, perhaps the inventor of that kind of poetry in honour of Bacchus which was ſung in the Phrygian mode at the public games, and partook of all that fire and hilarity which the god to whom it was addreſſed inſpired. Plutarch ſays, that he introduced new rhythms in his poetry and dithyrambic muſic, and upon the lyre imitated the compaſs and variety of the flute; for which he is mentioned, in the Dialogue on Muſic, as a great innovator. Theon of Smyrna teſtifies that Laſus, as well as the Pythagorean Hippaſus of Metapontus, made uſe of two vaſes of the ſame ſize and tone, in order to calculate the exact ratio or proportion of concords: for, by leaving one of the vaſes empty, and filling the other half full of water, they became octaves to each other; and, filling one a fourth part full, and the other a third, the percuſſion of the two veſſels produced the concords of 4th and 5th; from which proceſs reſulted the proportions of theſe three concords contained in the numbers 1, 2, 3, 4. This aſſertion, which has been taken upon truſt, like the anvil-ſtory of Pythagoras, is equally falſe. To tune glaſſes by water, has been lately practiſed, and thought a new diſcovery; but that their tones are altered in the proportions given above, is by no means true. Moſt glaſſes are lowered about a whole tone by being half filled with water, and not more than a major 6th if quite filled.

LAT'ABI, a town of Africa, belonging to the kingdom of Aquambo.

LATAC', a town of Thibet, on the north ſide of the Ganges. Lat. 30. 55. N. lon. 74. 34. E.

LATACUN'GA, a town of South America, and juriſdiction in the audience of Quito, containing 12,000 inhabitants. This town was deſtroyed by an earthquake in the year 1698, and a great number of the inhabitants were buried in its ruins. Of 600 ſtone houſes, only part of one, and a church, are now ſtanding. It is fifty miles ſouth of Quito. Lat. 0. 58. S. lon. 78. 16. W.

LATA'KIA, a ſeaport town of Syria, built by Seleucus Nicanor, who called it *Laodicea*, the name of his mother; ſituated at the baſe and on the ſouthern ſide of a ſmall peninſula, which projects half a league into the ſea. Its port, like all the others on this coaſt, is a ſort of baſon, environed by a mole, the entrance of which is very narrow. It might contain twenty-five or thirty veſſels, but the Turks have ſuffered it ſo to be choked up, as ſcarcely to admit four. Ships of above 400 tons cannot ride there, and hardly a year paſſes that one is not ſtranded in the entrance; notwithſtanding this, Latakia carries on a very great commerce, conſiſting chiefly of tobacco, of which upwards of twenty cargoes are annually ſent to Damietta; the returns from thence are rice, which is bartered in Upper Syria for oils and cottons. This place was viſited by an earthquake on the 26th of April, 1796, at a few minutes paſt nine o'clock in the morning. The ſea was then perfectly calm; not a breeze nor the ſlighteſt agitation could be perceived in the air; the ſky was ſomewhat hazy, and the ſun appeared pale. The ſhock was preceded by a ſubterraneous noiſe, loud enough to drown that which was occaſioned by the fall of houſes; or, to ſpeak more correctly, theſe two noiſes were almoſt ſimultaneous, and ſo blended that nobody had time to eſcape. So ſudden was the overthrow of the houſes, that even thoſe perſons who occupied the ground-floors, and happened to be in a ſtanding poſture, could not reach the threſhold of the doors. The tobacco ſtore-houſe, ſituated near the port, a large building, and conſtructed with great ſolidity, was laid proſtrate in a maſs, and ſo abruptly, that not an individual eſcaped: the aga, his officers, and four hundred workmen, there loſt their lives. Upon the whole, one third of the town was deſtroyed, and fifteen hundred perſons were killed. Latakia is fifty miles ſouth of Antioch, and ſeventy ſouth-weſt of Aleppo. Lat. 35. 36. N. lon. 35. 50. E.

LATALAT'TA, one of the Molucca iſlands. Lat. 0. 3. S. lon. 127. 5. E.

LATANG', a town of Thibet: nine miles ſouth of Dſaprong.

LATA'NIA, *f.* in botany, a name given by Commerſon to a kind of palm, found in the Iſle de Bourbon, and

which seems to be barbarously constructed of the French word *late*, a lath, this palm being called in that language *latanier*. It is a genus of the class dioecia, order monadelphia, natural order of palmæ.—*Essential Character.* Male. Spathe of numerous imbricated leaves; spadix branched, its branches fingered at the top, catkin-like, somewhat cylindrical, of many imbricated single-flowered scales. Corolla in six deep segments; the three outer ones smallest. Stamens fifteen or sixteen; antheræ oblong, two-celled. Female unknown.

Latania Borbonica, a single species. Trunk straight, simple, cylindrical, leafy at the top; leaves stalked, fan-shaped, glaucous; their ribs cottony at the back; flowers yellow.

LATAT'SI, a mountain of Thibet. Lat. 31. 35. N. lon. 77. 14. E.

LATCH, *s.* [*letse*, Dut. *laccio*, Italian.] A catch of a door moved by a string, or a handle.—The *latch* mov'd up. *Gay's Pastorals.*

Then comes rosy health from her cottage of thatch,
Where never physician had lifted the *latch*. *Smart.*

To LATCH, *v. a.* To fasten with a *latch*.—He had strength to reach his father's house: the door was only *latched*; and, when he had the latch in his hand, he turned about his head to see his pursuer. *Locke.*—*Spenser* uses it for to fasten, generally.—He popt him in, and his basket did *latch*. *Shepherd's Kalendar.*—[From læccan, Sax.] To catch:

Pumy stones I hastily hent,
And threw; but nought availed:
He was so wimble and so wight,
From bough to bough he leaped light,
And oft the pumies *latched*. *Spenser's March.*

LAT'CHA, a lake of Russia, in the government of Olonetz, about thirty-two miles in length, and eight in breadth. Lat. 61. to 61. 20. N. lon. 38. 30. E.

LATCHE, LAT'CHET, or LAS'KET, *s.* A sea term; a loop made of a small rope.—*Latches* or laskets, in a ship, are small lines like loops, fastened by sewing into the bonnets and drablers of a ship, in order to lace the bonnets to the courses, or the drablers to the bonnets. *Harris.*

LAT'CHET, *s.* [*lacet*, Fr.] The string that fastens the shoe.—There cometh one mightier than I, the *latchet* of whose shoes I am not worthy to unloose. *Mark*, i. 7.

LAT'CHING, *s.* The act of fastening with a latch.

LATCHOU', a river of Thibet, which runs into the Ganges in lat. 30. 50. N. lon. 77. 49. E.

LA'TE, a town of Peru, in the jurisdiction of Lima.

LATE, *adj.* [læt, Sax. *laet*, Dut. in the comparative *latter* or *later*, in the superlative *latest* or *last*. *Last* is absolute and definite, more than *latest*.] Contrary to early; slow; tardy; long delayed:

My hasting days fly on with full career,
But my *late* spring no bud nor blossom sheweth. *Milton.*

Just was the vengeance, and to *latest* days
Shall long posterity resound thy praise. *Pope's Odyssey.*

Last in any place, office, or character.—All the difference between the *late* servants, and those who staid in the family, was, that those latter were finer gentlemen. *Addison's Spectator.*—The deceased within a few years: as, The works of the *late* Dr. Gmelin.—Far in the day or night.

LA'TE, *adv.* After long delays; after a long time. It is used often with *too*, when the proper time is past:

A second Silvius after these appears,
Silvius Æneas, for thy name he bears:
For arms and justice equally renown'd,
Who, *late* restor'd, in Alba shall be crown'd. *Dryden.*

He laughs at all the giddy turns of state,
When mortals search too soon, and fear *too late*. *Dryden.*

In a later season.—To make roses, or other flowers, come *late*, is an experiment of pleasure; for the ancients esteemed much of the rosa sera. *Bacon's Natural History.*—Lately; not long ago:

In reason's absence fancy wakes,
Ill-matching words and deeds long past or *late*. *Milton.*

Far in the day or night:

Was it so *late*, friend, ere you went to bed,
That you do lie so *late*? *Shakespeare.*

Of LATE; lately; in times past; near the present. *Late* in this phrase seems to be an adjective.—Who but felt *of late*? *Milton.*—Men have *of late* made use of a pendulum, as a more steady regulator. *Locke.*

LA'TE-WAKE, *s.* A ceremony used at funerals in the Highlands of Scotland. The evening after the death of any person, the relations and friends of the deceased meet at the house, attended by bagpipe or fiddle; the nearest of kin, be it wife, son, or daughter, opens a melancholy ball, dancing and *greeting* (i. e. crying violently) at the same time, and this continues till day-light; but with such gambols and frolics among the younger part of the company, that the loss which occasioned them is often more than supplied by the consequences of that night. If the corpse remains unburied for two nights, the same rites are renewed.

LAT'EBRÆ, *s. plu.* [Latin.] Dens, hiding-places.

LAT'EBROUS, *adj.* Full of dens, full of hiding-places. *Cole.*

LA'TED, *adj.* Belated; surprised by the night:

The west glimmers with some streaks of day:
Now spurs the *lated* traveller apace
To gain the timely inn. *Shakespeare's Macbeth.*

LAT'EEN, *s.* A long triangular sail extended by a lateen-yard, and frequently used by xebecs, polacres, settees, and other vessels navigated in the Mediterranean sea.

LA'TELY, *adv.* Not long ago.—A certain Jew named Aquila, *lately* come from Italy. *Acts* xviii. 2.

LA'TENESS, *s.* Time far advanced.—*Lateness* in life might be improper to begin the world with. *Swift to Gay.*

LA'TENT, *adj.* [*latens*, Lat.] Hidden; concealed; secret.—If we look into its retired movements, and more secret *latent* springs, we may there trace out a steady hand producing good out of evil. *Woodward.*

Who drinks, alas! but to forget; nor sees,
That melancholy sloth, severe disease,
Mem'ry confus'd, and interrupted thought,
Death's harbingers, lie *latent* in the draught. *Prior.*

LAT'ERAL, *adj.* [*lateral*, Fr. *lateralis*, Lat.] Growing out on the side; belonging to the side.—The smallest vessels, which carry the blood by *lateral* branches, separate the next thinner fluid or serum, the diameters of which *lateral* branches are less than the diameters of the blood-vessels. *Arbuthnot on Aliments.*—Placed, or acting on the side:

Forth rush the Levant, and the ponent winds
Eurus and Zephyr, with their *lateral* noise,
Sirocco and Libecchio. *Milton.*

LATERAL EQUATION, in algebra, denotes a simple equation; an equation whose root is of one dimension.

LATERAL LIGAMENTS, in anatomy, are those placed at the sides of the joints.

LATERAL LINE, the line which runs from the head to the tail in the middle of the sides of most fishes.

LATERAL SINUSES, in anatomy, the two branches into which the superior longitudinal sinus of the dura mater is divided at the internal transverse ridge of the occipital bone.

LATERAL'ITY, *s.* The quality of having distinct sides.—We may reasonably conclude a right and left *laterality* in the ark, or naval edifice of Noah. *Brown.*

LAT'ERALLY, *adv.* By the side; sidewise.—The days are set *laterally* against the columns of the golden number. *Holder on Time.*

LATERAN',

LATERAN', was originally the proper name of a man; whence it deſcended to an ancient palace in Rome, and to the buildings ſince erected in its place; particularly a church called *St. John of Lateran*, which is the principal ſee of the popedom.

Councils of the LATERAN, are thoſe held in the baſilica of the Lateran; of theſe there have been five, held in 1123, 1139, 1179, 1215, and 1513.

Canons Regular of the Congregation of the LATERAN, is a congregation of regular canons, whereof that church is the principal place or ſeat. It is pretended there has been an uninterrupted ſucceſſion of clerks, living in community, from the time of the apoſtles; and that a number of theſe were eſtabliſhed in the Lateran in the time of Conſtantine. But the canons were not introduced till the time of Leo I. and theſe held the church 800 years, till the reign of Boniface, who took it from them, and placed ſecular canons in their room; 150 years after, the regulars were reinſtated.

LATERA'NUS, a man's name; a Roman conſul. A houſehold god.

LATER'CULUM, *ſ.* in antiquity, a roll or liſt of all the magiſtrates and military officers under the Roman emperors, with an account of their reſpective offices and fees.

LAT'ERE. See LEGATE.

LATERI'TIOUS, *adj.* Like brick; made of brick. *Beddoes.*

LATE'SA, a town of Naples, in Abruzzo Citra: ten miles ſouth of Lanciano.

LATE'WA, a town of Bengal: forty-five miles north-weſt of Ramgur.

LA'TEWARD, *adv.* [*late* and ꝑeapꝺ, Sax.] Somewhat late.

LA'TEX, *ſ.* in the old chemiſtry, a name by which Van Helmont has, in ſome of his writings, called the famous menſtruum, which he boaſts Paracelſus and himſelf to have been poſſeſſed of, and which he uſually calls ALKAHEST. See that word, vol. i.

LATF, a town of Egypt, three miles ſouth of Faoua.

LATH, *ſ.* [laꝺꝺa, Sax. *latte*, Fr.] A ſmall long piece of wood, uſed in plaſtering, tiling, and ſlating.—*Laths* are made of heart of oak for outſide work, as tiling and plaſtering; and of fir for inſide plaſtering, and pantile lathing. *Moxon.*

The god who frights away,
With his *lath* ſword, the thieves and birds of prey. *Dryd.*

Formerly a contemptuous appellation for a ſword:

Have your *lath* glu'd within your ſheath,
Till you know better how to handle it. *Titus Andronicus.*

For the purpoſe of plaſtering, the narrower the laths are, the better, provided they are of ſufficient breadth to hold the nails; as the number of interſtices is increaſed, the lime or ſtuff will hang more readily; and, the thicker they are, they will be the better adapted to reſiſt violence; but then they would be much more expenſive. The laths are generally made of fir, in three, four, and five, feet lengths, but may be reduced to the ſtandard of five feet. Laths alſo are ſingle or double; the latter are generally about three-eighths of an inch thick, and the former barely one quarter, and about an inch broad. Lath is ſold in bundles; the three-feet are eight ſcore to the bundle, the four-feet, ſix ſcore, and the five-feet, five ſcore. The lath for plain-tiling is the ſame as that uſed in plaſtering. Laths are alſo diſtinguiſhed into heart and ſap laths; the former ſhould always be uſed in plain-tiling; and the latter, of an inferior quality, is moſt frequently uſed by the plaſterer. Heart-of-oak laths, by the ſtatute Edw. III. ſhould be one inch in breadth, and half an inch in thickneſs; but now, though their breadth be an inch, their thickneſs is ſeldom more than a quarter of an inch; ſo that two laths, as they are now made, are but equal to one. According to the ſame ſtatute, pan-tile laths are nine or ten feet long, three-quarters of an inch thick, and one and a half inch broad, and ſhould be made of the beſt yellow deal; the bundle conſiſts of twelve ſuch laths. A ſquare of plain-tiling will require a bundle of laths, more or leſs, according to the pitch. The diſtance of laying laths one from another is various, differing more in ſome places than in others; but three and a half or four inches is the uſual diſtance, with a counter-lath between rafter and rafter; but, if the rafters ſtand at wide intervals, two counter-laths will be neceſſary. Laths are employed for various other purpoſes, as well as plaſtering and tiling: as in filleting for ſuſtaining the ends of boards; in naked flooring and roofing; for furring up the ſurfaces; and in every kind of ſmall work, where the dimenſions of the parts do not exceed the ſcantling of laths. In lathing for plaſtering, it is too frequent a cuſtom to lap the ends of the laths upon each other, where they terminate upon a quarter or batten, in order to prevent cutting them; but, though this practice ſaves a row of nails, it leaves only a quarter of an inch for plaſter; and, if the laths are very crooked, as they frequently are, there will be no ſpace whatever left to ſtraighten the plaſter; the finiſhed ſurface muſt, therefore, be rounded, contrary to the intention and to the good effect of the work; but if the ends are to be laid upon each other, they ſhould be thinned at the lapping out to nothing at the extremity, or otherwiſe they ſhould be cut to exact lengths.

Laths ſhould be as evenly ſplit as poſſible; thoſe that are very crooked ſhould not be uſed, or the crooked part ſhould be cut out; and ſuch as have a ſhort concavity on the one ſide, and a convexity on the other, not very prominent, ſhould be placed with the concave ſide outwards. The following is the method of ſplitting laths: The lath-cleavers having cut their timber into lengths, they cleave each piece with wedges into eight, twelve, or ſixteen, pieces, according to the ſcantling of the timber; the pieces thus cloven are called *bolts*; then, in the direction of the felt-grain, with their dowl-ax, into ſizes for the breadth of the laths; this operation they call *felting*; and, laſtly, with their chit they cleave them into thickneſs by the quarter-grain.

LATH-BRICKS, a particular ſort of bricks made in ſome parts of England, of twenty-two inches in length and ſix in breadth, which are uſed in the place of laths or ſpars, ſupported by pillars in caſts, for the drying of malt. This is an excellent contrivance; for, beſides that they are not liable to fire, as the wooden laths are, they retain the heat vaſtly better; ſo that, being once heated, a very ſmall quantity of fire will ſerve to keep them ſo.

To LATH, *v. a.* To fit up with laths.—The plaſterer's work is commonly done by the yard ſquare for *lathing*. *Mortimer's Huſbandry.*

LATH, or LATHE, *ſ.* A part of a county.—In ſome counties there is an intermediate diviſion between the ſhire and the hundred, as *laths* in Kent, and rapes in Suſſex; each of them containing three or four hundreds apiece. *Blackſtone.*—In Ireland the arrangement was different.—If all that tything failed, then all that *lath* was charged for that tything; and if the *lath* failed, then all that hundred was demanded for them; and if the hundred, then the ſhire, who would not reſt till they had found that undutiful fellow, which was not ameſnable to law. *Spenſer's Ireland.*

LA'THAM, a townſhip in the pariſh of Ormſkirk, Lancaſhire, ſituated 3 miles from Ormſkirk, and 210 from London. In this townſhip is Latham-houſe, the ſeat of Edward Wilbraham Bootle, eſq. This place is noted in the topographical annals of Lancaſhire as the ancient ſeat of the Lathams in the reign of Edward III. and afterwards of the Stanleys, and laſtly, of the Bootles. It is placed on a moſt barren ſpot, and commands a view as extenſive as dull. The back-front was begun by William earl of Derby; the reſt completed in a moſt magnificent manner by ſir Thomas Bootle. The houſe conſiſts of a ground-floor, principal, and attic; has a ruſtic baſement, with a double flight of ſteps to the firſt

ſtory. The front extends a hundred and fifty-ſix feet, and has nine windows on each floor: the offices are joined to it, by a corridor ſupported by pillars of the Ionic order. The hall is nearly a ſquare, 40 feet by 42, its height 36; the ſaloon 39 by 42. On this floor are thirteen apartments. The ancient *Latham*, the celebrated ſeat of nobility and hoſpitality, ſtood between the north-eaſt offices of the preſent houſe and the kitchen-garden. This place, with vaſt property, belonged to the Lathams till the year 1369, when, by the death of ſir Thomas de Latham, it fell to ſir John Stanley, knight of the garter, ſecond brother of ſir William Stanley of Hooton, in right of Iſabel daughter of ſir Thomas, who married into the fortunate houſe, and laid the foundation of its greatneſs. The form of this houſe may in a great meaſure be collected from the ſtate it was in immediately before the noted ſiege in the 17th century. In the centre was a lofty tower called the Eagles; it had two courts; for mention is made of a ſtrong and high gateway before the firſt. The whole was ſurrounded with a wall two yards thick flanked by nine towers, and this again guarded by a moat eight yards wide and two deep. Such was its ſituation in February 1644, when it was poſſeſſed by the heroic counteſs of Derby; who, receiving a ſummons from ſir Thomas Fairfax, with an offer of moſt honourable terms, replied, "That ſhe was there in a double truſt—of faith to her huſband, and allegiance to her ſovereign; and that ſhe meant to preſerve her honour and obedience, though in her own ruin." She was as good as her word; for, during the ſpace of ſixteen months, with the aſſiſtance of a ſet of gallant officers appointed and commanded by herſelf, ſhe repelled every effort to reduce the place. Colonel Edward Chiſenhall was one of the heroic officers who commanded under her. Hearing that the enemy hoaſted of their ſtore of proviſion, he ſallied out, and, as the expreſſion was, "ſtole their dinner." With a fortitude beyond her ſex, ſhe endured all the miſeries of a ſiege, and beheld, with as little emotion as Charles XII. a bomb fall through the room where ſhe and her children were at dinner. At length ſhe was relieved by the royal forces under prince Rupert and her lord, when ſhe retired from the place, recommending, as governor, captain Edward Rawſthorn, who, with the ſpirit of his miſtreſs, endured another ſiege till the ruin of the royal cauſe; and, by the royal command, he yielded up the houſe to colonel Booth, December 5, 1645. The reduction was thought of ſuch importance, that public thanks were, by order of parliament, given by the miniſters of London in all the churches. The place was diſmantled the following year; all the floors and wainſcotting were ſold for 54l. 7s. 10d. On the reſtoration it was re-poſſeſſed by the family; was repaired, and even inhabited, the beginning of the laſt century, when the Eagle Tower and ſome parts of the wooden houſe were ſtanding. The houſe, and this part of the eſtate, were transferred to John lord Aſhburnham, by his marriage in 1714 with Henrietta daughter of William ninth earl of Derby. Lord Aſhburnham ſold it to a Furneſs, who ſoon diſpoſed of it to ſir Thomas Bootle, in whoſe family it now remains. The park is about five miles in circumference, and contains ſome fine foreſt-ſcenery. In this townſhip is alſo Croſs-hall, once alſo belonging to the earls of Derby, but now the property of colonel Stanley. Near it is a medicinal ſpring, impregnated with vitriol and ſteel, called Maudlin's Well, which has wrought remarkable cures. Though it is remote from the ſea or any ſalt rivers, it uſed to caſt up marine ſhells in ſuch quantities, that they became troubleſome to the drinkers, till it was prevented by laying mill-ſtones on the ſpring. An oil is extracted from a bituminous earth here, which preſerves raw fleſh, and ſerves the country people inſtead of candles. *Pennant's Tour. England's Gaz.*

LA'THE, *ſ.* The tool of a turner, by which he turns about his matter ſo as to ſhape it by the chiſel.—Thoſe black circular lines we ſee on turned veſſels of wood, are the effects of ignition, cauſed by the preſſure of an edged ſtick upon the veſſel turned nimbly in the *lathe*. *Ray.*

The invention of the lathe is very ancient; Diodorus Siculus ſays, the firſt who uſed it was a grandſon of Dædalus, named Talus. Pliny aſcribes it to Theodore of Samos; and mentions one Thericles, who rendered himſelf very famous by his dexterity in managing the lathe. With this inſtrument the ancients turned all kinds of vaſes, many whereof they enriched with figures and ornaments in baſſo relievo. Thus Virgil: *Lenta quibus torno facili ſuperaddita vitis.* The Greek and Latin authors make frequent mention of the lathe; and Cicero calls the workmen who uſed it *vaſcularii*. It was a proverb among the ancients to ſay a thing was *formed in the lathe*, to expreſs its delicacy and juſtneſs.

The lathe is compoſed of two wooden cheeks or ſides, parallel to the horizon, having a groove or opening between; perpendicular to theſe are two other pieces called *puppets*, made to ſlide between the cheeks, and to be fixed down at any point at pleaſure. Theſe have two points, between which the piece to be turned is ſuſtained; the piece is turned round, backwards and forwards, by means of a ſtring put round it, and faſtened above to the end of a pliable pole, and underneath to a treadle or board moved with the foot. There is alſo a reſt which bears up the tool, and keeps it ſteady. As it is the uſe and application of this inſtrument that makes the greateſt part of the art of TURNING, we refer the particular deſcription thereof, as well as the manner of applying it in various works, to that head.

To LATH'ER, *v. n.* [leðran, Sax.] To form a foam:

Chuſe water pure,
Such as will *lather* cold with ſoap. *Baynard.*

To LATH'ER, *v. a.* To cover with foam of water and ſoap.

LATH'ER, *ſ.* [from the verb.] A foam or froth made commonly by beating ſoap with water.

LATH'ERING, *ſ.* The act of covering with the froth of ſoap and water; of turning into lather.

LA'THESLEY, a village in Surrey, ſouth-weſt of Guildford. The red-ſtraw wheat, much the ſame with that of Suſſex, is produced hereabouts, and in all Low Surrey.

LA'THING, *ſ.* The act of fitting up with laths; the part filled up with laths.

LATHRÆ'A, [from λαθραιος, Gr. clandeſtine, or concealed, becauſe the herbage is moſtly under the ground, or at leaſt covered with dead leaves of trees.] TOOTHWORT; In botany, a genus of the claſs didynamia, order angioſpermia, natural order of perſonatæ, (pediculares, *Juſſ.*) The generic characters are—Calyx: perianthium one-leafed, campanulate, ſtraight; mouth deeply four-cleft. Corolla: one-petalled, ringent; tube longer than the calyx. Border ringent, ventricoſe; upper lip concave, galeated, broad, with a narrow hooked tip. Lower lip leſs reflex, obtuſe, trifid. Nectary: an emarginate glandule, depreſſed on each ſide, very ſhort, inſerted into the receptacle of the flower at the other corner of the germ. Stamina: filaments four, awl-ſhaped, length of the corolla, hid under the upper lip. Antheræ obtuſe, depreſſed, converging. Piſtillum: germ globoſe-compreſſed; ſtyle filiform, length and ſituation of the ſtamens; ſtigma truncated, nodding. Pericarpium: capſule roundiſh, obtuſe with a point, one-celled, two-valved, elaſtic, coated with a very large ſpreading calyx. Seeds: few, ſubgloboſe, affixed to the middle of the valves. It approaches nearly, on account of its glandule, to Orobanche.—*Eſſential Character.* Calyx: four-cleft; gland depreſſed, at the baſe of the future of the germ; capſule one-celled.

Species. 1. Lathræa clandeſtina, or hidden toothwort: ſtem branched almoſt under ground, flowers upright ſolitary. Root thick, long, fibrous. Stem half a palm in height, ſurrounded by a few, very ſhort, thick, ſharp, leaves,

1. *Great Toothwort.* 2. *Narrow-leaved Everlasting Pea.*

from Fl. Dan. *J. Pass Sc.*

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and terminated by five, ſix, or more, naked peduncles, three inches long, each bearing one flower of a blue colour, near two inches in length. The ſtem bears the corymb under ground, ſo that ſolitary fructifications only appear above ground on each branch. Ray and others have this plant twice over. Native of France, the Pyrenées, and Italy; Ray obſerved it in moiſt ſhady places between Maſſa and Lucca.

2. Lathræa phelypæa, or doubtful toothwort: corollas ſpreading-bell-ſhaped. This is a tender juicy plant, a palm and a half high. Stem ſurrounded by abundance of ſoft ſucculent leaves, broad at the baſe, and ending in a ſharp point. From the top come out three or four tubular funnel-ſhaped flowers, an inch or an inch and a half in length, of a yellow colour, divided at top into five ſegments. The ſtructure of the flower in this plant is very different from that of Lathræa. Thunberg has conſtituted a new genus under the name of *Phelypæa*, which Mr. Correa ſuſpects to be a ſpecies of Cytinus.

3. Lathræa anblatum, or eaſtern toothwort: lips of the corollas undivided. Found by Tournefort in the Levant.

4. Lathræa ſquamaria, or great toothwort: ſtem quite ſimple; corollas pendulous, lower lip trifid. Root beaded, branched, and ſurrounded with white ſucculent ſcales; it is paraſitical, and generally attached to the roots of elms, haſels, or ſome other trees, in a ſhady ſituation. Stem naked, except ſometimes one or two oval ſcales. Flowers in a ſpike, from one ſide of the ſtem, in a double row; bractes roundiſh-oval, large, reddiſh, one at the baſe of each peduncle, forming a double line oppoſite to the flowers; calyx hairy, whitiſh, bellying; ſegments equal, bluntiſh; corolla pale purple or fleſh-coloured, except the lower lip, which is white: the upper lip is rather ſhort and truncate. Native of moſt parts of Europe; with us it is rather rare; but may be met with at Maidſtone in Kent; Harefield in Middleſex; Exton near Stamford; the woods of Derbyſhire; at Conzick-ſcar near Kendal, Weſtmoreland; near Gainsford, Durham; in Scotland, at Mevis-bank towards Laſwade, four or five miles from Edinburgh; and in Morvern, near the Sound of Mull. The flowers appear in April, emerging from the decayed leaves of trees, among which the plant is moſtly found half buried.

The Engliſh name *toothwort* is derived from the reſemblance of the ſcaly roots to the human fore-teeth; and hence it was fancied formerly to be good for the toothach. This genus is very miſcellaneous, the ſtructure of the fructification differing widely in the different ſpecies. When theſe ſhall be more accurately examined, perhaps the laſt only may remain in the genus. Of that therefore we have given a repreſentation, at fig. 1 of the annexed Plate.

LATHY'RIS, *ſ.* in botany. See EUPHORBIA.

LATHYROI'DES. See OROBUS and SPARTIUM.

LATH'YRUS, *ſ.* CHICHLING VETCH; in botany, a genus of the claſs diadelphia, order decandria, natural order of papilionacei, or leguminoſæ. The generic characters are —Calyx: perianthium one-leafed, half five-cleft, bell-ſhaped: diviſions lanceolate, ſharp: the three upper ones ſhorter: the loweſt longer. Corolla: papilionaceous; ſtandard obcordate, very large, reflex on the ſides and tip; wings oblong, lunulate, ſhort, obtuſe; keel half-orbiculate; ſize of the wings, and wider than the wings, gaping inwards in the middle. Stamina: filaments diadelphous, (ſingle and nine-cleft,) riſing upwards; antheræ roundiſh. Piſtillum: germ compreſſed, oblong, linear; ſtyle erected upwards, flat, wider above, with a ſharp tip; ſtigma, from the middle of the ſtyle to the tip villoſe in front. Pericarpium: legume very long, cylindric or compreſſed, acuminate, one-celled, bivalve. Seeds ſeveral, cylindric, globoſe, or but little cornered.—*Eſſential Character.* Calyx: two upper ſegments ſhorter; ſtyle flat, villoſe above, broader at the end.

Species. I. With one-flowered peduncles. 1. Lathyrus aphaca, yellow lathyrus, or vetchling: peduncles one-flowered; tendrils leafleſs; ſtipules ſagittate-cordate. Root annual, fibrous. Stem from a foot to eighteen inches or more in height, trailing or climbing, four-cornered, ſmooth. Leaves none, except on the young plants, which ſoon after they come up are uſually furniſhed with one or more pair of leaves ſimilar to thoſe of the other ſpecies, but totally diſappearing as the plants advance. Flowers ſmall, ſolitary, axillary. Native of moſt parts of Europe, in corn-fields, chiefly in light land: flowering in June, July, and Auguſt. About Tottenham and Enfield, but not common near London; between Norwich and Bungay; in Cambridgeſhire not uncommon.

2. Lathyrus niſſolia, crimſon lathyrus, or graſs-vetch: peduncles one-flowered; leaves ſimple; ſtipules awl-ſhaped. The young plant, before it flowers, is ſo like a graſs, that even an experienced botaniſt might miſtake it for ſuch; eſpecially among mowing-graſs, where it uſually occurs; it is alſo found on the borders of corn-fields, among buſhes and in woods, but not very common, at leaſt with us, though doubtleſs it is frequently overlooked. Its ſimple graſſy leaves diſtinguiſh this from the other ſpecies. The elegant flowers of a rich crimſon render it deſerving of a place in gardens. Mr. Miller informs us, that ſometimes two flowers are found on one peduncle.

3. Lathyrus ſphæricus, or ſpherical lathyrus: peduncles one-flowered, awned; tendrils two-leaved, quite ſimple; leaflets enſiform. Flowers ſmall, like thoſe of the preceding.

4. Lathyrus amphicarpos, ſubterranean lathyrus, or earth-pea: peduncles one-flowered, longer than the calyx; tendrils two-leaved, quite ſimple. Stems ſeveral, weak, ancipital or two-edged. Flowers pale purple. There are other ſtems, deſtitute of leaves, roundiſh, creeping under ground, whitiſh, and bearing flowers and fruit abſolutely perfect, and reſembling thoſe on the ſtems above ground, except that the flowers are ſmaller, and do not expand. Native of the Levant. Cultivated in 1680 in the botanic garden at Oxford; the ſeeds were ſent from Aleppo by Robert Huntingdon, fellow of Merton-college.

5. Lathyrus cicera, flat-podded lathyrus, or dwarf chichling-vetch: peduncles one-flowered; tendrils two-leaved; legumes ovate, compreſſed, channelled on the back. In ſize this takes the middle place between the preceding and following ſpecies. Haller thus diſtinguiſhes this from *ſativus*. The whole plant is lower, but the leaves are larger, broader, and elliptic. Flowers only half the ſize, with a much ſmaller ſtandard, of a duſky blood-red colour. Seeds four. The root is annual; ſtems ſeveral, from a foot to two feet in height, ſimple, angular, winged, procumbent unleſs ſupported by other plants. Flower of a middling ſize; corolla white or pale yellow, or red and white, very ſeldom blue, ſometimes quite red or deep purple. Seeds three, four, or five, ſmaller than peaſe; tawny, with dots of a deeper colour; angular, diſform. Native of France and Spain; cultivated here in 1633; flowers in June and July.

6. Lathyrus ſativus, common lathyrus, or blue chichling vetch: peduncles one-flowered; tendrils two or four leaved, legumes ovate, compreſſed, two-edged at the back. The habit of this is the ſame as the laſt, but the leaves are longer and narrower; flower double the ſize, moſt commonly white, ſometimes tinged with purple, or having a roſe-coloured ſtandard, or blue, or blue and white variegated. Notwithſtanding theſe differences, this and the preceding are perhaps no more than varieties. In our garden it is diſtinguiſhable by the blue colour of the corolla; but we have ſometimes the milk-white variety. The ſeed-pods afford a more certain mark of diſtinction, being unuſually ſhort, broad, and winged on the back. Native of France and Spain; commonly ſown in Swiſſerland for ſoiling horſes, but not indigenous of that country. The French name is *geſſe*. It flowers in June and July. A leaf of this ſpecies is ſhown on the BOTANY Plate VII. fig. 6. the corolla on Plate VIII. fig. 19. and

the fructification is completely explained and figured on Plate XII. fig. 30–33. vol. iii. p. 274.

In ſeveral parts of the continent a white light pleaſant bread is made from the flour of this pulſe; but it produced ſuch dreadful effects in the 17th century, that the uſe of it was forbid by an edict of George duke of Wirtemberg in 1672; and this not being obſerved was inforced by two other edicts under his ſucceſſor Leopold, in 1705 and 1714. Mixed with wheat-flour in half the quantity, it makes a very good bread, that appears to be harmleſs. But bread made with this flour only has brought on a moſt ſurpriſing rigidity of the limbs in thoſe who have uſed it for a continuance; inſomuch that the exterior muſcles could not by no means be reduced, or have their natural action reſtored. Theſe ſymptoms uſually appeared on a ſudden, without any previous pain; but ſometimes they were preceded by a weakneſs and diſagreeable ſenſation about the knees. Baths both hot and cold, fomentations and ointments of various kinds, have been tried without effect; inſomuch that it is regarded as incurable; but, being neither very painful nor fatal, thoſe who are ſeized with it uſually ſubmit to it with patience. Swine fattened with this meal loſt the uſe of their limbs, but grew very fat lying on the ground. A horſe fed ſome months on the dried herb was ſaid to have had his legs perfectly rigid. Kine are reported to grow lean on it, but ſheep not to be affected. Pigeons, eſpecially young ones, loſe the power of walking by feeding on the ſeed. Poultry will not readily touch it, but geeſe eat it without any apparent damage. In ſome parts of Swiſſerland cattle feed on the herb without any harm. It would be worth inquiring, therefore, whether the ſoil may not contribute ſomething to the ill qualities of the plant; and it is remarked that the ſeed from a ſtrong, fat, moiſt, ſoil, is much more deleterious than from a light dry one. Fabbroni, from Florence in 1786, ſays that the government there has cautioned the peaſants againſt the uſe of Lathyrus ſativus; ſwine having loſt the uſe of their limbs, and become pitiable monſters, by being fed on this pulſe excluſively. The peaſants however eat it boiled, or mixed with wheat-flour, in the quantity of one-fourth, without any harm.

7. Lathyrus inconſpicuus, or ſmall-flowered lathyrus: peduncles one-flowered, ſhorter than the calyx; tendrils two-leaved, ſimple; leaflets lanceolate. Root annual. Stems ſeveral, weak, a foot or eighteen inches in height. The whole plant ſmooth. Native of the Levant. Cultivated by Mr. Miller in 1739.

Monſ. Villars ſays that it is found wild in Dauphiné; where they have alſo another Lathyrus with one-flowered peduncles, which he names *biauritus*, on account of the two-eared ſtipules, broader than the leaves. The ſtems are ſtraight and quadrangular: the leaves linear-lanceolate and conjugate: the legume oblong, containing ſix ſeeds.

8. Lathyrus ſetifolius, or narrow-leaved lathyrus: peduncles one-flowered; tendrils two-leaved; leaflets ſetaceous-linear. Gerard thus diſtinguiſhes this from the next: The ſtem is ſimple, or at moſt double, (ſubſolitary as Linnæus calls it;) longer, procumbent, almoſt naked. Leaflets ſetaceous, narrower, with the nerves not ſo conſpicuous. Stipules linear, with a longer appendicle. Petiole thrice the length of the ſtipule. Legume ſubovate, turgid. Seeds two or three, ſpherical, very ſmooth. Grows about Montpellier, and on Monte Baldo, Italy. Cultivated in 1739 by Mr. Miller; who deſcribes it as an annual plant, ſeldom more than ſix or eight inches high, with bright ſcarlet flowers.

9. Lathyrus angulatus, or angulated lathyrus: peduncles one-flowered, awned; tendrils two-leaved, quite ſimple; leaflets linear. This is an annual plant, as well as the laſt; but it produces many ſtems, which are diffuſed, a ſpan long, with the internodes approximating. Seeds five or ſix, angular.

Allione has given a new ſpecies under the name of L. coccineus, which he diſtinguiſhes from this, by its ſcarlet flowers, lanceolate leaves with five nerves, and a nerved toroſe legume, not compreſſed and broad, as in that, and containing a greater number of ſeeds, which are nicely round, not angular. He gives the ſame ſynonyme of Ray which Duvernoy aſſigns to No. 5. and that of Seguier which Linnæus and others give to *ſetifolius*. Gerard ſays, that all the ſynonymes of *angulatus* are uncertain, except thoſe of Tournefort, Magnol, and Buxbaum.

10. Lathyrus articulatus, or jointed-podded lathyrus: peduncles one or two flowered; tendrils many-leaved; leaflets alternate. The leaves have uſually four leaflets; the lower petioles are lanceolate and leafleſs. The flower has the keel of the pea, waved on the ſides, and not oblique as in Lathyrus; ſtandard bright red, with white wings and keel. Seeds four, elliptic lens-ſhaped, ſmooth, clouded with aſh-colour and brown. Miller ſays, it is an annual plant with a climbing ſtalk which riſes near three feet high; that the leaves have ſeveral leaflets, terminated by very long claſpers; that the peduncles are five or ſix inches long, with two flowers, one above another; that it flowers in June and July, and the ſeeds ripen in autumn. Native of the ſouth of Europe. Cultivated in the botanic garden at Chelſea in 1739.

II. With two-flowered peduncles. 11. Lathyrus odoratus, ſweet-pea, or painted lady: peduncles two-flowered; tendrils two-leaved, leaflets ovate-oblong; legumes hirſute. The *ſweet-pea*, as it is commonly called, is an annual plant, which riſes from three to four feet high, by means of its long claſpers or tendrils. The flower-ſtalks come out at the joints, are about ſix inches long, and ſuſtain two larger flowers, which have a ſtrong odour; and are ſucceeded by oblong hairy pods, having four or five roundiſh ſeeds in each. In the common ſort the corolla has dark-purple ſtandards, with the keel and wings of a light blue. Other varieties are the white; the pink with a white keel, and the wings pale bluſh-colour; the pink or bluſh-coloured ſtandard with both keel and wings white; the roſe-coloured ſtandard with the wings and keel pale blue: thoſe that have a mixture of red with white or pale blue are called *painted ladies*. There is alſo a variety of the cominon dark ſort, with the keel pale violet, and the wings dark violet, &c. According to Linnæus, the common dark ſort is a native of Sicily, and the *painted lady* of Ceylon. This flower, now become ſo common, was not known to our gardens in the time of Parkinſon or Evelyn. It was cultivated by Dr. Uvedale at Enfield in the year 1700. Mr. Petiver obſerved it there with Dr. Plukenet, and afterwards at Chelſea and elſewhere. He inſerts it in his liſt of rare plants obſerved in 1713.

12. Lathyrus annuus, or two-flowered yellow annual lathyrus: peduncles two-flowered, tendrils two-leaved; leaflets enſiform; legumes ſmooth; ſtipules two-parted. This riſes with a climbing ſtalk five or ſix feet high, having two membranes or wings running from joint to joint. It has the appearance of the larger perennial Lathyri with yellow flowers, but differs in being annual; whence Linnæus gave it the trivial name of *annuus*, which is otherwiſe improper, all the ſpecies of the two firſt diviſions, except the thirteenth, being likewiſe annual. Native of France and Spain. Mr. Miller ſays he received ſeeds alſo from Siberia.

13. Lathyrus fruticoſus, or ſhrubby lathyrus: ſtem ſhrubby; peduncles two-flowered; leaves pinnate, tomentoſe. Stem woody, two feet high, much branched. Native of Peru, on the hills near Huanuco. It has the habit of Orobus, with the ſtyle of Lathyrus.

14. Lathyrus Tingitanus, Tangier lathyrus, or pea: peduncles two-flowered, tendrils two-leaved; leaflets alternate, lanceolate, ſmooth; ſtipules creſcent-ſhaped. Stem four or five feet high, branched, running out on each ſide into a ſlender ſharp wing. Native of Barbary. Cultivated in 1680, by Robert Moriſon, M. D. who had the ſeeds from Tangier. It flowers in June and July; and, although it has not the agreeable ſcent, or variety of co-

lours, or continuance in blow, of the ſweet-pea, yet it is uſually ſown in our gardens with other annuals.

15. Lathyrus clymenum, or various-flowered lathyrus: peduncles two-flowered; tendrils many-leaved, ſtipules toothed. Native of the Levant.

III. Peduncles many-flowered. 16. Lathyrus hirſutus, or hairy lathyrus: peduncles commonly three-flowered; tendrils two-leaved, leaflets lanceolate, legumes hirſute; ſeeds rugged. Root perennial; (all other authors ſay annual.) Stalks three or four, weak, near two feet long. Peduncles about four inches in length, ſuſtaining two purple flowers, frequently three; corolla purple, with yellow lines within. Native of many parts of Europe. With us not common. Mr. Miller found it in places ſpread over with brambles near Hockerel in Eſſex. It has been obſerved in ſeveral parts of that county, as about Hockley and Raleigh, and elſewhere in Rochford hundred; near Munden-church and Laydon-hall in Dengy hundred; on hills north of Pensford, on the Briſtol road, and between Pensford and Keynſham in Somerſetſhire. It flowers in July.

17. Lathyrus tuberoſus, or tuberous lathyrus: peduncles many-flowered; tendrils two-leaved; leaflets oval; internodes naked. Stems about a foot high, obſcurely quadrangular, branched, ſmooth. This plant is cultivated in Holland for the roots, is ſold in the markets, and commonly eaten there; but with us only for ornament, being a beautiful hardy perennial, reſembling the everlaſting pea, but of an humbler growth. It ſhould however be introduced with caution, on account of its creeping roots, and is perhaps better ſuited to the unclipped hedge of the pleaſure-ground than the border of the flower-garden. Native of France, Germany, Flanders, Holland, Swiſſerland, Auſtria, and Siberia. It flowers in July and Auguſt; and was cultivated in 1640 by Parkinſon; who calls it *peaſe earth-nut*, as does alſo Gerard.

18. Lathyrus pratenſis, or meadow lathyrus: peduncles many-flowered; tendrils two-leaved, quite ſimple; leaflets lanceolate. Root perennial, creeping. Stems a foot or eighteen inches, and ſometimes three feet, or even more, in length; when without ſupport procumbent, but climbing by means of tendrils, and having the appearance of being upright in meadows, and eſpecially among buſhes; they are obtuſely quadrangular, and much branched. Flowers in a raceme, directed one way, from four or five to eight or ten, on axillary peduncles, four or five inches long, four-cornered; corolla yellow. Legumes an inch and half long, compreſſed, ſmooth, black, containing from ſeven or eight to twelve globular ſhining ſeeds, of a yellowiſh or brown colour, with ſmall purple dots. Native of moſt parts of Europe, in meadows and paſtures, woods, thickets, and hedges, flowering from June to Auguſt.

In old authors this plant is much reprobated as a vile weed, that ſpreads much by means of its creeping roots; and accordingly Mr. Miller will not have it admitted into gardens. Many modern writers however recommend it as an excellent food for cattle, and not without reaſon, ſince its quality is good, and it bears a large burden of ſucculent leafy ſtalks. Among its patrons we may reckon Linnæus, Haller, Schreber, Anderſon, Curtis, and Young. Mr. Swayne aſſerts, that it does not ſeem to be at all agreeable to cattle, and that where they have a choice of feed they ſeldom touch it. But, with reſpect to this and many other leguminous plants, we are not to conclude that they are diſagreeable to cattle, becauſe they are not eaten in their fruiting ſtate. They may ſtill be excellent in hay, and the cattle may be fond of the young ſucculent herbage. This and other leguminous plants are beſt mixed with good graſſes in permanent meadows. Mr. Curtis informs us, that he obſerved a piece of ſtiff ſoil, belonging to lord Loughborough, near Mitcham, which produced an excellent crop, conſiſting chiefly of this plant and Feſtuca pratenſis. There could not well be a better mixture than this made by art, for ſtrong land. A difficulty which Mr. Swayne mentions is not ſo eaſily got over. This is, that it produces very few ſeeds, and that thoſe few are for the moſt part devoured by a ſpecies of Curculio. Probably with care, in a garden, a ſufficient quantity of ſeed might be produced; or, if not, we muſt have recourſe to the ordinary methods of increaſing perennial plants, by the roots, layers, or cuttings. It is called in Engliſh, common yellow or meadow vetchling, and tare-everlaſting.

19. Lathyrus ſylveſtris, wild lathyrus, or narrow-leaved everlaſting-pea: peduncles many-flowered; tendrils two-leaved; leaflets enſiform; internodes membranaceous. Perennial. Stems ſix feet or more in height, climbing or trailing, ſpreading widely, branched, winged, and ſmooth. Leaves petioled; leaflets ending in a ſhort point; beneath three-ribbed, glandular at the baſe. Tendrils for the moſt part trifid. Stipules linear-lanceolate, half-arrow-ſhaped or awl-ſhaped, very narrow, hooked or bearded at bottom. Peduncles a ſpan long, ſomewhat angular, naked; with one awl-ſhaped bracte at the baſe of each pedicel, which is ſhort, bending, and coloured. Flowers not more than ſix in a raceme; corolla red and white; ſtandard large, roſe-coloured, faintly netted-veined; wings violet; keel whitiſh green. Legumes two inches long, and nearly half an inch wide, compreſſed, ſmooth, brown. Seeds ten to twelve, nearly round, blackiſh. This is diſtinguiſhed from *latifolius* by the leaves not being much broader than the ſtem, and three-ribbed, and the flowers of a much ſmaller ſize. See the preceding Plate, fig. 2. It is a native of moſt parts of Europe. In England, between Caſtle Camps and Bartlow in Cambridgeſhire; between Bath and Briſtol; Conway in Wales; between Perſhore and Eckington in Worceſterſhire; Shelton-bank near Salop; near Pensford, &c. near London it is rare; but occurs in the Oak-of-Honour wood near Peckham; and in many parts of Kent and Bedfordſhire it grows abundantly.

20. Lathyrus latifolius, broad-leaved everlaſting-pea: peduncles many-flowered; tendrils two-leaved, leaflets ovate or lanceolate; internodes membranaceous. Stalks ſeveral, thick, climbing by means of tendrils to the height of ſix or eight feet, or even higher in woods: theſe die to the ground in autumn, and new ones riſe in the ſpring from the ſame root. Leaves ſtiff, marked with three or five ſtrong ribs, rolled in at the edge, blunt at the end, but terminating in a little point or briſtle; they are always in pairs, and on a winged petiole; at the baſe of this are large ſtipules, ſhaped ſomewhat like the head of a halbert. Tendrils multifid or branched. Each flower has an awl-ſhaped bracte at the baſe of the pedicel; corolla pale purpliſh roſe-colour. Native of many parts of Europe, in hedges and woods. Mr. Ray obſerved it about the middle of the ſeventeenth century in the Cambridgeſhire woods; and it ſtill keeps its poſt, though almoſt a century and half has elapſed. Johnſon in Gerard ſays, that great ſtore of it grows in Swainſcombe wood near Greenhithe in Kent. It flowers at the end of June and beginning of July. It is a ſhowy plant for ſhrubberies, wilderneſs-quarters, arbours, and trellis-work; but too large and rampant for the borders of the common flower-garden. Bees reſort much to it, and the flowers furniſh them with abundance of honey. It yields a great quantity both of green fodder and ſeeds; but in what degree the former might be agreeable to cattle, and the latter to pigeons or poultry, muſt be ſeen by experience.

21. Lathyrus heterophyllus: peduncles many-flowered; tendrils two and four leaved; leaflets lanceolate; internodes membranaceous. Stems quadrangular, winged, three or four feet high. Leaflets nerved, ſhorter than thoſe of L. ſylveſtris, and longer than thoſe of L. latifolius. Native of Sweden, Swiſſerland, France, Sileſia.

22. Lathyrus paluſtris, or marſh lathyrus: peduncles many-flowered; tendrils many-leaved; ſtipules lanceolate. Flowers three, ſometimes to ſix or more, pointing one way, in erect racemes; corolla vivid purpliſh-blue, of great

great beauty. The wings of the ſtem are narrower than in *ſylveſtris*. The figure in the Flora Danica repreſents thirteen flowers, rather red than blue. Native of many parts of Europe, in moiſt woods and paſtures, but in England not common.

23. Lathyrus piſiformis, or Siberian lathyrus: peduncles many-flowered; tendrils many-leaved; ſtipules ovate, broader than the leaflet. Plant growing like the pea. Corolla with the ſtandard and wings whitiſh with purple veins (Miller ſays blue). The leaflets are convolute, as in Piſum maritimum and Ochrus; not involute, as in moſt of the Lathyri. Native of Germany and Siberia; flowers in June.

Lathyrus Pariſienſis of Miller is different from all the above. It belongs to the firſt diviſion, having one-flowered peduncles. He deſcribes it as an annual plant, with a ſlender ſtalk, about a foot high. Leaves compoſed of ſeveral narrow leaflets, placed alternately. The flowers come out ſingly upon pretty long peduncles; they are blue, and about the ſize of thoſe of the common tare. From his ſpecimens in the Bankſian Herbarium, which came from the Paris garden, it appears that the leaflets are often in two pairs, but that the number varies exceedingly, from one to ſix or ſeven. Some of the tendrils are ſimple, others branched. The ſtem is winged, and the rachis of the leaves remarkably ſo. It has a glaucous hue. Miller ſeems to have confounded it with our L. paluſtris, from which it is very different.

Of Mr. Miller's laſt Lathyrus we know nothing. He calls it L. Americanus; it is one of Houſtoun's plants found at Vera Cruz, and belongs to the ſecond diviſion, having two-flowered peduncles. It is an annual plant, with a trailing ſtalk a foot long; a ſingle kidney-ſhaped leaf, veined beneath, at each joint; flowers ſmall, of a deep yellow colour; ſucceeded by ſhort taper pods, including three or four ſmall roundiſh ſeeds. Houſtoun names it *Niſſolia Americana procumbens, folio rotundo, flore luteo.*

Propagation and Culture. Theſe may all be propagated by ſowing their ſeeds either in ſpring or autumn; but thoſe which are ſowed in autumn ſhould have a light ſoil and a warm ſituation, where the plants will abide the winter, and come to flower early the following ſpring, and their ſeeds will ripen in July; but thoſe which are ſown in the ſpring ſhould have an open expoſure, and may be planted upon almoſt any ſoil, if not too wet, for they are not tender plants, nor do they require much culture: theſe ſorts ſhould all of them be ſown where they are deſigned to remain, for they ſeldom ſucceed when they are tranſplanted, unleſs it is done while the plants are young; ſo that, where they are ſown for ornament, there ſhould be four or five ſeeds ſown in a ſmall patch, in different parts of the borders of the flower-garden; and, when the plants come up, they ſhould be carefully kept clear from weeds; but, when they are grown two or three inches high, there ſhould be ſome ſticks put down by them to ſupport them, otherwiſe they will trail on the ground, or on whatever plants ſtand near them, and become unſightly. The eleventh ſort, with the varieties of it, are deſerving of room in every good garden for the beauty and odour of their flowers; and the fourteenth ſort is by ſome cultivated for the colour of the flowers; but there are few of the other ſorts worthy of room in gardens, except the twentieth ſort, which, if it be planted in a proper ſituation, and rightly trained, will make a fine appearance.

The ſeeds of L. ſavitus are ſown, in the countries where it is cultivated for fodder or the ſeed, at the end of Auguſt, or the beginning of September, or in the ſpring; in ſtrong ground; for in a light dry ſoil the roots are very weak, and it is apt to be deſtroyed by ſpring froſts. Its produce is abundant; and the culture, not being expenſive, is very general in ſome parts of Europe.

The gardeners, who raiſe ſweet peaſe (L. odoratus) for the London markets, ſow them in the autumn in pots, and ſecure them from ſevere weather by placing them in hot-bed frames; by which means they can bring them early to market. They may be continued in flower the whole ſummer by repeated ſowings in the ſpring. When ſown in pots they muſt be watered frequently. Tuberous lathyrus is as noxious a weed to the huſbandman as ſmall bindweed, (Convolvulus arvenſis,) and equally difficult to extirpate. The tubers of the root are in high eſteem in ſome countries as an article of food, and the plant is eaſily propagated either by theſe or the ſeed. With us the former method only can be practiſed. It thrives beſt on light ground. See OROBUS and VICIA.

LA'TIA, in mythology, the wife of Saturn.

LATIA'LIS, one of the names of Jupiter.

LATIA'NO, a town of Naples, in the province of Otranto: five miles eaſt of Oria.

LATIAR', a feaſt or ceremony, inſtituted by Tarquinius Superbus, in honour of Jupiter Latiaris, or Latialis. Tarquin, having made a treaty of alliance with the Latians, propoſed, for perpetuating it, to erect a common temple, where all the allies, the Romans, Latins, Hernici, Volſci, &c. ſhould aſſemble themſelves every year, hold a kind of fair, exchange merchandiſes, feaſt, ſacrifice, and make merry together. Such was the inſtitution of the Latiar. The founder only appointed one day for this feaſt; the firſt conſul added another to it, upon concluding the peace with the Latins; a third was added, after the people who had retired to the Mons Sacer were returned to Rome; and a fourth, after appeaſing the ſedition raiſed on occaſion of the plebeians aſpiring to the conſulate. Theſe four days were called the *Latin feriæ*; and all things done during the courſe of the feriæ, as feaſts, ſacrifices, offerings, &c. were called *Latiares.* See FERIÆ. LATINÆ, vol. vii. p. 325.

LAT'IBLE, *ſ.* [from the Lat. *lateo*, to be hid.] A hiding-place. *Cole.*

LAT'ICLAVE, *ſ.* [*laticlavium*, Lat.] In Roman antiquity, was an honourable diſtinction, peculiar, in the times of the republic, to the ſenators; but whether it was a particular kind of garment, or only an ornament upon it, the critics are not agreed: but the more general opinion is, that it was a broad ſtripe of purple ſewed upon the fore-part of their tunic, and round the middle of the breaſt. There were buttons ſet on the *latus clavus*, or laticlave, which appeared like the heads of large nails, whence ſome think it derived its name. The ſenators, prætors, and chief magiſtrates of colonies and municipal cities, had a right to wear it. The *prætexta* was always worn over it; but, when the prætor pronounced ſentence of death, the prætexta was then put off, and the laticlave retained. The *laticlavium* differed from the *anguſticlavium*, but authors do not agree in what this difference conſiſted; the moſt general opinion ſeems to be, that the ſlips or ſtripes of purple were narrower in the anguſticlave, as its name imports.

LAT'ICZOW, a town of Poland, in the palatinate of Braclaw: ſixty miles north-weſt of Braclaw.

LATIFO'LIOUS, *adj.* [from the Lat. *latus*, broad, and *folium*, a leaf.] Having broad leaves; broad leaved.

LATIL'LA (Gaetano), an excellent Neapolitan compoſer of the laſt century, much eſteemed by connoiſſeurs, in every ſpecies of vocal muſic. His comic operas were the moſt ſucceſsful of all burletta compoſitions, till the Buona Figliuola of his nephew Piccini came out, which ſurpaſſed all preceding comic operas ſo much, that no other excited any curioſity in the public, till Paeſiello's ſuperior fertility was known and felt. Latilla's comic operas, that were performed in London, from 1748 to 1753, were La Comedia in Comedia, Orazio, and Don Calaſcine. The melodies were new, eaſy, and pleaſing; the humour without buffoonery. Latilla finiſhed his courſe about the year 1780, at Venice, in the humble ſtation of deputy-organiſt at the church of St. Mark. He was an intelligent and well-informed man on other ſubjects beſides his own profeſſion, which, however, he had cultivated in all its departments.

LAT'IMER,

LAT'IMER, *ſ.* Uſed by ſir Edward Coke for an interpreter. 2 *Inſt.* 515. It ſeems that the word is miſtaken, and ſhould be *Latiner*, becauſe heretofore he that underſtood *Latin*, which in the time of the Romans was the prevailing language, might be a good interpreter. Camden agrees, that it ſignifies a *Frenchman*, or interpreter; and ſays the word is uſed in an old inquiſition. *Britan. fol.* 598. It may be derived or corrupted from the Fr. *latinier*, q. d. *latiner*. *Cowell.*

LAT'IMER (Hugh), an excellent Engliſh prelate in the ſixteenth century, and one of the leaders of that glorious army of martyrs who introduced the reformation into this country, was the ſon of a reſpectable yeoman at Thirkeſſen, or Thurcaſton, in Leiceſterſhire, where he was born about the year 1470. He was brought up with his parents in his younger years; and, as he diſcovered promiſing talents, and was their only ſon, they determined to make a ſcholar of him. Accordingly, after being initiated in the elements of learning in country ſchools, when he was fourteen years of age they ſent him to Chriſt's-college, in Cambridge. Here he applied himſelf cloſely to his ſtudies; acquitted himſelf with reputation in his academical exerciſes; took his degrees in arts, and that of bachelor of divinity; and entered into holy orders. The divinity which he had ſtudied was that of the times. He had been taught to read the ſcriptures and the ſchoolmen with the ſame reverence; to hold Thomas à Becket and the apoſtles in equal honour; in a word, he was a zealous papiſt. In common with the reſt of the clergy, he had taken the alarm at the progreſs of Lutheraniſm, and inveighed publicly and privately againſt the reformers. If any perſon, ſuſpected of holding their tenets, read lectures in the ſchools, Latimer was ſure to be there, to drive out the ſcholars; and, when he commenced bachelor of divinity, he delivered an oration againſt Melancthon, whom he treated with great ſeverity for what he called his impious innovations in religion. In ſhort, his zeal was ſo much taken notice of in the univerſity, that he was elected croſs-bearer in all public proceſſions; an employment which he accepted with reverence, and diſcharged with great ſolemnity.

Our good divine was a papiſt from conviction, and had a mind open to arguments on all ſides of the queſtion. He fortunately met with a Mr. Thomas Bilney, a clergyman of great piety, and who, by the peruſal of Luther's works, had become a ſecret favourer of the reformation. By degrees he infuſed into the mind of Latimer all thoſe doubts which he had formerly felt reſpecting the diſcordance of popery with pure Chriſtianity. Latimer heard the arguments of his friend, and was prepared at firſt to diſpute the ground inch by inch. At length he found the ground on which he ſtood abſolutely untenable; and acknowledged the errors in which he had been educated. But the temper of the ſcholar was not like that of the maſter; he could not be a proteſtant in ſecret; he muſt come forth boldly, and declare the convictions of his heart; he had ſought truth as the pearl of great price, and, having, as he believed, found it, was determined not to conceal its beauty from his friends and the world. He became an active apoſtle in the cauſe of proteſtantiſm; he preached in public, he exhorted in private, and every-where enforced the neceſſity of a holy life, in oppoſition to the ſuperſtitious ceremonies and obſervances inculcated by the Romiſh religion. He ſoon became obnoxious to the generality of the clergy; but, being contented to go through evil as well as good report, he continued on his courſe with more ardour in proportion to the outcry made againſt him. He inveighed againſt the ceremonies which encumbered true religion, and expoſed the pride and uſurpation of the Romiſh hierarchy; but what he moſt inſiſted on was the right of the people to read the ſcriptures in their native tongue. Dr. Buckenham, one of the black friars, was ſelected to anſwer, from the pulpit, the arguments of Latimer; he performed the taſk with great pomp, but not to the complete ſatisfaction even of his own party; and in a ſhort time afterwards the whole univerſity met to hear what the reformer had to ſay in his defence. Mr. Latimer at firſt recapitulated Dr. Buckenham's arguments; placed them in the ſtrongeſt light, and gave them much greater importance than the friar had been able to do; he then attacked them with ſo much force of reaſoning, and ſuch abundance of wit, as to render the learned doctor truly ridiculous; he next appealed to his hearers, urging them to reſpect their own underſtandings, and not to ſubmit to be led by the prieſts, who had ever been accuſtomed to treat the people at large with contempt; and he concluded with ardently hoping, that his honeſt countrymen might be permitted to have the uſe of the ſcriptures, till they ſhowed themſelves to be as abſurd interpreters of them as the learned friar. Latimer, by this exertion, and by an anſwer to Venetus, greatly increaſed the credit of the proteſtant party at Cambridge. Bilney and Latimer were regarded as the heads of the party, and to them the ſtudents looked with reſpect, attachment, and even veneration. The heads of the colleges, and the ſenior members of the univerſity, were alarmed, and determined to withſtand the progreſs of hereſy. Frequent convocations were held, and the ſtricteſt injunctions were laid on all the tutors to be watchful of the opinions of their pupils; but theſe efforts were in vain, and the biſhop of Ely was applied to, and entreated to cruſh, by his authority, the new opinions. The prelate, though a papiſt, was not a friend to perſecution; he was willing to judge for himſelf; and, though he went to Cambridge and preached againſt the heretics, yet he did not ſcruple to attend himſelf the ſermons of Latimer; and with much candour declared, that the reformer was the beſt preacher he had ever heard. Latimer's enemies next appealed to the court, and tranſmitted very heavy complaints reſpecting the increaſe of hereſy; and Wolſey, contrary, it is thought, to his own inclination, inſtituted a court, conſiſting of biſhops and other divines, to put the laws in execution againſt hereſy. Bilney and Latimer were called to anſwer for their conduct; and, as the former was regarded as the moſt guilty, by being the firſt promulgator of the new doctrines, his examination was the moſt ſevere, and he was pronounced guilty; but, not having a mind formed for the ſufferings prepared for him, he recanted, and after ſome ignominious treatment was diſmiſſed. Latimer, and others who were involved in the charge, were, by the management of the cardinal, and the merciful diſpoſition of Tunſtal biſhop of London, diſmiſſed probably without a reproach; the cardinal even granted Latimer his licence to preach throughout England.

The friends of our reformers, upon their return to Cambridge, received them with open arms. But Bilney, ſtruck with remorſe for his recantation, ſhunned the ſight of his acquaintance, and received their congratulations with confuſion and bluſhes. Reflection on what he had done in a ſhort time diſturbed his reaſon; and he was obliged to be cloſely attended, to prevent horrid effects from his deſpair. By degrees, his paſſion gave place to a profound melancholy; in which ſtate he continued about three years, reading much, avoiding company, and obſerving the ſeverity of an aſcetic. Having fully determined to expiate his abjuration by his death, he unexpectedly broke from his attachments at Cambridge, and ſet out for Norfolk, of which he was a native. When he arrived there, he went about the country, confeſſing his guilt in abjuring a faith in which he was now determined to die, and preaching to the people againſt popery with the utmoſt zeal and animation. Being apprehended, by order of the biſhop of Norwich, he was committed to the county gaol, and in a ſhort time afterwards executed in that city, having afforded at his death an admirable example of compoſure, firmneſs, and Chriſtian courage. In the mean time, Mr. Latimer began to exert himſelf more than ever, not confining his labours to Cambridge, but ſometimes preaching in other parts of the country; and once or twice he had the honour to preach before the king at

Windſor. On theſe occaſions he had been taken notice of by Henry, in a manner more than ordinarily gracious. Encouraged by theſe tokens of royal favour, he took the liberty of writing a very bold letter to his majeſty, againſt a proclamation which the clergy had prevailed upon the king to publiſh, forbidding the uſe of the bible in Engliſh, and other religious books, which were printed abroad by the friends of the reformation. His letter, which is the genuine picture of an honeſt ſincere heart, was chiefly deſigned to point out to the king the bad intention of the biſhops in procuring the proclamation. But the popiſh party had then ſuch influence, that this letter produced little effect. The king, however, no way diſpleaſed, received it not only with temper, but with great condeſcenſion, and graciouſly thanked Mr. Latimer for his well-intended advice. For, notwithſtanding his many vices, Henry was of an open temper, and loved openneſs and ſincerity in others; and Mr. Latimer's plain and ſimple manner had already made that favourable impreſſion upon him, which this letter did not a little contribute to ſtrengthen.

When meaſures were taking for the eſtabliſhment of the king's ſupremacy, Mr. Latimer exerted himſelf greatly in forwarding his majeſty's deſigns. His zeal in this buſineſs procured for him the preſentation to the rectory of Weſtkinton, in Wiltſhire; and, notwithſtanding the remonſtrances of his friends, who conſidered this as the firſt ſtep only to higher dignities in the church, he went to reſide on his living. His preaching rendered him very popular, and he was ſoon after appointed by the mayor of Briſtol to preach on Eaſter Sunday. Public notice of this appointment had been given, and received by the people with great joy; but an order was ſuddenly iſſued by the biſhop of Briſtol, prohibiting any one to preach there without his licence. This was but the firſt inſtance of oppoſition which the clergy in that neighbourhood excited againſt him; they traduced his character, and inveighed againſt him with the greateſt violence; and at length they drew up a ſet of articles, in the form of an accuſation, which was laid before Stokeſley biſhop of London, who immediately cited Latimer to appear before him. To this mandate he was not obedient; but on a citation from the archbiſhop he inſtantly ſubmitted. He ſet out in the midſt of winter, and at a moment when he was grievouſly afflicted with the ſtone and other acute diſorders. On his arrival in London, he found the court ſitting; but, inſtead of being examined as to any particular charges, he was ordered to ſubſcribe a paper put into his hand, containing the obnoxious doctrines againſt which he had been preaching. This he poſitively refuſed; and he was diſmiſſed for the preſent, with an exhortation to reflect upon his conduct, and ſubmit. Frequently was he brought before the court, and as frequently he rejected the propoſal. At length he remonſtrated againſt their ill-treatment, and was probably reſcued by the interpoſition of the king.

In 1534 he was appointed chaplain to queen Anne Boleyn, and in the following year he was offered the biſhopric of Worceſter, which he accepted, and diſcharged the duties of the office with zeal, piety, and diligence. In 1536, he was called on to attend the parliament and convocation; and it was hoped that this ſeſſion would bring with it many important advantages for the proteſtant cauſe. The convocation was opened by an eloquent Latin diſcourſe from Latimer, who had been appointed to this office on account of his great talents, and becauſe it was known that no other perſon could ſo ably expoſe the corruptions of the clergy as himſelf, and thus lead them to an active diſcharge of their duty. In a ſhort time after this, an Engliſh tranſlation of the Bible was publiſhed, and recommended by authority to a general peruſal. During the ſitting of the convocation, an animated but unſucceſsful attempt was made to ſtigmatize archbiſhop Cranmer and biſhop Latimer, by ſome public cenſure. As ſoon as the convocation broke up, the biſhop repaired to his dioceſe, he had no taſte for ſtate-affairs, and he had a mind ill adapted to the manners of a court. It was the cuſtom at that period for the biſhops, at the commencement of every new year, to make preſents to the ſovereign, and many of them were very liberal in their donations; but Latimer, on this occaſion, preſented, inſtead of a purſe of gold, a New Teſtament, with a leaf doubled down on this paſſage, "Whoremongers and adulterers God will judge."

Attempts were frequently made to ruin the biſhop, but hitherto they were unſucceſsful; and he continued in favour with the king. After the paſſing of the bloody ſtatute, or the act of the ſix articles, the biſhop proteſted againſt it by his conduct; he reſigned his biſhopric, and retired into the country. Here he intended to paſs the remainder of his days; but an accident, which befel him, by the fall of a tree, obliged him to come to London for ſurgical aſſiſtance. His arrival was ſoon known in the metropolis; and the ſpies of the bloody-minded Gardiner watched him in every place. At length they obtained, or made, matter for accuſation; he was charged with ſpeaking againſt the ſtatute of the ſix articles, and was, without heſitation, committed to the Tower, where he ſuffered a cruel impriſonment during the remainder of king Henry's reign. On the acceſſion of Edward VI. Latimer, and all the others who had been impriſoned in the ſame cauſe, were ſet at liberty. He might have been reinſtated in his biſhopric; but he preferred a more private life, accepted an invitation from Cranmer, and took up his reſidence at Lambeth, where his chief employment was to hear the complaints, and to procure redreſs for the injuries, of poor people. No man was ſo well qualified for an office of this kind; and he continued in it during two years, interfering very little with public tranſactions. It was, however, known that he aſſiſted the archbiſhop in compoſing the Homilies which were publiſhed by authority in the beginning of king Edward's reign, and intended to ſupply the want of preaching, which was now at a very low ebb. Being one of the moſt eloquent preachers of the age, he was appointed to preach the Lent ſermons before the king, during the firſt three years of his reign. After this he retired into the country, and made uſe of his majeſty's licence, as a general preacher, in thoſe parts where he thought his labours might be moſt ſerviceable. He continued in this practice till popery was re-eſtabliſhed in the reign of queen Mary, when he was cited to appear before the council in London. He immediately obeyed; and, as he paſſed through Smithfield, the ſcene of the moſt horrid cruelties exerciſed upon thoſe who had been denominated heretics, he ſaid, very cheerfully, to his attendants, "This place has long groaned for me." The next day he appeared before the council, who, after loading him with many reproaches, committed him to the Tower. His impriſonment was rendered uncommonly ſevere; but he endured every evil with reſignation, and true Chriſtian humility. The weather was exceedingly ſevere, but no fire was allowed him; which led him to tell the lieutenant of the Tower, that, however his enemies might expect he ſhould be burned, unleſs he was permitted to have a fire this froſty weather, he ſhould be firſt ſtarved to death with cold. About this time archbiſhop Cranmer and biſhop Ridley were committed to the Tower, which became ſo crowded with priſoners, that the three prelates were confined in the ſame room, a circumſtance which, no doubt, they greatly enjoyed. The pleaſure, however, was but of ſhort duration; they were hurried to Oxford under the pretence of a public diſputation to be held there by the moſt eminent divines on both ſides. At this place they were moſt cloſely confined in the common priſon, and deprived of every comfort, and of almoſt all the neceſſaries of life; hence they readily inferred what kind of diſputation would be allowed them. They fully expected that the argument of power was the only one that would be reſorted to, and, having made up their minds to this, Latimer ſaid he ſhould give them very little trouble; "I ſhall," ſaid he, "offer them a plain account of my

my faith, and ſay but little more; for I know that any thing more will be to no purpoſe. They talk of free diſputation; but I am aſſured, their grand argument will be, as it was that of their forefathers, *We have a law, and by our law ye ought to die.*" When he was brought into court, he had a cap on his head buttoned under his chin, a pair of ſpectacles hanging at his breaſt, a New Teſtament under his arm, and a ſtaff in his hand. He was exhauſted in preſſing through the crowd, and was permitted to ſit down; after a ſufficient pauſe, he was told he muſt diſpute upon the articles brought againſt him; he declared he was unable, through age, to do any ſuch thing: "I am not able to debate, ſaid the venerable old man; "I will avow my faith, and then do with me as you pleaſe." He was next enſnared, by the artful conduct of his accuſer, to make conceſſions which were againſt him; and upon this the prolocutor aroſe, and exclaimed to the populace, "Here you ſee the weakneſs of hereſy againſt the truth; here is a man, who, adhering to his errors, hath given up the goſpel, and rejected the fathers." The good old man made no reply, but, wrapping his gown about him, and taking his New Teſtament and his ſtaff, walked out with the greateſt compoſure. On the following Friday he was again brought into court, was firſt excommunicated, and then condemned to death. As ſoon as the ſentence was read, Latimer, lifting up his eyes to heaven, exclaimed, "I thank God moſt heartily, that he hath prolonged my life to this end."

No ſteps were taken towards putting the ſentence againſt the prelates into execution for nearly a year and a half; but, in 1555, new laws in ſupport of the Romiſh religion having been enacted, a commiſſion was granted by cardinal Pole, the pope's legate in England, to the biſhops of Lincoln, Glouceſter, and Briſtol, empowering them to try biſhops Latimer and Ridley for hereſy. The prelates were ordered before the commiſſioners; and, when Ridley had been examined, biſhop Latimer was brought to the bar, whom the biſhop of Lincoln addreſſed, in an eloquent and very pathetic ſpeech, earneſtly exhorting him to accept the mercy that was offered, and to acknowledge the authority of the ſee of Rome. The good biſhop was too firmly fixed in his opinions to give them up through motives of timidity, and the deſire of prolonging his life. He was, however, remanded, and on the next day judgment was paſſed on him and Ridley. Their execution was fixed for the 16th of October, and the place choſen was the north ſide of the city, near Baliol college. Leſt the bloody ſcene ſhould excite a tumult, the military were ordered to attend the place of execution. On the day appointed, the vice-chancellor of Oxford, and other perſons of diſtinction, repaired to the ſpot which was to witneſs the ſufferings of theſe worthy men; the priſoners, at the fixed hour, were ſent for; and the concern of the ſpectators, which was apparent in every countenance, excepting in thoſe who were actors in the ſcene, was greatly augmented by the ſtriking contraſt of their appearance. Ridley was dreſſed in his epiſcopal habit, ſhowing what they had formerly been; and biſhop Latimer wore his priſon-attire, by which he exhibited the condition to which they were now reduced. Having heard a ſermon by a popiſh doctor, in which they were treated with great inhumanity, they prepared for their laſt trial, and were chained to the ſtake. The fire was ſpeedily kindled; and at the ſight of the flames Latimer exclaimed, "Be of good cheer, maſter Ridley, and play the man; we ſhall this day light ſuch a candle, by God's grace, in England, as I truſt ſhall never be put out." He then recommended his ſoul to God, and a few minutes put an end to the ſufferings of theſe noble martyrs.

Such was the glorious and triumphant end of Hugh Latimer, who had been indefatigable in the diſcharge of the duties of life, and who exhibited the moſt aſtoniſhing firmneſs and compoſure in the ſeveral trials to which he was expoſed. He was not learned in the uſual ſenſe of the word, for he cultivated only uſeful learning; and he lived rather what the world calls a good than a great man. He was eminent as a preacher, but his ſermons that are extant are not patterns of good compoſition; his manner of preaching was affecting, as he ſpoke from the heart, and made deep and laſting impreſſions on his auditors. He diſplayed at all times a noble and apoſtolic zeal in the propagation of the truth. No one had a higher ſenſe of what became his office, or was leſs influenced by any ſiniſter motive; and none ever reproved vice with more freedom, without any regard to the rank of his hearers. A collection of his ſermons was publiſhed in 1570, by Auguſtus Bernhere, a Swiſs, (who calls the biſhop his maſter,) and dedicated by him to Catharine ducheſs of Suffolk. It conſiſts of forty ſermons, and has ſince been frequently reprinted. Several of his letters are preſerved in Fox's Acts and Monuments; among which is his celebrated one to king Henry VIII. in 1530, for reſtoring the free liberty of reading the holy Scriptures. Injunctions given by him to the prior and convent of St. Mary Houſe in Worceſter, during his firſt viſitation in 1537, are alſo inſerted in the collection of records, at the end of the ſecond volume of Burnet's Hiſtory of the Reformation. *Gilpin's Life of Latimer.*

LAT'IMERS, is a hamlet, with a chapel of eaſe, to Cheſham; it received its name from its ancient lords. In this hamlet lived ſir Edwin Sands, whoſe daughter, having four ſons and nine daughters by her huſband ſir Thomas Temple, anceſtor of the preſent earl Temple, lived to ſee ſeven hundred deſcended from her, and died in 1656. The ancient ſeat of the Cavendiſh family was here; which ſeat and park are now the property of lord George Cavendiſh.

LAT'IN, the language of the ancient Romans. See the article LANGUAGE, p. 181. In law-proceedings, three ſorts of Latin are noticed. 1. Good Latin, allowed by grammarians and lawyers. 2. Falſe or incongruous Latin, which in times paſt would abate original writs; though not make void any judicial writ, declaration, or plea, &c. 3. Words of art, known only to the ſages of the law, and not to grammarians, called *Lawyers' Latin.* 1 *Lil. Abr.* 146. 147. Stat. 36 Edw. III. c. 15, directed all pleas, &c. to be debated in Engliſh and recorded in Latin; but now, by 4 Geo. II. c. 26. 6 Geo. II. c. 14. the records and proceedings are to be in Engliſh. Formerly the uſe of a word not Latin at all, or not ſo in the ſenſe in which uſed, might in many caſes be helped by an *Anglicè*; though, where there was a proper Latin word for the thing intended to be expreſſed, nothing could help an improper one. And, when there was no Latin for a thing, words made which had ſome countenance of Latin, were allowed good, as *velvetum*, anglicè velvet, &c. 10 *Rep.* 133. Another maxim of law is, that *mala grammatica non vitiat chartam*; neither falſe Engliſh nor bad Latin will deſtroy a deed. *Co. Litt.* 233. Which perhaps a claſſical critic may think to be no unneceſſary caution.

LAT'IN, *adj.* Written or ſpoken in the language of the old Romans.—Auguſtus himſelf could not make a new *Latin* word. *Locke.*

LAT'IN, *ſ.* An exerciſe practiſed by ſchool-boys, who turn Engliſh into Latin.—In learning farther his ſyntaxis, he ſhall not uſe the common order in ſchools for making of *Latins*. *Aſcham.*—[The adjective, by ellipſis, for] The Latin language.—If you attend to the thoughts and images in French and Engliſh poetry, they will be of uſe to you, when you compoſe in *Latin* or Greek. *Cheſterfield.*

Of ſuch deep learning little had he need,
Ne yet of *Latin*, ne of Greek. *Spenſer's Hubberd.*

LATINA'RIUS, *ſ.* An interpreter of Latin. See LATIMER.

LATI'NI (Brunetto), an early reviver of literature in Italy, was born at Florence in the thirteenth century. He was employed, about the middle of that century, by the Guelphs in Florence, as ambaſſador to Alphonſo king of Caſtile, with the view of obtaining aid againſt Manfred king of Naples and Sicily. By the prevalence of the op-

poſite party he was driven from his country, and retired to France. At Paris he opened a ſchool of philoſophy, and wrote ſeveral books. We find him in his native country in 1284, and acting as ſyndic at Florence. He died in 1294. The moſt celebrated of his works was his *Teſoro*, a compilation from various authors, in hiſtory, philoſophy, rhetoric, and morals. He tranſlated into the Italian language part of the firſt book of Cicero de Inventione; and he was author of a moral work in verſe, entitled *Il Teſoretto*. He is repreſented as a profound rhetorician and philoſopher; and is ſaid to have been the firſt who began to poliſh the language, and refine the underſtanding, of his countrymen. Though he does not appear to have been a public inſtructor at Florence, he probably gave private aſſiſtance in the ſtudies of his friends; and he is mentioned as having been, in ſome meaſure, the tutor of Dante. *Tiraboſchi.*

LATI'NI (Latino), a learned Italian, was born at Viterbo in 1513. He ſtudied ſeveral years at Sienna, with a view to juriſprudence, which an ill ſtate of health obliged him to relinquiſh. He then aſſumed the eccleſiaſtical habit, went to Rome, and became librarian to cardinal Rodolpho Pio, who, dying in 1564, left Latini the bequeſt of his copious library. He was employed in the reformation of the Decretal of Gratian, firſt undertaken by deſire of pope Pius IV. and publiſhed under Gregory XIII. and committed to the care of many of the moſt learned eccleſiaſtics of the Roman court. He died in 1593, and bequeathed all his books to the chapter of Viterbo. He was highly eſteemed for his learning and induſtry, though his modeſty did not permit him to publiſh any thing during his life-time. After his deceaſe there appeared two volumes of his "Latin Letters, Poems, and other ſmall Pieces." He communicated many emendations of Tertullian to the edition of that father publiſhed by Pamelius. His manuſcript annotations on the fathers, and on other authors, were given to the public in the Bibliotheca Sacra et Profana, printed at Rome in 1667. *Moreri.*

LATI'NI, the LATINS, in ancient geography, comprehended in general all the people of Latium, and particularly thoſe who inhabited the territory along the Tiber from Rome to the ſea. They were formed, it is ſaid, by the union of the Aborigines, or of people whoſe origin was not known; of the Pelaſgi, who had migrated from Theſſaly; and of the Arcadians, brought thither by Evander ſixty years before the war of Troy.

LATI'NI FE'RIÆ. See FERIÆ LATINI, vol. vii.

LAT'INISM, *ſ.* A Latin idiom; a mode of ſpeech peculiar to the Latin.—Milton has made uſe of frequent tranſpoſitions, *Latiniſms*, antiquated words and phraſes, that he might the better deviate from vulgar and ordinary expreſſions. *Addiſon.*

LAT'INIST, *ſ.* One ſkilled in Latin.—Oldham was conſidered as a good *Latiniſt*. *Oldham's Life.*

LATIN'ITY, *ſ.* Purity of Latin ſtyle; the Latin tongue.—If Shakeſpeare was able to read Plautus with eaſe, nothing in *Latinity* could be hard to him. *Dennis.*

To LAT'INIZE, *v. a.* To uſe words or phraſes borrowed from the Latin.—He uſes coarſe and vulgar words, or terms and phraſes that are *latinized*, ſcholaſtic, and hard to be underſtood. *Watts.*

LAT'INIZING, *ſ.* The act of uſing Latin idioms.

LA'TION, *ſ.* A philoſophical term; local motion; the tranſlation of a natural body from one place to another in a right line.

LATIROS'TROUS, *adj.* [*latus* and *roſtrum*, Lat.] Broad-beaked.—In quadrupeds, in regard of the figure of their heads, the eyes are placed at ſome diſtance; in *latiroſtrous* and flat-billed birds, they are more laterally ſeated. *Brown.*

LA'TISH, *adj.* Somewhat late.

LAT'ITANCY, *ſ.* [from *latitans*, Lat.] Deliteſcence; the ſtate of lying hid.—In vipers ſhe has abridged their malignity by their receſſion or *latitancy*. *Brown's Vulgar Errors.*

LAT'ITANT, *adj.* Deliteſcent; concealed; lying hid.—Snakes and lizards, *latitant* many months in the year, containing a weak heat in a copious humidity, do long ſubſiſt without nutrition. *Brown.*

LAT'ITAT, *ſ.* A writ whereby all men are originally called to anſwer in perſonal actions in the King's Bench; having its name upon a ſuppoſition that the defendant *doth lurk and lie hid*, and cannot be found in the county of Middleſex to be taken by bill, but is gone into ſome other county, to the ſheriff of which this writ is directed, to apprehend him there. *F. N. B.* 78. *Terms de Ley.*

The origin of it is this: In ancient time, while the King's Bench was moveable, when any man was ſued, a writ was ſent forth to the ſheriff of Middleſex, or any other county where the court was reſident, called a Bill of Middleſex, to take him; and, if the ſheriff returned *Non eſt inventus*, then a ſecond writ was ſued out, reciting, that *it was teſtified* that the defendant *lurked and lay hid* in another county, and thereby the ſheriff of that county was commanded to attach the party in any other place, where he might be found; and, when the tribunal of the King's Bench came to be ſettled at Weſtminſter, the ſame courſe was obſerved for a long time; but afterwards, by the contrivance of clerks, it was deviſed to put both theſe writs into one, and ſo attach the defendant upon a fiction that he was not in the county of Middleſex, but lurking elſewhere; and that therefore he was to be apprehended by the ſheriff of the county where he was ſuſpected to be, and lie hid.

It is called a *teſtatum* writ, from the words "*Teſtatum eſt*, It is teſtified," iſſuing out of the K. B. grounded upon a bill of Middleſex, ſuppoſed to be ſued out before, and returned *Non eſt inventus*; and is in nature of the original writ *Clauſum fregit*, on which the practice is in the Common Pleas. 2 *Lil. Abr.* 147. A latitat cannot iſſue into the county of Middleſex, except the court remove out of Middleſex into another county; for, in the county where the court of K. B. is, the proceſs muſt be by bill, and out of the county by *latitat*. 2 *Lil. Abr.* 147.

If the writ of latitat is iſſued during the vacation, it muſt be as of the laſt day of the term preceding. A proceſs or note is to be made of it on paper for the officer by the plaintiff's attorney, together with a memorandum or minute of his warrant duly ſtamped, purſuant to ſtat. 25 Geo. III. c. 80. § 13. The latitat, being filled up, is to be carried with the note to the King's Bench Office, and there the writ is ſigned; from whence it is carried to the Seal-office, where it is ſealed. If it is intended to hold the defendant to bail, an affidavit of the debt muſt be made, an *ac-etiam* introduced into the body of the writ, the ſum ſworn to indorſed on the back previous to the ſigning and ſealing of the writ; after which a warrant is to be procured from the ſheriff of the county to execute the writ. See the article ARREST.

It was formerly holden that a writ of latitat did not run into Wales; but the contrary has ſince been determined, and is now the common practice. For other matters connected with and explanatory of this ſubject, ſee the article PROCESS.

To LAT'ITATE, *v. n.* To lurk in concealment; to lie hid. *Bailey.*

LATITA'TION, *ſ.* The ſtate of lying concealed.

LAT'ITUDE, *ſ.* [*latitude*, Fr. *latitudo*, Lat.] Breadth; width; in bodies of unequal dimenſions, the ſhorter axis; in equal bodies, the line drawn from right to left.—Whether the exact quadrat, or the long ſquare, be the better, I find not well determined; though I muſt prefer the latter, provided the length do not exceed the *latitude* above one third part. *Wotton.*—Room; ſpace; extent.—There is a difference of degrees in men's underſtandings, to ſo great a *latitude*, that one may affirm, that there is a greater difference between ſome men and others than between ſome men and beaſts. *Locke.*—The extent of the earth or heavens, reckoned from the equator to either pole: oppoſed to *longitude*. See the articles ASTRONOMY and GEOGRAPHY.—We found ourſelves

ſelves in the *latitude* of thirty degrees two minutes ſouth. *Swift.*—A particular degree, reckoned from the equator. —Another effect the Alps have on Geneva is, that the ſun here riſes later and ſets ſooner than it does to other places of the ſame *latitude*. *Addiſon.*—Unreſtrained acceptation; licentious or lax interpretation.—In ſuch *latitudes* of ſenſe, many that love me and the church well may have taken the covenant. *King Charles.*—Freedom from ſettled rules; laxity.—In human actions there are no degrees and preciſe natural limits deſcribed, but a *latitude* is indulged. *Taylor.*—Extent; diffuſion.—Albertus biſhop of Ratiſbon, for his great learning, and *latitude* of knowledge, ſirnamed Magnus, beſides divinity, hath written many tracts in philoſophy. *Brown.*—I pretend not to treat of them in their full *latitude*; it ſuffices to ſhew how the mind receives them, from ſenſation and reflection. *Locke.*

LATITUDINA'RIAN, *adj.* [*latitudinaire*, Fr. *latitudinarius*, low Lat.] Not reſtrained; not confined; thinking or acting at large.—*Latitudinarian* love will be expenſive, and therefore I will be informed what is to be gotten by it. *Collier on Kindneſs.*

LATITUDINA'RIAN, *ſ.* One who departs from orthodoxy.—'Tis to them doubtleſs that we owe the opprobrioufneſs and abuſe of thoſe naturally honeſt appellations of free-livers, free-thinkers, *latitudinarians*. *Shafteſbury.*

LA'TIUM, a country of Italy near the river Tiber. It was originally very circumſcribed, extending only from the Tiber to Circeii, but afterwards it comprehended the territories of the Volſci, Æqui, Hernici, Auſones, Umbri, and Rutuli. The firſt inhabitants were called *Aborigines*, and received the name of Latini from Latinus their king. According to others the word is derived from *lateo*, to conceal, becauſe Saturn concealed himſelf there when flying the reſentment of his ſon Jupiter. Laurentum was the capital of the country in the reign of Latinus; Lavinium under Æneas, and Alba under Aſcanius. The Latins, though originally known only among their neighbours, ſoon roſe in conſequence when Romulus had founded the city of Rome in their country.

LAT'MUS, in ancient geography, a mountain of Ionia, or on the confines of Caria, famous for the fable of Endymion, of whom the Moon was ſaid to be enamoured: hence called *Latmius Heros*, and *Latmius Venator*. In the mountain was a cave in which Endymion dwelt. See ENDYMION, vol. vi.

LAT'MUS, originally a village in Aſia, in Cilicia, on the banks of a river of the ſame name, which afterwards became an epiſcopal town of Iſauria. The river had its ſource in Mount Latmus, and diſcharged itſelf into the Latmic Gulf, near the town of Heraclea. The Latmic Gulf was a gulf of Ionia, which commenced between the mountains Latmus and Grius, and extended from thence towards the north-weſt, communicating with another gulf at the mouth of the Meander.—Alſo, a ſmall iſland ſituated to the ſouth-eaſt of the Latmic Gulf, near to and weſt-north-weſt of Heraclea.

LATO'BIUS, the god of health among the Corinthians.

LATOBRI'GI, in ancient geography, a people of Belgic Gaul.

LATO'AN, a ſmall iſland in the Eaſtern Indian Sea, near the north coaſt of Borneo. Lat. 7. 16. N. lon. 117. 21. E.

LATO'IS, a name of Diana, as being the daughter of Latona.

LATO'MIA, *ſ.* [from the Greek λας, a ſtone, and τεμνω, to cut.] A ſtone quarry. The places whence ſtones had been dug having been made uſe of ſometimes as dungeons, jails, or priſons for criminals, it is oftentimes applied as a name for a priſon. There was a place of confinement of this ſort at Rome, near the Tullianum; and another at Syracuſe, in which Cicero ſays Verres had ſhut up Roman citizens. It was cut out of the ſolid rock by Dionyſius; and now converted into a ſubterraneous garden filled with numerous ſhrubs, flouriſhing in luxuriant variety.

LATOMIST, *ſ.* A maſon; a ſtonecutter.

LATO'MUS (James), a celebrated catholic controverſial divine in the ſixteenth century, was a native of Cambron, a ſmall town in Hainault. He became a doctor and profeſſor of divinity in the univerſity of Louvain; obtained a canonry of St. Peter, in that city; and is claſſed by the catholics among the ableſt opponents of Luther and the other reformers, againſt whom he diſtinguiſhed himſelf by his writings from the year 1519 to 1544, which was the year of his death. He alſo wrote "A Dialogue concerning the Three Languages, or the Study of Theology;" in which he endeavours to defend ſcholaſtic divinity, and, without naming Eraſmus, to refute many things in his treatiſe on the ſtudy of divinity. That great writer was not ſlow in replying to Latomus, and in defending the advice given by him to theological ſtudents, to apply to the ſtudy of polite learning, and profane ſciences, as well as to that of divinity, the ſacred ſcriptures, and the ancient fathers. This reply our author endeavoured to refute in an "Apology." All his works were collected together, and publiſhed in 1550, in folio. *Moreri.*

LATO'NA, in mythology, a pagan goddeſs, whoſe hiſtory is very obſcure. Heſiod makes her the daughter of the Titan Coëus and Phœbe his ſiſter; but Homer calls her the daughter of Saturn. She was admired for her beauty, and celebrated for the favours which ſhe granted to Jupiter. Juno, always jealous of her huſband's amours, made Latona the object of her vengeance, and ſent the ſerpent Python to diſturb her peace and perſecute her. Latona wandered from place to place during her pregnancy, continually alarmed for fear of Python. She was driven from heaven; and Terra, influenced by Juno, refuſed to give her a place where ſhe might reſt and bring forth. Neptune, moved with compaſſion, ſtruck with his trident and made immoveable the iſland of Delos, which before wandered in the Ægean Sea, and appeared ſometimes above, and ſometimes below, the ſurface. Latona, changed into a quail by Jupiter, came to Delos; where ſhe reſumed her original ſhape, and gave birth to Apollo and Diana, leaning againſt a palm-tree or an olive. Her repoſe was of ſhort duration: Juno diſcovered the place of her retreat, and obliged her to fly from Delos. She wandered over the greateſt part of the world; and in Caria, where her fatigue compelled her to ſtop, ſhe was inſulted and ridiculed by the peaſants, of whom ſhe aſked for water while they were weeding a marſh. Their refuſal and inſolence provoked her, and ſhe entreated Jupiter to puniſh their barbarity: they were all changed into frogs. She was alſo inſulted by Niobe; who boaſted herſelf greater than the mother of Apollo and Diana, and ridiculed the preſents which the piety of her neighbours had offered to Latona. At laſt, Latona, though perſecuted and expoſed to the reſentment of Juno, became a powerful deity, and ſaw her children receive divine honours. Her worſhip was generally eſtabliſhed where her children received adoration; particularly at Argos, Delos, &c. where ſhe had temples. She had an oracle in Egypt, celebrated for the true and deciſive anſwers which it gave. Latona, Venus, and Diana, were the three goddeſſes moſt in veneration among the Roman women.

LATO'NA, a town of Egypt, upon the Nile, which was the capital of a nome called the Nomos Latopolites. *Ptolemy.*

LATOO', a paſs acroſs the mountains of Bengal, in the circar of Palamow.

LATOP'OLIS. See the article EGYPT, vol. vi. p. 352.

LATOPOLI'TES NO'MOS, a diſtrict of Egypt, the capital of which was dedicated to Latona, and ſituated on the left of the Nile. This nome is mentioned both by Strabo and Pliny.

LATOPOLI'TES NO'MOS, or HERMONTHITES NOMOS, another diſtrict of Egypt, the capital of which was called the town of Latonum, according to Ptolemy.

LA'TOR, *ſ.* [from the Lat. *fero latus*, to carry.] A bearer; a meſſenger. *Cole.*

LATORC'ZA, a river of Hungary, which riſes near the Carpathian Mountains, and runs into the Theyſs near Tokay.

LATOU'CHE's I'SLAND, an iſland in the North Pacific Ocean, at the entrance of Prince William's Sound, thirteen miles long, and three broad. Lat. 60. N. lon. 212. 39. E.

LATOVI'CI, in ancient geography, a people of Upper Pannonia.

LATOU'R, a town of Hindooſtan, in the circar of Aurungabad: twenty-five miles weſt of Aurungabad.

LATOU'R d'AUVER'GNE, equally celebrated as a ſoldier and a man of learning, was of a noble family in France, and a lineal deſcendant of the famous Turenne: he was born at Pontivy, in Brittany, and from his early years was engaged in military ſtudies and purſuits. He was forty-five years in the army, and thirty-three in active ſervice. Few men carried the ſpirit of frugality ſo far. He lived upon milk and fruits; the national uniform was his dreſs; and he lived at Paſſy for ſeveral years without a ſervant, and in one ſmall apartment, the ſole decoration of which was his books and his arms. Latour d'Auvergne manifeſted the moſt deciſive attachment to liberty from the commencement of the revolution. He ſerved during the whole war. In the army of the Weſtern Pyrenées, he commanded all the companies of grenadiers which formed the advanced guard; and that terrible column, called *la colonne infernale*, had almoſt always gained the victory by the time the main body of the army arrived on the field of battle. In the camp, in his tent, this illuſtrious captain lived in the midſt of the grenadiers, whom he called his children, and by whom he was called father. His leiſure hours were all devoted to ſtudy; and in barracks, or at the advanced poſts, he had always ſome books near his ſword. Twenty times had his hat, and his cloak, which he always kept upon his left arm in fighting, been pierced with bullets; yet Latour was never wounded. "Our captain," ſaid the grenadiers, "has the gift of charming bullets." Of the many extraordinary traits which rendered him famous in that army, two are very remarkable. The Spaniards had entrenched themſelves in front of Bedaſſoa, in a ſtone houſe, from which they harraſſed the advanced poſts, and prevented the French from taking the famous poſition of the Mountain of Louis XIV. It was neceſſary to drive them from the fortreſs, and Latour undertook the enterpriſe. He arrived at the head of his grenadiers, and amidſt the fire of the enemy, before the ſtone houſe. He advanced to the gate, and, ordering the grenadiers to place their muſkets in the apertures made for the garriſon to fire from, he knocked at the gate, and ſummoned the garriſon to ſurrender, threatening to ſet fire to the houſe if they did not. The Spaniards conſented; and the place, which was nearly impregnable, was given up. After the taking of the famous redoubts of Irun and Fontaraba, the French advanced guard arrived before St. Sebaſtian, a fortreſs ſituated upon a rock in the ſea. Latour d'Auvergne threw himſelf into a ſkiff, and ſummoned the commandant to ſurrender. The French were only able to convey an eight-pounder into the midſt of theſe mountains. Latour d'Auvergne, feigning that he had all the artillery before the place, threatened to batter it down; the commandant, intimidated with recent victories, and by the tone of intrepidity adopted by Latour, began to liſten to the demand; but, captain, (ſaid he,) you have not fired a ſingle gun at my citadel: do me at leaſt the honour to ſalute it; for, without that, you muſt be convinced that I cannot ſurrender." Latour d'Auvergne was too well acquainted with the laws of honour and war, not to accede to ſuch a demand; he returned to the camp, ordered the eight-pounder to play upon the fort, which replied by a ſhower of grape-ſhot. Latour then returned to the fortreſs, and the keys were delivered to him. He was always ſummoned to councils of war. In the Pyrennées he performed the duties of a general, but would never accept the rank. After the peace with Spain, he embarked on-board a French ſhip to proceed to Brittany, and was taken by the Engliſh, and carried into Bodmin in Cornwall. When he was exchanged, he returned to France, and for ſome time lived in retirement at Paris. In the year 1799, he joined the army in Swiſſerland, where he ſerved the whole of the campaign under Maſſena, who preſented him with a ſword of honour, the moſt valuable gift a republican ſoldier could receive; for it ſhould be obſerved, that Latour always conſidered himſelf as a private ſoldier, refuſing to accept of any commiſſion: Bonaparte therefore conferred on him the title of "firſt grenadier of the French republic." At length he met his death, where he ſo long had ſought it, in the field of glory: he was killed in the engagement of the 28th of June, 1800, between the armies of Moreau and Kray, on the heights of Neuburg in Bavaria. In this battle the Auſtrians appear to have been worſted, as they retreated to Ingolſtadt. The loſs of the French was conſiderable, but none was more ſeverely felt than that of Latour d'Auvergne. The French army was overwhelmed with grief, and, as a mark of their reſpect, the drums were ordered to be covered for three days with black crape; his name was kept on the roll of his company, his place was not to be filled up; and, at the roll-call, a ſoldier was appointed, at the mention of his name, to anſwer, "Dead, in fighting for the liberties of his country." A monument was erected to his memory on the ſpot where he fell. Latour was the author of a work, entitled Gallic Origins, in which the greateſt erudition is united with the ſoundeſt criticiſm, and the moſt animated ſtyle.

LATO'WIC, a town of the duchy of Warſaw: eighteen miles eaſt of Czerſk.

LATO'US, a name given to Apollo as ſon of Latona.

LA'TRANT, *adj.* [*latrans*, Lat.] Barking:

Thy care be firſt the various gifts to trace,
The minds and genius of the *latrant* race. *Tickell.*

LATRAP'PE, a monaſtic order of French origin, and one of the moſt auſtere and ſelf-denying of all the inſtitutions of this nature. The founder of this order is ſaid to have been a French nobleman, whoſe name was Bouthillier de Rancé, a man of pleaſure and diſſipation, which were ſuddenly converted into the deepeſt devotion and melancholy by the following circumſtance: His affairs had obliged him to abſent himſelf for ſome time from a lady with whom he had lived in the moſt intimate and tender connections. On his return to Paris, he contrived a plan in order to ſurpriſe her agreeably, and to ſatisfy his impatient deſire of ſeeing her, by going without ceremony or previous notice to her apartment. She lay ſtretched out an inanimate corpſe, diſfigured beyond conception by the ſmall-pox; and the ſurgeon was about to ſeparate the head from the body, becauſe the coffin had been made too ſhort! He was a few minutes motionleſs with horror; and then retired abruptly from the world to a convent, in which he paſſed the remainder of his days in the greateſt ſelf-mortification and devotion.

The following account of the economy of the abbey or monaſtery of Latrappe, on the borders of Perche and Normandy, founded in the year 1140, is extracted from the third volume of Mad. Genlis's Leſſons of a Governeſs. It contains ſome information reſpecting the order which is not commonly known.

"This morning at a quarter before ten we entered once more into the inner compartment of the abbey. After having heard maſs, we were admitted into the refectory to ſee the fathers dine. There was no cloth upon the table, but each monk had a napkin; their plates were of pewter, and their ſpoons of wood; each monk received a porringer of ſoup, a plate of herbs, two or three apples, a large ſlice of bread, a little mug of water, and another of beer. One of the ſociety aſcended a ſort of pulpit made for that purpoſe, and preached them a ſermon during their repaſt. Each monk preaches this ſermon in his

turn; and the monks who dine are attended by other monks, who afterwards take their refreſhment along with the preacher. The lay-brothers dine at the ſame time in a ſmaller hall adjoining the principal, and which is ſeparated from it only by an arcade without any door; we could ſee them therefore as we ſtood in the refectory; and they, as in the former inſtance, were ſerved by other lay-brothers, who ate when they had finiſhed. From the refectory we went to the library. The cells are very ſmall; they contain a ſtraw bed, a wooden table, and a crucifix. We ſaw the monks at work in the garden. We entered the medicine-room, which is large, and well ſupplied with drugs: adjoining to it is an excellent botanic garden, filled with the uſual plants.

"I ſhall here relate what I learned from the converſation of the fathers. The hiſtory of count de Comminges is fabulous, as well as various other things, viz. that the monks are every day employed in digging their own graves; that they raiſe and level hills for the purpoſe of occupying themſelves; that their ſalutation when they meet is, *We muſt die*; that they wear upon their hearts a cuſhion ſtuck with thorns, &c. All theſe things are abſolutely falſe. They faſt continually; they never eat either fiſh, ſugar, eggs, butter, or oil, except a ſmall quantity with their ſalads. Vinegar is allowed them, as well as milk; but the latter is prohibited during Lent. Their rule never allows them the uſe of wine except on journeys, and in any place of occaſional reſidence, where they may uſe both wine, fiſh, and butter. Their dreſs, like that of the Chartreux, is entirely white; their head and beard are ſhaved, and they have a large hood which they put on at pleaſure. They always ſleep in their clothes; their ſhirts are of wool, not hair-cloth, every mortification of this kind being prohibited by the rules of their order. No one is admitted among them till the age of twenty, when he enters upon his noviciate, which continues for the ſpace of twelve months. The infirm alone employ themſelves in little articles of induſtry, ſuch as the making of roſaries, wooden ſpoons, and in winter the work of the garden; after which they ſhell the peaſe, dreſs the vegetables, preſs the grain for uſe, &c. Theſe laſt occupations are common to them all.

"The monks of this abbey amount to about a hundred and twenty, including the fathers and lay-brothers. There are ſixty of the former, of whom eighteen only are prieſts; the reſt, though equally engaged by irrevocable vows, do not ſay maſs, and have not received holy orders, thinking themſelves not ſufficiently virtuous and devout to celebrate the ſacred myſteries. The abbot is elected for life, and is named by the king in purſuance of the vote of the monks; the votes are collected by way of ballot; and, as ſoon as that is done, the ballotting-box is ſealed up and ſent to Verſailles. There are three monks, called *hoteliers*, whoſe buſineſs it is to receive ſtrangers and the poor. From their original endowment and the bequeſts of private individuals, they are ſufficiently wealthy to afford three days' hoſpitality to every poor traveller who paſſes that way. When all the beds in the houſe are occupied, the traveller is accommodated at the inn, and his expenſes defrayed by the monks. If, during theſe three days, he fall ſick, they take care of him till his recovery; he is attended by their ſurgeons, ſupplied by them with medicines; the monks alſo viſit him, dreſs his wounds, &c. If any poor traveller be in want of money to purſue his journey, they give him as much as is neceſſary to carry him to the place of his deſtination. Not a day paſſes without their being viſited by perſons of this deſcription, particularly ſoldiers. It frequently happens that the gratitude and admiration which ſo much benevolence inſpires, induce the perſons who are the objects of it to become members of their fraternity, and paſs their lives with them. Theſe monks alſo aſſiſt and take care of all the poor in the neighbourhood for many leagues round. I interrogated a great number of the peaſants, who ſpoke of them with the reſpect and veneration that we ſhould feel for angels if they were to condeſcend to reſide among us. They never receive a widower among them, unleſs his children are already provided for; whatever may be the age of theſe children, if their ſituation be not ſuch as to enſure them a ſubſiſtence, they conceive that a father cannot, in that caſe, diſpoſe of his liberty, but is bound to beſtow all his care upon his family. When they have made their vow, they renounce every kind of epiſtolary correſpondence whatever, and do not allow themſelves to be viſited by their relations, except their father and mother, and this but ſeldom. They are expreſsly enjoined not to ſhow the leaſt preference to any individual of their order, as being bound to love them all equally. If one monk ſhould perceive that another had a particular *friendſhip* for him, he would conſider it as his duty, when they were all aſſembled, to aſk leave to ſpeak, and then publicly to accuſe him. In this caſe the ſuperiors impoſe a penance on the perſon criminated, who is not allowed to juſtify himſelf, or anſwer a word, even though he ſhould think himſelf wrongfully accuſed. He is to believe that he has in ſome way or other, though he cannot recollect it, given cauſe for the reproach, and he muſt ſacrifice without heſitation his ſelf-love to the obedience due to the rules of the order. In all caſes, indeed, where one monk obſerves in another any kind of fault, he is equally bound publicly to accuſe him, and the accuſed muſt obſerve a perfect ſilence, and ſubmit with reſignation to the penance that may be impoſed. If a word eſcape him in his defence, all the monks inſtantly proſtrate themſelves on the ground to aſk pardon of God for his pride; but this never happens except to novices and perſons newly profeſſed, and very ſeldom even to them. Theſe particulars were related to me by brother Proſper, a young monk twenty-eight years of age, and who has been eight years at Latrappe. I entreated him to tell me honeſtly if he did not know, among his brother monks, ſome ſingle individual who had, at heart, more friendſhip for him than the reſt? No, indeed, was his reply; I could ſooner name a dozen than one.

"When a ſick monk is pronounced to have but a few hours to live, he is told that he muſt receive extreme unction; he is then carried to the church, where it is always adminiſtered, and, after the ceremony is over, conveyed back to his bed. When he approaches his laſt moment, a bell is tolled to ſignify to the whole houſe that a brother is in the agonies of death. All the monks aſſemble round the dying man, and, having *placed him in aſhes*, pray aloud for him. This deſcription is terrifying to worldly minds; but at Latrappe the apparel of death and the religious ſolemnities that accompany it, are conſidered as auguſt and conſolatory, as the fore-runners of a grand triumph and ſupreme felicity. The frugal and laborious life we lead, ſaid father Theodore to me, exempts us from violent and putrid diſorders. I have never ſeen among us an inſtance of an epidemical malady, even when the contagion has ſpread through the country. We know ſcarcely any diſorders but thoſe of the lungs occaſioned by ſinging at church, and by the law which obliges us to get up frequently in the night. When a conſtitution is able to reſiſt theſe dangers, and has paſſed the age of thirty, life is protracted longer here than elſewhere, and old age is ſound and vigorous: thus we commonly die in the poſſeſſion of all our faculties; and, during the fifty years that I have lived here, I have ſcarcely ſeen an inſtance to the contrary."

When theſe monks were driven out of France at the beginning of the revolution, they were received at Lulworth, near Wareham, in Dorſetſhire, by the munificence of Mr. Weld, who aſſigned them a houſe within his own grounds; and afterwards built a more lonely retreat for them near Warbarrow-cliff, where for ſeveral years they continued to wear their proper habits, and practiſe all the rigid duties of their order.

LATRA'TION, *ſ.* [from *latro*, Lat. to bark.] The act of barking like a dog.

LA'TRIA,

LA'TRIA, *f.* [Greek.] The higheſt kind of worſhip; diſtinguiſhed by the papiſts from *dulia*, or inferior worſhip.—The practice of the catholic church makes genuflections, proſtrations, ſupplications, and other acts of *latria*, to the croſs. *Stillingfleet.*

LA'TRIS, in ancient geography, a town of Germany, at the mouth of the Viſtula. *Pliny.*

LATROCINA'TION, *f.* [from the Lat. *latro*, a robber.] The act of robbing; a depredation.

LATROCIN'IUM, *f.* in old charters, the prerogative of adjudging and executing thieves. Larceny; theft.

LATRO'CINY, *f.* [A literal verſion of the Latin *latrocinium*, which was afterwards contracted into] Larceny.

LATRONI'CA, a town of Naples, in Baſilicata: twenty-two miles ſouth-weſt of Turſi.

LATRUN'CULUS, *f.* A game amongſt the Romans, of much the ſame nature with our chefs. The *latrunculi* were properly the chefs-men, called alſo *latrones* and *calculi*; they were made of glaſs, and diſtinguiſhed by black and white colours; ſometimes they were made of wax or other convenient ſubſtances. Some give the invention of this game to Palamedes when at the ſiege of Troy. Seneca attributes it to Chilon, one of the ſeven Grecian ſages; others honour Pyrrhus with the invention; and others again contend that it is of Perſian origin. Frequent alluſions to this game are met with in the Roman claſſics; and a little poem was written upon it, addreſſed to Piſo, which ſome ſay was the work of Ovid, others of Lucan, in the end of ſome editions of whoſe works it is to be found, and to which we refer for a fuller account of the game. This game expreſſes ſo well the chance and order of war, that it is, with great appearance of probability, attributed to ſome military officer as the inventor. One Canius Julius was ſo exceedingly fond of chefs, that, after he was ſentenced to death by Caligula, he was found playing, but interrupted in his game by a call to execution; he obeyed the ſummons, but firſt deſired the centurion who brought the fatal order, to bear witneſs that he had one man upon the board more than his antagoniſt, that he might not falſely brag of victory when he ſhould be no more. See the article CHESS, vol. iv. p. 416.

LATSCH, a town in the county of Tyrol: ſix miles weſt-ſouth-weſt of Tyrol.

LAT'SCHACH, a town of the duchy of Carinthia: fourteen miles ſouth-weſt of Clagenfurt.

LATTA'I. See BICKERTON'S ISLAND, vol. iii. p. 17.

LATTAN'ZIO (Gambara), a painter of hiſtory and portraits. He was the ſon of a tailor at Cremona; but, being more inclined to painting than the uſe of the needle, he ſpent his youthful days in covering the walls and furniture of his father's houſe with drawings in charcoal, and thus drew upon himſelf the diſpleaſure of his parents, who evinced their diſſatisfaction by the unequivocal teſtimony of the ſcourge. Giulio Campo, an artiſt of ſome celebrity, reſiding at Cremona, happened one day to paſs by when the tailor was exerting his energies upon the back of his ſelf-willed ſon Lattanzio; hearing the cauſe, he took the boy home with him, and for ſix years aſſiſted and encouraged him in his purſuit of the art of painting. Such was the ſucceſs accompanying this act of generoſity, that, according to Vaſari, Gambara became the beſt painter of his time in Breſcia, where he took up his reſidence; and where many ingenious artiſts practiſed painting in conjunction or competition with him. His principal works are in freſco, and ſome are ſtill to be ſeen at Breſcia, particularly the cloiſter of Santa Euphemia, wherein he painted a ſeries of ſcriptural and evangelical ſubjects. Venice, Parma, and Cremona, all poſſeſs teſtimonials of his ſkill, which adorn their churches and many of their private houſes. His ſtyle is very much like that of Pordenone, an attempt to unite the colour of the Venetian with the drawing and deſign of the Florentine ſchool; but it is not ſo powerful. He married a daughter of Romanino; but died at the early age of thirty-two, by a fall from a ſcaffold while painting in the church of St. Lorenzo in Breſcia, about the year 1570.

LAT'TEN, or LATTIN, [*laiton*, Fr. *latoen*, Dut.] A name formerly uſed for thoſe plates of iron covered with tin, now uſually called *tin*, of which tea-caniſters, and ſuch other things, are made.

The principal part of the work is to prepare the leaves, beat out to a proper thinneſs, ſo as that they ſhall readily receive the tin; for, if there be but the ſmalleſt particle of duſt on them, or only the ſlighteſt ruſt in any part, the tin will never fix there. This ſmoothing of the plates is effected by ſteeping them in acid water till the ſurface is a little preyed upon by it, and then they are ſcoured with ſand, which makes them very ſmooth and fine. By this means a woman cleans more plates in an hour, than the moſt expert workman can do otherwiſe in many days. M. Reaumur, to whom the world owes the diſcovery of this proceſs, mentions ſeveral waters, any one of which will ſucceed; but the Germans themſelves uſe nothing but common water, made *eager* with rye. This they make a great ſecret of, but the preparation is very eaſy. After they have ground the rye groſsly, they leave it to ferment in common water for ſome time; and they are thus ſure of a ſharp and eager menſtruum, excellently fitted for their purpoſe. With this liquor they fill certain troughs, or tuns, and into theſe they put ſeveral bundles of the plates of iron; and, to make the liquor mere eager, and to act the better on them, they keep it in ſtoves, where it has little air, and is kept warm with ſmall charcoal fires.

There are ſeveral other ways of making iron ruſt, as keeping it in a moiſt cellar, expoſing it to the dew, ſprinkling it with ſimple water, or, what is ſtill better, with water in which ſal ammoniac has been diſſolved, ſeveral times a-day; and, in thoſe countries where the pyrites is common, the vitriolic waters, which partake of it, will do it very well. This water may be prepared at little or no expenſe, only by heaping up large quantities of the pyrites, and letting it moulder in the air, then putting it into common water, and making a lixivium of it. Whichever method of ruſting the plates be uſed, it is always neceſſary to ſcour them with ſand as ſoon as it is done; and, when they are thus cleaned, they muſt be immediately plunged into water, to prevent their ruſting again, and they are to be left in this water till the inſtant in which they are to be tinned, or, in the language of the workmen, *blanched*. The people employed in this part of the operation are called *blanchers*; and the others, who aſſiſt at the cleaning of the plates, the *ſcalers*. The blancher makes as great a ſecret of his art as the ſcaler does of his; and it was with great difficulty that M. Reaumur obtained it. The manner of doing it is this:

They flux the tin in a large iron crucible, which has the figure of an oblong pyramid with four faces, of which two oppoſite ones are leſs than the two others. The crucible is heated only from below, its upper part being luted with the furnace all round. The crucible is always deeper than the plates, which are to be tinned, are long; they always put them in downright, and the tin ought to ſwim over them. To this purpoſe artificers of different trades prepare plates of different ſhapes; but M. Reaumur thinks them all exceptionable. But the Germans uſe no ſort of preparation of the iron, to make it receive the tin, more than the keeping it always ſteeped in water till the time; only, when the tin is melted in the crucible, they cover it with a layer of a ſort of ſuet, which is uſually two inches thick; and the plate muſt paſs through this before it can come to the melted tin. The firſt uſe of this covering is to keep the tin from burning; as, if any part ſhould take fire, the ſuet would ſoon moiſten it, and reduce it to its primitive ſtate again. The blanchers ſay, this ſuet is a compounded matter. It is indeed of a black colour, but M. Reaumur ſuppoſed that to be only an artifice to make it a ſecret, and that it is only coloured with ſoot, or the ſmoke of a chimney; but he found it true ſo far, that the common unprepared ſuet was not ſufficient; for, after ſeveral attempts, there was always ſomething wanting to render the ſucceſs of the operation certain. The whole ſecret of blanching, therefore, was found

found to lie in the preparation of this ſuet; and this he at length diſcovered to conſiſt only in the firſt frying and burning it. This ſimple operation not only gives it the colour, but puts it into a condition to give the iron a diſpoſition to be tinned, which it does ſurpriſingly.

The melted tin muſt alſo have a certain degree of heat: for, if it is not hot enough, it will not ſtick to the iron; and, if it is too hot, it will cover it with too thin a coat, and the plates will have ſeveral colours, as red, blue, and purple; and, upon the whole, will have a caſt of yellow. To prevent this, by knowing when the fire has a proper degree of heat, they might try with ſmall pieces of iron; but, in general, uſe teaches them to know the degree, and they put in the iron when the tin is at a different ſtandard of heat, according as they would give it a thicker or thinner coat. Sometimes alſo they give the plates a double layer, when they would have them very thickly covered. This they do by dipping them into the tin, when very hot, the firſt time, and, when leſs hot, the ſecond. The tin, which is to give the ſecond coat, muſt be freſh covered with ſuet, and that with the common ſuet, not the prepared. *Phil. Tranſ.* N° 406.

LAT'TEN, *adj.* [from the *ſub.*] Made of thin plates of iron tinned over.

LAT'TER, *adj.* [This is the comparative of *late*, though univerſally written with *tt*, contrary to analogy, and to our own practice in the ſuperlative *lateſt*. When the thing of which the compariſon is made is mentioned, we uſe *later*; as, This fruit is *later* than the reſt; but *latter* when no compariſon is expreſſed, and the reference is merely to time; as, Thoſe are *latter* fruits.] Happening after ſomething elſe:

Thus will this *latter*, as the former, world,
Still tend from bad to worſe. *Milton.*

Modern; lately done or paſt.—Hath not navigation diſcovered, in theſe *latter* ages, whole nations at the bay of Soldania? *Locke.*—Mentioned laſt of two.—The difference between reaſon and revelation, and in what ſenſe the *latter* is ſuperior. *Watts.*

LATTER MATH, *ſ.* The graſs that grows after the firſt mowing; a ſecond mowing.

LAT'TERLY, *adv.* Of late; in the laſt part of life: *a low word, lately hatched.—Latterly* Milton was ſhort and thick. *Richardſon.*

LAT'TICE, *ſ.* [*lattis*, French; by *Junius* written *lettice*, and derived from lett ieɲn, a hindering-iron, or iron ſtop; by *Skinner* imagined to be derived from *latte*, Dut. a lath; or to be corrupted from *nettice*, or *network*: perhaps from *let* and *eye*; *leteyes*, that which *lets* the *eye*. It may be deduced from *laterculus*.] A reticulated window; a window made with ſticks or irons croſſing each other at ſmall diſtances.—My good window of *lattice*, fare thee well; thy caſement I need not open, I look through thee. *Shakeſpeare.*

Thou ſhalt not peep through *lattices* of eyes,
Nor hear through labyrinths of ears, nor learn
By circuit or collections to diſcern. *Donne.*

To LAT'TICE, *v. a.* To decuſſate, or croſs; to mark with croſs parts like a lattice.

LAT'TICED, *adj.* Having longitudinal lines, or furrows, interſected by tranſverſe ones.

LAT'TICING, *ſ.* The act of covering with lattice, of making lattices.

LAT'TIMO, *ſ.* in the glaſs-trade, a name for a fine milk-white glaſs. There are ſeveral ways of making it; but the beſt of all is this: Take 4 cwt. of cryſtal frit, 60 pounds of calcined tin, and 2½ of prepared manganeſe; mix theſe well with the frit, and ſet them in a pot in a furnace to melt and refine. At the end of eighteen hours this will be purified; then caſt it into water, purify it again afterwards in the furnace, and make a proof of it. If it be too clear, add 15 pounds more of calcined tin; mix it well with the metal, and let it ſtand one day to purify: it will then be of a whiteneſs ſurpaſſing even that of ſnow, and is fit to work into veſſels.

LAT'TON PRI'ORY, a village three miles north from Epping. The priory-church, now uſed as a barn, conſiſts of a nave and a croſs aiſle; and the inſide of the building is of the lighter ſtyle of Gothic, with the pointed arch. The materials of which it is compoſed are flint-ſtones, mortar, and the old flat bricks called Roman; and what appears to have been the ſite of the priory is ſurrounded by a moat, without which, ſouth of the preſent buildings, human bones are frequently found; which circumſtance points out the ancient burial-place. Eaſt of the church, without the moat, appears a ſmall riſing, with a hollow without it, like the remains of an intrenchment. The interval between this riſe and the moat, the inhabitants, from its appearance, called the Monks' Bowling-green. The canons of this priory were Auguſtine. At the diſſolution it was granted to ſir Henry Parker. It was purchaſed in 1562 by James Altham, eſq. whoſe deſcendant, ſir William Altham, ſold it to ſir William Luſhington, eſq. with the fine manor and manſion of Marks Hall, in this pariſh. Mr. Luſhington rebuilt the houſe in the modern ſtyle, and ſold it to Montague Burgoyne, eſq.

LATTYPOU'R, a town of Bengal: twenty miles north of Kiſhenagur.

LA'TUS, *ſ.* [Latin.] A ſide.

LATUS PRIMARIUM, LATUS RECTUM, and LATUS TRANSVERSUM; ſee the article CONIC SECTIONS, vol. v.

LATZ'KE, a town of Hinder Pomerania: four miles ſouth-ſouth-weſt of Belgard.

LATZ'KI, a town of Auſtrian Poland, in Galicia: eighty miles weſt-ſouth-weſt of Lemberg.

LA'VA, *ſ.* in mineralogy, a genus of argillaceous earth. Generic characters: Conſiſting of alumine, with a larger portion of ſilex and oxyd of iron, and frequently a little carbonat of lime and carbonat of magneſia. Generally of a dull colour, becoming hoary when ſcraped, meagre, breaking into indeterminate fragments, mouldering into argil in the air. Produced by the internal fires of volcanic mountains from which it is thrown out, and melting again into a black glaſs.

According to Kirwan, the word *lava* is derived from the Gothic word *lauſſen*, to run. Lava often reſembles porous baſalt; but it is impoſſible to define a lava accurately, becauſe not only different volcanoes but even the ſame volcanoes produce different lavas at different times; the internal fire perhaps taking different directions, and acting on different ſubſtances. Many lavas affect the magnetic needle. A lava analyſed by Bergman gave the following reſults: ſilex 49, alumine 35, lime 4, oxyd of iron 12; but one ſpecies, the pumice-ſtone, contains 77½ of ſilex. Many dark-coloured lavas become white, in conſequence of the neighbourhood of acid ſulphureous vapours; for theſe, acting on the iron and clay contained in the lavas, form ſulphat of alumine and of iron; which being afterwards waſhed away, the lava remains white. Some lavas are naturally white. Lavas often undergo a concentric diſintegration, after the manner of ſome whin-ſtones. Dolomieu ſays that he has ſeen, in the ruins of ancient Rome, blocks of granite and porphyry undergoing a ſimilar diſintegration from the action of the weather. Almoſt all lavas undergo diſintegration by expoſure to air; but the time required for this effect is very different in different inſtances. Some are decompoſed in an age or two; but ſome not under a thouſand years. Hence many occaſions of falſe judgment have ariſen with reſpect to the length of time employed in the accumulations of ſoils that have been formed by the diſintegration of lava. This obſervation, which Dolomieu firſt made, has been confirmed by Spallanzani and others: and Spallanzani expoſes the errors which Brydone and count Borch fell into relative to the age of the earth, by computing from the depth of the ſoil which had been accumulated from the diſintegrated lava; the proceſs advancing by no fixed ratio. Thus count Borch mentions a lava which flowed in the

year 1329, on which ſoil had accumulated to the depth of eight inches; while on the other hand Spallanzani mentions a lava which ruſhed into the ſea in the year 1320, but ſtill preſerves in every part its hardneſs and ſterility.

Thoſe lavas which are the lighteſt and leaſt vitrified, and at the ſame time contain the greateſt proportion of alumine and oxyd of iron, are the moſt eaſily diſintegrated; and, where the proportions of the conſtituent parts of a diſintegrated lava are ſuch as to be capable of retaining a juſt portion of moiſture for the longeſt time, the fertility of the reſulting ſoil is greateſt. Nothing can be more fertile than the fields of Catanea, and all the baſe of Etna. But volcanic eruptions do not invariably produce lava: the volcanoes of Quito, the flames of which are ſometimes elevated three thouſand feet, have never produced a ſingle drop of running lava. They ſend forth water, inflammable air, dirt, and clay impregnated with coaly matter. Similar muddy eruptions occaſionally take place in other volcanoes alſo.

The quantity of matter thrown out from volcanoes under the name of *lava* is prodigious. After the great eruption of Etna in 1669, Borelli went from Piſa to Sicily to obſerve the effects of it. The matter thrown out at that time amounted to 93,830,750 cubical paces; ſo that, had it been extended in length upon the ſurface of the earth, it would have reached more than four times round the whole globe. All this matter, however, was not lava, but conſiſted alſo of ſand, ſtone, gravel, &c. The lava he computed at 6,300,000 paces, which formed a river, according to our author ſometimes two miles broad; but according to others it was ſix or ſeven miles broad, and ſometimes twenty or thirty yards in depth. Sir William Hamilton informs us, that the lavas of Etna are very commonly fifteen or twenty miles in length, ſix or ſeven in breadth, and fifty feet deep: the moſt conſiderable are ſcarcely leſs than thirty miles long and fifteen broad. The moſt conſiderable lavas of Veſuvius do not exceed ſeven miles in length. The ſame author, however, tells us, that the lava which iſſued from Veſuvius in 1767, was ſix miles long, two in breadth, and in moſt places ſixty or ſeventy feet deep. In one place it had run along a hollow way made by currents of rain not leſs than two hundred feet deep and one hundred wide; and this vaſt hollow it had in one place filled up. He ſays, he could not have believed that ſo great a quantity of matter could have been thrown out in ſuch a ſhort time, if he had not examined the whole courſe of it himſelf. Even this quantity, however, great as it is, appears very trifling in compariſon to that thrown out in Iceland in the year 1783, which covered a ſpace of ground ninety miles in length and forty-two in breadth, to the depth of more than a hundred feet. Dr. Van Troil, in his Letters on Iceland, tells us, that he and his companions travelled over a tract of lava upwards of three hundred miles in length; and in 1728, we are told that an eruption of lava took place, which continued for two years to run into a great lake, which it almoſt filled up. See ICELAND, vol. x. p. 728.

Sir William Hamilton informs us of a curious fact relating to a lava in the iſland called Lacco. Here is a cavern ſhut up with a door; and this cavern is made uſe of to cool liquors and fruit, which it does in a ſhort time as effectually as ice. Before the door was opened, he felt the cold on his legs very ſenſibly; but, when it was opened, the cold ruſhed out ſo as to give him pain; and within the grotto it was intolerable. He was not ſenſible of wind attending this cold; though upon Mount Etna and Veſuvius, where there are caverns of this kind, the cold is evidently occaſioned by a ſubterraneous wind: the natives call ſuch places *ventaroli*. From old lavas there alſo frequently happens an eruption of noxious vapours called *mofetes*. Theſe likewiſe break out from wells and ſubterraneous places in the neighbourhood of a volcano before an eruption. Our author tells us, that the vapour affects the noſtrils, throat, and ſtomach, juſt as the ſpirit of hartſhorn or any ſtrong volatile ſalt; and would ſoon prove fatal if you did not immediately withdraw from it. Theſe mofetes, he ſays, are at all times to be met with under the ancient lavas of Veſuvius, particularly the great eruption of 1631.

Some kinds of lava take a fine poliſh, and are frequently manufactured into boxes, tables, &c. In Naples, the inhabitants commonly make uſe of it for paving the ſtreets; and even the ſubterraneous cities of Pompeii and Herculaneum have been paved with the ſame ſubſtance. The lava of Etna appears to be ſtill more generally uſed for building, ſince, according to Ferrari, there is not a houſe in its neighbourhood that is not conſtructed of it. The rapid progreſs in the rebuilding of Catanea (ſee vol. iii. p. 899) was in a great meaſure owing to the facility with which the building-materials were procured. Alſo mill-ſtones are made of the lava of Etna, many of which are exported to Calabria and Malta; and it has even been manufactured into canon balls. A fine large cubic piece of lava is preſerved in the hall of the Britiſh Muſeum.

Species. 1. Lava compacta, or compact lava. Specific character, nearly opake, compact, hardiſh, of a conchoidal texture. Found in volcanic mountains and their neighbourhood, appearing to have been fuſed by the action of fire, but not vitrified, and becoming, when cooled, compact, cloſe, and ſolid, and bearing the reſemblance of its original mineral. Colour generally blackiſh, ſometimes grey, brown, or red, rarely white, very rarely green or blue; its ſubſtance is ſo very little porous as to admit being cut into ſlabs with an almoſt entire ſurface, and poliſhed like marble; fracture earthy or fine ſplintery, more rarely foliated. Contains often hornblende, white garnet, olivin, calcareous ſpar, mica, ſhorl, &c.

2. Lava vitrea, or vitreous lava: diaphanous, ſhining, compact, hard, of a conchoidal texture. Found about volcanic mountains in New Spain, Peru, Hecla, Veſuvius, and ſometimes in places where ſubterraneous fires have taken place either from pyrites or in coal-pits; contains generally other ſubſtances imbedded, and is more or leſs tranſparent; colour generally black, rarely cinereous, greeniſh, bluiſh, or white, ſometimes priſmatic; uſually of a common, rarely of a ſtalactitical, globular, or pyramidal, form; melts with more difficulty than other ſpecies, on account of its containing leſs iron, carbonat of lime, and magneſia; is frequently ſo hard as to ſtrike fire with ſteel.

The lava, at its firſt diſcharge from the crater of a volcano, is in a ſtate of prodigious ignition, greatly ſuperior to any thing we can have an idea of from the ſmall artificial furnaces made by us. Sir William Hamilton informs us, that the lava of Veſuvius, at the place whence it iſſued (in the year 1767), "had the appearance of a river of red-hot and liquid metal, ſuch as we ſee in the glaſs-houſes, on which were large floating cinders half lighted, and rolling over one another with great precipitation down the ſide of the mountain, forming on the whole a moſt beautiful and uncommon caſcade." Now, if we conſider the materials of which the lava conſiſts, which undoubtedly are the common matters to be found everywhere in the earth, namely, ſtones, metallic ores, clay, ſand, &c. we ſhall find that our hotteſt furnaces would by no means be able to bring them into any degree of fuſion; ſince the materials for glaſs cannot be melted without a great quantity of very fuſible ſalts, ſuch as alkalies, nitre, &c. mixed along with them. The heat of a volcano muſt therefore be immenſe; and, beſides its heat, it is ſometimes attended with a very unconmon circumſtance; for ſir William Hamilton informs us, that "the red-hot ſtones thrown up by Veſuvius on the 31ſt of March, 1766, were perfectly *tranſparent*;" and the like remark he makes on the vaſt ſtream of lava which iſſued from the ſame volcano in 1779. This we cannot look upon to be the mere effect of heat; for mere heat with us will not make a ſolid body tranſparent; and theſe ſtones, we are ſure, were not in a ſtate of fuſion, or the reſiſtance of the air would have broke them all to pieces, even ſuppoſing them, which is very

very improbable, to have been in that ſtate detached from the reſt of the lava. For the tranſparency, therefore, (according to ſome authors,) we muſt have recourſe to electricity; which in ſome of our experiments has the property of rendering opaque bodies tranſparent. Indeed it is ſcarcely poſſible but the lava and every other matter thrown out of a volcano muſt be in the higheſt degree electrical, if the fire itſelf take its riſe from electricity.

The lava, after having once broke out, does not conſtantly continue running from the ſame vent, but often has intermiſſions, after which it will burſt out ſometimes at the ſame place, and ſometimes at another. No real flame ever appears to come from the lava. In the daytime its progreſs is marked by a thick white ſmoke, from which the light of the red-hot matter being reflected in the night-time, makes it appear like flame. But, if, during its progreſs, it meets with trees or other combuſtible ſubſtances, which it frequently does, a bright flame immediately iſſues from its ſurface, as hath alſo been remarked by ſir William Hamilton. This liquid ſubſtance, after having run pure for about 100 yards, (more or leſs, no doubt, according to different circumſtances,) begins to collect cinders and ſtones, and a ſcum is formed on the ſurface. Our author informs us, that the lava which he obſerved, with its ſcum, had the appearance of the river Thames, as he had ſeen it after a hard froſt and a great fall of ſnow, when beginning to thaw, carrying down vaſt maſſes of ſnow and ice. In ſome places it totally diſappeared, and ran in a ſubterraneous paſſage formed by the ſcum for ſeveral paces; after which it came out pure, having left the ſcum behind, though a new one was quickly formed. This lava at the fartheſt extremity from its ſource did not appear liquid, but like a heap of red-hot coals, forming a wall in ſome places 10 or 12 feet high, which rolling from the top ſoon formed another wall, and ſo on. This was the appearance alſo put on by the lava which iſſued in the great eruption of 1783 in Iceland; with this difference, that the wall was at one time 210 feet high, and the general thickneſs of it was more than 100: While a lava is in this ſtate, ſir William is of opinion, that it is very practicable to divert it into another channel, in a manner ſomewhat ſimilar to what is practiſed with rivers. This he was afterwards told had been done with ſucceſs during the great eruption of Etna in 1669: that the lava was directing its courſe towards the walls of Catanea, and advancing very ſlowly, when they prepared a channel for it round the walls of the town, and turned it into the ſea. A ſucceſſion of men, covered with ſheepſkins wetted, were employed to cut through the tough flanks of lava, till they made a paſſage for that in the centre, which was in perfect fuſion, to diſgorge itſelf into the channel prepared for it. But this, it is evident, can only take place in ſmall ſtreams of this burning matter; with that above-mentioned it would have been impoſſible. It has been alſo obſerved of the lavas of Etna, that they do not conſtantly fall down to the loweſt places, but will ſometimes aſcend in ſuch a manner as to make the valleys riſe into hills. On this ſir William Hamilton has the following note: "Having heard the ſame remark with regard to the lavas of Veſuvius, I determined, during an eruption of that volcano, to watch the progreſs of a current of lava; and I was ſoon enabled to comprehend this ſeeming phenomenon, though it is, I fear, very difficult to explain. Certain it is, that the lavas, while in their moſt fluid ſtate, follow always the laws of other fluids; but, when at a great diſtance from their ſource, and conſequently encumbered with ſcoriæ and cinders, the air likewiſe having rendered their outward coat tough, they will ſometimes (as I have ſeen) be forced up a ſmall aſcent, the freſh matter puſhing forward that which went before it, and the exterior parts of the lava acting always as conductors (or pipes, if I may be allowed the expreſſion) for the interior parts, that have retained their fluidity from not being expoſed to the air."

From the year 1767 to 1779, this gentleman made many curious obſervations on the lavas of Veſuvius. He found, that they conſtantly formed channels in the mountain as regular as if they had been made by art; and that, whilſt in a ſtate of perfect fuſion, they continued their courſe in thoſe channels, which were ſometimes full to the brim, and at others more or leſs ſo according to the quantity of matter thrown out. Theſe channels, after ſmall eruptions, were generally from two to five or ſix feet wide, and ſeven or eight in depth. They were often hid from the ſight by a quantity of ſcoriæ that had formed a cruſt over them, and the lava, having been conveyed in a covered way for ſome yards, came out again freſh into an open channel. Our author informs us, that he had walked in ſome of theſe ſubterraneous galleries, which were exceedingly curious, the ſides, top, and bottom, being very ſmooth and even: others were incruſted with what he calls very extraordinary ſcoriæ, beautifully ramified white ſalts in the form of dropping ſtalactites, &c.

On viewing a ſtream of lava while in its fluid ſtate in the month of May 1779, he perceived the operation of it in the channels above deſcribed in great perfection. After quitting them, it ſpread itſelf in the valley, and ran gently like a river that had been frozen, and had maſſes of ice floating upon it. The wind happening then to ſhift, our traveller was ſo incommoded by the ſmoke, that the guide propoſed to croſs it, which was inſtantly put in execution without any other inconvenience than the violent heat with which the legs and feet were affected. The cruſt was ſo tough, that their weight made no impreſſion upon it; and the motion ſo ſlow, that they were in no danger of falling. This circumſtance, according to ſir William, points out a method of eſcape ſhould any perſon happen to be incloſed betwixt two lavas, but ought never to be tried except in caſes of real neceſſity; and indeed, if the current of melted matter was very broad, muſt undoubtedly be attended with extreme danger, both from the heat of the upper cruſt, and the chance of its breaking and falling down with the paſſenger into the burning liquid below. That which ſir William Hamilton croſſed was about fifty or ſixty feet broad. Having paſſed this burning ſtream, our travellers walked up along the ſide of it to its very ſource. Here they ſaw it boiling and bubbling violently up out of the ground, with a hiſſing and crackling noiſe like that which attends the playing off an artificial fire-work. A hillock of about fifteen feet high was formed by the continual ſplaſhing up and cooling of the vitrified matter. Under this was an arched hollow, red-hot within, like a heated oven; the lava which ran from it being received into a regular channel raiſed upon a ſort of wall of ſcoriæ and cinders, almoſt perpendicularly, of about the height of eight or ten feet, and reſembling an ancient aqueduct. On quitting this fountain of lava, they went quite up to the crater, where as uſual they found a little mountain throwing up ſtones and red-hot ſcoriæ with loud exploſions; but the ſmoke and ſmell of ſulphur were ſo intolerable, that they were obliged to quit the place with precipitation.

By the great eruption in Auguſt 1779, the curious channels above-mentioned were entirely deſtroyed, the cone of the mountain was covered with a ſtratum of lava full of deep cracks, from whence continually iſſued a ſulphureous ſmoke that tinged the ſcoriæ and cinders with a deep yellow, or ſometimes white, tint. The lava of this eruption appeared to be more perfectly vitrified than that of any former one he had obſerved. The pores of the freſh lava were generally full of a perfect vitrification; and the ſcoriæ themſelves, viewed through a magnifying-glaſs, appeared like a confuſed heap of filaments of foul vitrification. When a piece of the ſolid lava had been cracked in its fall, without ſeparating entirely, fibres of perfect glaſs were always obſerved reaching from ſide to ſide within the cracks. The natural ſpun-glaſs which fell in ſome places along with the aſhes of this eruption, and which has likewiſe been obſerved in other places, he is of opinion muſt have proceeded from an operation of the kind

juſt mentioned; the lava cracking and ſeparating in the air at the time of its emiſſion from the crater, and by that means ſpinning out the pure vitrified matter from its pores or cells; the wind at the ſame time carrying off the filaments of glaſs as faſt as they were produced.

Our author obſerved a kind of pumice-ſtone ſticking to ſome very large fragments of the new lava. On cloſe inſpection, however, he found that this ſubſtance had been forced out of the minute pores of the ſolid lava itſelf; and was a collection of fine vitreous fibres or filaments confounded together at the time of their being preſſed out by the contraction of the large fragments of lava in cooling, and which had been bent downwards by their own weight. "This curious ſubſtance (ſays he) has the lightneſs of a pumice, and reſembles it in every reſpect, except that it is of a darker colour."

When the pores of this lava were large, and filled with pure vitrified matter, the latter was ſometimes found blown into bubbles on the ſurface; probably by the air which had been forced out at the time the lava contracted itſelf in cooling; and from theſe thin bubbles it appeared, that this kind of volcanic glaſs has much the ſame tranſparency with our common glaſs bottles, and like them is of a dirty yellow colour; but, when large pieces of it were broken off with a hammer, they appeared perfectly black and opaque. In the lava of this eruption it was obſerved, that many detached pieces were in the ſhape of a barley-corn or plum-ſtone, ſmall at each end, and thick in the middle. Some of theſe did not weigh above an ounce; but others could not be leſs than ſixty pounds. Our author took them to be drops from the liquid fountain of fire, which might naturally acquire ſuch a form in their fall. There were alſo many other curious vitrifications, different from any he had ſeen before, mixed with this huge ſhower of ſcoriæ and maſſes of lava.

In treating of Mount Etna, M. Houel makes mention of a piece of lava which, after having been once ejected by the volcano, was ſwallowed up, and thrown out a ſecond time. The intenſe heat to which it was then ſubjected, had ſuch an effect upon it, that it appeared all full of chinks to a conſiderable depth, and running at right angles to one another. He had alſo an opportunity of obſerving to great advantage ſome of the hollow channel formed by the lavas of Etna, ſimilar to thoſe deſcribed by ſir William Hamilton, but on a much larger ſcale. Here the great eruption of water in 1755 had overturned, in a vertical direction, a huge tube of this kind for the length of half a mile. The tube itſelf appeared to be compoſed of enormous maſſes, ſomewhat reſembling planks; each two feet thick and twelve or fifteen in breadth, continued in a ſtraight line through the whole of that ſpace. At the ſame time, by the action of the lava, a kind of walls had been formed, from ten to ſixteen feet in height, and curved at the top. Some of theſe walls appear rolled together like paper; and M. Houel is of opinion, that theſe various appearances on the ſurface of the lava when cooled, muſt have ariſen from particles heterogeneous to the real lava; and which detach themſelves from it, riſing to the ſurface under a variety of forms proportioned to the ſpaces of time taken up in cooling. Theſe cruſts are formed of different kinds of ſcoriæ and dirty lava, mixed with ſand or aſhes. At the ſame place are alſo found great numbers of ſmall pieces like thoſe of ice heaped upon one another after having floated for ſome time on a river. Beneath theſe the pure lava is met with, and which has evidently been in a ſtate of perfect fuſion. This is extremely denſe; and by looking narrowly into its chinks, the compoſition of the whole appears to be merely homogeneous. "It is curious (ſays he) to obſerve, ſo near one ſpecies of lava which is very pure, another which has likewiſe arrived at the ſame place in a fluid ſtate, and has there undergone ſo great a change as ſcarcely to retain an appearance of its original ſtate. It is, however, like iron droſs, in grains of unequal ſizes. We find it alſo at various diſtances, ſuch as one, two, or more, hundred fathoms. It is ſometimes found in large pieces like tables, covered over with ſharp points, ſome longer and others ſhorter. All theſe pieces are quite detached from one another, as if they had been brought thither and ſcattered from a tumbril. The matter of which the cruſt of the lava is formed, ſeems to have iſſued from it in the ſame manner in which froth riſes upon ſolution of ſoap in water. It appears afterwards to have ſwelled, burſt, and aſſumed its preſent form, preſenting to the view various ſpaces filled with ſmall looſe ſtones. A great number of new lavas were likewiſe obſerved, all of them putting forth various kinds of efflorescences in great quantity.

3. Lava ſcoriacea, ſpongy lava, or ſcoria: veſicular, rough, ſhining internally, of a conchoidal texture. Found in ſtreams of volcanic lava, generally covering the L. compacta; black or brown, with often a mixture of heterogeneous matters; the ſurface appears full of empty bubbles, often diſpoſed in an undulate manner.

4. Lava poroſa, porous or cellular lava: opake, without luſtre, porous, lightiſh. Found in volcanic mountains and their neighbourhood, more rarely in thoſe which have been extinguiſhed, and ſeems rather to have been thrown from the crater than run over at the ſides; colour black or brown, ſometimes reddiſh-brown. It probably contains more carbonat of magneſia than the reſt, and is more ſubject to deſtruction than compact lava; its pores are larger near the ſurface than towards the centre.

5. Lava pumex, or pumice-ſtone: opake, without luſtre, parallel, fibrous, porous, light, rough. Found in the aſhes of moſt volcanic mountains, from whence it is waſhed down into the ſea. Colour grey, greyiſh-white, brown, or reddiſh, rarely yellowiſh; the fibres are generally parallel, more or leſs diſcernible, and have a ſilky luſtre; does not effervesce with acids, melts into a white enamel. Pumice may be conſidered as a looſe vitrified lava, entirely devoid of iron. The pores of pumice, when obſerved in the undivided maſs, are always in the direction of the current of the lava of which the pumice makes a part; in proportion as it is nearer or farther from the ſurface, the pumice is more or leſs porous; and the lowermoſt part of the bed is generally completely compact, and paſſes into the ſtate of a denſe glaſs. In ſome ſpecimens the complete tranſition from the one to the other ſtate may be traced by very delicate gradations.

There appears to be the ſame relation between compact and porous pumice that there is between compact and porous lava; the inferior part of a bed of lava being always compact, the ſuperior porous. The true pumice, (ſays M. Faujas de St. Fond,) which we ſhould be careful not to confound with the lighteſt lavas, keeps the midway between the volcanic glaſſes and the enamels; it generally derives its origin from a peculiar kind of vitrification of compact feldſpar, and ſome porphyritic rocks. Thoſe of Lipari and Vulcano are the only known volcanoes that have produced pumice in conſiderable quantity; the iſle of Lipari, in particular, is the vaſt magazine that furniſhes almoſt the whole of the immenſe ſtores of this ſubſtance, conſumed for the purpoſes of different arts, in almoſt all parts of Europe. This maſs of pumice is an aggregation of numerous beds, or ſtrata, of pumices, ſucceſſively placed on each other, diſtinguiſhable by their colour and by their projection from the mountain. Some of theſe pumices are ſo compact, that the ſmalleſt pore cannot be diſcerned, nor do they exhibit the leaſt trace of a filamentous nature. With a lens they appear to be an irregular accumulation of ſmall flakes of ice. Others are full of pores and vacuities of a larger ſize, uſually round; and their texture is formed by filaments and ſtreaks, generally parallel to each other, and of a ſhining ſilvery whiteneſs. Of theſe pumices there are three kinds, which the people of Lipari dig for ſale. One kind is employed in poliſhing different ſubſtances; and the other two kinds are uſed in the conſtruction of arched vaults, and the corners of buildings.

buildings. There are other kinds which merit the attention of the natural hiſtorian. In examining theſe pumices, Spallanzani obtained the following reſults:

	1ſt Species of Campo Bianco.	2d Species.	3d Species.	4th Species.	Pumice of the rock of the caſtle of Lipari.
Silex	60·3	80	80	61	63
Alumine	23	6	4	22·7	24
Magneſia	6	3	2	6	5·6
Lime	6	4·7	4	5·8	3
Iron	3	4·8	5·3	3	2

6. Lava ſpuria, or baſtard lava: originating from ſubſtances which have been ignited by burning ſtrata of foſſil coals. Found in Bohemia, near Berlin, Seidſchuz, Laun, and Loboſan, in Waſſovia near Datweiler, in Hungary on Mount Schater; porous or compact, more or leſs ponderous; of a reddiſh, cinereous, black, blue, iron, ſteel, or irideſcent, colour.

LA'VA, in geography. See LAUB.

LAUA'CA, a ſmall iſland near the ſouth coaſt of Sardinia. Lat. 39. 4. N. lon. 8. 36. E.

LAVA'CRUM, in botany, a name given by ſome authors to the common wild teaſel, or DIPSACUS *ſylveſtris*.

LAVADE'RO, *ſ.* [Spaniſh.] A name given to certain places in Chili and Peru, where gold is got out of earth by waſhing. M. Frezier gives us the following deſcription of the *lavaderos*, or lavatories, of Chili: They dig deep into the earth, in ſuch places as they have reaſon to expect gold in; and, in order to facilitate this digging, turn a ſtream of water upon the ſpot, looſening the earth as much as poſſible all the time, that the current may have the greater effect, and tear up the earth more ſtrongly. When they are got to the earth they want, they turn off the ſtream, and dig dry. The earth that they now get is carried on mules, and diſcharged into a baſon made ſomewhat in the manner of a ſmith's bellows; into which a rivulet of water runs with great rapidity, diſſolving the parts of the earth, and carrying every thing away with it, excepting the particles of gold, which, by their great weight, precipitate to the bottom of the baſon, and mix with fine black ſand, where they are almoſt as much hidden as they were before in the earth. Sometimes they find very conſiderable pieces, particularly pieces of twenty-four ounces each. There are ſeveral lavaderos, where they find *pepitas*, or pieces of virgin gold, of a prodigious ſize. Among others, they tell of one that weighed 512 ounces, bought by the count de la Moncloa, viceroy of Peru.

Nine or ten leagues to the eaſt of Coquimbo, are the Lavaderos of Andacoll, the gold whereof is twenty-three carats fine. Their works here always turn to great profit, excepting when the water fails them. The natives maintain that the earth is *creative*, that is, it produces gold, continually; becauſe, after having been waſhed ſixty or eighty years, they find it impregnated afreſh, and draw almoſt as much out of it as at firſt.

LAVA'GNA, a river which riſes in the Apennines, and runs into the ſea near the town of Lavagna.

LAVA'GNA, a ſeaport town of Genoa, at the mouth of a river of the ſame name: fourteen miles weſt-north-weſt of Brugneto.

LAVAL', a city of France, and capital of the department of the Mayenne, ſituated on the river Mayenne, containing about 18,000 ſouls. Here are ſeveral manufactures of linen in the town and environs, which form a very conſiderable commerce: 9½ poſts eaſt of Rennes, 34¾ weſt-ſouth-weſt of Paris. Lat. 48. 5. N. lon. 0. 41. W.

LAVAL' ALGE'RE, a town of France, in the department of the Lozerre: nine miles north-weſt of Lagogne.

LAVAMEN'TUM, *ſ.* [from the Lat. *lavo*, to waſh.] A fomentation. *Scott.*

LAVAMUN'D, a town of Carinthia, on the Drave: twenty-four miles eaſt of Clagenfurt, forty weſt of Marburg. Lat. 46. 44. N. lon. 14. 37. E.

LAVAMUN'TER A'BEN, a mountain of Carinthia: four miles north of Lavamund.

LAV'AN SAN'DS, ſands on the north coaſt of Wales, between the iſland of Angleſey and the county of Caernarvon, eaſt of Beaumaris.

LAVAN'DULA, [*à lavando*; from its uſe in fomentations and baths.] LAVENDER; in botany, a genus of the claſs didynamia, order gymnoſpermia, natural order of verticillatæ, (labiatæ, *Juſſ. Tournef.* &c.) The generic characters are—Calyx: perianthium one-leafed, ovate: mouth obſcurely toothed, ſhort, permanent, ſupported by a bracte. Corolla: one-petalled, ringent, reſupine; tube cylindric, longer than the calyx; border ſpreading; one lip looking upwards, larger, bifid, ſpreading; the other lip looking downwards, triſid; diviſions all roundiſh, nearly equal. Stamina: filaments four, ſhort, within the tube of the corolla, deflected, of which two are ſhorter. Antheræ ſmall. Piſtillum: germ four-parted; ſtyle filiform, length of the tube. Stigma two-lobed; obtuſe, converging. Pericarpium none; calyx converging with the mouth and guarding the ſeed. Seeds four, obovate. —*Eſſential Character.* Calyx ovate, obſcurely toothed, ſupported by a bracte; corolla reſupine; ſtamina within the tube.

Species. 1. Lavandula ſpica, or common lavender; conſiſting of, *α*. L. anguſtifolia, or narrow-leaved lavender; and *β*. L. latifolia, or broad-leaved lavender: leaves ſeſſile, lanceolate-linear; rolled back at the edge; ſpike interrupted, naked. Root perennial, thick, woody. Stem ſhrubby, much branched, frequently five or ſix feet high, four-cornered, acute-angled, tomentoſe. Leaves numerous, blunt, hoary, the upper ones ſeſſile, the lower petioled. The flowers are produced in terminating ſpikes from the young ſhoots, on long peduncles; the ſpikes are compoſed of interrupted whorls, in which the flowers are from ſix to ten, the lower whorls more remote; each flower upright, on a ſhort pedicel; the common colour of the corolla is blue, but it varies with white flowers. The whole plant is covered with a down compoſed of forked hairs.

β. Broad-leaved lavender has much ſhorter and broader leaves, and the branches are ſhorter, more compact, and fuller of leaves. It will continue ſeveral years without producing flowers; and, when it does, the leaves on the flowering ſtalks approach nearer to thoſe of the common lavender, *α*; but are ſtill broader. The ſtalks grow taller, the ſpikes are looſer and larger, the flowers ſmaller, and appear a little later in the ſeaſon. Gerard obſerves, that this variety has not only broader leaves, but two oppoſite branches at the bottom of the ſtem, and paler-coloured flowers. This alſo varies with the corolla entirely white.

Native of the South of Europe, on mountains, by wayſides, and in barren places; Aſia, and Africa. It flowers here from July to September, and was cultivated in 1568, as appears from Turner.

Lavender is a plant which has long been celebrated for its virtues in nervous diſorders. According to Dr. Cullen, it is, "whether externally or internally, a powerful ſtimulant to the nervous ſyſtem; and amongſt others of this order, named cephalics, the lavender has a very good, and perhaps the beſt, title to it." And he farther ſays, "It appears to me probable that it will ſeldom go farther than exciting the energy of the brain to a fuller impulſe of the nervous power into the nerves of the animal functions, and ſeldom into thoſe of the vital." It may however be with great propriety that profeſſor Murray has diſſuaded its uſe where there is any danger from a ſtimulus applied to the ſanguiferous ſyſtem. It is however ſtill probable that lavender commonly ſtimulates the nervous ſyſtem only, and therefore may be more ſafe in palſy than the warmer aromatics, eſpecially if the lavender be not given in a ſpirituous menſtruum, or along with heating aromatics, which however is commonly done. The officinal preparations of lavender are the eſſential oil, a ſimple ſpirit, and a compound tincture. The eſſential oil

has been uſed for ſtimulating paralytic limbs, and for ſeveral external purpoſes.

2. Lavandula ſtœchas, or French lavender: leaves ſeſſile, linear, tomentoſe, rolled back at the edge; ſpike contracted, comoſe; bractes ſubtrilobate. French lavender, or purple ſtœchas, has a low, thick, ſhrubby, ſtalk, about two feet high, ſending out woody branches the whole length. Leaves about an inch long, hoary and pointed, of a ſtrong aromatic ſcent, oppoſite at each joint, with ſmaller leaves of the ſame ſhape coming out at the ſame places. The branches are terminated with ſcaly ſpikes of purple flowers, four-cornered, and an inch in length; and at the top a coma, or ſmall tuft, of purple leaves. The whole plant has a very ſtrong, aromatic, agreeable, odour. When it begins to flower, there are only four flowers in a whorl; but theſe are afterwards increaſed by the lateral gems, till it becomes gradually round. Native of the South of Europe; flowers from May to July.

β. L. ſtœchas pedunculata. In this variety the peduncles are three times the length of thoſe in the common ſtœchas, and naked. The ſpikes are longer, and not ſo thick; and the leaves of the coma are more numerous, longer, and of a brighter purple colour. Both theſe vary to purple, and white in the corolla; but the moſt common colour is blue.

3. Lavandula viridis, or Madeira lavender; leaves ſeſſile, linear, wrinkled, villoſe, rolled back at the edge; ſpike comoſe; bractes undivided. This differs from the preceding by its wrinkled villoſe leaves, which are green, and not hoary; the bractes alſo and coma are green and entire, not purple and ſubtrilobate. Found in the iſland of Madeira by Maſſon. Introduced in 1777; flowers from May to July.

4. Lavandula dentata, or tooth-leaved lavender: leaves ſeſſile, linear, pectinate-pinnate; ſpike contracted, comoſe. This has a woody ſtalk two or three feet high, with four-cornered branches on every ſide the whole length. Leaves oppoſite, about an inch long, and an eighth of an inch broad, indented regularly on both ſides almoſt to the midrib, of a greyiſh colour, a pleaſant aromatic odour, and a biting warm taſte. The flowers are produced in ſcaly ſpikes, at the ends of the branches, upon long naked peduncles. The ſpikes are four-cornered, hairy, and about an inch long, terminated by a few purpliſh leaves. Native of Spain and the Levant; cultivated in 1597, as appears from Gerarde; flowers from June to September.

5. Lavandula pinnata, or pinnated lavender: leaves petioled, pinnate; leaflets wedge-form; ſpike imbricate. This is a low very-branching ſhrub, with a browniſh bark. Calyx of the flower pale green or hoary; corolla purple or pale violet, with a hairy throat, an upright tube twice the length of the calyx, and the upper lip double the length of the lower. The flowers have a ſweet ſmell; but the leaves have very little ſmell or taſte. Native of Madeira, where it was found by Francis Maſſon; flowers from April to October.

6. Lavandula multifida, or jagged lavender: leaves petioled, pinnate; leaflets decurſively pinnatifid; ſpike quadrangular; angles ſpiral. This is an annual (or rather a biennial) plant, with an upright branching woolly ſtalk two feet high. Leaves hoary, oppoſite, cut into many diviſions to the midrib: theſe ſegments are again divided on their borders towards the top into three blunt ones, ſo that they end in many points. The peduncle is continued from the end of the branch, is naked, and about ſix inches long, quadrangular, and terminated by a cloſe ſpike of flowers about one inch long: the rows of flowers are twiſted ſpirally. The corolla varies from blue to white. Seeds roundiſh, ſmall, bay-coloured, convex on one ſide, obſcurely angular on the other, obliquely truncate at the baſe, and marked with a very wide white umbilical area. Native of Spain. Cultivated in 1597, as appears from Gerarde.

β. L. multifida Canarienſis, or Canary lavender. This riſes with an upright branching ſquare ſtalk, four feet high. Leaves longer, and cut into narrower ſegments, than the Spaniſh plant: they are of a lighter green, and almoſt ſmooth: the naked flower-ſtalk is alſo much longer, and terminated with a cluſter of ſpikes of blue flowers; at two or three inches below theſe are two ſmall ſpikes, one on each ſide. The flowers are ſmaller than thoſe of common lavender. Native of the Canary Iſlands, whence the ſeeds were ſent to Compton biſhop of London, in whoſe garden at Fulham the plants were firſt raiſed.

7. Lavandula carnoſa, or thick-leaved lavender: leaves petioled, ovate-cordate, ſerrate, fleſhy; ſpike four-cornered; calyxes recurved. This ſpecies does not coaleſce kindly with the reſt; but the bilabiate calyx and the reſupine corolla evidently place it here. Native of the Eaſt Indies, (where it was obſerved by Koenig near Sadraſs on very arid rocks and walls, and by Rheede in the ſands of Malabar.) It was introduced in 1778 by ſir Joſeph Banks, and flowers in June. This, as well as the laſt, is a biennial plant.

Propagation and Culture. Common lavender is propagated by cuttings or ſlips, planted in March in a ſhady ſituation, or in a border where they may be ſhaded by mats until they have taken root; after which they may be expoſed to the ſun; and, when they have obtained ſtrength, remove them to the places where they are to remain. Theſe plants will abide much longer in a dry gravelly or ſtrong ſoil, in which they will endure our ſevereſt winters; but they will grow much ſaſter in ſummer, on a rich light moiſt ſoil, but then they are generally deſtroyed in winter, nor are the plants ſo ſtrong ſcented, or fit for medicinal uſes, as thoſe which grow on a barren rocky ſoil. It was formerly in uſe to make edgings to borders, but it grows too large for the purpoſe; if often cut in dry weather it is ſubject to decay, and in hard winters ſome of the plants will be killed; it ſhould be planted therefore in beds in the kitchen-garden where the ſoil is drieſt. On account of its odour, however, plants of it ſhould be interſperſed among low ſhrubs and large herbaceous plants in the borders of large gardens and plantations.

Purple ſtœchas, ſo called on account of its being found on the iſlands called Stœchades, may be cultivated by ſowing the ſeeds upon a bed of light dry ſoil in March; when they come up, clear them from weeds until they are two inches high, and then remove them. For this prepare a ſpot of light dry ground, lay it level, and tread it out into beds, into which ſet the plants at five or ſix inches diſtance every way; watering and ſhading them until they have taken root. If the winter ſhould prove ſevere, cover them with mats, peaſe-haulm, or other light covering, to guard them againſt the froſt. In March, or the beginning of April, the following ſpring, remove them into the places where they are to remain; taking a warm moiſt ſeaſon, if poſſible, for this purpoſe, and not letting them remain long above ground. The ſoil ſhould be a dry warm ſand or gravel; and, the poorer the ſoil is, the better will this plant endure the cold of winter. In a rich moiſt ground it will not produce ſo many flowers, nor will they have ſo ſtrong an aromatic ſcent. It may alſo be increaſed by ſlips or cuttings; but the ſeeds ripen well in this country, and plants raiſed from theſe are much better.

Tooth-leaved lavender, and ſome of the others, ſeldom producing ſeeds in England, are propagated by ſlips or cuttings, planted in April, and treated as directed for the preceding ſorts. Theſe will take root very freely, but muſt be tranſplanted into pots, that they may be ſheltered from ſevere froſt in winter, eſpecially whilſt young. When they have obtained ſtrength, ſome may be planted in a warm ſituation, on a dry ſoil, where, being prevented from growing too vigorouſly, they will endure the cold much better than in richer ground. Jagged lavender, or jagged ſticados, as Gerarde calls it, may be ſown in a border of light earth in the ſpring, and tranſplanted into the borders of the flower-garden or into pots.

LAVATER.

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They may be preſerved through the winter in a greenhouſe; but, never continuing longer than two years, they are generally raiſed from ſeed every ſeaſon. The variety from the Canary Iſlands is more tender. Sow the ſeeds on a moderate hot-bed in the ſpring. When the plants come up, put each into a ſeparate ſmall pot filled with light earth. Plunge the pots into another hot-bed; and in the beginning of June inure them to the open air, and towards the end of the month place them in a ſheltered ſituation. In July the plants will flower, and if the autumn prove warm, the ſeeds will ripen in September: but when they do not perfect ſeeds, the plants may be preſerved through the winter in a good greenhouſe, where they will produce flowers and ſeeds moſt part of that ſeaſon. See VERBENA.

LAVAN'GE, one of the Virgin Iſlands, in the Weſt-Indies: three miles ſouth-eaſt from the iſland of St. Thomas.

LAVANSAA'RI, an iſland of Ruſſia, on the coaſt of Livonia, eighty miles from the capital, four miles and a half long, and two broad, ſurrounded on the north-weſt ſide by iſlets and ſhallows, having three tolerable harbours, and occupied by about forty families. Some patches of ſoil are cultivated; and in the middle of the iſland is a ſmall lake.

LAV'ANT, a river of England, in the county of Suſſex, which runs into the ſea about five miles below Chicheſter.

LAV'ANT, a river of Carinthia, which runs into the Drave at Lavamund.

LAV'ANT SE'E, a lake of Stiria: nine miles eaſt of Neumarck.

LAVA'RA, in ancient geography, a town of Hiſpania, in the interior of Luſitania. *Ptolemy.*

LAVARDAC', a town of France, in the department of the Lot and Garonne, and chief place of a canton, in the diſtrict of Nérac. The place contains 928, and the canton 9482, inhabitants, on a territory of 182½ kilometres, in 13 communes.

LAVAR'DENS, a town of France, in the department of the Gers: ſeven miles north-north-weſt of Auch, and thirteen ſouth-ſouth-eaſt of Condom.

LAVAR'DIN, a town of France, in the department of the Sarte: eight miles north-weſt of Le Mens.

LAVARE'DO, *ſ.* [from the Lat. *lavo*, to waſh.] A waſh; a place where gold is got out of the earth by waſhing. *Scott.* See LAVADERO, p. 281.

LAV'ARY, *ſ.* A lavatory; a place to waſh in. *Cole.*

LAVA'TER (Louis), a learned Swiſs proteſtant divine, was born at Kibourg, in the canton of Zurich, in the year 1527. He purſued his ſtudies at Cappel, and at Zurich; and afterwards travelled for further improvement into Germany, France, and Italy. On his return to his native country, he devoted himſelf to the work of the miniſtry; and, after having ſerved ſome time in a country church, was made canon of Zurich, and appointed one of the paſtors of that city. In the year 1554, he was choſen ſucceſſor to Bibliander, in the office of profeſſor of divinity; but he declined the appointment, from its interference with the duties of his paſtoral charge, to which he gave the preference. In theſe he ſpent thirty-ſix years of his life, ſuſtaining a high reputation for diligence, eloquence, and learning. He died in 1586, when he was about fifty-nine years of age. He was the author of various theological and controverſial works, which are held in eſteem by the Calviniſts; and, among others, of, 1. Commentaria in Lib. Joſuæ, in Eccleſiaſten Salomonis, in Lib. II. Paraleip, fol. 2. Homiliæ in Lib. Jobi, in Prov. Solomonis, in Lib. Ruth, in Ezechielem, fol. 1581–1586. 3. De Ritibus Eccleſiæ. 4. Cometarum Catalogus. 5. Vita Henrici Bullinger. 6. De Origine et Progreſſu Controverſiæ Sacramentariæ, 4to. 1563. 7. De Spectris, Lemuribus, et magnis atque inſolitis Fragoribus, &c. 8vo. 1580. The piece laſt mentioned is a very learned and curious treatiſe, in defence of the exploded doctrine of apparitions, diabolical deluſions, preſages, &c. which has been frequently printed, and tranſlated into the German, Dutch, French, and Italian, languages. *Melchoir. Adam. Vit. Germ. Theol.*

LAVA'TER (John Gaſpard Chriſtian), a writer of much temporary fame, was born at Zurich in 1741. He was brought up to the proteſtant miniſtry, and entered into holy orders in 1761. For ſome years he was paſtor of the orphans' church, Zurich; but from 1778 he filled the offices of deacon and paſtor at St. Peter's church in the ſame place. He acquired an early reputation by the eloquence of his pulpit-diſcourſes, and the zeal and benevolence with which he fulfilled the duties of his functions. Endowed by nature with great ſenſibility and a warm imagination, he ſtood upon the verge of fanaticiſm and myſticiſm. He had, however, a very acute diſcernment of characters; and, though little learned in books, poſſeſſed an extenſive knowledge of human nature. His theological and miſcellaneous writings in proſe and verſe are ſcarcely known beyond the limits of the German language; and it is only by his works on *phyſiognomy* that he has acquired a name throughout literary Europe. According to his own narrative, he felt an early propenſity to read the human countenance, and frequently exerciſed the pencil in ſketching ſuch features as had made a particular impreſſion upon him, which he ſtudied with attention. He had, however, entered into no regular reſearches on the ſubject, till, ſtanding once at the window with Dr. Zimmerman, the king's phyſician at Hanover, ſome remarks which he was led to make on the ſingular countenance of a paſſing ſoldier induced that medical philoſopher to urge him to purſue and methodiſe his ideas. He afterwards held a correſpondence with Dr. Zimmerman on the ſubject; and, in proceſs of time, with the natural progreſs of an enthuſiaſtic mind, acquired not only a fondneſs for the ſtudy, but a full conviction of the reality of phyſiognomical ſcience, and of his own diſcoveries in it. The firſt fruits of his labours appeared in a quarto volume, written in German, and printed at Leipzic in 1776. As the author profeſſed to be no more than a tiro in the ſcience, he modeſtly ſtyled the twenty ſections of which, excluſive of prefaces and introductions, it was compoſed, *fragments*. He took in them a wide range of inquiry, and diſplayed many acute and ingenious ſpeculations on human nature, with much of the fanciful and hypothetical. He carried his ideas of phyſiognomy beyond the obſervation of thoſe parts of the countenance which exhibit to a common eye the impreſſions of mental qualities and affections; and maintained as a leading poſition, "that the powers and faculties of the mind have repreſentative ſigns in the *ſolid* parts of the countenance." He even extended this notion through all animated nature, and conceived that internal qualities univerſally denote themſelves by external tokens. This was only the firſt part of a work, of which two more volumes appeared in ſucceſſion, and which preſented a moſt extraordinary aſſemblage of curious obſervation, ſubtle and refined reaſoning, delicate feeling, and philanthropical and pious ſentiment, together with a large admixture of paradox, myſticiſm, whim, and extravagance. The whole was illuſtrated with a great number of engravings, many of them highly finiſhed and ſingularly expreſſive, but many fanciful and little to the purpoſe. The work was difficult of comprehenſion in its native German, on account of the new phraſeology which the author found neceſſary to expreſs his novel ideas. It was, however, well tranſlated into French and Engliſh, and for a time became the favourite topic of literary diſcuſſion. It met with many enthuſiaſtical admirers, who received its principles as demonſtrations; it is even ſaid that in Germany, for a time, a ſervant could ſcarcely be hired, the lines of whoſe face did not correſpond with thoſe of favourable import in Lavater's plates. In France, his opinions were received with great avidity by the ladies, and formed the moſt intereſting topic of polite converſation. No diſtinguiſhed

foreigner

foreigner paſſed through Zurich without obtaining an interview with Lavater, and procuring his judgment of ſome character from a ſhade or miniature. On theſe occaſions the philoſopher ſometimes appears to have employed a little quackery, although candour and ſincerity were the habitual qualities of his heart; but he was engaged in ſupport of a ſyſtem, and his reputation for ſagacity was at ſtake. Together with admirers he met with opponents, who attacked his doctrines both with argument and ridicule. The reſult has been, that, novelty and wonder having ceaſed, his bulky volumes are ſeldom looked at except for the plates; and the Lavaterian phyſiognomy is conſigned to neglect among the other chimerical ſciences. He indeed confeſſed, in one of his books, that his wife, though totally unacquainted with his ſcientific rules, was rendered, by a natural turn for obſervation, a much better phyſiognomiſt than himſelf. One of the beſt known of his miſcellaneous writings is his Aphoriſms on Man, of which an Engliſh tranſlation from his original manuſcript was publiſhed in 1788. Theſe aphoriſms contain much originality of ſentiment and expreſſion, with many deep and philoſophical views of human nature; but ſometimes obſcure and bordering on extravagance, as well as tinged by the writer's peculiar notions.

Lavater was zealouſly attached to the Chriſtian revelation, and tranſlated "Bonnet's Enquiry into the Evidences of Chriſtianity" into the German language. This he thought proper to dedicate to the famous Jewiſh philoſopher, Moſes Mendelſohn, with a call upon him either publicly to refute it, or to profeſs his conviction of the truth of its arguments. A very excellent reply of Mendelſohn produced a fair confeſſion from Lavater, that his zeal had miſled him, and that his challenge was inconſiderate. He afterwards gave way to a devotional myſticiſm, which offended the orthodox, but procured him many votaries; and it is affirmed that he was the centre of an inviſible church, whoſe members extended from Naples to Conſtantinople, and who reſpected him as their founder and prophet. His popularity as a preacher and paſtor was extremely high at Zurich, where it was common in his walks for the people to flock about him and kiſs his hand in token of reſpect, and where he was applied to by all ranks as the decider of controverſies among them. His moral character was moſt exemplary, and his ardent zeal for doing good was ſcarcely ever ſurpaſſed. Though full of fire and ſenſibility, he was mild and moderate in converſation, and extremely candid in his eſtimate of thoſe who differed from him. His mode of living was ſimple. He roſe early, and never took his breakfaſt till he thought he had earned it. The multiplicity of buſineſs which he diſpatched was indeed wonderful. No man was ever a more determined oppoſer of tyranny and intolerance in every ſhape; and he had the true Swiſs zeal for liberty. This ſpirit rendered him a friend to the French revolution at its commencement; but, when the republican rulers began to diſplay their ſyſtem of rapine and extortion, and to extend it to Switzerland, he was the boldeſt of their antagoniſts. He wrote at that period an energetic appeal to the French government; and never ceaſed to proclaim the rights of his countrymen, till he was torn from his congregation as a preacher of ſedition, and ſent as a hoſtage to Schaffhauſen. He afterwards returned to Zurich; and, on the day when that unfortunate city was ſtormed by the troops of Maſſena, in the autumn of 1799, he ruſhed into the ſtreet, and received a ſevere wound in the breaſt from a Swiſs ſoldier on whom he had formerly conferred ſeveral benefits. From the effects of this wound he never entirely recovered; and he brought on a return of his ſymptoms by attending for above an hour, in the open air, a man condemned to be ſhot as a ſpy. The activity of his mind was, however, unſubdued till a ſhort time before his death, which happened on the 2d of January, 1801, in the ſixtieth year of his age. *Monthly Rev. Ann. Regiſt.*

LAVATE'RA, *ſ.* [ſo named by Tournefort from *Lavater*, a phyſician at Zurich. We have none of his writings.] TREE-MALLOW, &c. in botany, a genus of the claſs monadelphia, order polyandria, natural order of columniferæ, (malvaceæ, *Juſſ.*) The generic characters are—Calyx: perianthium double; exterior one-leafed, trifid, obtuſe, ſhort, permanent; interior one-leafed, half five-cleft, more acute, more erect, permanent. Corolla: petals five, obcordate, flat, ſpreading, affixed below to the tube of the ſtamens. Stamina: filaments numerous, coaleſcing below into a tube; looſe above, gaping at the tip and ſurface of the tube; antheræ reniform. Piſtillum: germ orbicular; ſtyle cylindric, ſhort; ſtigmas ſeven to fourteen, briſtly, length of the ſtyle. Pericarpium: capſule orbicular, compoſed of as many cells as there are ſtigmas, bivalve, and articulated in a whorl round the columnar receptacle, at length falling off. Seeds: ſolitary, reniform.—*Eſſential Character.* Calyx double, outer trifid; arils very many, one-ſeeded.

Species. 1. Lavatera arborea, or tree-mallow: ſtem arboreous, leaves ſeven-angled, hairy, plaited; peduncles cluſtered, one-flowered, axillary; outer calyxes larger. Tree-mallow, or mallow-tree, riſes with a ſtrong thick ſtalk the height of eight or ten feet (in gardens), dividing into many branches at the top. In its wild ſtate, when largeſt, from four to ſix feet high, and as much as four inches in diameter. Leaves alternate, numerous, cordate, roundiſh; ſome five and others three angled, the angles blunt, ſoft as velvet, ſhorter than the petioles. Flowers moſtly in pairs, ſometimes three together, on upright peduncles an inch and half in length; corolla purpliſh red, with dark blotches at the baſe, ſpreading-bell-ſhaped, (like that of the common mallow,) an inch or more in diameter; petals broader at top, narrow at the baſe, ſo that the calyx appears between the claws; cylinder of filaments purple, woolly at the baſe; germ very ſmooth; ſtyle uſually eight-cleft at top; ſtigmas revolute, reddiſh. Seeds kidney ſhaped, aſh-coloured. Native of Italy, the Levant, and Britain. With us it is ſmaller than it appears in the gardens; and is found at Hurſt caſtle, Portland iſland, Denny iſland near Briſtol, in Cornwall and Devonſhire; Teignmouth; rocks of Caldey iſland; Angleſey, &c. in Wales; Baſſe-iſlands, near Edinburgh; Inch-Garvey and Mykrie-Inch, in the Firth of Forth. It flowers from June or July to September or October.

Ray, Moriſon, and others, diſtinguiſh ours from the Italian plant; the leaves of ours being ſmaller, more hoary on the upper ſurface, and the upper ones more angular; the flowers not ſo large, and of a paler red colour. Moriſon found it growing plentifully on the iſland of Pierre Percé on the coaſt of Bretagne.

2. Lavatera micans, or ſhining tree-mallow: ſtem arboreous; leaves ſeven angled, acute, crenate, plaited, tomentoſe; racemes terminating. Leaves ſoft, waving on the edge, with brimſtone-coloured micæ, ſhining in the ſun on the upper ſurface. Stems from two to three feet in height. Native of Spain and Portugal.

3. Lavatera olbia, or downy-leaved lavatera: ſtem ſhrubby; leaves five-lobed-haſtate; flowers ſolitary. Stem round, branched, five feet high, villoſe at top, reddiſh; leaves ſoft, whitiſh, tomentoſe, unequally ſerrate. Linnæus obſerves, that the leaves of the firſt year are very large, and thoſe of the following years much ſmaller, which is a circumſtance common to this with other plants of the ſame natural order. It bears a great reſemblance to the next ſpecies: but in this the flowers are ſolitary, on a very ſhort peduncle; and the outer calyx is acuminate, almoſt three-parted, the length of the inner. Native of the South of France. It flowers from June to October. Cultivated by Mr. Hugh Morgan in 1570, according to Lobel.

4. Lavatera triloba, or three-lobed lavatera: ſtem ſhrubby; leaves ſubcordate, ſubtrilobate, rounded, crenate; ſtipules cordate; peduncles one-flowered, aggregate. Stem round, branched, from three to four feet in height. Linnæus obſerves, that the whole plant is tomentoſe, being covered

covered with very ſmall glutinous hairs, with other larger ones ſtellate at top mixed among them. Native of France and Spain. It flowers from June to September. Cultivated by Mr. Miller in 1759.

5. Lavatera Luſitanica, or Portugueſe lavatera: ſtem ſhrubby; leaves ſeven-angled, tomentoſe, plaited; racemes terminating. Native of Portugal. Cultivated by Mr. Miller in 1748. It flowers in Auguſt and September.

6. Lavatera maritima, or ſea-ſide tree-mallow: ſtem ſhrubby; leaves cordate, roundiſh-lobed, crenate, tomentoſe; flowers ſolitary. Stem reddiſh, covered with bundles of hairs ſo ſmall as to ſeem dots of meal, branched, two feet high or more. Leaves on the older plants ſmall, ſomewhat plaited, five-nerved; on the younger plants and branches double the ſize, near two inches in diameter. Native of Spain and the ſouth of France. It flowers from July to September.

Cavanilles has another ſpecies (Diſſ. 282. t. 139.) which he names *L. Africana*, being a native of the northern part of Africa, as well as Spain. He ſays it is allied to L. maritima. The ſtem is ſhrubby, as in that, branched, covered with a ſhort down, compoſed of a web of hairs in bundles, and four feet in height. Miller has alſo a ſpecies under the name of *L. Africana*, which is an annual, and very different from this.

7. Lavatera Thuringiaca, or great-flowered lavatera: ſtem herbaceous; fruits naked; calyxes gaſhed. Stem five or ſix feet high, woolly, branched. Native of Sweden, Thuringia, Hungary, Tartary, in hedges. It flowers from July to September.

8. Lavatera Cretica, or Cretan lavatera: ſtem upright, lower branches diffuſed; peduncles cluſtered, one-flowered; leaves lobed, upper ones acute. Root annual, fibrous, of thick fibres a foot in length, with innumerable other capillary fibres. Stem round, rugged, five feet high, branched. Flowers axillary, about four together, on upright peduncles; corolla twice the length of the calyx, pale blue, with oblong emarginate petals. Fruit ſmooth, within the calyx; capſules ten, round a column terminated by a hemiſphere with a very ſmall point at top, diſappearing when the fruit is ripe, and leaving a hole in the middle of the capſules, which then turn black. Native of the iſland of Candia, or Crete. It flowers in July.

9. Lavatera trimeſtris, or common annual lavatera: ſtem herbaceous, rugged; leaves ſmooth; peduncles one-flowered; fruits covered with a ring. Root annual, white, with ſpreading beards. Stem round, two feet high, branched, the lower branches almoſt horizontal. Flowers ſolitary, axillary; corolla large, ſpreading, bell-ſhaped, pale fleſh-colour, with whitiſh lines; petals broader above, crenate, frequently rolled up, the edges of the claws deep purple. Fruit hemiſpherical, convex beneath, covered at top with a circular, concave, ſmooth, lid, or peltate umbrella: there are about twenty capſules in a whorl; they are brown, cloſed all round and not opening, with a longitudinal raiſed line along the back, elegantly marked on the ſides with flexuoſe ſtreaks drawn from the circumference to the centre. Native of the ſouth of Europe and the Levant. Cultivated in 1640, according to Parkinſon. It flowers from July to September.

This ſpecies varies much, and the varieties are conſtant. Hence Mr. Miller makes three ſpecies out of it: 1. L. althææfolia, a native of Syria, with an upright branching ſtalk, two feet high; the under leaves cordate-orbiculate, ſmooth, on long footſtalks; the upper divided into three acute lobes; the flowers on long peduncles from the axils, very large and ſpreading open, like thoſe of the marſh-mallow, of a pale red or roſe colour. There is a variety of it with white flowers. 2. L. Africana, t. 161. f. 2. of his figures; native of the Cape of Good Hope, whence the ſeeds were brought to Holland. This differs from the preceding in the ſhape of the leaves; the lower having angles, and the upper being arrow-pointed; the ſtalks are hairy, the flowers larger, and of a brighter-red colour. 3. L. trimeſtris is a native of Spain and Sicily. It riſes with ſlender ſtalks about two feet high, covered with a brown bark. The lower leaves are roundiſh, and the upper are angular, ſome of them arrow-pointed. The flowers are not half ſo large as either of the former, are of a pale red colour, and ſtand on ſhort peduncles. They are all annual herbaceous plants, flowering in July; and the ſeeds ripen in autumn.

Propagation and Culture. All the ſhrubby ſorts are eaſily propagated by ſeeds, which ſhould be ſown in the ſpring upon a bed of light earth; and, when the plants are about three or four inches high, they ſhould be tranſplanted to the places where they are deſigned to remain; for, as they ſhoot out long fleſhy roots which have but few fibres, they do not ſucceed well if they are tranſplanted after they are grown large. If the ſeeds of theſe plants are permitted to ſcatter on the ground, the plants will come up the following ſpring; and, when they happen to fall into dry rubbiſh, and are permitted to grow therein, they will be ſhort, ſtrong, woody, and produce a greater number of thoſe flowers than plants which are more luxuriant. As theſe plants continue a long time in flower, a few of each ſort may be allowed a place in all gardens where there is room. Several of theſe ſhrubby ſorts will laſt only two years with us, unleſs on dry ground, where they will endure three or four years, but ſeldom longer. Moſt of them require the protection of the greenhouſe, or at leaſt to have the ground about them covered with old tanner's bark to keep out the froſt in ſevere winters.

The annual ſorts are propagated by ſeeds: the ſeaſon for ſowing them is the end of March or the beginning of April, upon a bed of freſh light earth; and, when the plants are come up, carefully clear them from weeds; and, in very dry weather, now and then refreſh them with water. When they are about two or three inches high, tranſplant them into the places where they are deſigned to remain, which ſhould be in the middle of the borders in the flower-garden; for, if the ſoil is good, they will grow two or three feet high; in tranſplanting them, take them up very carefully, preſerving a ball of earth to their roots, otherwiſe they are apt to miſcarry; and alſo water and ſhade them until they have taken root, after which they will require no other care but to clear them from weeds, and to faſten them to ſtakes, to prevent their being injured by ſtrong winds. You may alſo ſow their ſeeds in autumn, and, when the plants are come up, tranſplant them into ſmall pots, which, towards the end of October, ſhould be placed in a common hot-bed frame, where the plants, being defended from ſevere froſts, will abide the winter very well; and, in the ſpring, ſhake them out of the pots, and plant them into larger, or elſe into the full ground, where they may remain to flower. The plants thus managed will be larger, and flower ſtronger and earlier, than thoſe ſown in the ſpring; and from theſe you will conſtantly have good ſeeds, whereas thoſe ſown in the ſpring ſometimes miſcarry.

LAVATE'RA AMERICA'NA. See SIDA ABUTILOIDES.

LAVA'TION, *ſ.* [*lavatio*, Lat.] The act of waſhing.—Such filthy ſtuff was by looſe lewd varlets ſung before the chariot on the ſolemn day of her *lavation*. *Hakewill.*—In antiquity, a feaſt of the Romans, in honour of the mother of the gods, inſtituted in memory of the day when the worſhip of Cybele was transferred from Phrygia to Rome, and celebrated on the 25th of March.

LAVATO'RIUM, *ſ.* A laundry, or place to waſh in. Applied to ſuch a place in the porch or entrance of cathedral churches, where the prieſt and other officiating members were obliged to waſh their hands before they proceeded to divine ſervice. See *Liber Statut. Eccl. Paul. London*, MS. *f.* 59.

LAV'ATORY, *ſ.* [from *lavo*, Lat.] A waſh; ſomething in which parts diſeaſed are waſhed.—*Lavatories*, to waſh the temples, hands, wriſts, and jugulars, do potently profligate and keep off the venom. *Harvey.*

LAV'ATRINE, *ſ.* A ſink; a place in a kitchen to waſh in. *Cole.*

LAVA'TRIS, in ancient geography, a place of Great Britain, mentioned in Antonine's 5th Iter, and ſuppoſed to be Bowes in Yorkſhire.

LAVAU'R, a town of France, and principal place of a diſtrict, in the department of the Tarn; before the revolution it was the ſee of a biſhop: nineteen miles north-weſt of Caſtres, and eighteen north-eaſt of Toulouſe. Lat. 43. 41. N. lon. 1. 53. E.

LAU'BACH. See LAYBACH.

LAU'BACH, a town of France, in the department of the Rhine and Moſelle: two miles north of Simmern, and thirty-ſeven weſt of Mentz.

LAU'BACH, a town of Germany, in the principality of Solms Laubach: forty miles north-eaſt of Mentz, and ſixteen eaſt-ſouth-eaſt of Wetzlar. Lat. 50. 32. N. lon. 8. 59. E.

LAU'BAN, or LU'BAN, a town of Luſatia, on the river Quieſs, ſurrounded by a wall and ſome baſtions. The inhabitants carry on a conſiderable trade in cloth and linen. In the years 1427 and 1431, it was laid waſte by the Huſſites: thirteen miles eaſt-ſouth-eaſt of Gorlitz, ſixty-two north of Dreſden, and ſeventy-two north-north-eaſt of Prague. Lat. 51. 7. N. lon. 14. 25. E.

LAU'BENDORF, a town of Germany, in the principality of Anſpach: three miles weſt-north-weſt of Langenzenn.

LAUBI'ES, a town of France, in the department of the Lozerre: twelve miles north of Mende.

LAUCH, a river of France, which runs into the Ill in the department of the Upper Rhine.

LAU'CHA, a town of Saxony, in Thuringia, on the Unſtrutt: thirty-two miles north-eaſt of Erfurt, and ſix north-weſt of Naumburg. Lat. 51. 14. N. lon. 11. 47. E.

LAUCH'ART, a river of Germany, which runs into the Danube one mile eaſt of Sigmaringen.

LAUCH'HEIM, a town of Germany, belonging to the Teutonic Knights: ten miles weſt of Nordlingen, and thirty-eight weſt of Stuttgart. Lat. 48. 50. N. lon. 10. 14. E.

LAUCH'STADT, a town of Saxony, in the territory of Merſeburg, with a medicinal ſpring: four miles weſt of Merſeburg, and eleven eaſt of Querfurt. Lat. 51. 26. N. lon. 12. 1. E.

LAUCHKISS'KEN, a town of Pruſſia, in Samland: twenty-five miles eaſt-north-eaſt of Königſberg.

LAUD (William), archbiſhop of Canterbury in the reign of Charles I. was the ſon of a clothier at Reading in Berkſhire, where he was born in the year 1573. Having been inſtructed in grammar-learning at the free-ſchool in that place, he was ſent to the univerſity of Oxford in 1589, where he entered of St. John's college; of which houſe he became a ſcholar in 1590, and fellow in 1593. In the following year he was admitted to the degree of B. A. and to that of M. A. in 1598, when he was grammar-reader. Anthony Wood tells us, that he was "at that time eſteemed, by all thoſe that knew him, a very forward, confident, and zealous, perſon." He was ordained deacon in 1600, and prieſt in 1601; and in the following year he read a divinity-lecture in his college. It was either in reading this lecture, or in ſome other of his chapel-exerciſes, that he maintained the conſtant and perpetual viſibility of the church of Chriſt, derived from the apoſtles to the church of Rome, and continued in that church, as in others of the eaſt and weſt, till the reformation. Dr. Abbot, at that time maſter of Univerſity-college, and vice-chancellor of the univerſity, traced it, on the contrary, from the Berengarians to the Albigenſes, from them to the Wickliffites, from theſe to the Huſſites, and from the Huſſites to Luther and Calvin. This oppoſition in ſentiment between Abbot and Laud occaſioned, in the courſe of the diſputes upon the ſubject, no little animoſity between them. In the year 1603, Mr. Laud was one of the proctors of the univerſity; and in the ſame year he was appointed chaplain to Charles Blount, earl of Devonſhire. In 1604 he took his degree of bachelor of divinity; and in the exerciſe which he performed on this occaſion, maintained, 1ſt, the neceſſity of baptiſm; 2dly, that there could be no true church without dioceſan biſhops. For the laſt poſition he was attacked by Dr. Holland, divinity-profeſſor, as one who endeavoured to create diſſenſion between the church of England and the foreign reformed churches; and, with reſpect to what he had advanced on the firſt, it was alleged, that the greateſt part of what he had ſaid was taken out of the works of cardinal Bellarmine. This circumſtance, notwithſtanding that it could afford no evidence of his general agreement in opinion with the cardinal, contributed, however, to ſtrengthen the ſuſpicions which were entertained of him by many of the univerſity, that he was ſtrongly inclined to popery; and, according to Heylin, Dr. Abbot "ſo openly branded him for a papiſt, or at leaſt very popiſhly inclined, that it was made almoſt a hereſy for any one to be ſeen in his company, and a miſpriſion of hereſy to give him a civil ſalution as he paſſed the ſtreets."

The firſt benefice which Mr. Laud obtained, was the vicarage of Stanford in Northamptonſhire, into which he was inducted in 1607; and in the following year he was preſented to the advowſon of North Kilworth in Leiceſterſhire. In the ſummer of that year he proceeded doctor of divinity; and ſoon afterwards, upon the death of the earl of Devonſhire, he was made chaplain to Richard Neile, biſhop of Rocheſter. For the ſake of being near his new patron, in 1609 he exchanged North Kilworth for the rectory of Weſt Tilbury in Eſſex, and in the following year was preſented by the biſhop to the living of Cuckſtone in Kent. He now reſigned his fellowſhip at Oxford, and ſettled at Cuckſtone; but, finding the ſituation of that place unfavourable to his health, he ſoon afterwards exchanged it for Norton, a benefice of leſs value, but in a better air. In the year 1611, a vacancy having taken place in the preſidentſhip of St. John's college, in Oxford, Dr. Laud proved the ſucceſsful candidate for that poſt; but not without conſiderable oppoſition. And it is ſaid, that Dr. Abbot, lately raiſed to the archiepiſcopal ſee of Canterbury, had employed his intereſt againſt him with the king; which would have proved fatal to his election, on an appeal made by ſome of his competitors to his majeſty, had not his immoveable friend biſhop Neile perſuaded the king to confirm it. Upon the recommendation of the ſame prelate, he was ſoon afterwards nominated one of his majeſty's chaplains. Having thus obtained an appointment at court, he flattered himſelf with hopes of great and immediate preferment; but his expectations were for ſome time diſappointed, owing, as he imagined, to the influence of archbiſhop Abbot. At length, after three years fruitleſs waiting, he was upon the point of retiring wholly from the court to his college; when his friend biſhop Neile, who was now tranſlated to the ſee of Lincoln, perſuaded him to ſtay one year longer. And in the mean time, to keep up his ſpirits, the biſhop gave him a prebend in the church of Lincoln, in 1614; and, in the following year, the archdeaconry of Huntingdon. In 1616, the king preſented Dr. Laud to the deanery of Glouceſter; and at the ſame time required him to reform and to ſet in order what was amiſs in that cathedral. He therefore haſtened to Glouceſter, where he found the church in great decay, and many things, in his opinion, out of order; particularly the communion-table ſtanding almoſt in the middle of the choir, contrary to the poſition of it in other cathedral churches, and in the king's chapel. Laud, conſidering the rectification of this indifferent circumſtance to be a matter of great importance, immediately called a chapter of the prebends; and, after laying before them the king's inſtructions, obtained their conſent for the ſpeedy repair of the church, and for placing the communion-table at the eaſt end of the choir, againſt the wall. When this alteration had been effected, he recommended, that the

LAUD, ABP OF CANTERBURY.

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members of that church ſhould make their humble reverence to God, not only at their firſt entrance into the choir, but at their approaches towards the holy table. Theſe changes gave great offence to many perſons, on account of their ſuperſtitious tendency; and particularly to Dr. Miles Smith, biſhop of Glouceſter, who from that time never entered the church again ſo long as he lived. In 1617, Dr. Laud procured ſome royal directions to be ſent to Oxford, for the better government of that univerſity; and, above all, with a view to prevent the further ſpreading of puritaniſm. In the ſame year, he had the honour of being appointed to attend the king in a journey to Scotland; when it was intended, among other things, to attempt to bring the church of Scotland to an uniformity with that of England: a favourite ſcheme of Laud, and other divines. But "the Scots were Scots," ſays Heylin, "and reſolved to go their own way, whatſoever came of it." So that the king gained nothing by this expenſive journey, but the neglect of his commands, and a contempt of his authority.

Upon his return out of Scotland, Dr. Laud was inducted into the rectory of Ibſtock in Leiceſterſhire, which he received from the biſhop of Rocheſter in exchange for Norton; and, in 1620, he was inſtalled into a prebend of Weſtminſter. In the following year he was nominated to the biſhopric of St. David's, though the king was at firſt averſe to grant him this dignity, but was prevailed on by the lord-keeper Williams, at the inſtigation of the favourite Buckingham, to whom Laud had recommended himſelf. On the day before his conſecration, he reſigned the preſidentſhip of St. John's college, in conformity to the college-ſtatutes; but he was permitted to keep his prebend of Weſtminſter, *in commendam*; and ſoon afterwards was preſented by the king, on the ſame ground, to the rectory of Creeke in Northamptonſhire. About this time the king thought proper to iſſue directions concerning preachers and preaching, in which he took upon him to prohibit the introduction into the pulpit of the doctrines of predeſtination, election, irreſiſtibility of divine grace, &c. or of any matter relating to the power, prerogative, or authority, of ſovereign princes; and other points. Theſe directions were levelled againſt the puritans; and, as biſhop Laud was thought to have been concerned in forming them, he provoked againſt himſelf an increaſing hoſt of enemies among perſons of that deſcription. In the year 1622, he held a conference with Fiſher the Jeſuit, before the marquis of Buckingham and his mother, in order to confirm them both in the proteſtant religion, with reſpect to which they were then wavering; an account of which was afterwards printed. From this time a cloſe intimacy ſubſiſted between Laud and Buckingham, who made the biſhop his confeſſor and counſellor; and, when he went with prince Charles into Spain, left him as his agent at court, with whom he maintained a frequent correſpondence. In the courſe of that correſpondence, Laud gave an account of the uneaſineſs and murmuring occaſioned in England by that ill-adviſed journey; and reported that, among others, the lord-keeper Williams could not conceal his diſcontent. This circumſtance, to which that prelate attributed his ſubſequent diſgrace, occaſioned moſt violent quarrels, and a ſettled enmity between the two biſhops; Williams accuſing Laud of the deepeſt ingratitude on that account. Our prelate alſo correſponded with the duke of Buckingham during his journey into France, to bring about a marriage between the princeſs Henrietta-Maria and king Charles I. Supported by Buckingham's favour, to whom he is charged with having rendered himſelf too ſubſervient, biſhop Laud had now gained the confidence of the new king; and Roger Coke calls him vicegerent to Buckingham, obſerving, that "theſe two ſtopped up both the king's ears from any other doctrines, in church or ſtate, but what were infuſed by them." As an evidence of his influence with his majeſty, it is recorded that, ſoon after his acceſſion to the throne, Laud was ordered to furniſh him with a liſt of all the eminent divines in the kingdom, with their principles and qualifications, that proper perſons might be ſelected for royal chaplains, and other promotions; in which liſt the perſons whom he approved were marked O for orthodox, and thoſe whom he diſliked P for puritans. At the coronation of that prince, alſo, in 1626, biſhop Laud officiated as dean of Weſtminſter, by the king's appointment, in the room of biſhop Williams, who was then in diſgrace; and was accuſed, but without ſufficient evidence to ſupport the charge, of having altered the coronation-oath on that occaſion. In the ſame year he was tranſlated from St. David's to the biſhopric of Bath and Wells, and was alſo appointed dean of the chapel-royal. In 1627, he was ſworn a member of the privy-council; and, in 1628, tranſlated from the ſee of St. David's to that of London.

When archbiſhop Abbot was ſequeſtered, biſhop Laud was nominated one of the commiſſioners for exerciſing the archiepiſcopal juriſdiction; and by his advice the king was now almoſt entirely governed in the diſpoſal of eccleſiaſtical preferments. In the third parliament of king Charles I. he was voted to be one of the favourers of the Arminians; and, accordingly, his name was inſerted in the liſt of thoſe who were ſuſpected to hold unſound opinions, in the remonſtrance of the houſe of commons. This circumſtance, together with his zealous ſupport of the duke of Buckingham's adminiſtration, which was exceedingly unpopular, and the ſuſpicion that he was the maker of the king's ſpeeches, &c. rendered him ſo very obnoxious to the people, that not only great clamours were raiſed againſt him, but even his life was threatened. Upon the aſſaſſination of the duke of Buckingham by Felton, Laud perſuaded himſelf that ſome of the members of parliament, or ſome of the puritans, were privy to the murder; and he threatened Felton, at the council-board, with the rack, to induce him to diſcover his accomplices. He alſo prevailed upon the king to ſend to the judges for their opinion, "whether, by law, Felton might not be racked?" But crown-law was, upon this occaſion, more favourable to the ſubject than crown-divinity; for the judges returned their opinion, "that, according to the laws of England, Felton could not be racked." Biſhop Laud was alſo the moſt active and leading member of the high-commiſſion court; the arbitrary and ſevere proceedings of which were juſtly odious to the nation. Of the extreme vigour and cruelty which marked their proceedings, the caſe of Dr. Alexander Leighton, a learned Scotch divine, affords a ſtriking inſtance. He had publiſhed "An Appeal to the Parliament; or, Zion's Plea againſt Prelacy." For the publication of this treatiſe, he was brought before the high-commiſſion court; which decreed that, for this offence, "he ſhould pay a fine of ten thouſand pounds, and be degraded from his miniſtry; that he ſhould be brought to the pillory at Weſtminſter, while the court was ſitting, and be there whipped; after which he ſhould be ſet in the pillory a convenient time, and have one of his ears cut off, one ſide of his noſe ſlit, and be branded in the face with S. S. as a ſower of ſedition; that then he ſhould be carried back to priſon, and after a few days be pilloried a ſecond time in Cheapſide, and be there likewiſe whipped, and have the other ſide of his noſe ſlit, and his other ear cut off; and then be ſhut up in the priſon of the Fleet for the remainder of his life." No ſooner had this mercileſs ſentence been pronounced, than biſhop Laud pulled off his cap, and gave God thanks for it! This tranſaction, as well as many others in which Laud was concerned, ſufficiently evinced the juſtice of lord Clarendon's obſervation relating to this prelate, that "he intended the diſcipline of the church ſhould be *felt*, as well as ſpoken of." In the year 1630, biſhop Laud was elected chancellor of the univerſity of Oxford, to which he was a great benefactor. He adorned it with many noble buildings; and enriched it with books and manuſcripts. Of the latter deſcription, he gave the univerſity, at ſeveral times, thir-

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teen hundred manuſcripts in Hebrew, Syriac, Chaldee, Egyptian, Ethiopian, Armenian, Arabic, Perſian, Turkiſh, Ruſſian, Chineſe, Japaneſe, Greek, Latin, Italian, French, Saxon, Engliſh, and Iriſh; an invaluable collection, procured at a prodigious expenſe.

In the year 1631, biſhop Laud diſplayed great zeal and activity in cauſing St. Paul's cathedral, which was in a decayed ſtate, to be repaired and beautified in a very expenſive and magnificent manner. For this purpoſe, a ſubſcription and contribution was appointed all over the kingdom. But he is alſo ſaid, that he might ſupport the expenſe, to have reſorted to many oppreſſive and unjuſtifiable methods of raiſing money, by exorbitant fines in the ſtar-chamber and high-commiſſion courts, compoſitions with recuſants, and commutations of penance; ſo that it became a proverb, that "St. Paul's was repaired with the ſins of the people." Our prelate was alſo ſufficiently attentive to the external rites and ceremonies of the church, and preſſed a ſtrict conformity to them, even thoſe of the moſt trifling and inſignificant kind, with the greateſt zeal and ardour. He cauſed the churches in different parts of the kingdom to be adorned with pictures, images, and altar-pieces; and procured orders to be given and rigorouſly inſiſted on, that the communion-table ſhould be removed from the middle of the area, where it had hitherto ſtood in moſt churches, except in cathedrals; and it was now to be placed in the eaſt end, railed in, and denominated an altar. Kneeling at the altar, and the uſing of copes, a ſpecies of embroidered veſtment, in adminiſtering the ſacrament, were alſo enjoined. And the violence and heat with which theſe alterations and ceremonies were enforced, occaſioned great clamours in moſt parts of the kingdom; and the more ſo, as they were generally conſidered to be ſo many ſteps towards the introduction of popery. A remarkable inſtance of his fondneſs for ſuperſtitious ceremonies, was diſplayed in the manner of his conſecrating St. Catherine-Creed church; the account of which is too long to be detailed by us, but may be found in the Appendix to Dr. Welwood's Memoirs, No. vii. and in the ſecond volume of Neile's Hiſtory of the Puritans. In 1632, Laud made a declaration before the king at Woodſtock, which tended to ſtrengthen the ſuſpicions which had been entertained of his inclination to popiſh doctrines: he declared that, in the diſpoſal of all eccleſiaſtical preferments, he ſhould give the preference to ſingle men before thoſe who were married, ſuppoſing their abilities to be otherwiſe equal. This expoſed him to much cenſure; to put a ſtop to which, he negociated a marriage between one of his chaplains and a daughter of his friend Francis Windebank; and performed the marriage-ceremony himſelf in his own chapel at London-houſe. In 1633, our prelate attended the king on his journey into Scotland, when he went to be crowned in that kingdom; which ceremony was performed by archbiſhop Spotſwood, in the abbey-church of Holyrood-houſe. While at Edinburgh, he preached in the royal-chapel, which ſcarcely any Engliſhman had ever done before in the king's preſence; and the principal object of his diſcourſe, as lord Clarendon informs us, was to enforce the benefits of conformity, and the reverend ceremonies of the church. Indeed he never loſt ſight of his favourite deſign, to bring the church of Scotland into an exact conformity with the church of England; but he had the mortification to find, in the iſſue, that his endeavours for this purpoſe, inſtead of producing ſucceſs, had the effect of uniting the people of Scotland againſt his plans, as one man. Before he left Scotland, he was ſworn a privy-counſellor for that kingdom.

About a week after the king's return from Scotland, a vacancy took place in the archiepiſcopal ſee of Canterbury, by the death of archbiſhop Abbot. The king did not loſe time in appointing his ſucceſſor, but, two days afterwards, when biſhop Laud came to court, his majeſty addreſſed him in theſe terms: "My lord's grace of Canterbury, you are very welcome;" and gave orders the ſame day for the diſpatch of all neceſſary forms for the tranſlation. On the ſame day, a perſon came to him in private, and ſeriouſly made him an offer of a cardinal's hat, avowing that he was fully empowered to ſecure to him that dignity; and the ſame offer was afterwards made to him a ſecond time; but he declined it, his anſwer each time being, as he himſelf ſays in his diary, "that ſomewhat dwelt within him, which would not ſuffer that, till Rome were other than it is." Mr. Whitelock aſſigns this reaſon for his refuſal; that he was "as high already as England could advance him, and he would not be ſecond to any in another kingdom." In 1634 he commenced his metropolitical viſitation, in which an exact conformity to all the eccleſiaſtical rites and ceremonies which were now enjoined was enforced with great rigour. Among other things, the churchwardens in every pariſh were enjoined to remove the communion from the middle to the eaſt end of the chancel, to raiſe the ground on which to place it altarwiſe, and to fence it in with decent rails; and thoſe who refuſed to do ſo, were proſecuted in the high-commiſſion or ſtar-chamber courts. He alſo ſummoned before him the miniſters and elders of the Dutch and French churches, and, without any regard to their charter of privileges, granted by king Edward VI. and confirmed twice even by king Charles himſelf, enjoined ſuch of them as were born in England to repair for divine worſhip to the ſeveral pariſh-churches where they inhabited, and to perform all duties and payments required in that behalf; and thoſe of them, miniſters or others, who were aliens born, to uſe the Engliſh liturgy, tranſlated into French or Dutch. But many, rather than comply, choſe to leave the kingdom, to the great detriment of our manufactures. About this time, the archbiſhop cauſed ſeveral clergymen to be deprived and ſilenced, for not reading the king's declaration for allowing lawful ſports on Sundays after divine ſervice; which he was accuſed of having revived, and enlarged. But he was ſtill more ſevere againſt thoſe clergymen, who, from their attachment to puritan principles, did either preach or write any thing to the prejudice of the eſtabliſhed hierarchy. Some of them were fined, and impriſoned, and even whipped, and kept to hard labour. Among the many ſevere perſecutions in which Laud was concerned, and which were carried on at his inſtigation, thoſe of Prynne, Baſtwick, and Burton, made a great noiſe all over the nation. Theſe proſecutions were cruel, illegal, and tyrannical; and ſuch barbarous and unjuſt treatment of men of the three liberal profeſſions of law, phyſic, and divinity, (ſee vol. ii. p. 794. vol. iii. 540. and the article PRYNNE,) greatly inflamed the minds of the people againſt all who were concerned in theſe proceedings, particularly againſt Laud, who was conſidered to be the chief author of all their ſufferings. The ſame prelate alſo proved the perſecutor of his brother-prelate, and former benefactor, Dr. Williams, biſhop of Lincoln. Upon being deprived of his office of lord keeper, he had retired to his dioceſe, where he ſpent his time in reading, and the good-government of his charge, and became exceedingly popular, entertaining the clergy at his table, and diſcourſing freely about affairs of church and ſtate. He ſpoke with ſome ſmartneſs againſt the new ceremonies; and ſaid once in converſation, "that the puritans were the king's beſt ſubjects, and he was ſure would carry all at laſt; and that the king had told him, that he would treat them more mildly for the future." Laud, being informed of this expreſſion, cauſed an information to be lodged againſt him in the ſtar-chamber, for revealing the king's ſecrets; but, the charge not being well ſupported, a new bill was exhibited againſt him for tampering with the king's witneſſes; and, though there was very little ground for the charge, his lordſhip was ſuſpended in the high-commiſſion court from all his offices and benefices; he was fined ten thouſand pounds to the king, and one one thouſand pounds to ſir John Mounſon; and condemned to impriſonment in the Tower during the king's pleaſure. The biſhop was accordingly ſent from the bar

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to the Tower; all his rich goods and chattels, to an immenſe value, were plundered and ſold to pay the fine; his library ſeized, and all his papers and letters examined. Among theſe were found two or three letters written to him by Mr. Oſbaldeſton, chief maſter of Weſtminſter-ſchool, containing ſome dark and obſcure expreſſions, which the jealous archbiſhop interpreted againſt himſelf and the lord-treaſurer Weſton. Upon the ground of theſe letters, a new bill was exhibited againſt the biſhop, for divulging ſcandalous libels againſt the king's privy-counſellors. His lordſhip replied, that he did not remember having received the letters, and was ſure that he had never divulged them, becauſe they were ſtill among his private papers; but, notwithſtanding all that he could ſay, he was condemned in a fine of eight thouſand pounds; five thouſand to the king, and three thouſand to the archbiſhop; for the non-payment of which he was kept cloſe priſoner in the Tower till the meeting of the long parliament. Upon the ground of the ſame letters, Mr. Oſbaldeſton was charged with plotting with the biſhop of Lincoln to divulge falſe news, and to breed a difference between the lord-treaſurer Weſton and the archbiſhop of Canterbury, as long ago as the year 1633. And, though the council for the defendant abſolutely denied any reference to the archbiſhop, and named the perſons meant in the letter, yet the court fined him five thouſand pounds to the king, and the ſame ſum to the archbiſhop; and condemned him to be deprived of all his ſpiritual dignities and promotions; to be impriſoned during the king's pleaſure; and to ſtand in the pillory in the dean's yard before his own ſchool, and to have his ears nailed to it. Mr. Oſbaldeſton was enabled to eſcape to a place of concealment, where he remained undiſcovered till the meeting of the long parliament; however, all his goods and chattels were ſeized and confiſcated. In his remarks on theſe proſecutions, particularly that againſt Dr. Williams, biſhop Warburton ſays, "This proſecution muſt needs give every one a bad idea of Laud's heart and temper. You might reſolve his high acts of power in the ſtate into reverence and gratitude to his maſter; his tyranny in the church, to his zeal and love of what he called religion; but the outrageous proſecution of theſe two men can be reſolved into nothing but envy and revenge; and actions like theſe they were which occaſioned all that bitter, but indeed juſt, exclamation againſt the biſhops, in the ſpeeches of lord Falkland and lord Digby."

Archbiſhop Laud was an enemy to the liberty of the preſs, by means of which his own proceedings and character, and the arbitrary meaſures of the court, were expoſed. He therefore procured a decree to be made in the ſtar-chamber, in 1637, which ordained, that the number of printers ſhould be limited; and that thoſe who were allowed ſhould not from that time print any book or books of divinity, law, phyſic, philoſophy, or poetry, till the ſaid books ſhould be licenſed, either by the archbiſhop of Canterbury or the biſhop of London for the time being, or by their appointment, or otherwiſe by the chancellors or vice-chancellors of the univerſities; upon pain of the printer's being diſabled from following his profeſſion, and proſecuted in the ſtar-chamber, or high-commiſſion court. Every merchant alſo, or bookſeller, who ſhould import any books from abroad, was to deliver a catalogue of them to the archbiſhop or biſhop of London; and none were to be delivered, or expoſed to ſale, till theſe prelates, or their chaplains, had read and approved them, &c. This arbitrary and illegal reſtraint of the preſs greatly increaſed the number of Laud's enemies among perſons of all parties. Wearied out, at length, by his oppreſſive proceedings, and particularly by the extreme rigour with which a conformity to the rites and ceremonies of the church was now enforced, great numbers, both of clergy and laity, quitted the kingdom, and many of them went to New England. An attempt, however, was ſoon made, to prevent their thus withdrawing beyond the reach of eccleſiaſtical authority, by a royal proclamation, commanding the officers of the ſeveral ports to ſuffer none to paſs without licence from the commiſſioners of the plantations, and a teſtimonial from their miniſter of their conformity to the orders and diſcipline of the church. The officers were at the ſame time expreſsly enjoined to ſuffer no clergyman to tranſport himſelf without a teſtimonial from the archbiſhop of Canterbury and biſhop of London. "This," ſays Mr. Neale, "was a degree of ſeverity hardly to be parallelled in the Chriſtian world. When the edict of Nantz was revoked, the French king allowed his proteſtant ſubjects a convenient time to diſpoſe of their effects, and depart the kingdom; but our proteſtant archbiſhop will neither let the puritans live peaceably at home, nor take ſanctuary in foreign countries; a conduct hardly conſiſtent with the laws of humanity, much leſs with the character of a Chriſtian biſhop; but, while his grace was running things to theſe extremities, the people took a general diſguſt, and almoſt all England became puritans." The meaſures which by his advice were purſued with reſpect to Scotland, likewiſe, drew down on him the hatred of that kingdom; and provoked that reſiſtance which led to the renewal of the ſolemn league and covenant ſubſcribed by king James and the whole nation in the year 1590. The attempt, in 1637, to force on the Scotch the new liturgy, which had been compiled by ſome of the Scotch biſhops, but reviſed, corrected, and altered, by archbiſhop Laud and biſhop Wren, was the firſt ſtep which called forth the open oppoſition of all ranks. To the hiſtories of the time we refer our readers for an account of the proceedings, both of the government and of the Scotch people, till the commencement of the year 1639, when the king publiſhed his reſolution to go in perſon with an army into Scotland, to reduce the covenanters to ſubmiſſion. For this purpoſe the nobility were ſummoned to attend his majeſty, and all the wheels of the prerogative were put in motion, to raiſe men and money. Archbiſhop Laud alſo wrote a letter to his ſuffragans, in which he exhorted them and their clergy to contribute liberally towards this deſign; and he wrote to his commiſſary, ſir John Lamb, for a contribution in the civil court of Doctors' commons, requiring him to ſend the names of ſuch as refuſed to himſelf at Lambeth.

After the king had raiſed a numerous army, he marched at its head to the borders of Scotland; but, there perceiving that the Scots had made preparations to meet him in the field, and that his proteſtant nobility and ſoldiers were not hearty in his cauſe, he found himſelf under the neceſſity of coming to terms of pacification, and of diſmiſſing his forces. According to theſe terms, all points of difference were referred to a general aſſembly, to be held at Edinburgh; and a parliament which was to meet ſoon afterwards. But, by the king's not ratifying any of the acts of theſe bodies, it was ſoon rendered evident that he had yielded to the pacification only for the ſake of gaining time, and that the Engliſh court were determined once more to try the fortune of war. Laud and Strafford, however, who were the chief adviſers of this reſolution, in order to raiſe the requiſite ſupplies, thought it expedient to try the temper of an Engliſh parliament. Accordingly, after an interval of twelve years, a parliament was ſummoned to meet at Weſtminſter, April 13, 1640; and, when the two houſes were formed, his majeſty ordered the lord keeper Finch to acquaint them with the undutiful behaviour of the Scots, whom he was determined to reduce, and therefore expected their immediate aſſiſtance, after which he would give them time to conſider of any juſt grievances to be redreſſed. But the commons, inſtead of beginning with the ſupply, appointed committees for religion and grievances; which diſobliged the king ſo much, that, after ſeveral fruitleſs attempts to begin with the ſubſidy-bill, he diſſolved them in anger, without paſſing a ſingle act, and when they had ſat only about three weeks. All the engines of arbitrary power were now ſet at work to raiſe money for the war, as loans, benevolences, ſhip-money, coat and conduct money, knighthood, monopolies,

nopolies, and other ſprings of the prerogative, ſome of which, ſays lord Clarendon, were ridiculous, others ſcandalous, but all very grievous to the ſubject; and thoſe who refuſed payment were fined and impriſoned by the ſtar-chamber or council-table. A great part of the odium of theſe oppreſſions fell on archbiſhop Laud, of whom the populace expreſſed their deteſtation in a very open and public manner. On the 9th of May, 1640, a paper was poſted up at the Old Exchange, animating the apprentices to riſe, and ſack the archbiſhop's palace at Lambeth, on the Monday following; and on that night it was beſet by above five hundred; but the archbiſhop, having had notice of the paper, provided for his defence, ſo that their deſign was fruſtrated, after they had broken ſome of his windows. Some of them, however, were taken into cuſtody, of whom one ſuffered death as a traitor; but this ſeverity only ſerved to inflame the mob ſtill more againſt the archbiſhop. Another circumſtance which contributed to increaſe the number of his enemies, and to furniſh additional matter of complaint againſt him, was his conduct relative to the convocation, which was ſummoned to meet at the ſame time with the parliament lately diſſolved. According to ancient law and cuſtom, it ſhould have broken up at the ſame time; but, one of the lower houſe having acquainted the archbiſhop with a precedent, in the reign of queen Elizabeth, of the clergy's granting a ſubſidy after the parliament was riſen, and levying it by their own ſynodical act only, it was concluded from thence that the convocation might ſit independently of the parliament. The zealous archbiſhop, relying upon this ſingle precedent, obtained from the king a commiſſion to continue the convocation during his majeſty's pleaſure; and it ſat accordingly, till ſix ſubſidies had been granted to his majeſty; and, what the archbiſhop had near at heart, a collection of conſtitutions and canons eccleſiaſtical was prepared, which was approved by the privy-council. When theſe canons were made public, they gave great offence to all who loved the old Engliſh conſtitution, not only of the puritan party, but of ſuch as were regular and conformable churchmen. And, in conſequence of the number of petitions which were delivered in to the privy-council againſt them, from numbers of the clergy and others, in moſt counties of England, the king found it expedient to ſuſpend the enforcing of them till the next meeting of the convocation.

Upon the meeting of a new parliament, the canons and conſtitutions of the late convocation were among the firſt things which came before the houſe of commons; which paſſed reſolutions declarative of their containing in them "many matters contrary to the king's prerogative, to the fundamental laws and ſtatutes of this realm, to the rights of parliament, to the property and liberty of the ſubject, and matters tending to ſedition, and of dangerous conſequence." Upon the ſame day in which the houſe paſſed theſe reſolutions, ſeveral warm ſpeeches were made againſt the archbiſhop of Canterbury, as the chief author of them; and a committee was appointed to inquire more particularly how far his grace had been concerned in the proceedings of the convocation, and in the treaſonable deſign of ſubverting the religion and laws of his country. On the next day, articles againſt the archbiſhop, preſented by the Scotch commiſſioners, were read in the houſe of lords, and then reported to the houſe of commons, at a conference between the two houſes. When the report of theſe articles was made to the commons, the reſentment of the houſe againſt the archbiſhop immediately broke out into a flame; and, after many ſevere ſpeeches were delivered againſt his late conduct, a motion was made and carried, that he had been guilty of high treaſon. Upon this Denzil Hollis, ſon of the earl of Clare, was immediately ſent up to the bar of the houſe of lords, to impeach him in the name of all the commons of England; to inform their lordſhips that in convenient time they would bring up the particulars of their charge; and to requeſt, that, in the mean while, he might be committed to ſafe cuſtody. His grace being now commanded to withdraw, before he did ſo, ſaid, "that he was heartily ſorry for the offence taken againſt him, but humbly deſired their lordſhips to look upon the whole courſe of his life, which was ſuch, as that he was perſuaded not one man in the houſe of commons did believe in his heart that he was a traitor." Here he was interrupted by the earl of Eſſex, who obſerved, "that it was a high reflection upon the whole houſe of commons, to ſuppoſe that they would charge him with a crime which they themſelves did not believe." After this his grace withdrew, but was ſoon called in again to the bar, where he was delivered to the gentleman-uſher of the black rod, to be kept in ſafe cuſtody till the houſe of commons ſhould deliver in their articles of impeachment.

On the 26th of February, 1640–1, fourteen articles were brought up from the commons, by ſir Henry Vane the younger; and after their delivery it was declared, that the commons reſerved to themſelves the liberty of preſenting ſome additional articles, by which they intended to make their charge more particular and certain. When the archbiſhop had heard theſe articles read, he obſerved to the lords, that, although there was a heavy charge brought againſt him, it muſt be apparent to their lordſhips that it conſiſted of generals, which indeed made a great noiſe, but afforded no proof; and that, when they ſhould deſcend to particulars, he did not doubt but that his innocence would furniſh him with a ſufficent anſwer to what he ſhould be charged with. He was then voted to the Tower, whither he was carried in the gentleman-uſher's coach, and it was intended that he ſhould have paſſed incognito; but he was diſcovered by the populace, who gathered about the coach in great numbers, loaded him with the moſt bitter reproaches, and inſulted him with their huzzas, till he entered the Tower gate. Indeed, ſuch was the univerſal hatred of all ranks and orders to this prelate, for his tyrannical and cruel uſage of thoſe who had fallen into his hands in the time of his proſperity, that no man's fall in the whole kingdom was ſo unlamented as his. Before the archbiſhop was confined, he had the mortification to ſee moſt of the church and ſtate priſoners releaſed by the parliament; and, ſoon after his commitment, the houſe of commons ordered him, jointly with all thoſe who had paſſed ſentence in the ſtar-chamber againſt Prynne, Baſtwick, and Burton, to make ſatisfaction and reparation to them for the damages which they had ſuſtained by their ſentence and impriſonment. The archbiſhop was fined alſo twenty thouſand pounds, for his proceedings in the convocation held in 1640.

In June 1641, archbiſhop Laud reſigned the chancellorſhip of the univerſity of Oxford; and, in October following, the houſe of lords ſequeſtered his archiepiſcopal juriſdiction, ordering it to be adminiſtered by his inferior officers; and alſo enjoining, that he ſhould diſpoſe of no benefice or ſpiritual promotion which might become void before his trial, without firſt preſenting to the houſe the name of ſuch perſon as he nominated to it, to be approved of by the houſe, before collation or inſtitution. In January 1641-2, the houſes of parliament ordered the arms which he had at Lambeth-place, and which, he ſays, coſt him above three hundred pounds, to be taken away by the ſheriffs of London; and before the concluſion of that year, in purſuance of a reſolution of parliament, all the rents and profits of his archbiſhopric were ſequeſtered for the uſe of the commonwealth. Afterwards he petitioned the houſe for an allowance for his ſupport, but could not obtain an order for that purpoſe; nor could he have leave to ſend for a part of his own wood and coals at Lambeth, for his uſe in the Tower. In May 1643, likewiſe, his goods and books in Lambeth-houſe were ſeized, and the goods ſold for a third part of their value. This ſevere retaliation upon him of the treatment which he had practiſed, or ſanctioned, towards many worthy characters, was certainly cruel, and indeed unjuſt and indefenſible; for he had not yet been brought to any trial, nor legally convicted of any crime. Soon after this, Mr. Prynne, by a warrant

a warrant from the ſecret committee of the houſe of commons, came and ſearched the archbiſhop's room for papers, and even examined his pockets; taking away his diary, and private devotional compoſitions, as well as twenty-one bundles of papers which he had prepared for his defence. Prynne is ſaid to have promiſed to return theſe papers within three or four days, but never to have brought back quite three bundles of them. A few days after this, all the temporalties of the archiepiſcopal ſee were ſequeſtered to the parliament, and the archbiſhop was ſuſpended from his office and benefice, and all juriſdiction whatſoever. He had now been a priſoner in the Tower nearly three years, without once petitioning for a trial, or putting in his anſwer to the articles preferred againſt him; at length, in October 1643, he received a copy of ten additional articles, to which the lords ordered him to deliver his anſwer in three weeks.

His trial, which was put off from time to time, commenced on the 12th of March, 1643–4, and laſted twenty days; and it muſt be acknowledged, that ſome of the charges againſt him were very indifferently ſupported, and that much of the evidence was trifling and inſignificant. It ſufficiently appeared, however, from what was produced, that he had laboured to extend the royal prerogative and the eccleſiaſtical power to a degree that was utterly inconſiſtent with the liberties of the people; that he had been active in enforcing the illegal claim of ſhip-money; that he had committed perſons to priſon, and puniſhed them, without law; and that he had been guilty of many arbitrary, illegal, and cruel, actions. He often pleaded, indeed, that, as many of the things attributed to him were the acts of the privy-council, or the ſtar-chamber and high-commiſſion courts, of which he was only an individual member, it was unfair to endeavour to make him reſponſible for what was the proceeding of the whole board. But, were ſuch a plea admiſſible, it would be impracticable to bring a wicked miniſter of ſtate to juſtice, for any proceedings of the privy-council in which the other members concurred, however arbitrary, oppreſſive, and illegal. And it may be obſerved here, that it certainly would not be thought a proper juſtification of criminals of an inferior order, in any court of juſtice, if they were to allege, that there were other perſons accomplices with them in the crimes of which they were accuſed.

Archbiſhop Laud defended himſelf, during the whole of his trial, with uncommon eloquence, ſpirit, and acuteneſs, and with extraordinary preſence of mind; and the account which he has left behind him of what he ſaid on every day's hearing, diſplays great addreſs and ability, mixed with the moſt keen and ſatirical reflections upon his adverſaries. His counſel, who deferred what they had to ſay on his behalf to the cloſe of the trial, then reduced the ſeveral articles preferred againſt him to three general charges, to which they made their replies. They then endeavoured to ſhow that, if theſe ſeveral charges were admitted to be true, they did not amount to treaſon, by any eſtabliſhed law of the kingdom. This juſtification of the archbiſhop by his counſel, as to the matter of law, has been generally eſteemed a good one; and it certainly ſtaggered the houſe of lords, who were not ſatisfied with the reply of the managers for the houſe of commons. They had no doubt concerning the truth of the facts of which the prelate was accuſed; but, "whether any of them were treaſon by the laws of the land," this the judges very much queſtioned; and, therefore, the lords deferred giving judgment, till the commons thought fit to take another method to obtain it. Soon after this, to prevent all further delays, the houſe of commons ordered a bill of attainder to be brought in; which was paſſed on the 16th of November, and immediately ſent up to the lords. There its progreſs was ſlow; but at length it paſſed, on the 4th of January, 1644–5, in a very thin houſe. To ſtop the conſequence of this attainder, the archbiſhop produced the king's pardon under the great ſeal; but it was over-ruled by both houſes. By this bill of attainder, the archbiſhop was condemned to ſuffer death, as in caſes of high treaſon; and all the favour which he could obtain upon his petitioning was, to have his ſentence altered from hanging to beheading. He met his death with great firmneſs, on a ſcaffold erected upon Tower-hill, on the 10th of January, being then in the ſeventy-ſecond year of his age.

Archbiſhop Laud was low in ſtature, but well and ſtrongly made, and of a ruddy and cheerful countenance. His temper was warm, paſſionate, and vindictive; his ſpirit ambitious, active, and reſtleſs. Hence his conduct was often raſh and precipitate; for, according to Dr. Heylin, he attempted more alterations of the church in one year, than a prudent man would have done in a great many. His panegyriſts have beſtowed great praiſe on his piety; which, however, his diary ſhows to have been mixed with an abundant portion of ſuperſtition. Speaking of his learning and morals, Hume obſerves, that "he was virtuous, if ſeverity of manners alone, and abſtinence from pleaſure, could deſerve that name. He was learned, if polemical knowledge could entitle him to that praiſe." His ſtudies, indeed, appear to have been chiefly confined to the canon-law, and the writings of the fathers. As to his religious principles, though he was an avowed proteſtant according to the conſtitution of the church of England, yet, as the hiſtorian juſt mentioned truly ſays, "the genius of his religion was, though in a leſs degree, the ſame with that of the Romiſh. The ſame profound reſpect was demanded to the ſacerdotal character, the ſame ſubmiſſion required to the creeds and decrees of ſynods and councils, the ſame pomp and ceremony was affected in worſhip, and the ſame ſuperſtitious regard to days, poſtures, meats, and veſtments. No wonder, therefore, that this prelate was, every where, among the puritans, regarded with horror, as the forerunner of antichriſt." In his government of the church, he diſplayed a total want of charity towards thoſe who had made the leaſt oppoſition to the doctrines and ceremonies eſtabliſhed by authority; and, under his countenance, the ſtar-chamber wore all the horrors, and exerciſed all the cruelties, of an inquiſition. In ſtate-affairs, his counſels were high and arbitrary, and he was extremely active in promoting thoſe deſpotic meaſures and illegal projects, which ultimately proved the ruin of the king and conſtitution. We have already ſpoken of his generoſity and munificence towards the univerſity of Oxford, as diſplayed in the many noble buildings which he erected, and the expenſive collection of books and manuſcripts which he preſented to it. We ought not to omit adding, that he alſo founded an Arabic lecture in this univerſity, which began to be read in 1636. Oxford, likewiſe, owed to his influence a large charter, to confirm its ancient, and inveſt it with new, privileges. He obtained the advowſon of St. Lawrence in Reading for St. John's college; and he procured a charter for that town, and founded an hoſpital in it, which he endowed with a revenue of 200l. per ann. The archbiſhop publiſhed ſeven ſingle ſermons, preached on public occaſions, which after his death were reprinted in an octavo volume, in 1651. He alſo printed, in 1573, in folio, an account of "the Conference between him and Fiſher the Jeſuit," which has paſſed through ſeveral editions, and has been greatly commended. In 1695, Mr. Henry Wharton publiſhed his "Diary," which had before been imperfectly publiſhed by Prynne, together with the hiſtory of his troubles and trial, written by himſelf, in one volume folio. And, in 1700, was alſo publiſhed, in folio, "An hiſtorical Account of all material Tranſactions relating to the Univerſity of Oxford, from Archbiſhop Laud's being elected Chancellor to his Reſignation of that Office," written by himſelf. About eighteen of his Letters, to Gerard John Voſſius, were printed by Colomeſius, in his collection of G. I. Voſſii et clar. Vir. ad eum Epiſt. Lond. 1690, folio; and ſome others may be ſeen at the end of Dr. Parr's Life of Archbiſhop Uſher, and in Dr. Twell's Life of Dr. Pococke, prefixed to that author's theological works.

LAUD,

LAUD, *ſ.* [*laus*, Lat.] Praiſe; honour paid; celebration:

Doubtleſs, O gueſt, great *laud* and praiſe were mine,
Reply'd the ſwain, for ſpotleſs faith divine;
If, after ſocial rites, and gifts beſtow'd,
I ſtain'd my hoſpitable hearth with blood. *Pope.*

That part of divine worſhip which conſiſts in praiſe.—We have certain hymns and ſervices, which we ſay daily, of *laud* and thanks to God for his marvellous works. *Bacon.*—In the book of Pſalms, the *lauds* make up a very great part of it. *Government of the Tongue.*

The *lauds* (*laudi ſpirituali*, Ital.) are the moſt ancient melodies that can be found in Italy, ſet to Italian words. They are compoſitions in praiſe of God, the Virgin Mary, or the ſaints and martyrs. They reſemble hymns as to the ſubject, but not the character and verſification: hymns having been originally conſtructed on Greek and Roman models; but the laudi, or ſpiritual ſongs, are entirely of Italian invention. A ſociety for the performance of theſe religious poems was inſtituted at Florence ſo early as the year 1310, the members of which were called *laudeſi*, and *laudiſti*. In the fifteenth century this ſpecies of ſacred poetry was very much eſteemed and practiſed, as is manifeſt by the various collections that were made of them, one of which was printed in 1485. They were at firſt little more than chants, and without baſe. However, according to the commentary on Boccaccio, by Sanſovino, publiſhed at Venice in 1546, they were afterwards ſung in parts. Dr. Burney found this company ſtill ſubſiſting in the year 1770 and often heard them ſing their hymns, through the ſtreets, in three parts, and likewiſe in their church accompanied by an organ. See the article MUSIC.

To LAUD, *v. a.* [*laudo*, Lat.] To praiſe; to celebrate.—O thou almighty and eternal Creator, having conſidered the heavens the work of thy fingers, the moon and the ſtars which thou haſt ordained, with all the company of heaven, we *laud* and magnify thy glorious name. *Bentley.*

LAU'DA, a town of Wurzburg, on the Tauber: twenty-eight miles ſouth-ſouth-weſt of Wurzburg, and twenty-five ſouth-ſouth-eaſt of Heilbron.

LAU'DA. See LAUDIC.

LAUD'ABLE, *adj.* Praiſe-worthy; commendable.—Affectation endeavours to correct natural defects, and has always the *laudable* aim of pleaſing, though it always miſſes it. *Locke.*

I'm in this earthly world, where to do harm
Is often *laudable*; but to do good, ſometime
Accounted dang'rous folly. *Shakeſpeare's Mackbeth.*

Healthy; ſalubrious.—Good blood, and a due projectile motion or circulation, are neceſſary to convert the aliment into *laudable* animal juices. *Arbuthnot.*

LAUD'ABLENESS, *ſ.* Praiſe-worthineſs.

LAUD'ABLY, *adv.* In a manner deſerving praiſe.—Obſolete words may be *laudably* revived, when either they are ſounding or ſignificant. *Dryden.*

LAUDA'MIA, a daughter of Alexander king of Epirus and Olympias daughter of Pyrrhus, killed in a temple of Diana, by the enraged populace. *Juſtin*, 28, c. 3.—The wife of Proteſilaus. See LAODAMIA.

LAUDAMNAT', a town of Bengal: twelve miles ſouth of Nattore.

LAU'DANUM, *ſ.* A name given by chemiſts to certain preparations, chiefly extract or tincture of opium, on account of their excellent qualities; the word being derived from *laudare*, Lat. to praiſe. See PAPAVER.

LAUDA'TIO, *ſ.* [Latin.] In a legal ſenſe, was anciently the teſtimony delivered in court of the accuſed perſon's good behaviour and integrity of life. It reſembled the cuſtom, which prevails in our trials, of calling perſons to ſpeak to the character of the priſoner. The leaſt number of the *laudatores* among the Romans was ten.

LAUD'ATIVE, *adj.* Panegyrical.

LAUD'ATIVE, *ſ.* [from the *adj.*] Panegyric.—Funeral *laudatives*, and monuments for thoſe that died in the wars. *Bacon.*

LAUD'ATORY, *adj.* Praiſing, full of praiſe; panegyrical.

LAUDA'VA, a town of Pruſſia, in the palatinate of Culm: twenty miles north-eaſt of Thorn.

LAU'DER, a town of Scotland, in the county of Berwick, on the Leader; and a royal burgh, united with Dunbar, North-Berwick, Haddington, and Jedburgh, to return one member to parliament. In the reign of James III. the Scotch nobility, enraged at the conduct of the miniſters, one of whom, from a maſon, had been created earl of Mar, being ſummoned by the king to meet at Lauder, to conſult on the means of repelling an invaſion, before they proceeded to buſineſs, ſeized the earl of Mar and his aſſociates, and hung them over a bridge in ſight of the king and his army. Near this town is Lauder Caſtle, originally built as a fortreſs by Edward Longſhanks, who had overrun that part of Scotland: twenty-four miles weſt of Berwick, and twenty-ſix ſouth-eaſt of Edinburgh. Lat. 55. 45. N. lon. 2. 48. W.

LAU'DER, or LEADER, a river of Scotland, which riſes in the north part of Berwickſhire, and after a ſoutherly courſe runs into the Tweed near Melroſe. The diſtrict through which it paſſes is called Lauderdale.

LAU'DER (William), a native of Scotland, was educated at the univerſity of Edinburgh, where he finiſhed his ſtudies with great reputation, and acquired a conſiderable knowledge of the Latin tongue. On May 22, 1734, he received a teſtimonial from the heads of the univerſity, certifying that he was a fit perſon to teach in any ſchool or college whatever. In 1739 he publiſhed at Edinburgh an edition of Johnſton's Pſalms. In 1742, he was recommended by Mr. Patrick Cumming and Mr. Colin Maclaurin, profeſſors of church-hiſtory and mathematics, to the maſterſhip of the grammar-ſchool at Dundee, then vacant. Whether he ſucceeded in his application or not, is uncertain; but a few years afterwards we find him in London, contriving to ruin the reputation of Milton; an attempt which ended in the deſtruction of his own. This extraordinary attempt was no ſudden effort. He had brooded over it for many years; and to this hour it is uncertain what his principal motive was, unleſs it were a vain notion of his ſuperiority, in being able, by whatever means, to deceive mankind. To effect this, he produced certain paſſages from Grotius, Maſenius, and others, which had a faint reſemblance to ſome parts of the Paradiſe Loſt. In theſe he interpolated ſome fragments of Hog's Latin tranſlation of that poem, alleging that the maſs thus fabricated was the archetype from which Milton copied. Theſe fabrications he publiſhed from time to time in the Gentleman's Magazine; and, exulting in his ſancied ſucceſs, he in 1750 ventured to collect them into a pamphlet, entitled "An Eſſay on Milton's Uſe and Imitation of the Moderns in his Paradiſe Loſt." To this pamphlet Dr. Johnſon wrote a Preface, in full perſuaſion of Lauder's honeſty, and a Poſtſcript recommending, in the moſt perſuaſive terms, a ſubſcription for the relief of a granddaughter of Milton, of whom he thus ſpeaks: "It is yet in the power of a great people to reward the poet whoſe name they boaſt, and from their alliance to whoſe genius they claim ſome kind of ſuperiority to every other nation of the earth; that poet, whoſe works may poſſibly be read when every other monument of Britiſh greatneſs ſhall be obliterated; to reward him, not with pictures or with medals, which, if he ſees, he ſees with contempt, but with tokens of gratitude, which he, perhaps, may even now conſider as not unworthy the regard of an immortal ſpirit." Surely this is inconſiſtent with "enmity towards Milton," which ſir John Hawkins imputes to Johnſon upon this occaſion; adding, "I could all along obſerve that Johnſon ſeemed to approve not only of the deſign, but of the argument; and ſeemed to exult in a perſuaſion, that the reputation of Milton was likely to ſuffer by this

this diſcovery. That he was not privy to the impoſture, I am well perſuaded; that he wiſhed well to the argument, may be inferred from the Preface, which indubitably was written by Johnſon." Is it poſſible for any man of clear judgment to ſuppoſe that Johnſon, who ſo nobly praiſed the poetical excellence of Milton in a Poſtſcript to this very "diſcovery," as he then ſuppoſed it, could, at the ſame time, exult in a perſuaſion that the great poet's reputation was likely to ſuffer by it? This is an inconſiſtency of which Johnſon was incapable; nor can any thing more be fairly inferred from the Preface, than that Johnſon, who was alike diſtinguiſhed for ardent curioſity and love of truth, was pleaſed with an inveſtigation by which both were gratified. That he was actuated by theſe motives, and certainly by no unworthy deſire to depreciate our great epic poet, is evident from his own words; for, after mentioning the general zeal of men of genius and literature, "to advance the honour, and diſtinguiſh the beauties, of Paradiſe Loſt," he ſays, "Among the inquiries to which this ardour of criticiſm has naturally given occaſion, none is more obſcure in itſelf, or more worthy of rational curioſity, than a retroſpect of the progreſs of this mighty genius in the conſtruction of his work; a view of the fabric gradually riſing, perhaps, from ſmall beginnings, till its foundation reſts in the centre, and its turrets ſparkle in the ſkies; to trace back the ſtructure through all its varieties, to the ſimplicity of its firſt plan; to find what was firſt projected, whence the ſcheme was taken, how it was improved, by what aſſiſtance it was executed, and from what ſtores the materials were collected; whether its founder dug them from the quarries of Nature, or demoliſhed other buildings to embelliſh his own."

The fidelity of Lauder's quotations ſoon began to be doubted by ſeveral people; and the falſehood of them was at length demonſtrated by Dr. Douglas, in a pamphlet entitled, "Milton vindicated from the Charge of Plagiariſm brought againſt him by Lauder, and Lauder himſelf convicted of ſeveral Forgeries and groſs Impoſitions on the Public; in a Letter humbly addreſſed to the Right Honourable the Earl of Bath, 1751," 8vo. The appearance of this detection overwhelmed Lauder with confuſion. He ſubſcribed a confeſſion, dictated by Dr. Johnſon himſelf, and addreſſed to Dr. Douglas, acknowledging his fraud in terms of ſuitable contrition. Yet Lauder renewed his attempts on Milton's character in 1754, in a pamphlet entitled, "The Grand Impoſtor detected, or Milton convicted of forgery againſt King Charles I." which was reviewed, probably by Johnſon, in the Gent. Mag. 1754, p. 97. Lauder afterwards went to Barbadoes, where he taught in a ſchool, and at length died very miſerably about the year 1771. *Boſwell's Life of Johnſon.*

LAU'DICK, or LAUDA, a town of the duchy of Warſaw: twenty miles ſouth-eaſt of Gneſna.

LAUDICŒ'NI, *ſ.* [formed of the Lat. *laus*, praiſe; and *cæna*, ſupper or entertainment.] Among the Romans, applauders, or perſons who, for a reward, attended the exhibition of plays and orations, in order to raiſe, or join in, the acclamation.

LAUDIM'IUM, *ſ.* in the civil law, the fiftieth part of the value of an eſtate paid by a new proprietor to the tenant for inveſtiture or leave of poſſeſſion. *Scott.*

LAU'DOHN (Gideon Erneſt), baron Laudohn, field-marſhal in the imperial army, and grand croſs of the military order of Thereſa, was deſcended from a reſpectable family, ſaid to have come originally from the county of Air, in Scotland, a branch of which ſettled in Livonia, and there purchaſed an eſtate at Totzen, where the ſubject of this article was born in 1716. At an early period he conceived a ſtrong inclination for a military life; and, after being inſtructed under proper maſters in hiſtory, geography, and the mathematics, he applied to the ſtudy of tactics, both ancient and modern. At the age of fifteen he entered into the Ruſſian army as a cadet, and in 1733 was at the taking of Dantzic, in which the king of Poland, Staniſlaus Leſczinſky, had ſought refuge in conſequence of the diſturbances which then prevailed in that country. He afterwards accompanied the troops ſent to ſubdue the rebellious Tartars, and from 1736 to 1739 ſerved three campaigns under count Munich againſt the Turks, and was preſent at the taking of Azof, Oczakow, and Chozim. On the reſtoration of peace, he ſtaid ſome time at Peterſburgh, with a view of obtaining redreſs for certain grievances which he had ſuffered, and to ſolicit further promotion. Failing in this, he went to Vienna, and was ſoon appointed by the empreſs-queen to a command in the corps of Pandours, then raiſed by baron Trenck, and with them proceeded to Bavaria. While he belonged to this corps, he was ſeverely wounded, and taken priſoner by the French; but ſoon after the Pandours attacked the village, diſcovered their commander, and conveyed him back in triumph. After this, he was engaged much in active ſervice; but he employed every leiſure moment in the ſtudy of the military art, and in preparing himſelf for the active ſituation in which he was afterwards placed in the ſeven-years' war. In 1754, he was employed to reduce to obedience the rebellious Croats, which he did rather by his judicious conduct than by force of arms. During the ſeven-years' war, which commenced in 1756, he performed the moſt noble exploits, which belong to the articles GERMANY and RUSSIA reſpectively. Towards the cloſe of that war, he determined to make an attack on Schweidnitz. The night appointed for the execution of this plan was the 30th of September. Every preparation being made, Laudohn harangued his ſoldiers; forbade them, under the ſevereſt penalties, to plunder the town; and promiſed, in caſe of their obedience, to diſtribute among them the ſum of 100,000 rix-dollars. The guards exclaimed with one voice, "No, general, lead us on to glory; we do not want money." At two in the morning the ſignal was given, and the firſt aſſault made, and in four hours Laudohn was in poſſeſſion of the whole fortreſs. Although this achievement had been undertaken without the order of the aulic council, the empreſs congratulated the victor in a letter written by her own hand, and ſent him her picture ſet round with diamonds. On the concluſion of peace in 1763, the general retired to his eſtates in Bohemia; but in 1766 the empreſs appointed him a member of the aulic council of war, and in the following year he was elected a member of the equeſtrian order of the empire, and in 1769 he was made commander-in-chief in Moravia. In 1770, when Frederic the Great paid a viſit to the emperor Joſeph at Neuſtadt, the principal officers were invited to dine with the two monarchs. As the company were about to place themſelves at table, his Pruſſian majeſty ſaid to Laudohn, "Come, general, and ſit near me; I would rather have you by my ſide than oppoſite to me." In the war of Bavaria, in 1778, he was promoted by the emperor to be field-marſhal, and entruſted with the command of the Auſtrian army, which amounted to 50,000 men. The plans which he formed to counteract the deſigns of the enemy were worthy the reputation which he had before acquired. After the peace, Laudohn again retired to his eſtates; from whence he was again called, on the breaking out of the Turkiſh war, in 1788. He had the command of the grand army when it was reſolved to reduce Belgrade; the archduke Francis was to be preſent at the ſiege; and the emperor, in a letter to Laudohn, ſaid, that "his nephew could not be in a better ſchool than under his Gideon." The attack commenced on the 15th of September, and on the 30th it was determined that the place ſhould be carried by ſtorm. The aſſault began about nine in the morning, and at one the outworks were in poſſeſſion of the beſiegers. The fortreſs ſtill refuſed to capitulate; but, after a dreadful bombardment, by which moſt of the enemy's cannon were ſilenced, the place ſurrendered. In conſequence of this achievement, he was appointed generaliſſimo of the whole Auſtrian army, an office which had been conferred on no perſon ſince the time of prince Eugene, and

which gave him an unlimited controul over all the Auſtrian generals, and even over the aulic council of war. On his return to Vienna, he was received with every mark of diſtinction that his ſovereign and the people, by whom he was idolized, could beſtow. After the death of the emperor Joſeph, he was confirmed in all his appointments by his ſucceſſor Leopold, who continued the war. Soon after this he was taken ill of a fever, of which he recovered; but, having imprudently rode out, contrary to the advice of his phyſicians, he was ſeized with a ſuppreſſion of urine, which put an end to his life on the 14th of July, 1790.

Laudohn was of a middle ſize, and exceedingly thin. He had reddiſh hair, and ſtrong eyebrows, which, when his mind was intent on any ſerious occupation, projected from his face. He was ſimple in his dreſs, as well as in his manners. His temperament was of the melancholy caſt, and he was fond of ſolitude; but, when rouſed into action, he diſplayed invincible fire and impetuoſity; ſo that it appeared as if he had been animated by two different ſouls; for Laudohn at his country ſeat, and Laudohn at the head of the army, were two very different beings. He had always a reſerved and thoughtful look, which was ſeldom enlivened by a ſmile. He ſpoke little and ſlowly. He never indulged in long ſleep, was exceedingly moderate in the uſe of wine, and had a ſtrong averſion to medicine. Being accuſtomed to command thouſands in the field, he required from his domeſtics, as well as his ſoldiers, ſtrict and ſpeedy obedience. He ſeldom talked of war, and never made mention of his own actions but on occaſions when he could not avoid it. He had very little taſte for the ſplendour of high life, and on that account abſented himſelf as much as poſſible from the pomp and parade of the court. Though he had not the advantage of a liberal education, the powers of his mind were ſtrong and comprehenſive; and he was endowed with a retentive memory, which continued till a late period of his life. The principal object of his ſtudy was the military art; to improve himſelf in which, he read with great attention all thoſe works which record the campaigns of the moſt celebrated commanders both ancient and modern. He ſpoke and wrote German with great accuracy, and underſtood French ſo well as to be able to read it with facility. But he did not confine his ſtudy to military works alone; he peruſed a great many books on economical ſubjects, for he had enlarged the ſmall library ſelected for him by Gellert; and he formed ſo many uſeful eſtabliſhments in that part of Boſnia and Servia which he had conquered, as fully ſhowed that he would have been as great a ſtateſman as he was a general, had he been placed in the civil department. It was remarked, that his plans were always bolder the more he advanced in life; a proof that they were never formed at hazard, but were the reſult of multifarious experience and obſervation. Though he rigidly enforced ſubordination, which he conſidered as the eſſence of diſcipline, he never haraſſed his ſoldiers with trifles which had no determinate object. He was therefore beloved by his troops, who, under his command, believed themſelves to be invincible. He never encamped in any place till he had made himſelf acquainted with its local advantages or diſadvantages; he ſtudied the character of the generals oppoſed to him, and often diſcovered their plans by conjecture from their behaviour. On this account he was called by his enemies the cunning Laudohn. But the moſt ſtriking feature in his character was that dauntleſs preſence of mind combined with daring intrepidity, ſo eſſential to the hero, and which can turn to the beſt advantage any unexpected opportunity that occurs. As he had been inveſted with every honour that could be conferred on him, Joſeph II. in the year 1783, cauſed a buſt of him, made of Carrara marble, to be erected in the hall of the aulic council of war, with the following inſcription: "Gideonis Laudohni, ſummi caſtrorum præfecti, ſemper ſtrenui, fortis, felicis militis, et civis optimi exemplum, quod duces militeſque imitentur, Joſephus II. Aug. in ejus effigie proponi voluit, anno 1783." After the capture of Belgrade, the emperor, being at a loſs in what manner he could confer new honour upon him, took from the family repoſitory of the houſe of Auſtria the large ſtar of the Thereſian order, which conſiſts entirely of diamonds, and which, according to the ſtatutes, can be worn only by the grand maſter of the order, or the head of that houſe, and ſent it to Laudohn, with permiſſion for him to wear it on his breaſt. *Schlichtegroll's Necrology.*

LAU'DUM, *ſ.* in law, an arbitrament, or award. *Watſingham*, p. 60.

LAVE, a river of France, which runs into the Lys near Bethune.

To LAVE, *v. a.* [*lavo*, Lat.] To waſh; to bathe:

With roomy decks, her guns of mighty ſtrength,
Whoſe low-laid mouths each mounting hillow *laves*,
Deep in her draught, and warlike in her length,
She ſeems a ſea-waſp flying on the waves. *Dryden.*

[*Lever*, Fr.] To throw up; to lade; to draw out:

I'd plough up rocks, ſteep as the Alps, in duſt,
And *lave* the Tyrrhene waters into clouds,
But I would reach thy head. *Ben Jonſon.*

Some ſtow their oars, or ſtop the leaky ſides;
Another, bolder yet, the yard beſtrides,
And folds the ſails; a fourth with labour *laves*
Th' intruding ſeas, and waves ejects on waves. *Dryden.*

To LAVE, *v. n.* To waſh; to bathe:

In her chaſte current oft the goddeſs *laves*,
And with celeſtial tears augments the waves. *Pope.*

To LAVEE'R, *v. n.* To change the direction often in a courſe:

How eaſy 'tis, when deſtiny proves kind,
With full-ſpread ſails to run before the wind:
But thoſe that 'gainſt ſtiff gales *laveering* go
Muſt be at once reſolv'd, and ſkilful too. *Dryden.*

LAVEE'RING, *ſ.* The act of changing a courſe frequently.

LAVELANET', a town of France, in the department of the Arriege: twelve miles north-eaſt of Taraſcon, and nine ſouth of Mirepoix. Lat. 42. 56. N. lon. 1. 55. E.

LAVELD', or LA FELD. See LAFELDT, p. 81.

LAV'ELINE, a town of France, in the department of the Voſges: four miles ſouth-eaſt of St. Diey.

LAVEL'LO, a town of Naples, in Baſilicata, the ſee of a biſhop, ſuffragan of Bari: ſix miles north of Venoſa.

LAV'EMUND. See LAVAMUND, p. 281.

LA'VEN, a ſmall iſland near the eaſt coaſt of Luçon. Lat. 14. 12. N. lon. 124. 6. E.

LA'VEN, or LOVEN, a river of Norway, which runs into the ſea near Lavigen.

LAUENAU', a town of Weſtphalia, in the principality of Calenburg: fifteen miles north of Hameln.

LAU'ENBURG (Saxe), formerly a principality of Germany, bounded on the north-weſt by the duchy of Holſtein, on the north-eaſt and eaſt by the duchy of Mecklenburg, and on the ſouth and ſouth-weſt by Luneburg. This country was anciently a part of Slavia Tranſalpina; and its inhabitants, who were a tribe of the Weſtern Slavi, or Wendi, as confining on the Elbe, were named Polabers. Henry the Lion, duke of Saxony and Bavaria, ſubdued theſe Polabers, and held their country as his abſolute property; inſomuch that, when unjuſtly put under the ban of the empire, he could not be deprived of this acquiſition, as being no fief. The imperial inveſtiture of it, together with its ſeat and vote among the princes of the empire, was firſt obtained by George I. king of England, as elector of Hanover, in 1716. In the matriculas of the empire and circle, its contingent was eight horſe and thirty foot, or 216 florins; and to the chamber at Wetzlar it paid 243 rix-dollars 43 kruitzers and a half. The duchy of Saxe-Lauenburg, though dependent on the

privy-council at Hanover, yet had its own particular regency. It now makes a part of the kingdom of Saxony.

LAU'ENBURG, a town of Germany, ſituated on the right coaſt of the Elbe, built by Henry the Lion: thirty miles ſouth-eaſt of Hamburg, and forty-eight ſouth-ſouth-weſt of Lubeck. Lat. 53. 22. N. lon. 10. 48. E.

LAU'ENBURG, a town of Hinder Pomerania, and principal town of a lordſhip of the ſame name, on the Lehe: thirty-ſix miles weſt of Dantzic, and fifty eaſt-north-eaſt of Polnow. Lat. 54. 32. N. lon. 17. 42. E.

LA VENDE'E. See VENDE'E.

LAV'ENDER, *ſ.* [*lavendula*, Lat.] A plant. See LAVANDULA, p. 281.—The whole *lavender*-plant has a highly aromatic ſmell and taſte, and is famous as a cephalic, nervous, and uterine, medicine. *Hill.*

And then again he turneth to his play,
To ſpoil the pleaſures of that paradiſe:
The wholeſome ſage, and *lavender* ſtill grey,
Rank-ſmelling rue, and cummin good for eyes. *Spenſer.*

LAV'ENDER (Sea). See STATICE LIMONIUM, and SARRACENA.

LAV'ENDER COT'TON. See SANTOLINA.

LAVEN'DULA. See LAVANDULA, p. 281.

LAU'ENFORD, a town of Weſtphalia, in the principality of Calenburg, on the Weſer: fifteen miles north-weſt of Göttingen.

LAV'ENHAM or LAN'HAM, a market and clothing town near Long Melford in Suffolk. The church, ſituated on a riſing ground, is juſtly eſteemed the fineſt ſpecimen of Gothic architecture in the county. It was built by the Veres, earls of Oxford, in conjunction with the Springes, a rich clothing-family, about the cloſe of the fifteenth century; and the pews of theſe families are finiſhed pieces of Gothic work, in wood. The porch, adorned with the Vere quarterings, and erected by John the fourteenth earl, before 1529, is an elegant building; as is the tower or ſteeple, 141 feet high, on which are the arms of his predeceſſors. The church is 156 feet long, and 68 wide. The windows and various parts of the church are adorned with many coats of arms. It is built chiefly with free-ſtone, the reſt is of flint-work. The ornaments are all elegantly cut, and boldly relieved. "Specimens of Gothic Ornaments, ſelected from the Pariſh-church of Lavenham in Suffolk, on forty plates," were publiſhed in London, in 4to. in the year 1796.

Lavenham is ſixty-three meaſured miles from London, from Bury St. Edmunds ten, Clare ten, Sudbury ſeven, and Hadleigh ten; and is very healthfully ſituated. On the eaſt ſide of it runs the river Brett, (not navigable,) whence the town gradually riſes; it has nine ſtreets or diviſions, and a ſpacious market-place, with a ſtone croſs in the centre. Here is a free-ſchool, founded above a hundred years ago; and, in 1786, another ſchool was eſtabliſhed here, called St. Anne's, where twenty boys are clothed, boarded, and educated, until they attain the age of fourteen years, when they are put out apprentices. This ſchool is a part of St. Anne's Society-ſchool, Alderſgate, London. There are alſo two Sunday-ſchools; one ſupported by perſons belonging to the eſtabliſhment, the other by the diſſenters. Lavenham was formerly famous for the manufactory of blue cloths; but yarn from wool is now principally made here; ſays and calimancoes are ſtill manufactured, but the latter have greatly declined, owing to the preſent faſhion among the ladies of wearing Spaniſh leather for their ſhoes. A manufactory of hempen cloth, &c. has however been eſtabliſhed, in which a conſiderable number of hands are employed. The market is on Tueſday; and there are two fairs; one, for butter and cheeſe, begins October 10, and holds four days; the other, for horſes, is on Shrove Tueſday. The town is governed by ſix capital burgeſſes, who are for life, and chooſe the inferior officers. The tenants of the manor, and the other inhabitants, were always exempted from ſerving at any court held for its hamlet. They have that ſort of land here which is called Borough Engliſh, whereby lands and tenements deſcend to the youngeſt ſon, or, if the owner have no iſſue, to the youngeſt brother. Lat. 52. 8. N. lon. 0. 49. E.

LAVE'NIA, *ſ.* [a genus formed by the late Dr. Solander, and adopted from his manuſcripts by profeſſor Swartz, of the Cotula verbeſina and Verbeſina lavenia of their common preceptor Linnæus. The name is of unknown origin, and ſuſpected by profeſſor Martyn to be vernacular in Ceylon. It firſt appears in the ſupplement to Ray's Hiſtoria Plantarum, on the authority of Sherard, for the ſpecies laſt-mentioned, for which it was adopted by Linnæus as the trivial name. Forſter named it Adenoſtemma, conſtructed of αδην, a gland, and στεμμα, a crown; the ſeed being crowned with three glands, inſtead of the feather, hair, or membrane, appropriated to other genera of this family.] In botany, a genus of the claſs ſyngeneſia, order polygamia-equalis, natural order compoſitæ-diſcoideæ, (corymbiferæ, *Juſſ.*) The generic characters are—Calyx: common ovate, ſubimbricate; ſcales ten to fourteen, lanceolate, equal, permanent. Corolla: compound uniform: corollets hermaphrodite equal, fifteen to twenty: proper funnel-form, dilated at the baſe; border five-cleft, patulous. Stamina: filaments five, filiform, ſhorter than the tube. Antheræ oblong, flattiſh twin, ſlightly connate. Piſtillum: germ oblong; ſtyle filiform, longer than the corollet, two-parted; ſtigmas flattiſh, clubbed. Pericarpium none; calyx permanent, ſpreading. Seeds: ſubclavate, a little wrinkled, viſcid with glandules; down with three awl-ſhaped awns, glanduloſe at the baſe. Receptacle naked.—*Eſſential Character.* Calyx nearly regular; ſtyle bifid; down three-awned, glandular at the tip; receptacle naked.

Species. 1. Lavenia decumbens, or decumbent lavenia: ſtem ſimple, decumbent; leaves ſubcordate, bluntly ſerrate. Annual; native of the inland cool and ſhady woods of Jamaica.

2. Lavenia erecta, or erect lavenia: ſtem branched, erect; leaves elliptic, ſharply ſerrate. Native of the Eaſt Indies and the Society Iſles.

LAVENSAR', an iſland of Ruſſia, in the gulf of Finland: ſixty miles weſt of Peterſburg. Lat. 59. 54. N. lon. 27. 50. E.

LAV'ENSTEIN, or LŒWENSTEIN, a town of Germany, in the principality of Culmbach. Near it is a copper-mine: fourteen miles north-weſt of Lichtenberg, and twelve ſouth of Saalfeld.

LAU'ENSTEIN, a town of Weſtphalia, in the principality of Calenberg: nine miles eaſt of Hameln.

LAU'ENSTEIN, a town of Saxony, in the marggravate of Meiſſen: twenty-one miles ſouth-eaſt of Freyberg, and eighteen ſouth of Dreſden. Lat. 50. 42. N. 13. 46. E.

LAVEN'ZA, a ſeaport of Italy, in the department of the Apennines, with a harbour formed at the mouth of a ſmall river, at the expenſe of the duke of Modena. It is ſeven miles ſouth-eaſt of Sarzana, and two ſouth-weſt of Carrara. Lat. 44. 3. N. lon. 10. 1. E.

LA'VER, *ſ.* [*lavoir*, Fr. from *lave.*] A waſhing-veſſel.

Let us go find the body where it lies
Soak'd in his enemies' blood, and from the ſtream,
With *lavers* pure, and cleanſing herbs, waſh off
The clodded gore. *Milton's Agoniſtes.*

He gave her to his daughters, to imbathe
In nectar'd *lavers* ſtrew'd with aſophodil. *Milton.*

Young Aretus from forth his bridal bow'r
Brought the full *laver* o'er their hands to pour. *Odyſſey.*

In Scripture-hiſtory, a ſacred utenſil placed in the court of the Jewiſh tabernacle, conſiſting of a baſon, whence they drew water by cocks, for waſhing the hands and feet of the officiating prieſts, and alſo the entrails and legs of the victims.

LA'VER, the name of three pariſhes, four miles north-weſt from Chipping Ongar, in Eſſex, diſtinguiſhed by the appellations

appellations of *High, Magdalen,* and *Little.* In the parish of High Laver was Oates, the seat of sir Francis Marsham, member of parliament for Essex from 1690 to 1708. That illustrious philosopher, John Locke, spent much of his time, in the last ten years of his life, at Oates, where he was treated with the utmost friendship by sir Francis and his lady, who consoled his last moments by her kind offices. Here he died, in 1704, and was buried on the south side of the church-yard, under a black marble gravestone, inclosed by iron rails; and on the wall of the church above is his epitaph, printed in his works: this tomb and monument are now in a decayed state. Oates continued in this family till the death of the last lord Marsham, in 1776. We are sorry to add, that the mansion of Oates, which the author of the character of Mr. Locke, published in 1795, fondly imagined would be famous to posterity for the long abode that great man made there, was levelled with the ground about seven years ago, and the ploughman now "plods his weary way" over a spot once the residence of so many virtues and accomplishments!

LA'VER-BREAD, *s.* In the county of Glamorgan, and some other parts of Wales, they make a sort of food of a sea-plant, which seems to be the oyster-green, or sea liver-wort.

LAVERCANIE'RE, a town of France, in the department of the Lot: seven miles south of Gourdon.

LAVERDIE'RE, a town of France, in the department of the Var: six miles north of Barjols.

LAVER'NA, in mythology, the goddess of thieves and dishonest persons at Rome. She did not only preside over robbers, called from her *laverniones,* but she protected such as deceived others, or formed their secret machinations in obscurity and silence. Her worship was very popular, and the Romans raised her an altar near one of the gates of the city, which, from that circumstance, was called the gate of Laverna. She was generally represented by a head without a body.

LAV'ERNICK, a town of Prussia, in the territory of Culm, on the Drebentz: forty-four miles east of Culm.

LAVER'NIUM, a temple of Laverna, near Formiæ.

LAV'EROCK, or LAVROCK, *s.* [Scotch.] The lark:

The tuneful *lav'rocks* cheer the grove,
And sweetly swells the simmer green:
Now o'er the mead I love to rove
Wi' bonny Jem of Aberdeen. *Song.*

LAU'EZITZ, a town of Moravia, in Brunn: ten miles south of Brunn.

LAUF, a town of Germany, in the territory of Nuremberg: eight miles east-north-east of Nuremberg, and thirty south-east of Bamberg. Lat. 49. 8. N. lon. 11. 13. E.

LAU'FEN, a town of Switzerland, in the canton of Zurich: two miles south of Schaffhausen.

LAUF'FEN, a town of the archbishopric of Salzburg, on the Salza: eleven miles north-north-west of Salzburg, and twenty-six north-east of Kuffstein. Lat. 47. 54. N. lon. 12. 52. E.

LAUF'FEN, a town of France, in the department of the Upper Rhine, on the Barsch: six miles south of Bâle, and sixteen north of Soleure. Lat. 47. 32. N. lon. 7. 20. E.

LAUF'FEN, a village and castle of Switzerland, which gives name to a bailiwic, in the canton of Zurich, near the Rhine, where is a celebrated cataract: two miles below Schaffhausen.

LAUF'FEN, a town of Prussia, in Natangen: fifteen miles south of Bartenstein.

LAUF'FEN, a town of Austria. In 1147, a diet of the empire was held here under Frederic I. Eighteen miles south of Gemunden.

LAUF'FEN AM NEC'KAR, a town of Wurtemberg, on the Neckar, formerly imperial: sixteen miles north of Stuttgart, and four south of Heilbron. Lat. 49. 5. N. lon. 9. 18. E.

LAUF'FENBURG, a town of Germany, and one of the four forest-towns of the late Austrian Swabia; the head-place of an ancient county, and a fortified town; situated on both sides of the river Rhine, over which is a bridge; by means of which both parts of the town are joined to each other. This town is a fief of the foundation of Seckingen, which was possessed by the counts of Habsburg, together with the tract called the Seckingen, so early as the days of the Swabian dukes of the house of Hohenstaufen. The line of Habsburg-Laufenburg becoming extinct in the year 1409, both counties, together with the towns in them, descended to the house of Austria by way of inheritance, though, so early as the year 1387, duke Leopold had purchased the whole county of Laufenburg, of count John the younger of Habsburg, for 12,000 florins. At this place is a fall in the river Rhine; twenty-six miles west of Schaffhausen, and eighteen east of Bâle. Lat. 47. 36. N. lon. 8. 4. E.

LAUFF'NITZ, a river of Stiria, which runs into the river Raab near south Gothard in Hungary: ten miles south-east of Furstenfeld.

LAUF'FON, a town of France, in the department of the Upper Rhine, and chief place of a canton, in the district of Délémont, seated on the Barsch; 16 miles north of Soleure. The place contains 740, and the canton 7513, inhabitants, on a territory of 172½ kiliometres in 21 communes. Lat. 47. 32. N. lon. 7. 20. E.

LAUGEO'N, a town of Meckley: forty-two miles west of Munnypour.

LAUGE'RIA, *s.* [named by Jacquin from *Robert Laugier,* professor of chemistry and botany at Vienna, when a botanic garden was first established there.] In botany, a genus of the class pentandria, order monogynia, natural order of rubiaceæ, *Juss.* The generic characters are—Calyx: perianthium one-leafed, tubular, superior, with unequal mouth, small, deciduous. Corolla: one-petalled, salver-form; tube very long; border five-cleft; divisions obovate. Stamina: filaments five, very short; antheræ linear, long, beneath the throat. Pistillum: germ subovate, inferior; style filiform, rather longer than the tube; stigma headed. Pericarpium: drupe roundish, umbilicated with a point. Seed: nut two or five-celled, *Sw.* furrowed, *Jacqu.—Essential Character.* Corolla five-cleft; drupe with a five-celled nut.

Species. 1. Laugeria odorata, or sweet-smelling laugeria: leaves subovate, acute, smooth; stem somewhat spiny; racemes panicled; drupes with five-celled nuts. This is an upright branching shrub, ten feet high. Leaves quite entire, petioled, opposite, two inches long. Flowers of a dirty red, very sweet during the night. Fruits black, larger than pease, soft, very numerous, falling when ripe with every slight motion of the bush. It comes up both unarmed and with long opposite straight spines from the seed of the same shrub. Native of America, Carthagena, Havannah, &c.

2. Laugeria lucida, or shining laugeria: leaves oblong, blunt, entire, membranaceous, shining; racemes dichotomous; drupes with two-celled nuts. Branches round, smooth, covered with an ash-coloured bark, scarred at top with the fallen leaves. Native of the West Indies, Jamaica, and Santa Cruz.

3. Laugeria tomentosa, or rough laugeria: leaves ovate, acute, entire, tomentose underneath; racemes dichotomous; drupes with a two-celled nut. Native of Jamaica.

To LAUGH, *v. n.* [hlaþan, Sax. *lachen,* Germ. and Dut. *lach,* Scot.] To make that noise which sudden merriment excites:

The large Achilles, on his prest-bed lolling,
From his deep chest *laughs* out a loud applause. *Shakesp.*

[In poetry.] To appear gay, favourable, pleasant, or fertile.—Then *laughs* the childish year with flowrets crown'd. *Dryden.*

The plenteous board, high-heap'd with cates divine,
And o'er the foaming bowl the *laughing* wine. *Pope.*

To LAUGH *at.* To treat with contempt; to ridicule.—The dissolute and abandoned, before they are aware of it,

are betrayed to *laugh at* themſelves; and upon reflection find, that they are merry at their own expenſe. *Addiſon.*

No wit to flatter, left of all his ſtore;
No fool to *laugh at*, which he valued more. *Pope.*

To LAUGH, *v. a.* To deride; to ſcorn.—A wicked ſoul ſhall make him to be *laughed* to ſcorn of his enemies. *Ecclus.* vi. 4.

Be bloody, bold, and reſolute; *laugh* to ſcorn
The pow'r of man. *Shakeſpeare's Macbeth.*

LAUGH AND LIE DOWN. The name of a certain game at cards, alluded to in the following paſſage: As apt to *laugh*, as we to *lie down*. *Broome's Jovial Crew.*

LAUGH, *ſ.* [from the verb.] The convulſion cauſed by merriment; an inarticulate expreſſion of ſudden merriment:

She feigns a *laugh*, to ſee me ſearch around,
And by that *laugh* the willing fair is found. *Pope.*

LAUGH'ABLE, *adj.* Such as may properly excite laughter.—Caſaubon confeſſes Perſius was not good at turning things into a pleaſant ridicule; or, in other words, that he was not a *laughable* writer. *Dryden.*

Nature hath fram'd ſtrange fellows in her time:
Some that will evermore peep through their eye,
And laugh like parrots at a bagpiper;
And others of ſuch vinegar aſpect,
That they'll not ſhow their teeth in way of ſmile,
Though Neſtor ſwear the jeſt be *laughable*. *Shakeſpeare.*

LAUGH'ABLY, *adv.* So as to excite merriment.

LAUGH'ER, *ſ.* A man fond of merriment.—Some ſober men cannot be of the general opinion; but the *laughers* are much the majority. *Pope.*

LAU'GHI, a fief of Piedmont, which takes its name from a mountain; formerly held immediately from the empire, but, in the year 1736, ceded to the king of Sardinia, as duke of Savoy; and now annexed to France.

LAUGH'ING, *ſ.* The noiſe occaſioned by ſudden merment.—*Laughing* cauſeth a continued expulſion of the breath with the loud noiſe, which maketh the interjection *laughing*, ſhaking of the breaſt and ſides, running of the eyes with water, if it be violent. *Bacon's Natural Hiſtory.*

LAUGH'ING-STOCK, *ſ.* A butt; an object of ridicule.—Pray you, let us not be *laughing-ſtocks* to other men's humours. *Shakeſpeare.*

The forlorn maiden, whom your eyes have ſeen
The *laughing-ſtock* of fortune's mockerie. *L'Eſtrange.*

LAUGH'INGLY, *adv.* In a merry way; merrily.

LAUGH'TER, *ſ.* Convulſive merriment; an inarticulate expreſſion of ſudden merriment.—The act of *laughter*, which is a ſweet contraction of the muſcles of the face, and a pleaſant agitation of the vocal organs, is not merely voluntary, or totally within the juriſdiction of ourſelves. *Brown.*

We find not that the *laughter*-loving dame
Mourn'd for Anchiſes. *Waller.*

Laughter is an affection peculiar to mankind. In laughter, the eyebrows are raiſed about the middle, and drawn down next the noſe; the eyes are almoſt ſhut; the mouth opens and ſhows the teeth, the corners of the mouth being drawn back and raiſed up; the cheeks ſeem puffed up, and almoſt hide the eyes; the face is uſually red; the noſtrils are open; and the eyes wet.

Authors attribute laughter to the fifth pair of nerves, which ſending branches to the eye, ear, lips, tongue, palate, and muſcles of the cheek, parts of the mouth, præcordia, &c. there hence ariſes a ſympathy, or conſent, between all theſe parts; ſo that when one of them is acted upon, the others are proportionably affected. Hence a ſavoury thing ſeen, or ſmelt, affects the glands, and parts of the mouth; a thing ſeen, or heard, that is ſhameful, affects the cheeks with bluſhes; on the contrary, if it pleaſe and tickle the fancy, it affects the præcordia, and muſcles of the mouth and face, with laughter; if it cauſe ſadneſs and melancholy, it likewiſe affects the præcordia, and demonſtrates itſelf by cauſing the glands of the eyes to emit tears.

The affection of the mind by which laughter is produced is ſeemingly ſo very different from the other paſſions with which we are endowed, that it hath engaged the attention of very eminent perſons to find it out: but theſe perſons differ ſo exceedingly in their definitions of it, that we ſhould make the reader yawn were we to enter into the arguments by which every ſucceeding philoſopher has laboured to refute his predeceſſor. Indeed the pleaſing emotion, ariſing from the view of ludicrous ideas, is known to every one by experience; but, being a ſimple feeling, admits not of definition. It is to be diſtinguiſhed from the laughter that generally attends it, as ſorrow is to be diſtinguiſhed from tears; for it is often felt in a high degree by thoſe who are remarkable for gravity of countenance. Swift ſeldom laughed, notwithſtanding his uncommon talents in wit and humour, and the extraordinary delight he ſeems to have had in ſurveying the ridiculous ſide of things. Why this agreeable emotion ſhould be accompanied with laughter as its outward ſign, or ſorrow expreſs itſelf by tears, or fear by trembling or paleneſs, we cannot ultimately explain, otherwiſe than by ſaying, that ſuch is the appointment of the Author of nature.

We ſhall conclude this ſhort article with inſtances of two perſons in whom laughter appears to have been excited by cauſes certainly not within the calculation of any of the philoſophers we have alluded to. In one of Congreve's letters, printed in Berkeley's Literary Relics, we have the following paſſage: "One thing I muſt tell you, which gave me much pleaſure. Whenever we have ſeen any thing extremely ſurpriſing, chiefly in painting, though the picture has been the moſt ſolemn, the moſt devout, the moſt moving, both in the ſubject and the expreſſions of the paſſion; as ſoon as our Charles began to be touched with it, he always burſt out a-laughing, which I like mightily; and ſo he did the firſt time he heard Abell ſing." The other inſtance, ſtill more extraordinary, is from the Monthly Review, vol. iii. "A boy, about ten years old, was obliged, for ſome ſurgical complaint, to ſuffer the application of a cauſtic. On queſtioning the mother, whether the lad had felt much pain from it, ſhe replied, that he would not own it, but ſhe was ſure he had, from his laughing immoderately during the whole time of the application; which he always did when he was in pain."

LAU'GHTON, a village near Roche-abbey, in the North Riding of Yorkſhire. It has a church, whoſe tower and ſpire, for their delicacy and juſt proportion, are not excelled by any Gothic piece of the kind. The height of the ſteeple to the weather-cock is 195 feet; and it is ſeen from many places forty, fifty, and ſixty, miles diſtant.

LAUGIE'RIA, *ſ.* in botany. See LAUGERIA, p. 296.

LAVIA'NA, in ancient geography, a province of Armenia Minor.

LAVIA'NO, a town of Naples, in Principato Citra: twenty-ſeven miles eaſt of Salerno.

LAU'JAR, a town of Spain, in the province of Grenada: eighteen miles north-weſt of Almeria.

LAVI'GEN, a town of Norway, in the dioceſe of Drontheim: twenty-four miles north of Drontheim.

LAUIN'GEN, a town of Bavaria, in the principality of Neuburg, on the Danube. This is ſuppoſed to have been a Roman colony. A ſhoe-maker of this town having killed a celebrated Hungarian champion, the emperor Otho I. gave it for its arms a Moor's head crowned, with a gold chain about its neck. In the year 1632 this town was taken by the Swedes. It is ſix miles above Hochſtet, and twenty-two north-eaſt of Ulm. Lat. 48. 32. N. lon. 10. 22. E.

LAV'INGTON (Eaſt), or MARKET LAVINGTON, a market-town and pariſh in the hundred of Swanborough,

and county of Wilts, ſituated at the northern termination of Saliſbury plain. It was formerly called Steeple (or Staple) Lavington, and was a conſiderable town; having acquired the name of Cheaping (or Market) Lavington, from its great corn-market, which was eſtabliſhed early in the fifteenth century, but is now much decreaſed, as the chief reſort of the dealers is to Devizes. Eaſt Lavington is eighty-nine miles from London; the markets were on Monday and Wedneſday. Biſhop Tanner, the celebrated author of Notitia Monaſtica, was born in this town in 1674.

Weſt or Biſhop's Lavington, is a pariſh within two miles of the foregoing, but ſituate in the hundred of Whorlſdon.

LAVIN'IA, a daughter of king Latinus and Amata. She was betrothed to her relation king Turnus; but, becauſe the oracle ordered her father to marry her to a foreign prince, ſhe was given to Æneas after the death of Turnus. At her huſband's death ſhe was left pregnant; and, being fearful of the tyranny of Aſcanius her ſon-in-law, ſhe fled into the woods, where ſhe brought forth a ſon called Æneas Sylvius.

LAVIN'IUM, or LAVI'NUM, a town of Italy, built by Æneas, and called by that name in honour of Lavinia. It was the capital of Latium during the reign of Æneas.

LAVI'NO, a town of Italy, in the Milaneſe: eighteen miles weſt-north-weſt of Como.

LAVI'NO, a town of Naples, in the county of Moliſe: twenty-four miles north-eaſt of Moliſe.

LA'VIS, a river which riſes in the lake of the Tyroleſe, and runs into the Adige four miles north of Trent.

LA'VIS, a town of the county of Tyrol, ſituated at the union of the Lavis with the Adige. In September 1796, it was taken by the French, who drove out the Auſtrians with ſome loſs. It is eight miles north of Trent.

LAU'IS. See LUGANO.

LAV'ISH, *adj.* [this word may be plauſibly derived from to *lave*, to *throw out*; as *profundere opes* is to be *laviſh*.] Prodigal; waſteful: indiſcreetly liberal:

His jolly brother, oppoſite in ſenſe,
Laughs at his thrift; and, *laviſh* of expenſe,
Quaffs, crams, and guttles, in his own defence. *Dryden.*

Scattered in waſte; profuſe: as, The coſt was *laviſh*.—Wild; unreſtrained:

Bellona's bridegroom, lapt in proof,
Confronted him, curbing his *laviſh* ſpirit. *Shakeſpeare.*

To LAV'ISH, *v. a.* To ſcatter with profuſion; to waſte; to ſquander:

Should we thus lead them to a field of ſlaughter,
Might not th' impartial world with reaſon ſay,
We *laviſh'd* at our deaths the blood of thouſands? *Addiſon.*

LAV'ISHER, *ſ.* A prodigal; a profuſe man.

LAV'ISHLY, *adv.* Profuſely; prodigally.—Praiſe to a wit is like rain to a tender flower; if it be moderately beſtowed, it cheers and revives; but, if too *laviſhly*, overcharges and depreſſes him. *Pope.*

My father's purpoſes have been miſtook;
And ſome about him have too *laviſhly*
Wreſted his meaning and authority. *Shakeſpeare.*

Then laughs the childiſh year with flowrets crown'd,
And *laviſhly* perfumes the fields around. *Dryden.*

LAV'ISHMENT, or LAV'ISHNESS, *ſ.* Prodigality; profuſion:

Firſt got with guile, and then preſerv'd with dread,
And after ſpent with pride and *laviſhneſs*. *Fairy Queen.*

LAVI'T DE LOMA'GNE, or VIT DE LOMAGNE, a town of France, in the department of the Gers: twelve miles eaſt of Lectoure. Lat. 43. 57. N. lon. 1. 0. E.

LAU'KAS, a town of Sweden, in the government of Waſa: 124 miles eaſt-ſouth-eaſt of Waſa.

LAU'KOWITZ, a town of Bohemia, in Boleſlaw: ten miles north-north-eaſt of Jung Buntzel.

LAU'MONITE, *ſ.* in mineralogy, a ſubſtance formerly denominated *efflorescent zeolite*, in conſequence of its undergoing diſintegration, and finally falling into powder, on expoſure to the air; and from the belief that it belonged to the genus Zeolithus. Having been found, however, to differ entirely from the latter, it has been named *laumonite*, in honour of M. Gillet de Laumont, who diſcovered it about twenty-five years ago, in the lead-mine of Huelgoet, in Lower Brittany. Count Bournon, foreign ſecretary to the Geological Society, has detailed its cryſtallographical, phyſical, chemical, and ſpecific, characters, and has added ſome ingenious obſervations on its cryſtalline forms, &c. thus contributing additions and corrections to the prior notices of de Laumont and Haüy. Since the date of its diſcovery, laumonite has been alſo found in the iſland of Feroe; in prehnite, ſaid to have been brought from China; in the cavities of an amygdaloid, with a very argillaceous and earthy baſe, from the Venetian ſtates; and in zeolitic rocks at Portruſh, in the county of Antrim, in Ireland, and from the neighbourhood of Paiſley in Scotland.

LAUN, or LAU'NY, a town of Bohemia, in the circle of Saatz, on the Egra, in the road from Leipſic to Prague: nine miles eaſt-north-eaſt of Saatz. Lat. 50. 20. N. lon. 13. 54. E.

LAUNAY' (Peter), an eſteemed French proteſtant writer, was born at Blois in the year 1573. He obtained a poſt under government in the department of finance, and was made ſecretary to the king. He renounced, however, the advantages and honours of theſe ſituations, and all his flattering proſpects of rank and fortune, that he might devote his time to the ſtudy of the ſacred writings. By his talents and virtues he acquired the reſpect and confidence of the French proteſtants, and was choſen deputy to all the ſynods of his province, and to almoſt every national ſynod which was held in his time. He died in 1662, at the great age of eighty-nine years. He was the author of the following works, which at their firſt appearance were received with much approbation, and are ſtill held in eſteem by the French Calviniſts: 1. Paraphraſes on the Book of Proverbs, Eccleſiaſtes, the Prophet Daniel, all the Epiſtles of St. Paul, and the Apocalypſe; which were publiſhed at different periods. 2. Remarks on the Bible, or an Explanation of the different Words, Phraſes, and Figures, in the ſacred Writings, 1667, 4to. 3. A treatiſe on the Holy Supper, &c. *Nouv. Dict. Hiſt.*

LAUNCE, *ſ.* [from *lanx*, Lat.] Balance:

That fortune all in equal *launce* doth ſway,
And mortal miſeries doth make her play. *Spenſer.*

LAUN'CEGAY, *ſ.* A kind of offenſive weapon now diſuſed, and prohibited by the ſtat. 7 R. II. c. 13.

LAUN'CELOT, or LANCELOT, a man's name.

LAUN'CESTON, a populous borough and market-town in the hundred of Eaſt, and county of Cornwall, England, is ſituated on an eminence, at the diſtance of one mile from the river Tamer, near the central part of the eaſtern ſide of the county. Its ancient name was *Dunheved*, or the Swelling Hill; but the preſent appellation, according to Borlaſe, ſignifies the "Church of the Caſtle." The caſtle is the moſt important object in the town, to which, in all probability, it gave origin. Its mouldering walls ſurround and cover a conſiderable extent of ground, and prove it to have been a fortreſs of great ſtrength and importance. The principal entrance was from the ſouth-weſt, through a fortified paſſage upwards of a hundred feet in length, and ten in breadth. At the end of this ſtood the great gate, the arch of which was pointed, but is now in ruins. This led to a ſmaller gate, with a round arch, opening into the baſe court, which formed a ſquare of 136 yards, ſurrounded by thick walls, and fortified with a deep ditch. At the ſouth-weſt

angle was a very ſtrong round tower, whence a terrace extended to the keep or citadel at the ſouth-eaſt angle of the court. This conſiſted of an immenſe artificial hill, nearly ninety feet in perpendicular height, about three hundred feet diameter at its baſe, and ninety-three at its ſummit. The aſcent to this keep originally commenced at a ſemi-circular tower, and continued to the top through a covered way, ſeven feet wide, now in ruins. The keep conſiſts of three wards, and is ſurrounded by a circular wall. The thickneſs of the outer wall, or parapet, is about three feet; the ſecond wall is ſix feet from the former, nearly four times the thickneſs, and conſiderably higher. About eight feet within this wall is another, ten feet thick, and thirty-two feet high from the floor of the incloſed area, the diameter of which is about eighteen feet. In the baſe court formerly ſtood the county gaol, a ſpacious aſſiſe-court, a chapel, and other buildings; but theſe have all been taken down, except the gaol, which retains its ſituation near the bottom of the hill. The building of the caſtle has been generally attributed to William earl of Moreton and Cornwall, in the time of William the Conqueror; but this opinion is probably erroneous, as the ſtyle of workmanſhip exhibited in ſeveral parts of the remains is apparently of a much earlier date. The walls of the keep, in particular, have every appearance of being conſiderably more ancient; and, from a retroſpective view of events that have occurred in this county, the conjecture appears to be fully warranted that the foundation of the caſtle is as remote as the time of the Britons. The era in which the town was founded, or, at leaſt, began to aſſume a regular form, is better determined; this was about the year 900. No remains of the original buildings are now extant. On the north ſide of the town was a priory of Auguſtine monks, ſaid to have been eſtabliſhed by Warlewaſt, biſhop of Exeter.

As this town was a principal reſidence of the earls of Cornwall for many years after its foundation, its conſequence continually increaſed, and many liberties and privileges were granted to its inhabitants. Soon after the conqueſt, a weekly market was eſtabliſhed on Sunday; in the reign of king John, the townſmen paid five marks for the removal of the market to Thurſday; but it has ſince been changed to Saturday. In the reign of Henry III. Launceſton was made a free borough by the king's brother, Richard, earl of Poictiers and Cornwall; he alſo granted the inhabitants ſome additional immunities, which were confirmed by ſeveral ſubſequent charters; and in the reign of Richard II. the aſſiſes were ordered to be held at Launceſton, and "no where elſe." This regulation was obſerved till the firſt year of George I. when an act was paſſed empowering the lord chancellor to appoint any other place in the county. Since that period the winter aſſiſes only have been held here; thoſe of the ſummer having been removed to Bodmin. By a charter of Philip and Mary, granted in 1555, which enumerates and confirms the various prior charters, the government is veſted in a mayor, recorder, and eight aldermen, who, with the free burgeſſes, have the right of electing the parliamentary repreſentatives. The whole number of voters is about twenty. This borough made its firſt return in the twenty-third of Edward I. and had a mayor as early as the time of Edward IV. Near the centre of the town is the church of St. Mary Magdalen, a handſome fabric, built with ſquare blocks of granite, moſt of which are enriched with carved ornaments, executed in a very ſingular manner. At the weſt end is a lofty tower; and a figure of the Magdalen, in a recumbent poſture, is placed in a niche at the eaſt end. This church was originally only a chantry-chapel; in the reign of Henry IV. it was re-edified and conſiderably enlarged; in Henry the VIth's reign it was conſtituted a pariſh-church; and was again rebuilt in the time of Henry VIII. The town was formerly ſurrounded by a wall, of which ſome parts ſtill remain. The ſtreets are narrow; but the houſes are well built; on the ſouth ſide is a fortified gateway, containing an apartment uſed as the town gaol. The children of the poor are educated in two charity-ſchools maintained by voluntary ſubſcription; and a free-ſchool founded and endowed by queen Elizabeth. Launceſton is diſtant from London 213 miles; has a weekly market on Wedneſday, beſides that on Saturday already mentioned, and ſix annual fairs.

Hengſton-hill, near Launceſton, had formerly rich veins of tin; and the tinners, both of Cornwall and Devon, uſed to meet here in great numbers every ſeventh or eighth year, to conſult for their common intereſt. Here the Corniſh-Britons joined the Danes, to drive out the Saxons from Devonſhire; but were totally defeated by Egbert in 831.

Newport is a little village adjoining, and was formerly part of Launceſton; and yet ſends two members to parliament; and indeed there are no leſs than forty-four for this county; and the number of electors is ſo ſmall, in many places, that the miniſters for the time being have uſually a great reliance on the elections in this county every new parliament, in order to obtain a majority in the houſe of commons; forty-four members from Cornwall, and forty-five from Scotland, who generally go one way, make no ſmall figure in a queſtion. And, in this caſe, it may not be improperly obſerved, that the two extremities of the iſland, let the other parts go as they will, are generally united in the ſame way of thinking, or at leaſt of acting, in all political debates; and are likely to be ſo in all times to come. This place was never incorporated, or ſo much as anciently to be ſtyled a borough; and the whole is the property of the duke of Northumberland, who is lord of the manor, and appoints, at his court-leet, both the returning officers and the members. This place firſt returned members in Edward VIth's laſt parliament. The two vianders, and all the reſt of the inhabitants paying ſcot and lot, chooſe the members. The number of voters is at preſent only twenty-four; the vianders are the returning officers.

Before we quit Launceſton and Newport, we muſt not forget to mention Werrington, formerly the ſeat of ſir William Morris, ſecretary to king Charles II. in whoſe family it continued till 1775, when it was purchaſed, together with the adjoining eſtate, by the late duke of Northumberland, in whoſe family it ſtill remains. The houſe is not undeſerving attention, and the park is one of the fineſt in England, diſtinguiſhed for its noble woods and fine ſlopes, and being full of red and fallow deer. The beautiful river that runs through the park is the bounday that here divides the counties of Cornwall and Devon. This place is believed to have been the ancient reſidence of Orgar earl of Devonſhire, whither king Edgar ſent his favourite earl Athelwold, to demand for him the beautiful Elfrida, whom that unfaithful emiſſary (ſeduced by her beauty) obtained for himſelf; and here, it is believed, was acted the ſubſequent tragedy of that earl's death. Certain it is, that in the houſe is preſerved a part of the ancient caſtle, ſtili called Edgar's Tower; and in the park are ſhown the remains of a croſs, which, according to tradition, was erected by Elfrida, on the very ſpot where Athelwold was ſlain by the hand of his enraged maſter. *Britiſh Directory. Beauties of England.*

To LAUNCH, *v. n.* [It is derived by *Skinner* from *lance*, becauſe a ſhip is puſhed into water with great force.] To force a veſſel into the ſea.—For general hiſtory, Raleigh and Howel are to be had. He who would *launch* farther into the ocean, may conſult Whear. *Locke.*

So ſhort a ſtay prevails;
He ſoon equips the ſhip, ſupplies the ſails,
And gives the word to *launch.* *Dryden.*

To rove at large; to expatiate; to make excurſions.—Whoever purſues his own thoughts, will find them *launch* out beyond the extent of body into the infinity of ſpace. *Locke.*—Spenſer has not contented himſelf with ſubmiſſive imitation: he *launches* out into very flowery paths, which ſtill conduct him into one great road. *Prior.*

From

From hence that gen'ral care and ſtudy ſprings,
That *launching* and progreſſion of the mind. *Davies.*

To LAUNCH, *v. a.* To puſh to ſea.—All art is uſed to ſink epiſcopacy, and *launch* preſbytery, in England. *King Charles.*

With ſtays and cordage laſt he rigg'd the ſhip,
And, roll'd on leavers, *launch'd* her in the deep. *Pope.*

To dart from the hand. This perhaps, for diſtinction ſake, might better be written *lanch* or *lance.*

The King of Heav'n, obſcure on high,
Bar'd his red arm, and, *launching* from the ſky
His writhing bolt, not ſhaking empty ſmoke,
Down to the deep abyſs the flaming fellow ſtrook. *Dryd.*

LAUN'CHING, *ſ.* The act of throwing off the ſtocks into the water; the act of throwing from the hand.

LAUND, *ſ.* [*lande*, Fr. *lawn*, Welſh.] Lawn; a plain extended between woods. *Hanmer.*

For through this *laund* anon the deer will come;
And in this covert will we make our ſtand. *Shakeſpeare.*

LAUN'DER, *ſ.* in tin-works, a trench for waſhing ore. *Scott.*

LAUN'DERER, *ſ.* [from *laundry.*] A man that follows the buſineſs of waſhing.—He is a *launderer* of ſouls, and tries them, as men do witches, by water. *Butler's Characters.*

LAUN'DRESS, *ſ.* [*lavandiere*, Fr. *Skinner* imagines that *lævandareſſe* may have been the old word.] A woman whoſe employment is to waſh clothes.—The counteſs of Richmond would often ſay, On condition the princes of Chriſtendom would march againſt the Turks, ſhe would willingly attend them, and be their *laundreſs. Camden.*

To LAUN'DRESS, *v. a.* [from the *ſubſt.*] To ſupply with laundreſſes:

Did I want
Ten leaſh of courtezans, it would furniſh me;
Nay, *laundreſs* three armies. *Webſter's White Devil.*

LAUN'DRY, *ſ.* [as if *lavanderie.*] The room in which clothes are waſhed.—The affairs of the family ought to be conſulted, whether they concern the ſtable, dairy, the pantry, or *laundry. Swift.*—The act or ſtate of waſhing.—Chalky water is too fretting, as appeareth in *laundry* of cloaths, which wear out apace. *Bacon.*

Waſhing and getting up linen are employments of great importance in moſt families; and they have engaged the attention of many ingenious mechanics, who have contrived various waſhing-machines for the abridgment of labour and expenſe in this department of domeſtic economy. Moſt of the machines hitherto uſed are objectionable on many accounts, but principally becauſe they operate by *friction*, inſtead of *preſſure*. When the linen is properly prepared for waſhing, it may be thoroughly cleanſed by *preſſure* only. Rubbing it with the hands, or by any machine that operates by friction, injures it more than the wear it ſuſtains in actual uſe. Hence it follows, that the beſt method of cleanſing foul linen is, firſt, to prepare it for the operation by ſoaping it where neceſſary, and putting it to ſoak for at leaſt twelve hours. This will looſen the filth, and decompoſe the greaſe and other matter with which it is ſoiled, and it will then be readily removed by alternately ſoaking, and ſqueezing or preſſing. The deſideratum, therefore, is, to conſtruct a machine that would by a rotative motion, or an up-and-down ſtroke, (like pumping,) alternately preſs and ſaturate the linen with the ſuds, and laſtly with clear water. The machine that comes neareſt to this, of any that has fallen under our notice, is one invented by Mr. Gould.

In a late publication we have met with a very ample deſcription of a waſh-houſe and laundry, conſtructed upon ſcientific principles by John Bentley, eſq. the preſent poſſeſſor of Highbury-houſe, near London; which we ſhall preſent entire to our readers.

The waſh-houſe is twenty-four feet long, nine broad, and eight high. It is furniſhed with a filtering-machine, a ciſtern for filtered water, two coppers, a copper colander, a jack with pulleys, ſix waſhing-tubs, a ſtone ſink, a table, a wringing-machine, and a pump of hard water. The floor is rough Yorkſhire-ſtone, laid upon a ſharp current. Over two-thirds of the roof is a lead ciſtern containing forty hogſheads of rain-water, ſupplied from the adjoining buildings. The other third of the roof is conical, ſurmounted with a cylinder for a ſteam-vent, which opens and ſhuts at pleaſure. When open, beſides emitting the ſteam, it admits both light and air. The ciſtern for filtered water holds 200 gallons; and ſupplies, by pipes and cocks, the copper, tubs, and ſink. The firſt copper is fixed ſo that the top of it is level with the bottom of the ciſtern, and the bottom of it is level with the top of the other copper, and the tops of the tubs and ſink, all which it ſupplies with hot water. The tubs, coppers, and ſink, are ſupplied with cold water from the ciſtern. Each of the tubs has a braſs plug at bottom, to diſcharge the foul water. A nine-inch board runs along the front of the tubs and ſink on the ground, to prevent the ſplaſhing of the water when diſcharged. Each tub is furniſhed with a ſmall wooden ſtrainer for ſoap. The ſecond copper is for boiling the linen, and has a copper colander to hold the linen, which is drawn up by the jack and pulleys. The jack has a paul and ratchet-wheel to keep the colander ſuſpended over the copper till the water is drained from the linen into the copper, which can then be turned out all together into the rinſing-tub. By this contrivance, the uſual mode of poking the linen out with a ſtick (which frequently damages it) is avoided. At the bottom of this copper is a large braſs cock for diſcharging the ſuds when they are done with. Though the ſix tubs are ſupplied with both hot and cold water, there are only ſix cocks to the whole, one cock ſupplying two tubs, by means of a ſcrew-joint in the nozzle, which turns at pleaſure to either tub. There is alſo a ſcrew-joint between the key and pipe in each cock, by which means it can at any time be repaired without the aſſiſtance of the plumber.

The filtering-machine performs its operation by aſcent. It has three cocks in one pipe. The uppermoſt is for regulating the quantity of water to be filtered, which can be varied at pleaſure from fifty to five hundred gallons in a day. The other is for cleanſing the machine when ſaturated with filth, which is accompliſhed by only turning the cock, and will, in a few minutes, be as clean as it was at firſt, the mud, &c. being diſcharged at the third or middle cock, which alſo ſerves to draw unfiltered water when required. Under the ciſtern is a receptacle for coals, and under the filtering-machine a place for pails and mops. Both ciſterns have a ſurplus water-pipe to prevent running over, and in which are alſo plugs to diſcharge all the water when needful.

The table hangs to the wall, and may be put up and down at pleaſure. It is for ſorting and ſoaping the foul linen, &c.

The laundry adjoining the waſh-houſe is eighteen feet ſquare, and eleven feet in height. It has two windows in front. The floor is level, of rubbed Yorkſhire-ſtone, laid upon brick piers, to keep it perfectly free from damp. It is furniſhed with one of Baker's large mangles; an ironing-board twelve feet by three, with four large drawers for the ironing-cloth, iron-holders, &c. with room for the clothes-baſkets underneath; a ſtove or drying-cloſet, eight feet by ſix; a furnace for heating the cloſet and the irons; and a place for coals under the floor, cloſe by the furnace. The cloſet contains four wooden horſes, each with five rails or bars. Each horſe runs in and out of the cloſet upon two ſmall iron wheels, upon an iron rail-way. One horſe holds ſix ſhirts, or a proportionable quantity of other linen; and the whole will dry off as much and as ſpeedily as ſix women can waſh in ſucceſſion. It hardens the linen after being ironed; and is alſo uſeful for airing feather beds, &c. The linen, whilſt drying, is kept free

from

from ſmoke and duſt, and there never can be any ſteam in the room. The furnace for heating it is ſimilar to thoſe under coppers or in a hot-houſe; immediately over which, before it enters the flue to the cloſet, is an iron oven for heating the irons. The flue is continued round the bottom of the cloſet, and carried up the end of the building. The top of the horizontal part of the flue is of caſt-iron plates; iron being a good, and brick a bad, conductor of heat. A few inches above theſe iron plates, the iron rail-way before-mentioned is laid, between which and the flue there is a flooring of wire-work. This prevents any accident from the caſual falling of linen upon the flues, but does not impede the aſcent of warm air. Level with the rail-way, inſide the cloſet, there is an opening fifteen inches ſquare, communicating with the external air. The ceiling of the cloſet is in the form of a hopper, terminating in a funnel of the ſame diameter (fifteen inches) as the external air-vent. Both theſe vents are furniſhed with a ſliding door, which opens and ſhuts, as required, by pulley-cords. The principle upon which it acts is by heating it to a degree ſufficient to excite a ſtrong evaporation from the wet linen, and carrying off the moiſture by means of the two vents. During the time of its acquiring this heat, both the vents, and alſo the horſes, are kept cloſely ſhut, ſo that the cloſet is nearly air-tight. As ſoon as the proper degree of heat is obtained, both the vents are to be opened, when a ſtrong current of air ruſhes in at the loweſt, carrying up all the vapour from the linen through the upper vent or funnel, when the drying will be very ſpeedily completed. The linen is then removed, a freſh ſupply put in, and the operation repeated as before, beginning by cloſely ſhutting all up. Beſides the diſpatch and economy attending this waſh-houſe and laundry, the health and comfort of thoſe employed in them are greatly promoted, by being entirely free from the pernicious effects of damp vapour, and not being inconmoded by any extra heat in hot weather.

The gentleman above-mentioned has alſo conſtructed an apparatus for waſhing by *ſteam*; but this invention is applicable to white linen only, becauſe the operation proves to be ſo powerful, that it diſcharges the colour from all dyed and printed articles that have been tried with it. We ſhall deſcribe this invention and proceſs in few words. At the end of the waſh-houſe a ſtrong iron-boiler is fixed, three feet ſix inches long, one foot eight inches wide, and two feet nine inches deep, with fittings-up the ſame as thoſe for common ſteam-engines, viz. a feeding-pipe with regulator, a mercury gauge-tube, a three-inch ſteam-tube, two obſervation-cocks, a ſafety-valve, and a diſcharging-pipe. From the ſteam-tube, a pipe of one half inch bore is continued the whole length of the building; and from this main ſteam-pipe, others of ſmaller dimenſions, from three eighths to three quarters of an inch diameter, are laid on the different ſteaming-veſſels. Theſe ſhould be of copper; they muſt be fitted with a looſe grating inſide, about two inches from the bottom; a cock at one end, to admit the ſteam; and another at the other end, quite at the bottom, to diſcharge the foul water. The proceſs is as follows: Soap the linen where it is very dirty, and put it to ſoak; then place the linen upon the grating in the ſteam-veſſel; cover it up, and turn on the ſteam. The diſcharging-cock muſt be occaſionally opened, to draw off the condenſed ſteam; and, when it is found to come off perfectly clear, which it will do in half an hour, or leſs, the operation is finiſhed, and the articles will come out perfectly clean, and moſt beautifully white. By this ſimple and eaſy proceſs, the drudgery of waſhing is entirely done away; and the ſaving in time, ſoap, and other expenſes, is greater than can well be conceived. The ſaving of water in many ſituations is a matter of conſequence; but, what is of ſtill more importance, the linen will laſt double the time it otherwiſe would do: for, as there is neither preſſure nor friction, it cannot be injured in this proceſs. Waſhing by ſteam has been practiſed, but never before by this method. The way it has been done has been by ſteaming the linen *in the ſuds*. Hence it is evident that the filth that is forced out of the linen is mixed with the ſuds, and is again diſperſed equally all through the linen; ſo that repeated changes of ſoap and water muſt be had recourſe to, before the linen is made thoroughly clean. But, by this new proceſs, the linen being put into the ſteaming-veſſels, without any other liquor than it retains on being taken out of the ſoaking-tubs, every particle of matter which is diſlodged from it inſtantly ſubſides to the bottom of the veſſel, and never can again come in contact with the linen. The boiler above deſcribed alſo heats an hot-houſe in an adjoining garden, beſides boiling a copper; and thus does the work of ſix fires.

LAU'NITZ, a town of Pruſſia, in the palatinate of Culm: two miles north-weſt of Bretchen, and fifty north-eaſt of Culm.

LAUNIOWIT'Z, a town of Bohemia, in the circle of Kaurzim: ten miles ſouth of Beneſchow.

LAUNOY', a town of France, in the department of the Ardennes: ten miles ſouth-ſouth-weſt of Mezieres, and ten north-north-eaſt of Rethel.

LAUNOY' (John de), a very learned French prieſt, and voluminous writer, was born at Valdeſie, a village of Lower Normandy, two leagues from Valogne, in the year 1603. He received the early part of his education at Conſtance; whence he was ſent to the univerſity of Paris, in which he purſued his ſtudies with uncommon diligence for five or ſix years. In the year 1636, he was ordained prieſt, and admitted to the degree of doctor of divinity at the college of Navarre. For the ſake of improvement he made a journey to Rome, where he became acquainted with the moſt eminent literary characters, and gained the eſteem and friendſhip of Holſtenius and Leo Allatius. After his return to Paris, he contracted an intimacy with the moſt learned of the clergy, and particularly with father Sirmond, who afforded him much aſſiſtance in his inquiries. Every Monday, many of them were accuſtomed to meet in his apartments, where, as in a kind of academic ſchool, they freely diſcuſſed literary, hiſtorical, and polemical, topics. Eccleſiaſtical diſcipline, and the rights of the Gallican church, were the frequent ſubjects of their conferences; and they oppoſed, with great ſpirit, the pretenſions of the court of Rome. They alſo employed themſelves in examining and expoſing legendary fables and pretended canonizations. The miſſion of St. Dionyſius the Areopagite into France, the travels of Lazarus and Mary Magdalen in Provence, the reſurrection of the canon who converted St. Bruno, and a multitude of other traditions, as well as reputed ſaints, were proſcribed at this tribunal. He was one of the ableſt champions in defence of the privileges of the Gallican church; but he attacked falſe traditions with great intrepidity; and contended ſo forcibly for expunging the names of ſeveral falſe ſaints from the calendar, that he was called "the baniſher of ſaints." Vigneuil Marville obſerves, that he "was a terrible critic, formidable both to heaven and earth. He has expelled a greater number of ſaints from paradiſe, than ten popes have canonized. He ſuſpected the whole martyrology; and he examined all the ſaints one after another, in the ſame manner as they do the nobility in France." The rector of St. Euſtachius's church in Paris uſed to ſay: "Wherever I meet M. de Launoy, I bow as low as the ground; and never ſpeak to him but with my hat in my hand, and with the utmoſt humility, for fear he ſhould bereave me of my Saint Euſtachius." He alſo wrote againſt the ſuperſtitions and pretended immunities of the monks; and he drew down upon himſelf the indignation of the whole order of St. Dominic, by attacking the reputation of Thomas Aquinas. In the affair alſo of the celebrated doctor Arnauld, he choſe rather to be excluded from the Sorbonne, than to ſubſcribe the cenſure of that doctor, though he did not agree with him in opinion on the ſubject of grace. He even wrote againſt the *formulary*. By the freedom which he thus exerciſed in his writings, he provoked againſt himſelf a hoſt

of enemies, among the bigoted and ignorant, who found means to engage the higher powers on their ſide. In conſequence of this, it was intimated to him, that it was the king's deſire that the aſſemblies in his apartments ſhould be diſcontinued. They likewiſe were ſo ſucceſsful in their artifices, as to procure his expulſion from the college of Navarre in the year 1648. Upon this he retired to the abbé d'Eſtrees, who lived in Laon-college. That abbé, having been made biſhop of Laon in 1653, preſented his friend de Launoy to two canonries in his cathedral; but he ſoon reſigned theſe preferments, upon the pretence that he had no voice, and, conſequently, was not qualified for theſe employments. He alſo refuſed other offers of promotion, and lived contented on his own ſmall income, preferring a life of ſimplicity and poverty, and being entirely indifferent to the things of the world. He ſaid, that God had made him underſtand, that it is much more difficult for a Chriſtian to make a right uſe of riches than to live without them. He died in 1678, at the hotel of cardinal d'Eſtrees, when he was in the ſeventy-fifth year of his age. His chief work was *De Auctoritate neganlis Argumenti*; which, Bayle ſays, had he publiſhed no other, would have eſtabliſhed his fame as a great benefactor to the republic of letters, by the thouſand fine hints which it contains for diſtinguiſhing truth from falſehood in hiſtorical matters. The reſt of his works we ſhall not enumerate: a good edition of the whole was publiſhed by the abbé Granet, in 1731, in ten volumes, folio.

LAUNZAN', *ſ.* The name given by the natives of the Burman empire to a tree which grows on the mountains of that country, and yields an abundance of oil and eſculent fruit. It is deſcribed by Dr. F. Buchanan in the 5th volume of the Aſiatic Reſearches; but, as the doctor never ſaw the tree growing, nor the ripe fruit, his account muſt of courſe be imperfect; and hence we do not find that it has ever received a name in the Linnæan ſyſtem. If it ſhould not be taken to conſtitute a new genus, it will probably be conſidered as a ſpecies of SAPONARIA. The tree is ſaid to be very lofty; and muſt produce immenſe quantities of the fruit. In times of plenty, little uſe is made of the fruit, except for yielding oil; and beſides a ſmall quantity of the ſeeds are gathered, and ſent to all parts of the empire, where they are uſed for nearly the ſame purpoſes that almonds are amongſt us; but the demand in this way cannot be conſiderable. It is in times of ſcarcity that the fruit becomes valuable. It is ſaid, when ripe, to be red; and, like a peach, conſiſts of a ſucculent outer fleſh, containing a hard ſhell, in which there is a ſingle ſeed. The outer fleſhy part is ſaid to be agreeably acid, and ſafe to eat. When that is removed, the ſhells, by a ſlight beating, ſplit in two, and are thus eaſily ſeparated from the kernel. Theſe kernels taſte very much like a walnut; but are rather ſofter, but more oily. As they can, at thoſe places where the trees grow, be afforded very cheap, in times of ſcarcity they are carefully gathered; and, when boiled with a little rice or Indian corn, furniſh a great part of the food of the lower claſs of the natives.

LAVOISI'ER (Anthony Laurence), an eminent chemiſt and philoſopher, was born at Paris in Auguſt 1743. His father, a man of opulence, gave him every advantage of education; which he ſo well improved, as to acquire, while a young man, a thorough acquaintance with all the branches of phyſical ſcience. In the year 1764, the French government having propoſed a prize-queſtion, what was the beſt method of lighting the ſtreets of a great city, the prize was divided among three artiſts who had made experiments on the ſubject, as noticed under our article LAMP, p. 120; but Lavoiſier, who had examined it as a philoſopher and man of letters, was rewarded in a different manner: the paper which he wrote in anſwer to this queſtion was publiſhed at the expenſe of the Academy of Sciences, and the king cauſed a gold medal to be preſented to him by the preſident in a public ſitting of the academy held on the 9th of April, 1766. This paper, which contained a great many excellent mathematical and philoſophical obſervations, announced the author's entrance in the career of ſcience in which he afterwards continued to diſtinguiſh himſelf.

On the 18th of May, 1768, he was choſen a member of the academy, in the room of Baron; and about the ſame period he publiſhed ſeveral treatiſes in different periodical publications, ſuch as Obſervations on the propoſal for erecting a ſteam-engine to ſupply the city of Paris with water, on thunder, on the northern lights, on the tranſition of water into ice, &c. The Memoirs of the Academy for the year 1770 contain Obſervations by him on the nature of water, and on the experiments ſaid to prove the poſſibility of its converſion into earth. Lavoiſier, however, ſhowed that the earth obtained by the diſtillation of water was a part of the veſſel which had been attacked during the operation; for, having continued the diſtillation without interruption 101 days, the total weight of the veſſel and of the water contained in it remained unchanged, but the veſſel had loſt as much in weight as the water had gained.

Lavoiſier, by various journeys to the different diſtricts of France, in company with M. Guettard, furniſhed himſelf with copious materials for the lithology and mineralogy of the kingdom, which he arranged into a kind of a chart. They were the foundation for a work of his on the revolutions of the globe, and the formation of the ſtrata of the earth, of which ſketches were given in the Memoirs of the Academy for 1772 and 1787.

At this period the experimental philoſophers were eagerly employed in reſearches concerning the *gaſes*, or factitious airs, and ſeveral new ſubſtances of this claſs had been diſcovered, principally by the ſagacity and induſtry of Dr. Prieſtley. M. Lavoiſier, ſtruck with the beauty and importance of theſe diſcoveries, entered into the ſame field of inquiry with all the ſcientific ardour by which he was characteriſed; and, poſſeſſing the advantage of a conſiderable fortune, he conducted his experiments upon a large ſcale, with inſtruments of the moſt improved conſtruction. The Opuſcules Chymiques, which he publiſhed in 1774, gave a clear and elegant view of every thing which had hitherto been done with reſpect to the hiſtory of aeriform bodies, with ſeveral experiments of his own, remarkable for their ingenuity and accuracy. Soon after the diſcovery of that which Dr. Prieſtley called *dephlogiſticated air*, and Scheele *very pure air*, Lavoiſier engaged in an examination of its nature; and, in 1778, publiſhed his proofs that this ſubſtance is a conſtituent principle of all acids, to which, therefore, he gave the name of *oxygen*. His experiments of the production of water, in 1783, by burning oxygen gas with hydrogen gas, and of its decompoſition into the ſame elements, were a further ſtep towards the new ſyſtem of chemiſtry, of which he was the founder. It was completed by his theories of combuſtion and oxydation, his analyſis of atmoſpherical air, his doctrine of caloric, or the matter of heat, &c. and was given to the world in his *Elémens de Chymie*, publiſhed in 1789, which was a model of ſcientific compoſition. Its principles were adopted by the moſt eminent chemiſts in Europe; and have given an entirely new form to the ſcience of CHEMISTRY.

In France, more than in any other country, men of ſcience have been conſulted in matters of public concern; and the reputation of Lavoiſier cauſed him to be applied to in 1776, by the enlightened miniſter Turgot, to ſuperintend the manufacture of gun-powder. His inveſtigations were ſo ſucceſsful, that he increaſed the exploſive force of that article by one-fourth; and, while he ſuppreſſed the troubleſome regulations for the collection of its materials from private houſes, before in uſe, he quintupled the produce. He rendered many other ſervices to the arts and ſciences, both in a public and a private capacity. Being appointed to the office of treaſurer of the academy, he introduced order into the accounts, and economy into the expenditure. He was a member of its

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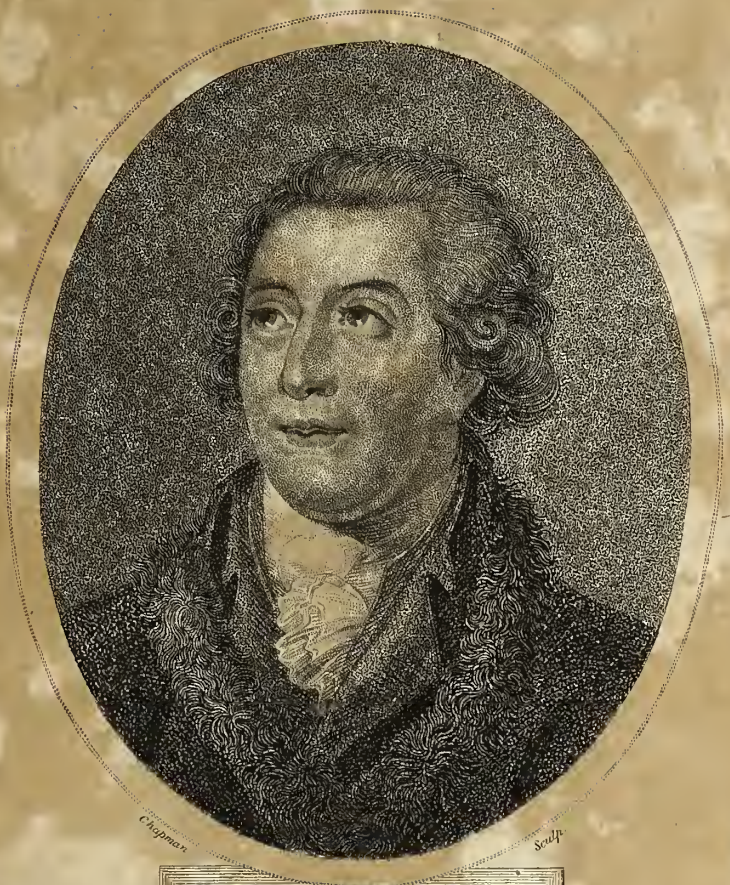

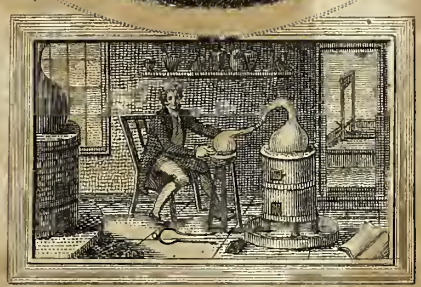

LAVOISIER

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board of conſultation, and actively promoted all its uſeful plans and reſearches. When the new ſyſtem of meaſures was propoſed, he contributed ſome new and accurate experiments on the expanſion of metals. The national convention conſulted him with advantage concerning the beſt method of manufacturing aſſignats, and of ſecuring them againſt forgery. Agriculture early engaged his attention, and he allotted a conſiderable tract of land on his eſtate in the Vendomois for the purpoſe of experimental and improved farming. The committee of the conſtituent aſſembly of 1791, appointed to form an improved ſyſtem of taxation, deſired to avail itſelf of his extenſive knowledge. For its information, he drew up an extract of a large work on the different productions of the country and their conſumption, for which he had been long collecting materials. It was printed by order of the aſſembly, under the title of *Richeſſes territoriales de la France*; and was regarded as the moſt valuable memoir on the ſubject. After having been one of the adminiſtrators of the caſſe d'eſcompte, he was appointed, in 1791, one of the commiſſioners of the national treaſury; and he introduced into that department ſuch order and regularity, that the proportion between the income and expenditure, in all the branches of government, could be ſeen at a ſingle view every evening. This ſpirit of ſyſtematic and lucid arrangement was indeed the quality by which he was peculiarly diſtinguiſhed; and its happy influence appeared in every ſubject which occupied his attention. In the twenty volumes of Memoirs of the Academy of Sciences, from 1772 to 1793, are forty papers of his writing, relative to many of the moſt important ſubjects in philoſophical chemiſtry. One of the lateſt of his reſearches was upon the reſpiration of animals, concerning which he made ſeveral curious and delicate experiments, of importance to the ſcience of phyſiology. He has ſhown that this vital function is a real combuſtion of carbon and hydrogen, by which carbonic acid and water are produced. The effect of this combuſtion is animal heat, the degree of which he was ſo fortunate as to aſcertain by calculation. His experiments on this ſubject conducted him to means for determining the remarkable relation which exiſts between accelerated reſpiration, the circulation of the blood, and perſpiration, and between the different powers, and the application made of them by nature. He had laboured alſo for a long time on a particular work on the ſubject of digeſtion. The laſt, and perhaps the moſt important, of Lavoiſier's labours related to animal perſpiration, on which ſubject he read a paper before the Academy of Sciences on the 4th of May, 1791. He firſt lays it down as an eſtabliſhed principle, that the animal body is maintained by reſpiration, perſpiration, and digeſtion. He then examines in a chemical view each of theſe effects, the nature of the perſpiration of the ſkin and of the lungs, diſtinguiſhes the effects from each other, and, as it were, interrogates nature reſpecting the three cauſes by which they are produced. He invented an apparatus by which every thing that relates to evaporation externally, and to breathing internally, could be obſerved. In conjunction with Seguin, he made on this ſubject ſome exceedingly difficult and laborious experiments, by which he found that a man by perſpiration loſes daily 2 pounds 13 ounces; that in the courſe of 24 hours he conſumes 33 ounces of oxygen gas; that in the ſame period 8 cubic feet of carbonic acid gas, one-third of which conſiſts of carbon, and two-thirds of oxygen, are diſengaged from the lungs; that the quantity of water produced in the lungs amounts to 1 pound 7 ounces, of which 3 ounces are hydrogen, and 20 oxygen; and that only 6 ounces of water are formed by the perſpiration of the lungs. For theſe experiments he had provided balances which did not err half a dram in 125 pounds. By theſe accurate and difficult experiments, Lavoiſier had obtained great inſight into the cauſes of ſeveral diſeaſes, as well as in regard to the means of aſſiſting the powers of nature in curing them; and on that account had reſolved to overturn the immenſe coloſſus of medical prejudices and errors which had been before eſtabliſhed. None of his undertakings was of more importance than this, and it is much to be lamented that he did not live to carry it into execution.

The moral qualities of this eminent perſon were not leſs eſtimable than thoſe of his underſtanding. He was mild, ſociable, and obliging; charitable to the poor upon his eſtates; and liberal to young men of talents, whom he encouraged in the purſuit of ſcience. At the aſſemblies held twice a-week in his houſe were to be found the moſt diſtinguiſhed votaries of ſcience and letters in France, as well as illuſtrious foreigners. A man ſo valuable, and ſo generally eſteemed, might have hoped to paſs unhurt through the ſcenes of civil commotion; but the time arrived in which eminence of any kind was dangerous, and, when joined with wealth, was almoſt certainly fatal. The bloody reign of Robeſpierre was ſupported by ſacrificing to popular odium all whoſe ſituation under preceding adminiſtrations had raiſed them to diſtinction or opulence; and they who had occupied poſts in the financial department were among the firſt victims. Lavoiſier foreſaw that he ſhould be ſtripped of all his property, and was prepared to gain his bread by his labours; but a more rigorous doom awaited him. Involved in charges fabricated againſt twenty-eight farmers-general, he was capitally condemned, and ſuffered on the ſcaffold, May 8, 1794. Lavoiſier was of a large ſtature; complacency and penetration were diſplayed in his countenance. He married, in 1771, the daughter of a farmer-general, a lady of pleaſing manners and conſiderable talents. She engraved with her own hand the copper-plates for his laſt work. She has ſince given her hand to another eminent philoſopher, count Rumford.

LAVOL'TA, *ſ.* [*la volte*, Fr.] An old dance, in which was much turning and much capering. *Hanmer.*

I cannot ſing,
Nor heel the high *lavolt*; nor ſweeten talk;
Nor play at ſubtle games. *Shakeſpeare.*

LAV'ONCOURT, a town of France, in the department of the Upper Saône: twelve miles ſouth of Juſſey, and ten eaſt of Champlitte.

LAVO'NIA, a town of Naples, in Calabria Citra: eight miles weſt-ſouth-weſt of Roſſano.

LAVO'NIA, a town of Naples, in Calabria Ultra: fourteen miles weſt of Squillace.

LAVO'RA, a province of Naples, bounded on the north by the province of Abruzzo Ultra and Abruzzo Citra, on the eaſt by the county of Moliſe and the province of Principato Ultra, on the ſouth by the province of Principato Ultra and the Gulf of Naples, and on the weſt by the Mediterranean and the Campagna di Roma; about 140 miles in length, and 33 where broadeſt. It is populous and fertile, yielding abundance of corn, wine, oil, and other productions of Italy. Anciently it was called *Campania*, and in the middle ages the *Caſtellany of Capua*; but received its preſent appellation in the year 1091, from Richard II. prince of Capua; and the Normans, who, in the beginning of the ſame year, were driven by the Langobardian inhabitants out of the city of Capua, and, inſtead of the appellation of the Principality of Capua, uſed to give it that only of *Terra di Lavora*, from the fitneſs of the ſoil for all manner of culture. The Normans, in the year 1098, recovering the poſſeſſion of Capua, retained this name inſtead of the former, which was afterwards diſuſed, except on certain occaſions in public writings. Naples is the capital.

LAU'PEN, a town of Swiſſerland, in the canton of Berne, the principal place of a bailiwic; ſituated at the conflux of the Sannen and Senſe: five miles ſouth-weſt of Berne.

LAU'QUEN, called *Villarica* by the Spaniards, a lake of Chili, about ſeventy-two miles in circuit, with a beautiful conic hill in the centre. From this hill ſprings the river Tolten, which joins the Pacific Ocean.

LAUR, a river of the duchy of Wurzburg, which runs into the Saal three miles north of Munnerſtadt.

LAUR, a town of the duchy of Wurzburg: two miles north of Munnerſtatt.

LAUR, a town of Perſia, in Chuſiſtan: fifty miles eaſt of Toſtar.

LAU'RA, a woman's name. See PETRARCH.

LAU'RA, *ſ.* [Gr. primarily ſignifying village, ſtreet, or hamlet.] A name given to the reſidence of certain ancient monks. Authors cannot agree about the difference between a laura and a monaſtery; ſome pretend, that a laura was a monaſtery wherein there lived at leaſt a thouſand monks; but this is nowiſe credible. The more natural opinion is, that the ancient *monaſteries* were the ſame with the modern, conſiſting of large buildings divided into halls, chapels, and cells, poſſeſſed by the monks, each of whom had his apartment; but the *lauræ* were a kind of villages, whereof each houſe was inhabited by one or two monks at the moſt; ſo that the houſes of the Chartreux ſeem, in ſome meaſure, to repreſent the ancient lauræ, and thoſe of the other monks proper monaſteries. The moſt celebrated lauras mentioned in church-hiſtory were in Paleſtine; as the laura of St. Euthymus, at four or five leagues diſtance from Jeruſalem; the laura of St. Saba, near the brook Cedron; the laura of the Towers, near the river Jordan, &c.

LAU'RA, a place near Alexandria in Egypt.

LAV'RA, a town of Ruſſia, in the government of Moſcow: thirty-ſix miles north-eaſt of Moſcow.

LAU'RA, a town of Hindooſtan, in the circar of Nagore: twenty miles weſt of Catchwana.

LAURAC' LE GRA'ND, a town of France, in the department of the Aude: fifteen miles weſt of Carcaſſonne, and five ſouth of Caſtelnaudary.

LAURA'DIO, a town of Portugal, in the province of Eſtramadura, on the ſouth ſide of the Tagus: ſix miles ſouth-ſouth-eaſt of Liſbon, and ten north-north-weſt of Setuval.

LAURAGA'IS, before the revolution, a ſmall country of France, in Upper Languedoc, of which Caſtelnaudary was the capital.

LAURA'NA, a ſeaport of Iſtria, with a ſmall harbour, in the gulf of Quarnero: eight miles ſouth of Caſtua. Lat. 45. 28. N. lon. 14. 17. E.

LAURDAU'NG, a mountain paſs in Bengal, from Burwa to Nagpour: twenty-five miles north-weſt of Doeſa.

LAU'RE, a town of Portugal, in the province of Alentejo: thirty miles weſt-north-weſt of Evora.

LAU'RE, a town of France, in the department of the Aude: eight miles north-eaſt of Carcaſſonne.

LAUREA'CUM, in ancient geography, a town at the confluence of the Ens and the Danube; now *Lorch*.

LAU'REAT, or LAUREATE, *ſ.* [from *laurus*, Lat.] An officer of the houſehold of the kings of Great Britain, whoſe buſineſs conſiſts only in compoſing an ode annually on his majeſty's birth-day, and on the new year; ſometimes alſo, though rarely, on occaſion of any remarkable victory. Of the firſt inſtitution of poets laureate, Mr. Wharton has given the following account in his Hiſtory of Engliſh Poetry. "Great confuſion has entered into this ſubject, on account of the degrees in grammar, which included rhetoric and verſification, anciently taken in our univerſities, particularly at Oxford; on which occaſion, a wreath of laurel was preſented to the new graduate, who was afterwards uſually ſtyled *Poeta laureatus*. Theſe ſcholaſtic laureations, however, ſeem to have given riſe to the appellation in queſtion. I will give ſome inſtances at Oxford, which at the ſame time will explain the nature of the ſtudies for which our academical philologiſts received their rewards. About the year 1470, one John Watſon, a ſtudent in grammar, obtained a conceſſion to be graduated and laureated in that ſcience, on condition that he compoſed one hundred Latin verſes in praiſe of the univerſity, and a Latin comedy. Another grammarian was diſtinguiſhed with the ſame badge, after having ſtipulated, that, at the next public act, he would affix the ſame number of hexameters on the great gates of St. Mary's church, that they might be ſeen by the whole univerſity. This was at that period the moſt convenient mode of publication. About the ſame time, one Maurice Byrchenſaw, a ſcholar in rhetoric, ſupplicated to be admitted to read lectures, that is, to take a degree, in that faculty; and his petition was granted, with a proviſion, that he ſhould write one hundred verſes on the glory of the univerſity, and not ſuffer Ovid's Art of Love, and the Elegies of Pamphilus, to be ſtudied in auditory. Not long afterwards, one John Bulman, another rhetorician, having complied with the terms impoſed, of explaining the firſt book of Tully's Offices, and likewiſe the firſt of his Epiſtles, without any pecuniary emolument, was graduated in rhetoric; and a crown of laurel was publicly placed on his head by the hands of the chancellor of the univerſity. About the year 1489, Skelton was laureated at Oxford, and in the year 1493 was permitted to wear his laurel at Cambridge. Robert Whittington affords the laſt inſtance of a rhetorical degree at Oxford. He was a ſecular prieſt, and eminent for his various treatiſes in grammar, and for his facility in Latin poetry; having exerciſed his art many years, and ſubmitting to the cuſtomary demand of a hundred verſes, he was honoured with the laurel in the year 1512.

"With regard to the poet laureate of the kings of England, he is undoubtedly the ſame that is ſtyled the *king's verſifier*, (Henry d'Avranches,) and to whom 100 ſhillings were paid as his annual ſtipend in the 36th year of Henry III. anno 1251. But, when or how that title commenced, and whether this officer was ever ſolemnly crowned with laurel at his firſt inveſtiture, I will not pretend to determine, after the reſearches of the learned Selden on this queſtion have proved unſucceſsful. It ſeems moſt probable, that the barbarous and inglorious name of *verſifier* gradually gave way to an appellation of more elegance and dignity; or, rather, that at length thoſe only were in general invited to this appointment, who had received academical ſanction, and had merited a crown of laurel in the univerſities for their abilities in Latin compoſition, particularly Latin verſification. Thus the *king's laureate* was nothing more than 'a *graduated* rhetorician employed in the ſervice of the king.' That he originally wrote in Latin, appears from the ancient title *verſificator*; and may be moreover collected from the two Latin poems, which Baſton and Gulielmus, who appear to have reſpectively acted in the capacity of royal poets to Richard I. and Edward II. officially compoſed on Richard's cruſade, and Edward's ſiege of Striveling caſtle.

"Andrew Bernard, ſucceſſively poet laureate of Henry VII. and VIII. affords a ſtill ſtronger proof that this officer was a Latin ſcholar. He was a native of Thouloufe, and an Auguſtine monk. He was not only the king's poet laureate, as it is ſuppoſed, but his hiſtoriographer, and preceptor in grammar to prince Arthur. He obtained many eccleſiaſtical preferments in England. All the pieces now to be found, which he wrote in the character of poet laureate, are in Latin. Theſe are, An Addreſs to Henry VII. for the moſt auſpicious beginning of the 10th year of his reign, with an *Epithalamium* on the marriage of Francis the dauphin of France with the king's daughter; A New Year's Gift for the year 1515; and, Verſes wiſhing Proſperity to his Majeſty's 13th Year. He has left ſome Latin hymns; and many of his Latin proſe pieces, which he wrote in the quality of hiſtoriographer to both monarchs, are remaining.

"I am of opinion, that it was not cuſtomary for the royal laureate to write in Engliſh till the reformation of religion had begun to diminiſh the veneration for the Latin language; or, rather, till the love of novelty, and a better ſenſe of things, had baniſhed the narrow pedantries of monaſtic erudition, and taught us to cultivate our native tongue."

Sir John Hawkins obſerves, that there are no records which

which aſcertain the origin of the inſtitution of the office in this kingdom, though there are many that recognize it. In 1341 Petrarch was crowned with laurel in the Capitol by the ſenate of Rome; afterwards Frederic III. emperor of Germany, gave the laurel to Conradus Celtes; and ever ſince the counts palatinate of the empire have claimed the privilege of ſolemnly inveſting poets with the bays. Chaucer, who was contemporary with Petrarch, and acquainted with him, when abroad, aſſumed the title of poet-laureate on his return to England; and in the 12th year of Richard II. obtained a grant of an annual allowance of wine. We read of perſons under the ſame title in the reigns of Edward IV. Henry VII. and VIII. and of James I. who, in 1615, granted to his laureat an annual penſion of 100 marks. In the year 1630, this penſion was augmented, by letters patent of Charles I. to 100l. per annum, with an additional grant of one terſe of Canary Spaniſh wine, to be taken out of the king's ſtore of wines yearly.

LAU'REATE, *adj.* [*laureatus*, Lat.] Decked or inveſted with a laurel:

Bid Amaranthus all his beauty ſhed,
And daffodillies fill their cups with tears,
To ſtrew the *laureate* hearſe where Lycid lies. *Milton.*

Belonging to the court-poet.—Soft on her lap her *laureate* ſon reclines. *Pope.*

LAU'REATED, *adj.* Crowned with laurel.

LAUREA'TION, *ſ.* A term in the Scottiſh univerſities, uſed for the act of taking up the degree of a maſter of arts, to which the ſtudents are admitted after four years' ſtudy in the univerſities. Dr. Johnſon adds, that upon theſe occaſions a flowery crown is uſed, in imitation of laurel among the ancients.

LAU'REL, *ſ.* [*laurus*, Lat. *laurier*, Fr.] A tree. See LAURUS.—The *laurus* or *laurel* of the ancients is affirmed by naturaliſts to be what we call the bay-tree. *Ainſworth.*

The *laurel*, meed of mighty conquerors,
And poets ſage. *Fairy Queen.*

Pieces of gold coined in the year 1619, with the king's head laureated; which gave them the name of *laurels*, or *laurets*. The twenty-ſhilling piece was marked with XX. the ten-ſhilling X. and the five-ſhilling piece V. *Camd. Annal. Jac.* I. *MS.*

LAU'REL, *adj.* Belonging to the laurel; made of laurel.

LAU'REL (Alexandrian). See RUSCUS.

LAU'REL (Chineſe). See ANTIDESMA, vol. i. p. 764.

LAU'REL (Dwarf American). See KALMIA, vol. v. p. 597.

LAU'REL (Flax-leaved). See DAPHNE gnidium, vol. v. p. 597.

LAU'REL (Sea-ſide). See PHYLLANTHUS.

LAU'REL (Spurge). See DAPHNE, vol. v. p. 595.

LAU'REL MOUN'TAINS, mountains of Virginia. Lat. 38. 30. N. lon. 80. 30. W.

LAU'REL MOUN'TAINS, mountains between Virginia and Kentucky. Lat. 37. N. lon. 82. W.

LAU'REL RID'GE, a part of the Allegany Mountains, in the weſtern part of Pennſylvania. Lat. 40. N. lon. 79. 20. W.

LAU'REL RIV'ER, a river of Kentucky, which runs into the Cumberland in lat. 36. 36. N. lon. 83. 50. W.

LAU'RELLED, *adj.* Crowned or decorated with laurel; laureated:

Then future ages with delight ſhall ſee
How Plato's, Bacon's, Newton's, looks agree;
Or in fair ſeries *laurell'd* bards be ſhown;
A Virgil there, and here an Addiſon. *Pope.*

LAU'REMBERG (Peter), a learned phyſician, was born at Roſtock, where his father was profeſſor of medicine and mathematics. Peter took the degree of doctor in the univerſity of his native place, and afterwards travelled into France, and ſettled for ſome time at Montauban, where he taught philoſophy in 1611. In 1614, however, he was at Hamburgh, and was profeſſor of natural philoſophy there until 1620; when he returned to Roſtock, and was appointed profeſſor of poetry in 1624. He died in this city on the 13th of May, 1639, at the age of fifty-four. He left ſeveral works; as, 1. Diſputationes Phyſicæ, Roſtock, 1616. 2. Iſagoges Anatomicæ Græcæ Interpretatio, Hamb. 1616. 3. Proceſtria Anatomica, ibid. 1619. 4. Laurus Delphica, ſeu Conſilium quo deſcribitur Methodus perfacilis ad Medicinam, Leyd. 1621. 5. In Synopſin Aphoriſmorum Chymiatricorum Angeli Salæ, Vicentini, Notæ et Animadverſiones, Roſt. 1624. 6. Porticus Eſculapii, ſeu geralis Artis Medicæ Conſtitutio, ibid. 1630. 7. Apparatus Plantarius primus, &c. Frankfort, 1632. 8. Paſicompſe nova, id eſt Delineatio Pulchritudinis, Leipſ. 1634. 9. Anatomia Corporis humani, ſive Collegium Anatomicum duodecim diſputationibus comprehenſum, Roſt. 1636.

William Lauremberg, the father of the preceding, who died in 1612, left an Eſſay on the malignant petechial Fever, Roſt. 1605; and the following poſthumous works: De Curatione Calculi, Leyd. 1619; Botanotheca, ſive Modus conficiendi Herbarium vivum, 1626; and Hiſtoria Deſcriptionis Aelitis, ſive Lapidis Aquilæ, 1627.—His younger ſon, *John Lauremberg*, was likewiſe a phyſician, and author of ſeveral works on the antiquities of Greece, algebra, and arithmetic, &c. *Eloy. Dict. de la Méd.*

LAUREMBER'GIA, *ſ.* in botany; [ſo named by Bergius in honour of Peter Lauremberg, juſt noticed.] See SERPICULA repens.

LAU'RENBERG, a town of Germany, in the county of Holzapfel: three miles ſouth of Holzapfel.

LAU'RENCE, or LAWRENCE, a man's name.

LAU'RENCE (Bay of St.), a bay on the eaſt coaſt of Ruſſia, at the entrance of Beering's Straits. Lat. 63. 47. N. lon. 188. 15. E.

LAU'RENCE (Canons of St.), an order of regular canons, ſo called from the monaſtery of St. Laurence d'Oulx, in Dauphiné. This congregation is ſaid to have been founded by St. Benedict. It was deſtroyed by the Vandals, and continued uninhabited till the middle of the 11th century. In 1057, Odo count of Savoy gave it to one Gerard and his canons. This donation was confirmed in 1065, by Cunibert, biſhop of Turin, who added to it above forty other churches; by which means a very conſiderable congregation was formed, to whom the ſucceeding popes, and counts of Savoy, granted a great many privileges. It had thirty priories; the chief, who is the prior of the congregation, bears the title of provoſt, and exerciſes a ſpiritual juriſdiction throughout his provoſtſhip.

LAU'RENCE CREE'K, a river of Kentucky, which runs in the Ohio in lat. 38. 30. N. lon. 83. 36. W.

LAU'RENCE HAR'BOUR, a bay on the ſouth coaſt of Newfoundland, ſituated north-weſt of the entrance into Placentia Bay.

LAU'RENCE I'SLAND, a ſmall iſland in the gulf of Florida, near the coaſt of Eaſt Florida. Lat. 25. 36 N. lon. 80. 22. W.

LAU'RENCE I'SLAND, an iſland in the Pacific ocean, on the coaſt of Ruſſia, near Tſchukotſkoi Noſs; about three leagues in circuit. Lat. 63. 47. N. lon. 188. 15. E.

LAU'RENCE KE'Y, a ſmall iſland in the bay of Honduras, near the coaſt of Mexico. Lat. 16. N. lon. 89. 48. W.

LAU'RENCE KIR'K, a town of Scotland, in the county of Kincardine. Manufactures of lawn, cambric, &c. have been lately eſtabliſhed. In 1719, it was erected into a burgh of barony, with the privilege of a market. In 1801, the population was 1215. It is ſeven miles weſt of Bervie.

LAU'RENCE RIV'ER AND GUL'F. The St. Laurence is one of largeſt rivers in North America. It iſſues from Lake Ontario forming the outlet of the long chain of great lakes which ſeparate Upper Canada from the

United States. From Lake Ontario to Montreal it has the name of *Iroquois*, and, taking a north-eaſt courſe, emboſoms the iſland of Montreal; juſt above which it receives Ottawas from the weſt, and forms many fertile iſlands. From Montreal it aſſumes the name of St. Laurence, and, continuing the ſame courſe, paſſes by Quebec, and meets the tide upwards of four hundred miles from the ſea; and is ſo far navigable for large veſſels. Having received in its courſe, beſides Ottawas, St. John's, Seguina, Deſprairies, Trois Rivieres, and innumerable other ſmaller ſtreams, it falls into the ocean at Cape Roſieres, by a mouth about ninety miles broad. In its courſe it forms a great variety of bays, harbours, and iſlands, many of them fruitful and extremely pleaſant. The main entrance into the Gulf of St. Laurence from the Atlantic Ocean, is on the eaſtward between Cape Ray, the ſouth point of Newfoundland Iſland, and the north cape of Cape Breton; the Gut of Canſo leads into it from the ſouth-eaſt between Nova-Scotia and the ſouth end of Cape Breton; and the Straits of Belliſle lead into it from the north between Newfoundland and the coaſt of Labrador.

LAU'RENS (Andrew du), a French phyſician of eminence, was a native of Arles. He ſtudied at Paris under Duret, and, having taken the degree of M. D. ſettled firſt at Carcaſſone. Returning to court with a lady of quality, he was by her intereſt made one of the king's phyſicians, and profeſſor-royal at Montpellier. He was at length received among the faculty of Paris, was made phyſician to the queen in 1603, and firſt phyſician to the king (Henry IV.) in 1606. He died in 1609. Of the writings of du Laurens, the principal are, Diſcours de la Vue, des Maladies melancholiques, des Catarrhes, & de la Vielleſſe, 1596, tranſlated into Latin and Engliſh; and Hiſtoria Humani Corporis et ſingularum ejus partium anatomica, folio, 1600, often reprinted, and tranſlated into French by Heliot in 1741.

LAU'RENS, in geography, a diſtrict of South Carolina, lying between Enoree and Saluda Rivers; about thirty-one miles long and twenty-two broad; containing 12,809 inhabitants, of whom 1919 are ſlaves.

LAURENS COURT-HOUSE, a place in the above diſtrict, twenty miles from Buſh River, thirty-two from Newbury, and forty from Greville; in which is a poſt-office.

LAU'RENS (St.), a ſmall iſland in the Indian Sea. Lat. 9. 35. S. lon. 52. E.

LAUREN'T (St.), a town of Hiſpaniola, on the Ozama: ſeven miles north of St. Domingo.—A town of France, in the department of the Vendée: three miles ſouth-eaſt of Mortagne.—A town of France, in the department of the Jura: twelve miles north of St. Claude, and twelve ſouth of Nozeroy.—A town of France, in the department of the Lower Seine: ten miles ſouth-eaſt of Cany, and ſeven north of Rouen.—A town of France, in the department of the Gironde: ten miles ſouth of Leſparre.—A town of France, in the department of the Aude: four miles eaſt of La Graſſe.—An iſland in the Pacific Ocean, near the coaſt of Peru, at the entrance of the harbour of Callao.

LAUREN'T d'AIGOU'ZE, a town of France, in the department of the Gard: fifteen miles ſouth of Niſmes, and fifteen eaſt-north-eaſt of Montpellier.

LAUREN'T d'AR'CE, a town of France, in the department of the Gironde: eight miles ſouth-eaſt of Bourg.

LAUREN'T DE CER'DANS, a town of France, in the department of the Eaſt Pyrenées: nine miles ſouth-weſt of Ceret, and ſixteen ſouth-ſouth-weſt of Prades.

LAUREN'T DE CHAMOUSSE'T, a town of France, in the department of the Rhône and Loire: fifteen miles weſt of Lyons, and eighteen north-eaſt of Montbriſon.

LAUREN'T DE GOR'RE, a town of France, in the department of the Upper Vienne: fifteen miles weſt-ſouth-weſt of Limoges.

LAUREN'T LE MINIE'R, a town of France, in the department of the Gard: ſix miles ſouth-eaſt of Le Vigan.

LAUREN'T DU MOTTAY', a town of France, in the department of the Mayne and Loire: nine miles ſouth-eaſt of St. Florent.

LAUREN'T DES MU'RES, a town of France, in the department of the Iſere: nine miles ſouth-eaſt of Lyons.

LAUREN'T SUR OTHAI'N, a town of France, in the department of the Meuſe: twelve miles north of Eſtain.

LAUREN'T DU PO'NT, a town of France, in the department of the Iſere: twelve miles north of Grenoble, and fifteen ſouth-ſouth-weſt of Chambery.

LAUREN'T DE LA PLAI'NE, a town of France, in the department of the Mayne and Loire: three miles ſouth-weſt of Chalonne.

LAUREN'T DE RIVIDOL', a town of France, in the department of the Aveiron: nine miles north of Severac.

LAUREN'T DE LA SALAN'QUE, a town of France, in the department of the Eaſt Pyrenées: ſeven miles north-eaſt of Perpignan.

LAURENTA'LIA, or LARENTA'LIA, feaſts celebrated among the Romans on the 10th of the kalends of January, or 23d of December, in memory of Acca Laurentia, wife of the ſhepherd Fauſtulus, and nurſe of Romulus and Remus.

LAURENTE'VA, a bay or gulf of the Frozen Sea, on the weſt coaſt of Nova Zembla. Lat. 72. 15. N. lon. 53. 14. E.

LAUREN'TIA, *ſ.* in botany. See LOBELIA.

LAUREN'TIA, the nurſe of Romulus and Remus. See ACCA LAURENTIA, vol. i.

LAURENTI'NI, the inhabitants of Latium. They received this name from the great number of laurels which grew in the country. King Latinus found one of uncommon largeneſs and beauty, when he was going to build a temple to Apollo; and the tree was conſecrated to the god.

LAUREN'TIUS. See COSTER (Lawrence), vol. v. p. 256.

LAUREN'TUM, the capital of the kingdom of Latium in the reign of Latinus.

LAUREO'LA, *ſ.* A wreath of laurel; a crown of laurel. In botany, ſee CESTRUM and DAPHNE.

LAU'RESTINE, *ſ.* in botany. See VIBURNUM TINUS.

LAU'RI, a town of Naples, in Lavora: two miles ſouth-weſt of Sezza.

LAU'RI, *ſ.* in botany, a natural order of plants, to which *Laurus*, one of the number, gives its name; it is the 27th order of Juſſieu's ſyſtem, the fourth of his ſixth claſs; but there is nothing equivalent to it among the Ordines Naturales of Linnæus.

LAU'RI (Filippo), a painter of figures and landſcapes. He was ſon of Baldaſſare Lauri of Antwerp, a landſcape-painter of note, who ſettled at Rome, and died there in 1641. Filippo was born in 1623, and became celebrated for cabinet-pictures in the Flemiſh ſtyle of colour, but with a much more correct and refined taſte of form than prevailed in that ſchool; which moſt probably he acquired by reſiding with his father in Rome. His pictures are agreeably compoſed, touched with great ſpirit and freedom, of good colour and picturesque effect. Claude Lorraine paid him the compliment to employ him frequently to put figures in the fore-grounds of his landſcapes; and, in ſome of his beſt pictures, the hand of Lauri is diſcernible in the better proportion and beauty of touch with which the figures are wrought than in thoſe completed by Claude's own hand. The ſubjects he generally ſelected were thoſe of nymphs, gods, and goddeſſes, and the like; where he could, with propriety, introduce much of the nude. To theſe he gave great eaſe in their actions, and compoſed them in a very agreeable manner. He died in 1694, at the age of 71.

LAU'RIA, a town of Naples, in Baſilicata: ſeventeen miles eaſt of Policaſtro, and ninety ſouth-eaſt of Naples.

LAURICAU'CHA, a mountain of Peru, abounding in ſilver ore: ſix miles north of Paſco.

LAURICAU'CHA, a lake of Peru: eighty miles north of Lima.

LAURIE'RE,

LAURIE'RE, a town of France, in the department of the Upper Vienne: eighteen miles eaſt of Bellac, and eighteen north-north-eaſt of Limoges.

LAURIE'RE (Euſebius Jacob de), a profound writer on French law, was the ſon of a ſurgeon in Paris, where he was born in 1659. He was admitted an advocate in 1679, but ſoon quitted the buſineſs of the bar for the profeſſional ſtudies of the cloſet. He carried his reſearches into the whole maſs of ancient and modern juriſprudence, and, by his induſtry and ſagacity, made himſelf maſter of the moſt knotty points of local cuſtom, ſo that he came to be regarded as an oracle in all queſtions of legal antiquity. He was eſteemed and conſulted by the ableſt magiſtrates of the time, and aſſiſted the ſtudies of the celebrated d'Agueſſeau, afterwards chancellor. He died in 1728. The principal works of this lawyer are, 1. De l'Origine du Droit d'Amortiſſement, 1692. 2. Texte des Coutumes de la Prevoté de Paris, reprinted with additions, in 3 vols. 12mo. 1777. 3. Bibliothèque des Coutumes, 4to. in conjunction with M. Berroyer, an unfiniſhed work upon a vaſt plan. 4. Gloſſaire du Droit François, 4to. 1704; an improvement of the gloſſary of old law-terms by Ragueau, for which Lauriere was peculiarly qualified by his intimate acquaintance with the old French poets and romancers. 5. Inſtituts Coutumieres de Loyſel, 2 vols. 12mo. 6. Table chronologique des Ordonnances, from Hugh Capet to Philip de Valois. He alſo aſſiſted in other profeſſional works. *Moreri.*

LAURIES'TON, a village of Scotland, in the county of Kincardine; where is an ancient caſtle, built in the 10th or 11th century. In the year 1336 it was taken by the Engliſh, but ſoon recovered. It is ſix miles north of Montroſe.

LAURIF'EROUS, *adj.* [from the Lat. *laurus*, a laurel, and *fero*, to bear.] Bearing laurel; producing laurel. *Bailey.*

LAURIFO'LIA, *ſ.* in botany. See GARCINIA and SIDEROXYLON.

LAURIFO'LIA AR'BOR. See HIPPOMANE.

LAURIN'GEN, a town of the duchy of Wurzburgh, on the Laur: thirty miles north-eaſt of Wurzburgh, and twenty-four north-weſt of Bamberg. Lat. 50. 13. N. lon. 10. 32. E.

LAURI'NO, a town of Naples, in the Principato Citra: nine miles weſt-north-weſt of Policaſtro.

LAURI'NUM, *ſ.* [from *laurus*.] Oil of bay; otherwiſe called *daphnelæon*.

LAU'RION, in ancient geography, a place of Attica, where were gold-mines, from which the Athenians drew conſiderable revenues, and with which they built their fleets by the advice of Themiſtocles. Theſe mines failed before the age of Strabo.

LAURISTAN', a town of Perſia, in the province of Irak, on the Zenderoud: ninety miles weſt of Iſpahan.

LAU'RO, a town of Portugal, on a river of the ſame name, in the province of Alentejo: twenty-ſeven miles weſt-north-weſt of Evora.

LAU'RO, a river of Portugal, which runs into the Almanſor in the province of Alentejo.

LAU'RO (Philippo). See LAURI, p. 306.

LAU'RO, or LAURON, in ancient geography, a town of the Hither Spain, where Cn. Pompeius, ſon of Pompey the Great, was defeated and ſlain. Now *Lorigne*, five leagues to the north of Liria in Valencia.

LAU'RO-AFFI'NIS, *ſ.* in botany. See CAMOCLADIA and FAGARA.

LAU'RO-CER'ASUS, *ſ.* in botany, the CHERRY-LAUREL, ſo called from the laurel-like appearance of its leaves, as well as from the fruit; which is truly a cherry, and, though not wholeſome, eatable, notwithſtanding the very dangerous qualities of the reſt of the plant. See PRUNUS.

LAUROW', a town of Hindooſtan, in Malwa: twelve miles ſouth-weſt of Kimlaſſa.

LAUROW', a town of Hindooſtan, in Bahar: ten miles ſouth-ſouth-weſt of Gayah.

LAU'RUS, *ſ.* in botany, the ancient Latin name of the BAY-TREE, for which it is retained by modern botaniſts; and along with which it now comprehends a great number of ſpecies, as the CINNAMON, CAMPHOR, SASSAFRAS, &c. The origin of the word is loſt in the obſcurity of antiquity; and, whether etymologiſts derive it from *lavo*, to waſh, or from *laus*, praiſe or honour, they give us little more ſatisfaction in one caſe than the other. It is a genus of the claſs enneandria, order monogynia, natural order of holoraceæ, (lauri, *Juſſ.*) The generic characters are—Calyx: none, unleſs the corolla be taken for ſuch. Corolla: petals ſix, ovate, acuminate, concave, erect; the alternate ones exterior. Nectary conſiſting of three acuminate coloured tubercles, ending in two briſtles, ſtanding round the germ. Stamina: filaments nine, ſhorter than the corolla, compreſſed, obtuſe, three in each rank; antheræ growing on each ſide to the margin of the filament on the upper part. Glandules two, globoſe, with a very ſhort footſtalk, affixed to each filament of the inner rank near the baſe. Piſtillum: germ ſubovate; ſtyle ſimple, equal, length of the ſtamens; ſtigma obtuſe, oblique. Pericarpium: drupe (or berry) oval, acuminate, one-celled, comprehended by the corolla. Seeds: nut ovate-acuminate; kernel of the ſame form. The greater part of the ſpecies, including the cinnamon and camphor, are hermaphrodite; but in ſome there are male flowers apart in dioecia, as in *L. nobilis*, where there are alſo frequently from eight to fourteen ſtamens, with naked four-parted corollas.—*Eſſential Character.* Calyx none; corolla calycine, ſix-parted; nectary of three two-briſtled glands, ſurrounding the germ; filaments inner glanduliferous; drupe one-ſeeded.

Species. 1. Laurus cinnamomum, the cinnamon-tree: leaves three-nerved, ovate-oblong; nerves diſappearing towards the end. Jacquin deſcribes the cinnamon-tree of America as twenty feet high or more, the trunk about ſix feet high, and a foot and a half in diameter; the outer bark ſmoothiſh, and of a duſky cinereous colour; it has ſpreading branches that form an elegant head. Leaves oppoſite, or nearly ſo, ovate-oblong, oblong-acuminate, or ſubovate, bluntly acuminate, quite entire, ſhining, coriaceous, on ſhort petioles, from three to five inches long; the three nerves ſpring from the petiole, and either immediately recede from each other, or continue united for a line or two and then diverge; they are of a bright green on the upper ſurface, but pale on the under, with the nerves whitiſh. On the younger branches or twigs ariſe ſlender common peduncles, from oppoſite axils, the terminating ones an inch, the others two or three inches, long, three-flowered at top, or elſe trifid, with each diviſion three-flowered. Flowers ſmall, greeniſh yellow, almoſt inſipid, with a ſomewhat fetid ſmell, reſembling that of Lilium martagon. Fruit the form and ſize of a middling olive, inſipid, deep blue, and ſoft, incloſing a thin pale-coloured nut with a white kernel, which germinates ſoon after it falls, and therefore cannot eaſily be tranſported to a diſtance. The inner bark perfectly reſembles the oriental cinnamon in ſmell, taſte, and figure; the only difference is that it has a coarſer texture, and a more acrid taſte, which may ariſe from the climate. But the varieties of cinnamon are numerous. The timber is white and not very ſolid. The root is thick and branching, and exudes abundance of camphor. Native of Martinico, on the mountain Calebaſſe: flowering in February and March. It is a native alſo of Braſil.

The following account of the cinnamon of Ceylon is given by Albertus Seba, from the chief inſpector of the cinnamon-trade in that iſland, and is printed in Act. Nat. Cur. and the Philoſophical Tranſactions. The beſt ſort of cinnamon, which grows in great plenty in Ceylon, and is peculiar to that iſland, is called by the natives *raſſe coronde*, or ſharp ſweet cinnamon. It is this choice ſort which is exported by the Dutch Eaſt-India Company; and it is prohibited, under ſevere penalties, to mix any other ſort with this. The ſecond is called *canatte coronde*,

or bitter aſtringent cinnamon. The bark of this comes off very eaſily, and ſmells very agreeably when freſh, but has a bitter taſte. It has an advantage that it is not ſo plentiful as the firſt; becauſe it requires much ſkill and attention to diſtinguiſh them. The root of this yields a very good ſort of camphor. The third is called *capperoe coronde*, or camphorated cinnamon, becauſe it has a very ſtrong ſmell and taſte of camphor. It grows plentifully in the iſland, but not in the eaſtern part. However, they find means to ſend it over privately, and ſell it to the Danes and Engliſh trading upon the coaſts of Coromandel. The fourth ſort is called *welle coronde*, or ſandy cinnamon, becauſe upon being chewed it feels gritty, or as if grains of ſand were between the teeth. The bark comes off eaſily, but is not ſo readily rolled up. It is of a ſharp bitteriſh taſte, and the roots yield only a ſmall quantity of camphor. The fifth ſort is called *ſewel coronde*, glutinous or mucilaginous cinnamon. This acquires in drying a conſiderable degree of hardneſs; it has little taſte, and an ungrateful ſmell; but the colour is very fine, and the natives mix a good deal of it with the beſt ſort, the colour being much alike, except that in the genuine ſort there are ſome few yelloviſh ſpots towards the extremities. The ſixth ſort is called *nieke coronde*, the tree bearing much reſemblance to another tree which the natives call *nieke gas*. The bark has no taſte or ſmell, and is only uſed by the natives in medicine. By roaſting it they obtain an oil, with which they anoint themſelves to keep off infection; and they expreſs a juice from the leaves, with which they rub their heads, to cool and ſtrengthen the brain. The ſeventh is called *dawel coronde*, or drum-cinnamon; the wood being light and tough, and uſed by the natives for making drums. The bark is taken off whilſt the tree is yet growing; is of a pale colour, and is uſed for the ſame purpoſes as the ſixth. The eighth ſort is called *catle coronde*, thorny or prickly cinnamon; the tree being very prickly. The bark is in ſome meaſure like that of the true cinnamon, but it has nothing of the taſte or ſmell, and the leaves differ very much. The natives apply the root, bark, and leaves, in form of cataplaſms to tumours. The ninth ſort is called *mael coronde*, or flowering cinnamon, being always in bloſſom. The flowers come neareſt to thoſe of the firſt ſort, but they bear no fruit. The wood never becomes ſo ſolid and weighty in this as in the others, which are ſometimes eight, nine, or ten, feet, in circumference. If this tree be cut or bored into, a limpid water will iſſue from the wound, as from the birch-tree, but it is of no uſe, any more than the leaves and bark. There is a tenth ſort, called *toupat coronde*, or three-leaved cinnamon, which does not grow near the Dutch ſettlements, but higher up towards Candia. Some of theſe are probably the caſſia; and the ninth is the male tree of the true cinnamon.

With reſpect to the time when the bark is fit to be taken off, ſome trees are ready two or three years ſooner than others, owing to the difference of ſoil which they grow in; thoſe for inſtance which grow in valleys where the ground is a fine whitiſh ſand, will be fit to have the bark taken off in five years; but, others which ſtand in a wet ſlimy ſoil, muſt have ſeven or eight years to grow before they are fit to bark. Thoſe trees are alſo later which grow in the ſhade of other large trees, whereby the ſun is kept from their roots. Hence alſo it is, that the bark of ſuch trees has not that ſweetneſs obſervable in the bark of thoſe which grow in a white ſandy ground, where with little wet they ſtand full expoſed to the ſun; but is rather of a bitteriſh taſte, ſomewhat aſtringent, and ſmells like camphor: for by the heat of the ſun's rays the camphor is made ſo volatile, that it riſes up and mixes with the juices of the tree, where it undergoes a ſmall fermentation; and then, riſing ſtill higher between the wood and the thin inner membrane of the bark, it is ſo effectually diffuſed through the branches and leaves, that there is not the leaſt footſtep of it to be perceived. Meanwhile that thin and glutinous membrane which lines the bark on the inſide attracts all the pureſt and ſweeteſt particles of the ſap, leaving the thick and groſs ones to puſh forwards, in order to nouriſh the branches, leaves, and fruit. If the bark be freſh taken off, that ſap which remains in the tree has a bitteriſh taſte, not unlike that of cloves. On the contrary, the inner membrane of the bark, when freſh taken off, has a moſt exquiſite ſweetneſs, whilſt the outer part differs very little in taſte from that of other trees. But, when the bark is laid in the ſun to be dried and roll up, this oily and agreeable ſweetneſs of the inner membrane is diffuſed through the whole. The bark may be taken off from trees that have ſtood fourteen, fifteen, or ſixteen, years, according to the quality of the ſoil; but beyond that time they loſe by degrees their agreeable ſweetneſs, and the bark has more of the taſte of camphor. Beſides, the bark is then become ſo thick, that, when laid in the ſun, it will no longer roll up, but remain flat. To account for the great quantities of cinnamon-trees ſtill remaining on the iſland of Ceylon, after the general exportation of the bark that has prevailed during ſeveral centuries, ſome authors have aſſured us, that after the bark has been ſtripped off the tree, it becomes fit to be ſtripped a ſecond time in four or five years. But this aſſertion is no leſs contrary to obſervation than it is to the common courſe of nature. The truth is, the barked trees, being cut down, quickly put forth new ſhoots, which, in a period of from five to eight years, come again to the knife. Great numbers alſo of trees are continually ſpringing from the fruit which either drops upon the ground, or is diſſeminated by the wild doves called there *cinnamon-eaters*; inſomuch that here and there along the roads ſuch quantities of theſe young trees are to be ſeen, as to look like little woods.

The inner bark of this ſpecies is the ſpice ſo well known under the name of *cinnamon*. The uſe of the cinnamon-tree however is not confined to the bark; for it is remarkable that the leaves, fruit, and root, all yield oils of different qualities, and of conſiderable value. That produced from the leaves is called oil of cloves, and oleum malabathri; that from the fruit is extremely fragrant, and of a thick conſiſtence, and at Ceylon is ſaid to be made into candles, for the ſole uſe of the king; and the bark from the root not only affords an aromatic oil, which has been called oil of camphor, but alſo a ſpecies of camphor which is purer and whiter than the common camphor. The bark of the cinnamon-tree, while on the tree, is firſt ſtripped of its outer greeniſh coat; and is then cut longitudinally from the tree, and dried in the ſand, till it becomes fit for the market, when it is of a reddiſh yellow or pale ruſty-iron colour, very light, thin, and curling up into quills or flakes. Cinnamon is one of the moſt grateful of aromatics; its qualities are extracted both by water and ſpirit. It is an aſtringent, and corroborates the viſcera, and proves of great ſervice in ſeveral kinds of alvine fluxes, and immoderate uterine diſcharges. An eſſential oil is ſometimes prepared from cinnamon, which is moſt exceſſively pungent, ſo as to produce an eſchar on the ſkin, if applied to it; but in doſes of a drop or two properly diluted, with ſugar, mucilages, &c. it is ſaid to be one of the moſt immediate cordials and reſtoratives in caſes of languor and debility.

Cinnamon is a native of the iſland of Ceylon. Linnæus, in his Hortus Cliffortianus (1737), ſpeaks of it as a forbidden tree, not then known in Europe but from dried ſpecimens, and not eaſy to be introduced, probably from the jealouſy of the Dutch. It was however cultivated by Mr. Miller before 1768; and is now cultivated both in our territories in the Eaſt Indies, and in the iſlands of the Weſt Indies. Monſ. Poivre alſo introduced it, along with the nutmeg and clove, into the Iſles of France and Bourbon. Dr. George Young had one hundred and forty cinnamon-trees at St. Vincent's in May 1772. In 1789 it was ſucceſsfully cultivated in Jamaica, from trees taken in a French prize by admiral Rodney, and preſented by him to the aſſembly of that iſland. In 1792, ſamples of this

this cinnamon, ſent by Dr. Dancer, were examined by a committee of the Society of Arts, &c. and ſome eminent dealers in that ſpice; who were of opinion that two of the ſamples were excellent, and even preferable to any cinnamon imported from Ceylon, both in colour and flavour. Mrs. Anſtey brought two cinnamon-trees from Ceylon to Madras; and Dr. Roxburgh procured ſix trees in 1789.

2. Laurus caſſia, caſſia, or wild cinnamon: leaves triple-nerved, lanceolate. Caſſia, or wild cinnamon, though diſtinguiſhed by Linnæus and others, is thought by the beſt judges not to be a diſtinct ſpecies from the preceding, or true cinnamon. Linnæus's diſtinction, founded upon the leaves, is certainly nugatory; and the difference of the bark may be owing to ſoil or ſituation, but more probably to want of ſkill or attention in the cultivators. The caſſia-bark is coarſer, and will not roll up like true cinnamon; but the eſſential difference between the bark of cinnamon and caſſia is that the former is always dry, whereas the latter becomes mucilaginous in chewing; hence it has been ſuggeſted as a conjecture on the moſt reſpectable authority, that the ſuperior excellence of cinnamon-bark may be in great meaſure owing to its having been deprived of that mucilage which adheres to its interior ſurface. At leaſt we are certain that in a curious drawing of Herman's, now in the poſſeſſion of ſir Joſeph Banks, repreſenting the proceſs of cutting and preparing cinnamon in the iſland of Ceylon, one of the principal figures is that of a woman who is evidently employed in this operation of ſcraping the mucilage from the inner ſurface of the bark.

The caſſia is deſcribed at great length in the Hortus Malabaricus; and Linnæus refers to this as an excellent deſcription of the true cinnamon. Mr. Marſden informs us, that the caſſia-trees grow from fifty to ſixty feet high, with large ſpreading horizontal branches, almoſt as low as the earth. The leaves are about four inches long, narrower than thoſe of the bay, and more pointed, deep green, with a ſmooth ſurface and plain edge; the principal fibres or nerves take their riſe from the peduncle. The young leaves are moſtly of a reddiſh hue. The bloſſoms grow ſix in number upon ſlender footſtalks, cloſe to the bottom of the leaf. They are monopetalous, ſmall, white, and ſtellated in ſix points. The ſtamina are ſix (Linnæus ſays nine), with one ſtyle growing from the germ, which ſtands up in three browniſh ſegments reſembling a cup. The fruit of cinnamon and caſſia are very different, according to Gærtner's figure and deſcription. The root is ſaid to contain much camphire. The bark is commonly taken from ſuch of the trees as are a foot or eighteen inches diameter; for, when they are younger, it is ſaid to be ſo thin as to loſe all its qualities very ſoon. Thoſe trees which grow in a high rocky ſoil have red ſhoots, and the bark is ſuperior to that which is produced in a moiſt clay, where the ſhoots are green. I have been aſſured, ſays Mr. Marſden, by a perſon of extenſive knowledge, that the caſſia produced in Sumatra is from the ſame tree that yields the true cinnamon; and that the apparent difference ariſes from the leſs judicious manner of quilling it. Perhaps the younger and more tender branches ſhould be preferred; perhaps the age of the tree, or the ſeaſon of the year, ought to be more nicely attended to; and it is ſuggeſted, that the mucilage, which adheres to the inſide of the freſh-peeled rind, does, when not carefully wiped off, injure the flavour of the caſſia, and renders it inferior to that of the cinnamon. It is ſaid to be ſometimes purchaſed by the Dutch merchants, and ſhipped for Spain as cinnamon, being packed in boxes which came from Ceylon with that article. It is of the ſame quality with cinnamon, but inferior in fragrancy and efficacy. The leaves are called by officinal writers *folia malabathri*, and the bark *caſſia lignea*. It is a native of Malabar, Java, Sumatra, chiefly in the northern and central part of the iſland, in thoſe diſtricts which lie inland of Tappanooly.

3. Laurus camphora, the camphor or camphire-tree: leaves triple-nerved, lanceolate-ovate. The camphire-tree is very near a-kin to the cinnamon-tree, from which it differs in the leaves, thoſe of the latter having three ribs running longitudinally from the footſtalk to the point, where they ſoon diminiſh; whereas in this the ribs are ſmall, and extend towards the ſides; their ſurface is ſmooth and ſhining. They are male and hermaphrodite in different trees. It is a large tree, with aſcending branches. Leaves quite entire, ſmooth, moſtly alternate, but ſome oppoſite, petioled, whitiſh underneath. Flowers white, on ſimple, long, lateral, peduncles. Berry ſmall, ovate, duſky or browniſh red. Mr. Marſden alſo deſcribes it as equal in height and bulk to the largeſt timber-trees, being frequently found upwards of fifteen feet in circumference. The leaf is ſmall, of a roundiſh oval, ending in a long point or tail, the fibres running all parallel and nearly ſtraight. The wood is in much eſteem for carpenters' purpoſes, being eaſy to work, light, durable, and not liable to be injured by inſects, particularly the *coombang*, a ſpecies of bee, which, from its faculty of boring timber for its neſt, is called the *carpenter*.

Native of China, Japan, Borneo, and Sumatra, if the *capoor-barroos* of the Malays be the product of the ſame tree. Sir George Staunton met the young ſhrubs of it growing in the botanic garden of Batavia. He informs us that it is the only ſpecies of the laurel genus growing in China, and is there a large and valuable timber-tree. It is uſed in the beſt buildings of every kind, as well as for maſts of veſſels; and bears too high a price to allow of any part except the branches being cut up for the ſake of the drug, called alſo *camphor*, which it affords. This ſubſtance is obtained ſometimes by boiling the branches, twigs, and leaves, in water; upon the ſurface of which it is found ſwimming in the form of an oil; or adhering, in a glutinous form, to a wooden rod, with which the boiling matter is conſtantly ſtirred. The glutinous maſs is then mixed with clay and lime, and put into an earthen veſſel, with another of the ſame ſize properly luted over it: the lower veſſel being placed over a ſlow fire, the camphor gradually ſublimes through the clay and lime, and adheres to the ſides of the upper veſſel, forming a cake of a ſhape correſponding to the cavity which received it. It is, however, leſs pure, and much weaker, than what is diſcovered in a ſolid ſtate among the fibres of the trunk, as turpentine is found in different ſorts of pines. In the great, but ill-peopled, iſland of Borneo, and alſo in Japan, the camphor-tree is felled for the ſole purpoſe of finding this coſtly drug in ſubſtance among the ſplinters of the trunk, in the ſame manner as other trees are felled in Louiſiana merely for collecting the fruit they bear upon their ſummits. The Borneo or Japan camphor is pure, and ſo very ſtrong as readily to communicate much of its odour and virtue to other inſpiſſated oils, which thus paſs for real camphor; and this adulterated drug is ſold by the Chineſe artiſts at a vaſtly lower price than they gave themſelves for the genuine ſubſtance from Borneo or Japan. The tallow-tree grows generally near, and the camphor farther from, the banks of the river.

Native camphor, the *capoor-barroos* of the Malays, is a production for which Sumatra and Borneo have in all ages been much celebrated; the Arabians being, at a very early period, acquainted with its virtues. Camphor, being of a dry nature, does not exude from the tree, or manifeſt any appearance on the outſide. The natives, from long experience, know whether any is contained within, by ſtriking the tree with a ſtick. In that caſe, they cut it down, and ſplit it with wedges into ſmall pieces, finding the camphor in the interſtices in the ſtate of a concrete cryſtallization. Some have aſſerted that it is from the old trees alone that this ſubſtance is procured, and that in the young trees it is in a fluid ſtate, called *meenio capoor*, or camphor oil; but this is a miſtake. The ſame ſort of tree that produces the fluid does not produce the dry tranſparent flaky ſubſtance, nor ever would. They are readily diſtinguiſhed by the natives. The native camphor is pur-

chaſed on the ſpot at the rate of ſix Spaniſh dollars the pound, or eight dollars the catty for the beſt ſort; which ſells at the China market for about twelve or fifteen hundred dollars the pecul of one hundred catties, or one hundred thirty-three pounds and a third. The traders uſually diſtinguiſh three degrees of quality, by the names of head, belly, and foot, according to its purity and whiteneſs. Some add a fourth ſort, of extraordinary fineneſs, of which a few pounds only are imported to Canton, and ſell there at the rate of two thouſand dollars the pecul. It has been generally ſuppoſed that the Chineſe mix the camphor of Sumatra and Borneo with their own and the Japaneſe. But the truth ſeems to be, that they purchaſe the former for their own uſe, from an idea of its ſuperior efficacy, and export the latter as a drug they hold in no eſtimation. It is certain that the common camphor will evaporate till it wholly diſappears; whereas that of Sumatra and Borneo, called *native camphor*, though doubtleſs from its volatility it muſt be ſubject to ſome decreaſe, does not appear to loſe much in quantity from being kept.

Camphor-oil is a valuable domeſtic medicine, much uſed by the Sumatrans in ſtrains, ſwellings, and inflammations; the particles, from their extreme ſubtilty, readily entering the pores. It is not manufactured, undergoes no preparation, and, though termed an oil, is rather a liquid and volatile reſin, without any oily quality. To procure it, they make a tranſverſe inciſion into the tree, to the depth of ſome inches, and then cut ſloping downwards from above the notch, till they leave a flat horizontal ſurface. This they hollow out, till it is of a capacity to receive a quart. They then put into the hollow a bit of lighted reed, and let it remain for about ten minutes, which, acting as a ſtimulus, draws the fluid to that part. In the ſpace of a night, the liquor fills the receptacle prepared for it; and the tree continues to yield a ſmaller quantity for three ſucceſſive nights, when fire muſt be again applied; but on a few repetitions it is exhauſted. An oil not much unlike this from the camphor-tree is procured from another tree by the ſame method. It is called *meenia cayoo*, or wood-oil, and is uſed to rub on timber expoſed to the weather, to preſerve it from decay; and it is alſo boiled with the *dammar* to pay the bottom of ſhips and boats.

Camphor is conſidered as one of the principal diaphoretics and antiſeptics, and as poſſeſſing a degree of anodyne or antiſpaſmodic power. It is a medicine of a ſubtile and penetrating nature, and quickly diffuſes itſelf through the whole habit. If taken in conſiderable quantity, it produces an uneaſy ſenſation in the ſtomach, though it does not heat the body ſo much as might be expected from its taſte: on the contrary, it often rather occaſions a ſenſe of coolneſs. In acute diſeaſes it is given from a quarter of a grain to one or two grains or more, in conjunction with nitre or other anti-inflammatory medicines of the ſaline kind. Hoffman obſerves that it anſwers beſt on the approach of a criſis, or in the decline; and that it ſhould be uſed with caution during the height of fever, where the heat is great and the ſkin dry; and the ſame caution, he adds, ſhould be obſerved in plethoric habits, &c. In chronical diſorders it is uſed more freely; and ſometimes is taken in conjunction with opium. It is conſidered as a corrector of the irritating powers of cantharides. Camphor alone has ſometimes been known to cure that peculiar ſpecies of ſpaſmodic diſorder called St. Vitus's dance. Camphor is alſo uſed in a diſſolved ſtate in ſpirit of wine, &c. as an external embrocation in rheumatic pains, paralytic numbneſs, &c. &c. It is alſo made an ingredient in many other preparations.

4. Laurus culilaban, the clove-laurel, or coelit lawan: leaves triple-nerved, oppoſite. Loureiro deſcribes his L. caryophyllus, which is probably this ſpecies, as a middle-ſized tree, with brachiate and ſomewhat ſpreading boughs. Leaves ovate-lanceolate, quite entire, with three terminating nerves, ſmooth, an inch and a half long, duſky-green above, glaucous beneath, petioled, alternate, and oppoſite. Bark and root duſky red, having the ſmell and taſte of cloves, whence Loureiro's trivial name. Linnæus recommends the fructification to be examined, on account of the ſingularity of a Laurus having oppoſite leaves. But it appears that the leaves are not conſtantly oppoſite, and that the fructification is that of Laurus. (The L. æſtivalis is however deſcribed in the Hort. Kew. as having oppoſite leaves.) Native of the Eaſt Indies and Cochinchina.

5. Laurus montana, or mountain laurel: leaves triple-nerved; ovate-acuminate, perennial; flowers raceme, panicled. Native of Jamaica.

6. Laurus chloroxylon, Jamaica laurel, or green-wood: leaves three-nerved, ovate, coriaceous; nerves reaching the tip. This tree riſes by a ſtrong branched trunk to a very conſiderable height; the inward bark is of a light blood colour, and incloſes a ſtrong greeniſh timber, which has given occaſion to the trivial name of Linnæus, taken from Browne's generic appellation. Leaves ſmooth, with three conſiderable arched nerves, reſembling thoſe of the camphor-tree in ſhape, ſize, and texture. Fruit ſcattered up and down upon the branches, ſeldom exceeding a hazel-nut in ſize. Wood very tough and hard, anſwering better than any other ſort for the cogs in the rolls of a ſugar-mill. Generally eſteemed one of the beſt timber-woods in the iſland of Jamaica, and uſed on all occaſions where ſtrength and durability are required. Browne calls it green-heart or cogwood-tree.

7. Laurus glauca, glaucous laurel, or candle-tree: leaves nerved, lanceolate, perennial; branchlets tubercled; flowers ſolitary. This is a tree with ſpreading branches, rugged with raiſed dots, but without any pubeſcence; aſh-coloured. The expreſſed oil of the nuts is uſed for making candles in Japan, of which country it is a native.

8. Laurus pedunculata, or peduncled laurel: leaves nerved, oblong, entire; flowers ſolitary, peduncled. Native of Japan.

9. Laurus nobilis, or common ſweet bay: leaves ovate-lanceolate, perennial, veined, ſhining; (ſee BOTANY Plate IV. fig. 49.) axils of the veins glandular underneath; flowers in very ſhort racemes. The laurus, or bay, has been celebrated in all ages, and hence is called *nobilis* by Linnæus. With us it appears as a ſhrub, but in the ſouthern parts of Europe it becomes a tree of twenty or thirty feet in height; much ſubject however in general to put out ſuckers. Leaves evergreen, of a firm texture, the largeſt from an inch and half to two inches in breadth in the broad-leaved variety, and from three to four inches in length, entire, on ſhort petioles, having an agreeable ſmell, and an aromatic, ſubacrid, bitteriſh, taſte. Flowers dioecous, or male and female on different trees, in racemes ſhorter than the leaves, of an herbaceous colour. Corollas four-petalled in the male flowers, with from eight to twelve ſtamens. Berry ſuperior, ovate, fleſhy, dark purple, almoſt black. Receptacle none, except a ſmall tubercle at the bottom, whence a vaſcular band riſes on each ſide the whole length of the ſeed; which is large, ovate, ſlightly mucronate above. Native of the ſouthern parts of Europe, and of Aſia. Ray obſerved it not uncommon in woods and hedges in Italy. Haller ſays it abounds in all the orchards about Moutru, near the lake of Geneva. According to Scopoli, it is found in the woods of Iſtria. Bellonius remarked it on mount Ida, and very large trees on mount Athos. St. Pierre obſerves that fine bay-trees are no-where more common than on the banks of the river Peneus in Theſſaly, which might well give occaſion to the fable of the metamorphoſis of Daphne, daughter of that river. Pallas ſets it down as a native of the Cherſoneſus Taurica, &c. It is wild alſo in the ſouth of France, Spain, Crete, and many parts of the Levant. In England, it was cultivated certainly in 1562, as we learn from Turner; probably much earlier.

Miller makes three ſorts of the ſweet bay. 1. The broad-leaved bay of Aſia, Spain, and Italy, almoſt too tender

from Catesby

The Willow-leaved Bay.

J. Pass Sc.

London, Published as the Act directs, Dec. 10. 1812, by G. Jones.

tender for the open air in England; with leaves much broader and ſmoother than thoſe of the common ſort. 2. Common bay, ſeldom hurt with us except in very ſevere winters. Of this there are two varieties; one with plane leaves, the other with leaves waved on the edges. 3. Narrow-leaved bay, with very long narrow leaves, not ſo thick as thoſe of the two preceding, and of a light green: the branches are covered with a purpliſh bark, and the male flowers come out in ſmall cluſters from the axils of the leaves, ſitting cloſe to the branches. It is to be found in the nurſeries with variegated leaves; and other trifling varieties are mentioned in the old authors.

The leaves and berries of this well-known ſpecies have an aromatic aſtringent taſte, and a fragrant ſmell: the berries are much ſtronger than the leaves; both are accounted ſtomachic, carminative, and uterine; in which intentions the leaves are infuſed and drunk as a tea, and the eſſential oil of the berries adminiſtered on ſugar, or diſſolved by means of mucilages or in ſpirit of wine in the doſe of a few drops. The principal uſe of bay leaves and berries however in the preſent practice is external; viz. for fomentations, &c. &c.

There is ſome confuſion, among perſons ignorant of botany, between the ſweet bay and what we now commonly call laurel, (Prunus laurocerafus,) which is known only to more modern times in Europe. What we now call bay was formerly called laurel, and the fruit of it only named *bayes*. In Greek it is Δαφνη; in German, *lorbeerbaum*; in Daniſh, *laurbærtræe*; in Swediſh, *lagerbarſtrad*; in French, *laurier*; in Italian, *alloro*; in Spaniſh, *laurel*; in Portugueſe, *loiro*, *loireiro*; in Ruſſian, *lawr*, or *lawro woe derewo*. This is certainly the true *Laurus* of the Romans, and *Daphne* of the Greeks, deſtined to furniſh the Delphic wreath, to grace the head of the triumphant hero, to guard the gate of the Cæſars and the pontifex maximus, to be placed on the houſes of the ſick, and to be worn on the head of the prieſteſs of Delphi, who alſo chewed the leaves, and threw them on the ſacred fire.

10. Laurus Indica, royal bay, or Indian laurel: leaves oblong-lanceolate, perennial, ſomewhat glaucous underneath, the edges at the baſe rolled back; racemes elongated. This is a large tree with aſcending branches. The branches, and particularly the ſhoots, are tubercled with ſcars from the fallen leaves; they are alternate, curved inwards, wrinkled and ſmooth. Native of Madeira; the Canary Iſlands, Virginia, Japan, Cochin-china. Mr. Miller ſays it was brought from the Canary iſlands to Portugal, where it has been propagated in ſo great plenty, as to appear now as if it were a native of that country. In the year 1620 it was raiſed in the Farneſian garden from berries brought from India, and was ſuppoſed to be a baſtard ſort of cinnamon. Loureiro obſerves that the wood is of a yellow colour, not heavy, good for building, but better ſtill for furniture. This wood is called *vigniatico* in the iſland of Madeira, and is probably what is imported into England under the name of *Madeira mahogany*. It is hardly to be diſtinguiſhed from mahogany, except that it is ſomewhat leſs brown.

11. Laurus fœtens, Madeira laurel, or til: leaves veined, elliptic, acute, perennial; axils of the veins villoſe underneath; racemes elongated, compound, panicle-form. Native of Madeira and the Canary iſlands.

12. Laurus perſea, the alligator pear: leaves ovate, coriaceous, tranſverſely veined, perennial; flowers corymbed. The alligator, or avocado, pear grows to the height of thirty feet or more, in the Weſt Indies, and has a trunk as large as our common apple-tree; the bark is ſmooth, and of an aſh-colour; the branches are beſet with pretty large, oblong, ſmooth, leaves, like thoſe of laurel, of a deep-green colour. The flowers are for the moſt part produced towards the extremities of the branches. The fruit is the ſize of one of our biggeſt pears, incloſing a large ſeed with two lobes; included in a thin ſhell. This fruit is held in great eſteem in the Weſt Indies; the pulp is of a pretty firm conſiſtence, and has a delicate rich flavour; it gains upon the palate of moſt perſons, and becomes ſoon agreeable even to thoſe who cannot like it at firſt; but it is ſo rich and mild, that moſt people eat it with ſome ſpice or pungent ſubſtance to give it a poignancy; and for this purpoſe, ſome make uſe of wine, ſome of ſugar, ſome of lime-juice, but moſt of pepper and ſalt. This fruit ſeems equally agreeable to the horſe, the cow, the dog, and the cat, as well as to all ſorts of birds; when plentiful, it makes a great part of the delicacies of the negroes. Native of the Weſt Indies.

13. Laurus Borbonia, broad-leaved Carolina bay, or red bay: leaves oblong-lanceolate, veined; fruits oblong, immerſed in a berried receptacle. In ſome ſituations near the ſea this riſes with a ſtraight large trunk to a conſiderable height; but in the inland parts of the country it is of an humbler ſtature. The leaves are much longer than thoſe of the common bay, and are a little woolly on their under ſide; their edges are a little reflexed; the veins run tranſverſely from the midrib to the ſides. The male flowers come out in long bunches from the axils of the leaves; the female flowers in looſe bunches on pretty long red peduncles. Berries blue in red cups; growing two and ſometimes three together. Theſe trees are not common in Virginia, except in ſome places near the ſea. In Carolina they are every-where ſeen, particularly in low ſwampy land. The wood is fine-grained, and of excellent uſe for cabinets, &c. Some of the beſt reſembles watered ſatin, and is very beautiful. Plumier, regarding it as a genus diſtinct from Laurus, gave it the name of *Borbonia*, from Gaſton Bourbon, ſon of Henry IV. and uncle of Louis XIV.

14. Laurus exaltata, or upright bay: leaves ovate-lanceolate, veined, coriaceous, perennial, flat; racemes upright, compound; calyx cup-ſhaped, permanent. 15. Laurus triandra, or triple-flowered bay: leaves broad-lanceolate, perennial, flat; flowers three-ſtamened; fruit covered by the calyx. 16. Laurus coriacea, or leathery bay: leaves ovate-acuminate, flat, veined, ſhining, coriaceous; racemes upright, ſhorter than the leaves. 17. Laurus leucoxylon, loblolly whitewood, or white ſweetwood: leaves oblong-lanccolate, flat, perennial; racemes ſhorter than the leaves; calyxes incraſſated, warted; berries black, as big as cherries. 18. Laurus membranacea, or membranous bay: leaves oblong, acuminate, veined, convex, coriaceous-membranaceous; branches and racemes upright, ſhorter than the leaf. 19. Laurus patens, or ſpreading bay: leaves ovate-lanceolate, flat, membranaceous, racemes upright, diffuſed, longer than the leaves. 20. Laurus pendula, or hanging bay: leaves oblong, veined, membranaceous, perennial; racemes looſe; fruits pendulous; calyxes deciduous; berries an inch long. 21. Laurus floribunda, or flowering bay: leaves ovate-lanceolate, flat, membranaceous; flowers raceme-panicled, looſe, terminating. All theſe are natives of Jamaica.

22. Laurus lucida, or ſhining bay: leaves oblong, ſerrate; branchlets in threes; flowers axillary, ſolitary, ſubſeſſile. 23. Laurus umbellata, or umbelled bay: leaves ovate, ſerrate; branchlets umbelled; flowers in racemes. Natives of Japan.

24. Laurus æſtivalis, or willow-leaved bay: leaves veined, oblong, acuminate, annual; wrinkled underneath; branches ſuper-axillary. This riſes with a ſhrubby branching ſtalk from ten to ſixteen feet high. Leaves alternate, like the common bay-tree, but more pointed at the end, and of a brighter and more ſhining green. By Martyn (from the Hort. Kew.) the leaves are deſcribed as oppoſite. Flowers white, ſix-petalled, at the top of the branches, followed by green berries incloſed in reddiſh cups, and not unlike thoſe of ſaſſafras. Petioles red, an inch long. This appears to be the Cornus foliis ſalicis laureæ acuminatis, fructu ſaſſafras, of Cateſby; and is repreſented on the annexed Plate. Native of North America, in ſwampy lands.

25. Laurus benzoin, the common benjamin-tree: leaves nerveleſs, ovate, ſharp at both ends, entire, annual. This riſes to the height of ten or twelve feet, dividing into many

many branches. Leaves near three inches long, and an inch and a half broad, ſmooth on their upper ſurface, but with many tranſverſe veins on their under ſide. Flowers of a white herbaceous colour, with ſix ſtamina in each. Native of Virginia; whence it was ſent by Baniſter to Compton biſhop of London, and cultivated in his garden at Fulham in 1688, by Mr. George London. This tree has been confounded with the true benzoin-tree, for which ſee STYRAX BENZOIN.

26. Laurus ſaſſafras, the ſaſſafras-tree: leaves entire, and three-lobed; (ſee BOTANY Plate V. fig. 99.) The ſaſſafras-tree is commonly rather a ſhrub, ſeldom riſing more than eight or ten feet high. It ſometimes however grows into a large tree. The leaves are of different ſhapes and ſizes; ſome oval and entire, about four inches long and three broad; others are deeply divided into three lobes; theſe are ſix inches long, and as much in breadth from the extremity of the two outſide lobes; they are placed alternately on pretty long footſtalks, and are of a lucid green; they fall off early in the autumn, and in the ſpring, ſoon after the leaves begin to come out, the flowers appear juſt below them, on ſlender peduncles, each ſuſtaining three or four ſmall, yellow, or greeniſh-white, flowers, which have five oval concave petals, and eight ſtamina in the male flowers, which are upon different plants from the hermaphrodite flowers. Theſe are ſucceeded by an oval berry, which, when ripe, is blue. Ehret, in the year 1735, obſerved the male flowers in the nurſery of Mr. Chriſtopher Gray at Fulham to have uſually nine ſtamens, with glands between them uncertain in their number. Theſe flowers had a ſimple ſtyle, a ſtigma variouſly conſtructed, and no germ. He alſo examined the female flowers in Mr. James Gordon's nurſery at Mile-end, and found the petals ſmaller, ſix ſtamens, with an uncertain number of glands, from three or four to nine, ſtyle ſimple, crowned with its ſtigma, and a germ. From this deſcription it appears that the two ſorts of flowers ſhould have been called imperfect hermaphrodites, rather than male and female.

Cateſby deſcribes the ſaſſafras as a ſmall tree, the trunk uſually not a foot thick. The leaves divided into three lobes by very deep inciſures. In March, bunches of ſmall five-petalled flowers come forth, ſucceeded by berries, in ſize and ſhape not unlike thoſe of the bay-tree, hanging on red footſtalks, with a red calyx, reſembling that of an acorn; they are at firſt green, and, when ripe, blue. This tree is deſcribed at full length in the ſecond volume of Nova Acta Nat. Cur. by Trew, who has there given an ample account of its natural hiſtory. He obſerves, that the male flowers have eight or nine ſtamens, and ſometimes as many as thirteen, and ſix glands; two to each inner filament; the female or rather hermaphrodite flowers only four ſtamens without any glands. Native of almoſt all America, commonly in a ſandy ſoil, never in ſwamps. It was alſo obſerved by Loureiro in the north of Cochin-china near Tonquin. It has withſtood the cold of ſeveral winters at Mr. Collinſon's at Peckham, Mr. Bacon's at Hoxton, Mr. Gray's at Fulham, Mr. Gordon's at Mile-end, &c. &c. and was cultivated before 1633, by Mr. Wilmot, at Bow.

The wood of this tree, which is of a light and ſpongy texture, has a fragrant ſmell, and a ſweetiſh aromatic taſte, and, with the bark, is much uſed in the materia medica. It gives out its virtues both to ſpirit and water, but moſt readily to the former. Saſſafras is uſed as a mild corroborant, diaphoretic, and ſweetener, in ſcorbutic, venereal, cachetic, and catarrhal, diſorders. Infuſions made in water from the cortical or woody part raſped or ſhaved, are commonly drunk as a tea; and this, in ſome conſtitutions, from its fragrance, is ſaid to affect the head at firſt; which inconvenience ceaſes on continuing its uſe a little time. It is made an ingredient in ſeveral diet-drinks, both empyrical and ſuch as are uſed in regular practice. A decoction of ſaſſafras with ſugar was ſold in coffee-houſes at the end of the laſt century, under the name of *bochet*. There has been a ſhop in Fleet-ſtreet for the ſale of it under the name of *ſaloop*, for ſeventy years paſt. The bark has been ſubſtituted in America for ſpice. It is ſaid that bedſteads made of the wood will never be infeſted with bugs. Loureiro remarks, that it is very proper for making cabinets in hot climates, on the ſame account, becauſe the ſmell repels inſects. Willdenow however doubts whether the Cochin-chineſe ſaſſafras be the ſame with the American.

27. Laurus involucrata, or involucred bay: leaves obovate, umbels involucred. Native of Tranquebar in the Eaſt Indies, whence it was ſent by Köenig. It is the *narra* of the Telingas, and is thus deſcribed by Dr. Roxburgh: Trunk erect; bark brown on the trunk and larger branches; on the ſmall, light-aſh coloured and ſmooth; leaves ſcattered, petioled, broad-lanced, attenuated into a long ſlender waved point, three-nerved, (nerves united above the baſe, as in cinnamomum, and vaniſh a little above the middle of the leaf,) entire, ſmooth, above ſhining, below whitiſh, four to five inches long, and one to one and a half broad. When they firſt appear, they are covered with a moſt beautiful ſoft ſatin-like yellowiſh ſilver down. Native of the tops of mountains on the coaſt of Coromandel, where it grows to a ſmall tree of about twenty-four or thirty feet in height, branches included; flowers during the cold ſeaſon: berries ripe in April. This tree has much the appearance of L. camphora; every part of it ſmells ſtrongly of camphor, the roots and berries exceedingly ſo, and are very acrid. It does appear to yield any ſort of gum or reſin; nor do the natives make any other uſe of it, than occaſionally for fire-wood; except that the freſh bark well bruiſed, and mixed with pepper, is by the hill-people employed to cure wounds.

28. Laurus myrrha, or myrrh-laurel: leaves three-nerved, ovate: with a long point; flowers heaped, ſeſſile, axillary. This is a ſmall tree, five feet high, very much branched, with an unarmed twiſted trunk. Flowers white. The root is warm, diuretic, emmenagogue, antiputredinous, and anthelmintic. A red oil expreſſed from the berries; and, having the ſmell and taſte of the plant, is uſed by the natives in the itch, wounds, puſtules, and putrid ulcers, againſt worms and inſects that attack the human body. Loureiro ſuſpects that this may be the plant which affords the true myrrh. Native of Cochin-china. *Liſbon Tranſ.*

29. Laurus polyadelpha, or polyadelphous laurel: leaves obſcurely three-nerved, lanceolate; flowers axillary, polyadelphous. 30. Laurus curvifolia, or curve-leaved laurel: leaves obſcurely three-nerved, oblong, curved inwards; racemes ſmall, ſubterminating. Theſe are large trees with ſpreading branches; native of Cochin-china in mountain-woods; and have a great affinity with the Ocotea guianenſis of Aublet, and the Poroſtema of Schreber.

31. Laurus cubeba, or white laurel: leaves nerveleſs, veinleſs, lanceolate; flowers heaped, peduncled. This is a middle-ſized and very branching tree; native of Cochin-china, and probably alſo of China. The berries are corroborant, cephalic, ſtomachic, and carminative; a decoction of them is of ſervice in the vertigo, hyſterics, palſy, &c. the bark has the ſame qualities, but in an inferior degree. The natives uſe the freſh berries as a ſauce for fiſh; the ſmell is fragrant, the taſte aromatic and warm; they have the ſize, colour, and form, of black pepper; and, being faſtened to a long ſlender peduncle, are not unaptly called *piper caudatum*, or tailed pepper. The fruit having the form, ſize, and quality, of the cubeb, Loureiro ſuppoſes this to be the tree which produces it: but the cubeb is repreſented as a climbing plant, and the younger Linnæus decides that it is a ſpecies of pepper.

32. Laurus piloſa, or hairy laurel: leaves nerveleſs, oblong, hairy; racemes wide, terminating. This is a large tree with ſpreading branches. Leaves acuminate, quite entire, ſcattered, petioled, five inches long. Flowers polygamous, greeniſh yellow. Native of mountain-woods

in Cochin-china. The wood is yellow, durable, and fit for building or turning.

Loureiro remarks, that, in all the ſpecies of Laurus which he found in India, he obſerved always hermaphrodite flowers, berries and not drupes, and the leaves perennial; but the latter circumſtance is common to almoſt all trees in the torrid zone.

Propagation and Culture. Cinnamon and caſſia are not ſo tender as moſt perſons imagine; and the tender treatment of the plants brought to England has generally deſtroyed them. Great heat is certainly prejudicial to them; when the plants therefore have taken new root in the pots or tubs, they ſhould in ſummer be placed in a glaſs-caſe, where they may have plenty of air in warm weather; and in winter they ſhould be placed in a ſtove moderately warm. The camphor-tree in Europe is propagated by layers, which are generally two years, and ſometimes longer, before they take root, ſo that the plants are very ſcarce; and, as all thoſe we have ſeen flower are male trees, there can be no hopes of procuring ſeeds from them here; but, if the berries of this, and alſo of the cinnamon-tree, were procured from the places of their growth, and planted in tubs of earth, as is directed for the ſaſſafras-tree, there may be a number of theſe plants procured in England; and, if they were ſent to the Britiſh colonies in America, they might be there cultivated, ſo as to become a public advantage; eſpecially the cinnamon-tree, which will grow as well in ſome of our iſlands in the Weſt Indies as it does in the native places of its growth, and in a few years the trees might be had in plenty; for they propagate eaſily by the berries, as the French experienced in their American Iſlands. The Portugueſe brought ſome of the cinnamon-trees from the Eaſt Indies, and planted them in the Iſland of Princes, on the coaſt of Africa, where they now abound, having ſpread over a great part of the iſland. The camphor-tree does not require any artificial heat in winter; ſo that, if it be placed in a warm dry green-houſe, it will thrive very well. During the winter ſeaſon it muſt be ſparingly watered; and in the ſummer be placed abroad in a warm ſituation, where it may be defended from ſtrong winds, and not too much expoſed to the direct rays of the ſun: but during this ſeaſon it muſt be frequently refreſhed with water. It may be propagated by laying down the young branches in autumn, which ſhould be treated in the ſame manner as is directed for L. benzoin.

The bay-tree, properly ſo called, may be propagated by layers; and the common ſort is generally propagated by ſuckers. Thoſe plants, however, never keep to one ſtem, but generally ſend out a great number of ſuckers from their roots, and form a thicket, but do not advance in height; therefore the beſt way to have good plants, is to raiſe them from the berries, when they can be procured; for the plants which come from ſeeds always grow larger than the others, and do not put out ſuckers from their roots, ſo may be trained up with regular ſtems. The beſt way is to ſow the berries in pots, and plunge them into a moderate hot-bed, which will bring up the plants much ſooner than if they are ſown in the full ground, and they will have a longer time to get ſtrength before winter. But the plants muſt not be forced with heat; therefore they ſhould be inured to bear the open air the beginning of June, into which they ſhould be removed, where they may remain till autumn; then the pots ſhould be placed under a common frame, that the plants may be protected from hard froſt; but in mild weather they may enjoy the free air; for, while the plants are ſo young, they are in danger of ſuffering in hard froſt, even the common ſort of bay. The ſpring following, thoſe ſorts which will not live in the open air ſhould be each tranſplanted into ſeparate pots; but the common ſort may be planted in nurſery-beds ſix inches aſunder each way, where they may grow two years, by which time they will be fit to plant where they are deſigned to grow. The other ſorts muſt be conſtantly kept in pots, and ſhould every year be new potted; and, as they advance in growth, they muſt have larger pots. As theſe plants require ſhelter in winter, a few of each ſort will be enough for a large green-houſe. The common bay will make a variety in all ever-green plantations; and, as it will grow under the ſhade of other trees, where they are not too cloſe, it is very proper to plant in the borders of woods, where it will have a good effect in winter. Mr. Evelyn makes mention of bay-trees thirty feet high, and almoſt two feet in diameter in the trunk. In the laſt century abundance of theſe trees were raiſed and kept in tubs, with curious round heads, and brought over here from Holland and Flanders. In a warm dry ſandy or gravelly ſoil, the bay however will grow to the height of thirty or forty feet; but, to ſecure its fine verdure, it ſhould be planted in ſituations defended from north and north-eaſt winds, from which it ſometimes ſuffers in ſevere winters; generally however recovering in ſummer. The bay ſhould never have a branch taken from it but in the ſpring. As a plant of elegance and beauty, yielding a moſt refreſhing and ſalubrious ſmell to a conſiderable diſtance, it cannot be too much encouraged; and to perſons of claſſical taſte it can never fail to furniſh many pleaſing ideas, by recalling to their minds various fine paſſages and alluſions of the ancient poets. The berries are ripe the end of January or beginning of February, when they ought to be gathered, and preſerved in dry ſand till the beginning of March. Then, or as ſoon as the weather becomes favourable, on a ſhady border of rich looſe undunged ſoil, made fine and well protected, drop the berries in rows fifteen inches aſunder, and four inches in the row, ſifting over them fine rich mould an inch thick. As ſoon as you perceive the plants to heave up the earth, refreſh them frequently but moderately with water, in the mornings when cold, in the evenings when mild weather, and continue to do ſo all the ſummer-months. Let them remain two years, watering the ſecond ſummer. Such as are intended to be increaſed by layers, may be laid down in March or Auguſt; the latter is the beſt ſeaſon, and by the ſecond ſpring will make good plants. The bay will alſo grow by cuttings, but in the open ground ſlowly; in the beginning of April therefore prepare a moderate hot-bed of tanners' bark, and cover it eight inches deep with rich looſe freſh earth. Plant the cuttings five inches deep, and eight or nine aſunder; rubbing off their leaves; water them gently every evening while the bed continues warm, and cover the glaſſes with mats during the heat of the day. When the cuttings have ſhot, let them receive all mild gentle ſhowers, and the evening dews. The beginning of Auguſt the glaſſes may be taken off, and replaced when the weather begins to be froſty; keeping them open every mild day. The beginning of April, following, or as ſoon as the weather becomes temperate, remove both glaſſes and frames; continue frequent and plentiful waterings during the ſummer-months as the weather may require; and the ſucceeding April the plants will be ſtrong, well rooted, and fit for removal. The plants raiſed in any of theſe ways may now be removed to the nurſery; when, having cut away their ſuperfluous roots and branches, attentively encouraging the leading ſhoot, plant them in a well-ſheltered quarter of light mould, in rows three feet and a half aſunder, and eighteen inches in the row. Dig the ground autumn and ſpring; keep it clean, looſe, and mellow, in ſummer, and prune the plants annually in April. Let them continue three, but not more than four, years, before they are planted out where they are to remain.

The alligator-pear is propagated by ſeeds, which ſhould be obtained as freſh as poſſible from the countries of its growth; if they are brought over in ſand, they will be more likely to grow than when dry. Set them in pots filled with rich light earth; plunge them into a hot-bed of tanners' bark, which ſhould be kept pretty warm; water them frequently, but moderately, when the earth appears dry. In five or ſix weeks the plants will come up; treat them very tenderly, by keeping up the bed to a due temperature of heat; and, when the weather proves warm,

admit the freſh air by raiſing the glaſſes a little. When they are about four inches high, tranſplant them carefully; and, where there are ſeveral plants in one pot, part them, preſerving a ball of earth to the root of each, and put them into ſeparate ſmall pots filled with light rich earth, which plunge into a hot-bed of tanners' bark, ſhading them until they have taken new root; after which freſh air ſhould be admitted to them, in proportion to the warmth of the ſeaſon. Towards Michaelmas the plants muſt be removed into the ſtove, and plunged into the bark-bed, where during the winter-ſeaſon they ſhould be kept in a moderate warmth, and muſt be gently watered twice a-week. In the ſpring the plants ſhould be ſhifted into pots a ſize larger, and the bark-bed ſhould be then renewed with freſh tan, which will ſet the plants in a growing ſtate early, whereby they will make great progreſs the following ſummer. Theſe plants muſt be conſtantly kept in the ſtove, for they are too tender to bear the open air in this country at any ſeaſon, but in warm weather they ſhould have a large ſhare of air admitted to them.

The ſaſſafras-tree is commonly propagated by the berries, which are brought from America; but theſe berries generally lie in the ground a whole year, and ſometimes two or three years, before they grow, when they are ſown in the ſpring; therefore the ſureſt method of obtaining the plants will be, to get the berries put into a tub of earth ſoon after they are ripe, and ſent over in the earth; and, as ſoon as they arrive, to ſow the berries on a bed of light ground, putting them two inches in the earth; and, if the ſpring ſhould prove dry, the bed muſt be frequently watered, and ſhaded from the great heat of the ſun in the middle of the day; with this management many of the plants will come up the firſt ſeaſon; but, as a great many of the berries will lie in the ground till the next ſpring, ſo the bed ſhould not be diſturbed, but wait until the ſeaſon after, to ſee what will come up. The firſt winter after the plants come up, they ſhould be protected from the froſt, eſpecially in the autumn; for the firſt early froſt at that ſeaſon is apt to pinch the ſhoots of theſe plants, which, when young, are tender and full of ſap, ſo will do them more injury than the ſevere froſt of the winter; for, when the extreme part of the ſhoots are killed, it greatly affects the whole plant. When the plants have grown a year in the ſeed-bed, they may be tranſplanted into a nurſery, where they may ſtand one or two years to get ſtrength, and may then be tranſplanted into the places where they are to remain for good. There have been ſome of theſe plants propagated by layers, but theſe are commonly two, and ſometimes three, years before they put out roots; and, if they are not duly watered in dry weather, they rarely take root at all; ſo that it is uncertain whether one in three of theſe layers ſucceeds; which renders theſe plants ſcarce in England.

Willow-leaved bay may alſo be propagated by ſeeds, when they can be procured, and by layers, which put out roots pretty freely. The benjamin-tree alſo, as it is falſely called, may be propagated by ſowing the berries. They generally lie long in the ground, ſo that, unleſs they are brought over in earth, they often fail. But this may likewiſe be increaſed by layers, which put out roots freely, when the young ſhoots are made choice of. See CANELLA, KIGGELARIA, MAGNOLIA, MEDEOLA, MYRICA, RUSCUS, VIBURNUM, UVULARIA, and WINTERANIA.

LAURUSTI'NUS, *ſ.* An evergreen ſhrub, which flowers about Michaelmas, and holds its flowers through the winter.—The duſky bay, and *lauruſtinus* bright. *Anonymous.*

LAUR'WIG. See LARVIGEN, p. 249.

LAUS, now LAINO, a town on a river of the ſame name, which formed the ſouthern boundary of Lucania. *Strabo.*

LAUS KAU'RENS, a peninſula of Finmark, in the Frozen Sea. Lat. 70. 45. N. lon. 30. 24. E.

LAUS KRAU'T, in botany. See DELPHINIUM ſtaphiſagria, vol. v. p. 683.

LAUS POMPE'IA, a town of Italy, founded by a colony ſent thither by Pompey.

LAUSAN'NE, a city of Swiſſerland, in the canton of Berne, about two miles from the Lake of Geneva. It is the largeſt town in the country of Vaud, and is pretty well built, on a very uneven tract of land, formed by three ſmall hills. Pierre Viret introduced the reformation in the year 1536, which extended through the whole country of Vaud, after a diſputation held at Lauſanne the ſame year. This place is doubtleſs indebted for its fame and aggrandiſement to the transfer of the biſhop's ſee from Avenches, which took place at the latter end of the ſixth century. It afterwards became celebrated for the council held there in 1448, in which Felix V. reſigned the pontificate, in order to give peace to the church. The dioceſe of the biſhop comprehended the greater part of the cantons of Berne, Soleure, and Friburg, the country of Vaud, the principality of Neufchâtel, Bienne and its territory, and the country of Erguel, and extended almoſt to Franche Comté. At the reformation, it was reduced to little more than the canton of Friburg and a part of that of Soleure. An academy was eſtabliſhed here in 1537, and a college in 1540. The bailiwick of Lauſanne is one of the moſt extenſive of the canton. The bailiff has ſucceeded to the biſhop: he reſides in his château, and has juriſdiction over the ſame places that the biſhop had. The air is very pure and healthy; there is plenty of excellent water. In a word, every neceſſary of life is here found in the greateſt abundance. It was a favourite reſidence of Gibbon the hiſtorian, who here finiſhed his great work on the Decline and Fall of the Roman Empire, June 27, 1787. Lauſanne is forty-one miles ſouth-weſt of Berne. Lat. 46. 33. N. lon. 6. 28. E.

LAUS'NITZ, a river which riſes in Auſtria, and runs into the Muldaw four miles ſouth-weſt of Bechin, in Bohemia.

LAUSSEIGNA'N, a town of France, in the department of the Lot and Garonne: five miles north-weſt of Nerac, and five weſt of Agen.

LAUS'SIG, a town of Saxony, in the circle of Leipſic, fourteen miles ſouth-eaſt of Leipſic. Lat. 51. 7. N. lon. 12. 36. E.

LAUSS'NITZ, a town of Saxony, in the margravate of Meiſſen: thirteen miles north of Dreſden.

LAU'SUS, a ſon of Numitor, and brother of Ilia. He was put to death by his uncle Amulius, who uſurped his father's throne. *Ovid.*—A ſon of Mezentius, king of the Tyrrhenians, killed by Æneas in the war which his father and Turnus made againſt the Trojans. *Virgil.*

LAUS'ZA, a town of Samogitia: forty-four miles north-weſt of Miedniki.

LAUT, a town of the duchy of Wurzburg: ſeven miles weſt of Kiſſingen.

LAUT. See PULO LAUT.

LAUTAKA'RI, a ſmall iſland in the north part of the gulf of Bothnia. Lat. 65. 35. N. lon. 24. 34. E.

LAU'TENBURG, a town of Pruſſia, in the territory of Culm; forty-eight miles eaſt of Culm, and ſixty ſouth-weſt of Heilſberg.

LAU'TENHAL, a town of Weſtphalia, in the Hartz Foreſt: eight miles weſt of Goſlar.

LAU'TER, a river of Germany, which runs into the Neckar, near Wendlingen.

LAU'TER, a river of Germany, which runs into the Danube near Marchthal.

LAU'TER, a river of Bavaria, which runs into the Maine near Staffelſtein.

LAU'TER, a river of Germany, which runs into the Itſch near Coburg.

LAU'TER, a river of France, which runs into the Rhine near Lauterburg.

LAU'TER, a town of Germany, in the county of Henneberg: eleven miles north-eaſt of Meinungen.

LAU'TERACH, a river of Bavaria, which runs into the Vils near Schmid.

LAU'TERBACH,

LAU'TERBACH, a town of Bohemia, in the circle of Saatz: ſeven miles ſouth-eaſt of Falkenau, and ſixty-five weſt of Prague. Lat. 50. 2. N. lon. 12. 45. E.

LAU'TERBACH, a river of Sileſia, which runs into the Katzbach near Schonau in the principality of Jauer.

LAU'TERBACH, a river of Wurtemberg, which runs into the Enz two miles weſt-ſouth-weſt of Wildbad.

LAU'TERBACH, a town of Upper Heſſe: thirteen miles north-weſt of Fulda, and thirty-three eaſt of Wetzlar.

LAU'TERBACH, a town of Saxony five miles north-weſt of Zwickau.

LAU'TERBERG, a town of Weſtphalia, in the Hartz Foreſt, near which are mines and forges of copper and iron: fourteen miles ſouth of Goſlar.

LAUTERBRUNN', a valley of Swiſſerland, in the canton of Berne, of about fifteen miles in circumference, celebrated for its picturesque and romantic ſcenery; a beautiful cataract, magnificent glaciers, rocks of calcareous ſtone and granite, and mines of iron and lead; it takes its name from a village: ſix miles ſouth of Interlacken.

LAU'TERBURG, a town of France, in the department of the Lower Rhine, on the Lauter. On the 16th of September, 1793, the Auſtrians were defeated by the French near this town, with the loſs of 1500 men. It was taken by the Auſtrians in October 1793. It is fourteen miles ſouth of Landau, ten eaſt of Weiſſembourg, and twenty-nine north-north-eaſt of Straſburg. Lat. 49. N. lon. 8. 14. E.

LAU'TERECK, a town of France, in the department of the Sarne, ſituated on the Glan: twenty-four miles north of Deux Ponts, and forty-ſix ſouth of Coblentz. Lat. 49. 39. N. lon. 7. 35. E.

LAU'TERHOFEN, a town of Bavaria: thirteen miles ſouth-weſt of Amberg, and twelve ſouth-weſt of Sulzbach.

LAU'TERN, or KAISER'S LAUTERN. See KAISERS-LAUTERN, vol. xi. p. 586.

LAU'TERN, a town of Pruſſia, in the province of Ermeland: fourteen miles ſouth-ſouth-eaſt of Heilſberg.

LAU'TERSHAUSEN, a town of Germany, in the principality of Anſpach, on the Altmuhl: thirteen miles north-north-eaſt of Dinckelſhuhl, and eight weſt of Anſpach.

LAU'TERSTEIN, a town of Saxony, in the circle of Erzgeberg: ſeventeen miles ſouth-ſouth-weſt of Freyberg, and thirty-two ſouth-weſt of Dreſden.

LAU'TRACH, a town of Germany, in the county of Bregentz: two miles ſouth of Bregentz.

LAU'TREC, a town of France, in the department of the Tarn: twelve miles north-north-weſt of Caſtres, and fifteen ſouth of Gaillac.

LAU'TTE, a town of Pruſſia, in Oberland: ſixteen miles eaſt-ſouth-eaſt of Marienwerder.

LAVUN'S, a town of France, in the department of the Lower Pyrenées: fifteen miles ſouth-eaſt of Oleron, and nineteen ſouth of Pau.

LAU'WERS (Conrad and Nicholas), brothers and engravers, born at Leuſe, in Hainault, in 1613 and 1620, but eſtabliſhed themſelves and publiſhed their engravings at Antwerp. Their fortunes and their merits were nearly equal. Both emulated the merits of the ſchool of Rubens, and, as Strutt thinks, ſtudied under Paul Pontius, whoſe ſtyle of engraving they for the moſt part imitated, working with the graver alone. Neither was, however, by any means equal to that great maſter, either in knowledge of forms, powers of delineation, or excellency of handling. The time of their death is not known.

LAUZER'TE, a town of France, and principal place of a diſtrict, in the department of the Lot: ſeventeen miles north-weſt of Montauban, and ſeventeen ſouth-weſt of Cahors. Lat. 44. 15. N. lon. 1. 13. E.

LAU'ZES, a town of France, in the department of the Lot, and chief place of a canton, in the diſtrict of Cahorn. The place contains 444, and the canton 7139, inhabitants.

LAUZE'T, a town of France, in the department of the Lower Alps: ten miles weſt of Barcelonette.

LAUZUN', a town of France, and principal place of a diſtrict, in the department of the Lot and Garonne: fourteen miles north-eaſt of Marmande, and fourteen north-weſt of Monflanquin. Lat. 44. 38. N. lon. 0. 32. E.

LAW, *ſ.* [lagɛ, lagea, or lah, Sax. *lawe*, Belg. *loi*, Fr. *legge*, Ital. *ley*, Span. and Port. *laugh*, Erſe; *lex*, from *ligo*, to bind, Lat.] A rule of action.—That which doth aſſign unto each thing the kind, that which doth moderate the force and power, that which doth appoint the form and meaſure of working: the ſame we term a *law*. *Hooker.*

Unhappy man! to break the pious *laws*
Of nature, pleading in his children's cauſe. *Dryden.*

A degree, edict, ſtatute, or cuſtom, publicly eſtabliſhed as a rule of juſtice.—Our nation would not give *laws* to the Iriſh, therefore now the Iriſh gave *laws* to them. *Davies.*

Ordain them *laws*, part ſuch as appertain
To civil juſtice, part religious rites. *Milton.*

A decree authoritatively annexing rewards or puniſhments to certain actions.—So many *laws* argue ſo many ſins. *Milton.*—Judicial proceſs.—Tom Touchy is a fellow famous for taking the *law* of every body: there is not one in the town where he lives that he has not ſued at a quarter-ſeſſions. *Addiſon's Spectator.*

He hath reſiſted *law*,
And therefore *law* ſhall ſcorn him further trial
Than the ſeverity of public power. *Shakeſpeare.*

A diſtinct edict or rule.—One *law* is ſplit into two. *Baker on Learning.*—Conformity to law; any thing lawful:

In a rebellion,
When what's not meet, but what muſt be, was *law*,
Then were they choſen. *Shakeſpeare's Coriolanus.*

The rules or axioms of ſcience: as, the *laws* of mechanics.—An eſtabliſhed and conſtant mode or proceſs; a fixed correſpondence of cauſe and effect: as, the *laws* of magnetiſm.—Natural agents have their *law*. *Hooker.*

I dy'd, whilſt in the womb he ſtay'd,
Attending Nature's *law*. *Shakeſpeare's Cymbeline.*

The Moſaical inſtitution: diſtinguiſhed from the *goſpel*:

Law can diſcover ſin, but not remove,
Save by theſe ſhadowy expiations. *Milton.*

The books in which the Jewiſh religion is delivered: diſtinguiſhed from the *prophets*.—Whatſoever ye would that men ſhould do to you, do ye even ſo to them: for this is the *law* and the prophets. *Matth.* vii. 12.—A particular form or mode of trying and judging: as, *law* martial, *law* mercantile, the eccleſiaſtical *law* whereby we are governed. Juriſprudence; the ſtudy of law.

Thus then LAW, in its primary and moſt comprehenſive ſenſe, ſignifies a rule of action; it is applied indiſcriminately to all kinds of action, whether animate or inanimate, rational or irrational; and it is that rule of action which is preſcribed by ſome ſuperior, and which the inferior is bound to obey.

Thus, when the Supreme Being formed the univerſe, and created matter out of nothing, he impreſſed certain principles upon that matter, from which it can never depart, and without which it would ceaſe to be. When he put that matter into motion, he eſtabliſhed certain laws of motion, to which all moveable bodies muſt conform. And, to deſcend from the greateſt operations to the ſmalleſt, when a workman forms a clock, or other piece of mechaniſm, he eſtabliſhes at his own pleaſure certain arbitrary laws for its direction; as, that the hand ſhall deſcribe a given ſpace in a given time; to which law as long as the work conforms, ſo long it continues in perfection, and anſwers the end of its formation.

If we farther advance, from mere inactive matter to vegetable and animal life, we ſhall find them ſtill governed by laws; more numerous indeed, but equally fixed and

invariable. The whole progreſs of plants, from the ſeed to the root, and from thence to the ſeed again; the method of animal nutrition, digeſtion, ſecretion, and all other branches of vital economy; are not left to chance, or the will of the creature itſelf, but are performed in a wondrous involuntary manner, and guided by unerring rules laid down by the great Creator.

This then is the general ſignification of law, A RULE OF ACTION DICTATED BY SOME SUPERIOR BEING: and, in thoſe creatures that have neither the power to think nor to will, ſuch laws muſt be invariably obeyed, ſo long as the creature itſelf ſubſiſts; for its exiſtence depends on that obedience. But LAW, in its more confined ſenſe, and in which it is our preſent buſineſs to conſider it, denotes *the rule*, not of action in general, but of *human action* or conduct: that is, the precepts by which man, the nobleſt of all ſublunary beings, a creature endowed with both reaſon and free will, is commanded to make uſe of thoſe faculties in the general regulation of his behaviour. And this perhaps is the only ſenſe in which the word LAW can be ſtrictly uſed; for, in all caſes where it is not applied to human conduct, it may be conſidered as a metaphor; and in every ſuch inſtance a more appropriate term may be found. When it is uſed to expreſs the operations of the Deity, or Creator, it comprehends ideas very different from thoſe which are included in its ſignification when it is applied to man or his other creatures. The *volitions* of the Almighty are his laws; he had only to will, γενεσθω φως και εγενετο; but, when we apply the word law to motion, matter, or the works of nature or of art, we ſhall find in every caſe, that, with equal or greater propriety and perſpicuity, we might have uſed the words *quality*, *property*, or *peculiarity*; as for inſtance, that it is the *property* or *quality* of all matter to move in a ſtraight line or to gravitate, as it is to be ſolid or extended; and, when we ſay that it is the *law* of a ſeries, that ſuch term is the ſquare or ſquare-root of the preceding term, we mean nothing more than that ſuch is its *property*, or *peculiarity*. The word *law*, in this ſenſe, is therefore uſed in thoſe caſes only which are ſanctioned by uſage; for it would be thought a harſh expreſſion to ſay that it is the *law*, that ſnow ſhould be white, or that fire ſhould burn; and, when *law* is applied to any other object than man, it ceaſes to contain two of its eſſential ingredients, viz. *diſobedience* and *puniſhment*.

OF LAW IN GENERAL.

Man, conſidered as a creature, muſt neceſſarily be ſubject to the laws of his Creator, for he is entirely a dependent being. A being, independent of any other, had no rule to purſue but ſuch as he preſcribes to himſelf; but a ſtate of dependence will inevitably oblige the inferior to take the will of him on whom he depends as the rule of his conduct; not indeed in every particular, but in all thoſe points wherein his dependence conſiſts. This principle therefore has more or leſs extent and effect, in proportion as the ſuperiority of the one and the dependence of the other is greater or leſs, abſolute or limited. And conſequently, as man depends abſolutely upon his Maker for every thing, it is neceſſary that he ſhould in all points conform to his Maker's will.

This will of his Maker is called the LAW OF NATURE. For as God, when he created matter, and endued it with a principle of mobility, eſtabliſhed certain rules for the perpetual direction of that motion; ſo, when he created man, and endued him with free will to conduct himſelf in all parts of life, he laid down certain immutable laws of human nature, whereby that free will is in ſome degree regulated and reſtrained, and gave him alſo the faculty of reaſon to diſcover the purport of thoſe laws.

Conſidering the Creator only as a being of infinite power, he was able unqueſtionably to have preſcribed whatever laws he pleaſed to his creature man, however unjuſt or ſevere. But, as he is alſo a Being of infinite wiſdom, he has laid down only ſuch laws as were founded in thoſe relations of juſtice, that exiſted in the nature of things antecedent to any poſitive precept. Theſe are the eternal immutable laws of good and evil, to which the Creator himſelf in all his diſpenſations conforms; and which he has enabled human reaſon to diſcover, ſo far as they are neceſſary for the conduct of human actions. Such, among others, are theſe principles: That we ſhould *live honourably*, ſhould *hurt nobody*, and ſhould *render to every one his due*; to which three general precepts Juſtinian has reduced the whole doctrine of law.

But, if the diſcovery of theſe firſt principles of the law of nature depended only upon the due exertion of right reaſon, and could not otherwiſe be obtained than by a chain of metaphyſical diſquiſitions, mankind would have wanted ſome inducement to have quickened their inquiries, and the greater part of the world would have reſted content in mental indolence, and ignorance its inſeparable companion. As therefore the Creator is a being, not only of infinite power and wiſdom, but alſo of infinite goodneſs, he has been pleaſed ſo to contrive the conſtitution and frame of humanity, that we ſhould want no other prompter to inquire after and purſue the rule of right, but only our own ſelf-love, that univerſal principle of action. For he has ſo intimately connected, ſo inſeparably interwoven, the laws of internal juſtice with the happineſs of each individual, that the latter cannot be attained but by obſerving the former; and, if the former be punctually obeyed, it cannot but induce the latter. In conſequence of which mutual connexion of juſtice and human felicity, he has not perplexed the law of nature with a multitude of abſtracted rules and precepts, referring merely to the fitneſs or unfitneſs of things, as ſome have vainly ſurmiſed; but has graciouſly reduced the rule of obedience to this one paternal precept, "that man ſhould purſue his own happineſs." This is the foundation of what we call *ethics*, or NATURAL LAW. For the ſeveral articles into which it is branched in our ſyſtems amount to no more than demonſtrating, that this or that action tends to man's real happineſs, and therefore very juſtly concluding, that the performance of it is a part of the law of nature; or, on the other hand, that this or that action is deſtructive of man's real happineſs, and therefore that the law of nature forbids it.

This law of nature, being coeval with mankind, and dictated by God himſelf, is of courſe ſuperior in obligation to any other. It is binding over all the globe, in all countries, and at all times: no human laws are of any validity, if contrary to this; and ſuch of them as are valid derive all their force, and all their authority, mediately or immediately, from this original.

But, in order to apply this to the particular exigencies of each individual, it is ſtill neceſſary to have recourſe to reaſon: whoſe office it is to diſcover, as was before obſerved, what the law of nature directs in every circumſtance of life, by conſidering what method will tend the moſt effectually to our own ſubſtantial happineſs. And, if our reaſon were always, as in our firſt anceſtor before his tranſgreſſion, clear and perfect, unruffled by paſſion, unclouded by prejudice, unimpaired by diſeaſe or intemperance, the taſk would be pleaſant and eaſy; we ſhould need no other guide but this. But every man now finds the contrary in his own experience; that his reaſon is corrupt, and his underſtanding full of ignorance and error.

This has given manifold occaſion for the benign interpoſition of Divine Providence; which, in compaſſion to the frailty, the imperfection, and the blindneſs, of human reaſon, hath been pleaſed, at ſundry times and in divers manners, to diſcover and enforce its laws by an immediate and direct revelation. The doctrines thus delivered, we call the REVEALED or DIVINE LAW, and they are to be found only in the Holy Scriptures. Theſe precepts, when revealed, are found upon compariſon to be really a part of the original law of nature, as they tend in all their conſequences to man's felicity. But we are not from thence to conclude, that the knowledge of theſe truths

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was attainable by reaſon in its preſent corrupted ſtate; ſince we find, that, until they were revealed, they were hid from the wiſdom of ages. As then the moral precepts of this law are indeed of the ſame original with thoſe of the law of nature, ſo their intrinſic obligation is of equal ſtrength and perpetuity. Yet undoubtedly the *revealed law* is of infinitely more authenticity than that moral ſyſtem which is framed by ethical writers, and denominated the *natural law*; becauſe one is the law of nature, expreſsly declared ſo to be by God himſelf; the other is only what, by the aſſiſtance of human reaſon, we imagine to be that law. If we could be as certain of the latter as we are of the former, both would have an equal authority; but till then they can never be put in any competition together.

Upon theſe two foundations, the *law of nature* and the *law of revelation*, depend all human laws; that is to ſay, no human laws ſhould be ſuffered to contradict theſe. There are, it is true, a great number of indifferent points, in which both the divine law and the natural leave a man at his own liberty; but which are found neceſſary, for the benefit of ſociety, to be reſtrained within certain limits. And herein it is that human laws have their greateſt force and efficacy; for, with regard to ſuch points as are not indifferent, human laws are only declaratory of, and act in ſubordination to, the former. To inſtance in the caſe of murder; this is expreſsly forbidden by the divine, and demonſtrably by the natural, law; and from theſe prohibitions ariſes the true unlawfulneſs of this crime. Thoſe human laws that annex a puniſhment to it, do not at all increaſe its moral guilt, or ſuperadd any freſh obligation in *foro conſcientiæ* to abſtain from its perpetration. Nay, if any human law ſhould allow or enjoin us to commit it, we are bound to tranſgreſs that human law, or elſe we muſt offend both the natural and the divine. But, with regard to matters that are in themſelves indifferent, and are not commanded or forbidden by thoſe ſuperior laws; ſuch, for inſtance, as exporting of wool into foreign countries; here the inferior legiſlature has ſcope and opportunity to interpoſe, and to make that action unlawful which before was not ſo.

If man were to live in a ſtate of nature, unconnected with other individuals, there would be no occaſion for any other laws than the law of nature and the law of God. Neither could any other law poſſibly exiſt; for a law always ſuppoſes ſome ſuperior who is to make it; and in a ſtate of nature we are all equal, without any other ſuperior but him who is the Author of our being. But man was formed for ſociety; and, as is demonſtrated by the writers on this ſubject, is neither capable of living alone, nor indeed has the courage to do it.

As it is impoſſible, however, for the whole race of mankind to be united in one great ſociety, they muſt neceſſarily divide into many; and form ſeparate ſtates, commonwealths, and nations, entirely independent of each other, and yet liable to a mutual intercourſe. Hence ariſes a third kind of law to regulate this mutual intercourſe, called the LAW OF NATIONS; which, as none of theſe ſtates will acknowledge a ſuperiority in the other, cannot be dictated by either; but depends entirely upon the rules of natural law, or upon mutual compacts, treaties, leagues, and agreements, between theſe ſeveral communities; in the conſtruction alſo of which compacts we have no other rule to reſort to but the law of nature; being the only one to which both communities are equally ſubject; and therefore the civil law very juſtly obſerves, that *quod naturalis ratio inter omnes homines conſtituit, vocatur jus gentium.*

To the conſideration, then, of the law of nature, the revealed law, and the law of nations, ſucceeds that of the MUNICIPAL or CIVIL LAW; that is, the rule by which particular diſtricts, communities, or nations, are governed; being thus defined by Juſtinian; *Jus civile eſt quod quiſque ſibi populus conſtituit.* We call it *municipal* law, in compliance with common ſpeech; for though, ſtrictly, that expreſſion denotes the particular cuſtoms of one ſingle *municipium*, or free town, yet it may with ſufficient propriety be applied to any one ſtate or nation which is governed by the ſame laws and cuſtoms.

MUNICIPAL LAW, thus underſtood, is properly defined to be *a rule of civil conduct preſcribed by the ſupreme power in a ſtate, commanding what is right, and prohibiting what is wrong.* According to Demoſthenes, "the origin and object of laws is to aſcertain what is juſt, honourable, and expedient; and, when that is diſcovered, it is proclaimed as a general ordinance, equal and impartial to all. This," he adds, "is the origin of law, which, for various reaſons, all are under an obligation to obey, but eſpecially becauſe all law is the invention and gift of reaſon, the reſolution of wiſe men, the correction of every offence, and the general compact of the ſtate: to live in conformity to which is the duty of every individual in ſociety." *Orat. 1. cont. Ariſtog.*

1. Law, conſidered as a RULE, is not a tranſient ſudden order from a ſuperior to or concerning a particular perſon; but ſomething permanent, uniform, and univerſal. Therefore a particular act of the legiſlature to confiſcate the goods of Titius, or to attaint him of high treaſon, does not enter into the idea of a municipal law; for the operation of this act is ſpent upon Titius only, and has no relation to the community in general; it is rather a ſentence than a law. But an act to declare that the crime of which Titius is accuſed ſhall be deemed high treaſon; this has permanency, uniformity, and univerſality, and therefore is properly a *rule*. It is alſo called a *rule*, to diſtinguiſh it from *advice* or *counſel*, which we are at liberty to follow or not, as we ſee proper, and to judge upon the reaſonableneſs or unreaſonableneſs of the thing adviſed; whereas our obedience to the law depends not upon *our approbation*, but upon the *maker's will*. Counſel is only matter of perſuaſion, law is matter of injunction; counſel acts only upon the willing, law upon the unwilling alſo.

It is alſo called a *rule*, to diſtinguiſh it from a *compact* or *agreement*; for a compact is a promiſe proceeding from us, law is a command directed to us. The language of a compact is, "I will, or will not, do this;" that of a law is, "Thou ſhalt, or ſhalt not, do it." It is true there is an obligation which a compact carries with it, equal in point of conſcience to that of a law; but then the original of the obligation is different. In compacts, we ourſelves determine and promiſe what ſhall be done, before we are obliged to do it; in laws, we are obliged to act without ourſelves determining or promiſing any thing at all. Upon theſe accounts law is defined to be "a rule."

2. Municipal law is alſo "a rule of *civil conduct*." This diſtinguiſhes municipal law from the natural or revealed; the former of which is the rule of moral conduct; and the latter not only the rule of moral conduct, but alſo of faith. Theſe regard man as a creature; and point out his duty to God, to himſelf, and to his neighbour, conſidered in the light of an individual. But municipal or civil law regards him alſo as a citizen, and bound to other duties towards his neighbour, than thoſe of mere nature and religion; duties, which he has engaged in by enjoying the benefits of the common union; and which amount to no more, than that he do contribute, on his part, to the ſubſiſtence and peace of the ſociety.

3. It is likewiſe "a rule *preſcribed*." Becauſe a bare reſolution, confined in the breaſt of the legiſlator, without manifeſting itſelf by ſome external ſign, can never be properly a law. It is requiſite that this reſolution he notified to the people who are to obey it. But the manner in which this notification is to be made, is matter of very great indifference. It may be notified by univerſal tradition and long practice, which ſuppoſes a previous publication, and is the caſe of the common law of England and of Scotland. It may be notified *viva voce*, by officers appointed for that purpoſe; as is done with regard to proclamations, and ſuch acts of parliament as are appointed to be publicly read in churches and other aſſem-

blies. It may, laſtly, be notified by writing, printing, or the like; which is the general courſe taken with all our acts of parliament. Yet, whatever way is made uſe of, it is incumbent on the promulgators to do it in the moſt public and perſpicuous manner; not like Caligula, who, according to Dio Caſſus, wrote his laws in a very ſmall character, and hung them up upon high pillars, the more effectually to enſnare the people. There is ſtill a more unreaſonable method than this, which is called making of laws *ex poſt facto*; when, after an action (indifferent in itſelf) is committed, the legiſlature then for the firſt time declares it to have been a crime, and inflicts a puniſhment upon the perſon who has committed it. And there is an extraordinary inſtance, in the reign of Henry VIII. of an *ex-poſt-facto* law, made for the purpoſe of puniſhing a cook who had been *convicted* of throwing poiſon into broth prepared for the biſhop of Rocheſter's family; namely, the ſtat. 28 Hen. VIII. c. 9. by which the delinquent was ordered to be boiled to death. Under ſuch laws, *ex poſt facto*, after the offence is committed, it is impoſſible that the party could foreſee, that an action, innocent when it was done, ſhould be afterwards converted to guilt by a ſubſequent law; he had therefore no cauſe to abſtain from it; and all puniſhment for not abſtaining muſt of conſequence be cruel and unjuſt. All laws ſhould be therefore made to commence *in futuro*, and be notified before their commencement; which is implied in the term "preſcribed." But, when this rule is in the uſual manner notified or preſcribed, it is then the ſubject's buſineſs to be thoroughly acquainted therewith; for, if ignorance of what he might know were admitted as a legitimate excuſe, the laws would be of no effect, but might always be eluded with impunity.

4. Municipal law is "a rule of civil conduct preſcribed *by the ſupreme power in a ſtate*." For legiſlature, as was before obſerved, is the greateſt act of ſuperiority that can be exerciſed by one being over another. Wherefore it is requiſite to the very eſſence of a law, that it be made by the ſupreme power. Sovereignty and legiſlature are indeed convertible terms; one cannot ſubſiſt without the other.

This will naturally lead us into a ſhort inquiry concerning the nature of ſociety and civil government; and the natural inherent right that belongs to the ſovereignty of a ſtate, wherever that ſovereignty be lodged, of making and enforcing laws.

The only true and natural foundations of ſociety are the wants and fears of individuals. Not that we can believe, with ſome theoretical writers, that there ever was a time when there was no ſuch thing as ſociety; and that, from the impulſe of reaſon, and through a ſenſe of their wants and weakneſſes, individuals met together in a large plain, entered into an *original contract*, and choſe the talleſt man preſent to be their governor. This notion, of an actually-exiſting unconnected ſtate of nature, is too wild to be ſeriouſly admitted; and, beſides, it is plainly contradictory to the revealed accounts of the primitive origin of mankind, and their preſervation 2000 years afterwards; both which were effected by the means of ſingle families. Theſe formed the firſt ſociety among themſelves, which every day extended its limits; and, when it grew too large to ſubſiſt with convenience in that paſtoral ſtate wherein the patriarchs appear to have lived, it neceſſarily ſubdivided itſelf, by various migrations, into more. Afterwards, as agriculture increaſed, which employs and can maintain a much greater number of hands, migrations became leſs frequent; and various tribes, which had formerly ſeparated, re-united again; ſometimes by compulſion and conqueſt, ſometimes by accident, and ſometimes perhaps by compact. But, though ſociety had not its formal beginning from any convention of individuals, actuated by their wants and their fears; yet it is the ſenſe of their weakneſs and imperfection that keeps mankind together, that demonſtrates the neceſſity of this union, and that therefore is the ſolid and natural foundation, as well as the cement, of ſociety. And this is what we mean by the *original contract* of ſociety; which, though perhaps in no inſtance it has ever been formally expreſſed at the firſt inſtitution of a ſtate, yet in nature and reaſon muſt always be underſtood and implied in the very act of aſſociating together; namely, that the whole ſhould protect all its parts, and that every part ſhould pay obedience to the will of the whole; or, in other words, that the community ſhould guard the rights of each individual member, and that, in return for this protection, each individual ſhould ſubmit to the laws of the community; without which ſubmiſſion of all, it was impoſſible that protection could be certainly extended to any.

For, when civil ſociety is once formed, government reſults of courſe, as neceſſary to preſerve and to keep that ſociety in order. Unleſs ſome ſuperior be conſtituted, whoſe commands and deciſions all the members are bound to obey, they would ſtill remain as in a ſtate of nature, without any judge upon earth to define their ſeveral rights, and redreſs their ſeveral wrongs. But, as all the members of ſociety are naturally equal, it may be aſked, In whoſe hands are the reins of government to be intruſted? To this the general anſwer is eaſy; but the application of it to particular caſes has occaſioned one half of thoſe miſchiefs which are apt to proceed from miſguided political zeal. In general, all mankind will agree, that government ſhould be repoſed in ſuch perſons, in whom thoſe qualities are moſt likely to be found, the perfection of which is among the attributes of him who is emphatically ſtyled the *Supreme Being*; the three grand requiſites, namely, of wiſdom, of goodneſs, and of power: wiſdom, to diſcern the real intereſt of the community; goodneſs, to endeavour always to purſue that real intereſt; and ſtrength or power to carry this knowledge and intention into action. Theſe are the natural foundations of ſovereignty; and theſe are the requiſites that ought to be found in every well-conſtituted frame of government.

How the ſeveral forms of government we now ſee in the world at firſt actually began, is matter of great uncertainty, and has occaſioned infinite diſputes. But, however they began, or by what right ſoever they ſubſiſt, there is and muſt be in all of them a ſupreme, irreſiſtible, abſolute, uncontrolled, authority, in which the *jura ſummi imperii*, or the rights of ſovereignty, reſide. And this authority is placed in thoſe hands, wherein (according to the opinion of the founders of ſuch reſpective ſtates, either expreſsly given or collected from their tacit approbation) the qualities requiſite for ſupremacy, wiſdom, goodneſs, and power, are the moſt likely to be found.

The political writers of antiquity will not allow more than three regular forms of government: 1. When the ſovereign power is lodged in an aggregate aſſembly conſiſting of all the members of a community, which is called a *democracy*. 2. When it is lodged in a council compoſed of ſelect members, and then it is ſtyled an *ariſtocracy*. 3. When it is intruſted in the hands of a ſingle perſon, and then it takes the name of a *monarchy*. All other ſpecies of government, they ſay, are either corruptions of, or reducible to, theſe three.

By the *ſovereign power*, as was before obſerved, is meant the making of laws; for, wherever that power reſides, all others muſt conform to and be directed by it, whatever appearance the outward form and adminiſtration of the government may put on. For it is at any time in the option of the legiſlature to alter that form and adminiſtration by a new edict or rule, and to put the execution of the laws into whatever hands it pleaſes; and all the other powers of the ſtate muſt obey the legiſlative power in the execution of their ſeveral functions, or elſe the conſtitution is at an end. In a *democracy*, where the right of making laws reſides in the people at large, public virtue or goodneſs of intention is more likely to be found than either of the other qualities of government. Popular aſſemblies are frequently fooliſh in their contrivance, and weak in their execution; but generally *mean* to do the thing

thing that is right and juſt, and have always a degree of patriotiſm, or public ſpirit. In *ariſtocracies* there is more wiſdom to be found than in the other forms of government; being compoſed, or intended to be compoſed, of the moſt experienced citizens; but there is leſs honeſty than in a republic, and leſs ſtrength than in a monarchy. A *monarchy* is indeed the moſt powerful of any, all the ſinews of government being knit and united together in the hand of the prince; but then there is imminent danger of his employing that ſtrength to improvident and oppreſſive purpoſes.

Thus theſe three ſpecies of government have all of them their ſeveral perfections and imperfections. Democracies are uſually the beſt calculated to direct the end of a law; ariſtocracies, to invent the means by which that end ſhall be obtained; and monarchies, to carry thoſe means into execution. And the ancients, as was obſerved, had in general no idea of any other permanent form of government but theſe three: for, though Cicero declares himſelf of opinion, *eſſe optimè conſtitutam rempublicam, quæ ex tribus generibus illis, regali, optimo, et populari, ſit modicè confuſa*; yet Tacitus treats this notion of a mixed government, formed out of them all, and partaking of the advantages of each, as a viſionary whim, and one that, if effected, could never be laſting or ſecure. But, happily for us of this iſland, the Britiſh conſtitution has long remained, and we truſt will long continue, a ſtanding exception to the truth of this obſervation. For, as with us the executive power of the laws is lodged in a ſingle perſon, they have all the advantages of ſtrength and diſpatch that are to be found in the moſt abſolute monarchy; and, as the legiſlature of the kingdom is intruſted to three diſtinct powers, entirely independent of each other; firſt, the king; ſecondly, the lords ſpiritual and temporal, which is an ariſtocratical aſſembly of perſons ſelected for their piety, their birth, their wiſdom, their valour, or their property; and, thirdly, the houſe of commons, freely choſen by the people from among themſelves, which makes it a kind of democracy; as this aggregate body, actuated by different ſprings and attentive to different intereſts, compoſes the Britiſh parliament, and has the ſupreme diſpoſal of every thing, no innovation can be attempted by either of the three branches, but will be withſtood by one of the other two, each branch being armed with a negative power ſufficient to repel any new meaſure which it ſhall think inexpedient or dangerous. Here then is lodged the ſovereignty of the Britiſh conſtitution; and lodged as beneficially as is poſſible for ſociety. For in no other ſhape could we be ſo certain of finding the three great qualities of government ſo well and ſo happily united. If the ſupreme power were lodged in any one of the three branches ſeparately, we muſt be expoſed to the inconveniences of either abſolute monarchy, ariſtocracy, or democracy; and ſo want two of the three principal ingredients of good polity, either virtue, wiſdom, or power. If it were lodged in any two of the branches, for inſtance, in the king and houſe of lords, our laws might be providently made and well executed, but they might not always have the good of the people in view; if lodged in the king and commons, we ſhould want that circumſpection and mediatory caution, which the wiſdom of the peers is to afford; if the ſupreme rights of legiſlature were lodged in the two houſes only, and the king had no negative upon their proceedings, they might be tempted to encroach upon the royal prerogative, or perhaps to aboliſh the kingly office, and thereby weaken, if not totally deſtroy, the ſtrength of the executive power. But the conſtitutional government of this iſland is ſo admirably tempered and compounded, that nothing can endanger or hurt it, but deſtroying the equilibrium of power between one branch of the legiſlature and the reſt. For, if ever it ſhould happen, that the independence of any one of the three ſhould be loſt, or that it ſhould become ſubſervient to the views of either of the other two, there would ſoon be an end of our conſtitution. The legiſlature would be changed from that which was originally ſet up by the general conſent and fundamental act of the ſociety; and ſuch a change, however effected, is, according to Mr. Locke (who perhaps carries his theory too far), "at once an entire diſſolution of the bands of government; and the people are thereby reduced to a ſtate of anarchy, with liberty to conſtitute to themſelves a new legiſlative power."

Having thus curſorily conſidered the three uſual ſpecies of government, and our own ſingular conſtitution ſelected and compounded from them all, we proceed to obſerve, that, as the power of making laws conſtitutes the ſupreme authority, ſo, wherever the ſupreme authority in any ſtate reſides, it is the right of that authority to make laws; that is, in the words of our definition, *to preſcribe the rule of civil action*. And this may be diſcovered from the very end and inſtitution of civil ſtates. For a ſtate is a collective body, compoſed of a multitude of individuals, united for their ſafety and convenience, and intending to act together as one man. If it is therefore to act as one man, it ought to act by one uniform will. But, inaſmuch as political communities are made up of many natural perſons, each of whom has his particular will and inclination, theſe ſeveral wills cannot by any natural union be joined together, or tempered and diſpoſed into a laſting harmony, ſo as to conſtitute and produce that one uniform will of the whole. It can therefore be no otherwiſe produced than by a political union; by the conſent of all perſons to ſubmit their own private wills to the will of one man, or of one or more aſſemblies of men, to whom the ſupreme authority is intruſted; and this will of that one man, or aſſemblage of men, is in different ſtates, according to their different conſtitutions, underſtood to be law.

Thus far as to the *right* of the ſupreme power to make laws; but farther, it is its *duty* likewiſe. For, ſince the reſpective members are bound to conform themſelves to the will of the ſtate, it is expedient that they receive directions from the ſtate declaratory of that its will. But it is impoſſible, in ſo great a multitude, to give injunctions to every particular man, relative to each particular action; therefore the ſtate eſtabliſhes general rules, for the perpetual information and direction of all perſons in all points, whether of poſitive or negative duty; and this, in order that every man may know what to look upon as his own, what as another's; what abſolute and what relative duties are required at his hands; what is to be eſteemed honeſt, diſhoneſt, or indifferent; what degree every man retains of his natural liberty, and what he has given up as the price of the benefits of ſociety; and after what manner each perſon is to moderate the uſe and exerciſe of thoſe rights which the ſtate aſſigns him, in order to promote and ſecure the public tranquillity.

From what has been advanced, the truth of the former branch of our definition is (we truſt) ſufficiently evident; that *Municipal law is a rule of civil conduct, preſcribed by the ſupreme power in a ſtate*. We proceed now to the latter branch of it; that it is a rule ſo preſcribed, *commanding what is right, and prohibiting what is wrong*.

Now, in order to do this completely, it is firſt of all neceſſary that the boundaries of right and wrong be eſtabliſhed and aſcertained by law. And, when this is once done, it will follow of courſe, that it is likewiſe the buſineſs of the law, conſidered as a rule of civil conduct, to enforce theſe rights, and to reſtrain or redreſs theſe wrongs. It remains therefore only to conſider, in what manner the law is ſaid to aſcertain the boundaries of right and wrong; and the methods which it makes to command the one and prohibit the other. For this purpoſe, every law may be ſaid to conſiſt of ſeveral parts: 1. Declaratory; whereby the rights to be obſerved, and the wrongs to be eſchewed, are clearly defined and laid down. 2. Directory; whereby the ſubject is intruſted and enjoined to obſerve thoſe rights, and to abſtain from the commiſſion of thoſe wrongs. 3. Remedial; whereby a method is pointed out to recover a man's private rights, or redreſs his private wrongs: to which may be added a fourth, uſually termed the *ſanction*

tion or *vindicatory* branch of the law; whereby it is ſignified what evil or penalty ſhall be incurred by ſuch as commit any public wrongs, and tranſgreſs or neglect their duty.

1. With regard to the firſt of theſe, the *declaratory* part of the municipal law; this depends not ſo much upon the law of revelation or of nature, as upon the wiſdom and will of the legiſlature. This doctrine, which before was ſlightly touched, deſerves a more particular explication. Thoſe rights, then, which God and nature have eſtabliſhed, and are therefore called *natural rights*, ſuch as are life and liberty, need not the aid of human laws to be more effectually inveſted in every man than they are; neither do they receive any additional ſtrength when declared by the municipal laws to be inviolable. On the contrary, no human legiſlature has power to abridge or deſtroy them, unleſs the owner ſhall himſelf commit ſome act that amounts to a forfeiture. Neither do divine or natural *duties* (ſuch as, for inſtance, the worſhip of God, the maintenance of children, and the like) receive any ſtronger ſanction from being alſo declared to be duties by the law of the land. The caſe is the ſame as to crimes and miſdemeanors, that are forbidden by the ſuperior laws, and therefore ſtyled *mala in ſe*, ſuch as murder, theft, and perjury; which contract no additional turpitude from being declared unlawful by the inferior legiſlature. For that legiſlature in all theſe caſes acts only, as was before obſerved, in ſubordination to the Great Lawgiver, tranſacting and publiſhing his precepts. So that, upon the whole, the declaratory part of the municipal law has no force or operation at all, with regard to actions that are naturally and intrinſically right or wrong. But, with regard to things in themſelves indifferent, the caſe is entirely altered. Theſe become either right or wrong, juſt or unjuſt, duties or miſdemeanors, according as the municipal legiſlator ſees proper, for promoting the welfare of the ſociety, and more effectually carrying on the purpoſes of civil life. Thus our own common law has declared, that the goods of the wife do inſtantly upon marriage become the property and right of the huſband; and our ſtatute law has declared all monopolies a public offence; yet that right, and this offence, have no foundation in nature; but are merely created by the law, for the purpoſes of civil ſociety. And ſometimes, where the thing itſelf has its riſe from the law of nature, the particular circumſtances and mode of doing it become right or wrong, as the laws of the land ſhall direct. Thus, for inſtance, in civil duties, obedience to ſuperiors is the doctrine of revealed as well as natural religion; but who thoſe ſuperiors ſhall be, and in what circumſtances or to what degrees they ſhall be obeyed, is the province of human laws to determine. And ſo, as to injuries or crimes, it muſt be left to our own legiſlature to decide, in what caſes the ſeizing another's cattle ſhall amount to the crime of robbery; and where it ſhall be a juſtifiable action, as when a landlord takes them by way of diſtreſs for rent.

2. Thus much for the declaratory part of the municipal law; and the *directory* ſtands much upon the ſame footing; for this virtually includes the former, the declaration being uſually collected from the direction. The law that ſays, "Thou ſhalt not ſteal," implies a declaration that ſtealing is a crime. And we have ſeen, that, in things naturally indifferent, the very eſſence of right and wrong depends upon the direction of the laws to do or to omit them.

3. The *remedial* part of a law is ſo neceſſary a conſequence of the two former, that laws muſt be very vague and imperfect without it. For in vain would rights be declared, in vain directed to be obſerved, if there were no method of recovering and aſſerting thoſe rights when wrongfully withheld or invaded. This is what we mean properly, when we ſpeak of the protection of the law. When, for inſtance, the *declaratory* part of the law has ſaid, that "the field or inheritance which belonged to Titius's father is veſted by his death in Titius," and the *directory* part has "forbidden any one to enter on another's property without the leave of the owner;" if Gaius after this will preſume to take poſſeſſion of the land, the *remedial* part of the law will then interpoſe its office; will make Gaius reſtore the poſſeſſion to Titius, and alſo pay him damages for the invaſion.

4. With regard to the *ſanction of laws*, or the evil that may attend the breach of public duties; it is obſerved, that human legiſlators have for the moſt part choſen to make their laws rather vindicatory than remuneratory, or to conſiſt rather in puniſhments than in rewards; becauſe, in the firſt place, the quiet enjoyment and protection of all our civil rights and liberties, which are the ſure and general conſequence of obedience to the municipal law, are in themſelves the beſt and moſt valuable of all rewards; becauſe alſo, were the exerciſe of every virtue to be enforced by the propoſal of particular rewards, it were impoſſible for any ſtate to furniſh ſtock enough for ſo profuſe a bounty; and, farther, becauſe the dread of evil is a much more forcible principle of human actions than the proſpect of good. For which reaſons, though a prudent beſtowing of rewards is ſometimes of exquiſite uſe, yet we find that thoſe civil laws, which enforce and enjoin our duty, do ſeldom, if ever, propoſe any privilege or gift to ſuch as obey the law; but do conſtantly come armed with a penalty denounced againſt tranſgreſſors, either expreſsly defining the nature and quantity of the puniſhment, or elſe leaving it to the diſcretion of the judges, and thoſe who are intruſted with the care of putting the laws in execution.

Of all the parts of a law, the moſt effectual is the *vindicatory*. For it is but loſt labour to ſay, "Do this," or "Avoid that," unleſs we alſo declare, "This ſhall be the conſequence of your non-compliance." We muſt therefore obſerve, that the main ſtrength and force of a law conſiſts in the *penalty* annexed to it. Herein is to be found the principal obligation of human laws.

Legiſlators and their laws are ſaid to *compel* and *oblige*; not that, by any natural violence, they ſo conſtrain a man as to render it impoſſible for him to act otherwiſe than as they direct, which is the ſtrict ſenſe of obligation; but becauſe, by declaring and exhibiting a penalty againſt offenders, they bring it to paſs that no man can eaſily chooſe to tranſgreſs the law; ſince, by reaſon of the impending correction, compliance is in a high degree preferable to diſobedience. And, even where rewards are propoſed as well as puniſhments threatened, the obligation of the law ſeems chiefly to conſiſt in the penalty; for rewards, in their nature, can only perſuade and allure; nothing is compulſory but puniſhment.

It has been held, and very juſtly, by the principal of our ethical writers, that human laws are binding upon men's conſciences. But, if that were the only or moſt forcible obligation, the good only would regard the laws, and the bad would ſet them at defiance. And, true as this principle is, it muſt ſtill be underſtood with ſome reſtriction. It holds, we apprehend, as to *rights*; and that, when the law has determined the field to belong to Titius, it is a matter of conſcience no longer to withhold or to invade it. So alſo in regard to *natural duties*, and ſuch offences as are *mala in ſe*; here we are bound in conſcience, becauſe we are bound by ſuperior laws, before thoſe human laws were in being, to perform the one and abſtain from the other. But, in relation to thoſe laws which enjoin only poſitive duties, and forbid only ſuch things as are not *mala in ſe*, but *mala prohibita* merely, without any intermixture of moral guilt, annexing a penalty to non-compliance; here conſcience ſeems to be no farther concerned, than by directing a ſubmiſſion to the penalty, in caſe of our breach of thoſe laws; for otherwiſe the multitude of penal laws in a ſtate would not only be looked upon as an impolitic, but would alſo be a very wicked, thing; if every ſuch law were a ſnare for the conſcience of the ſubject. But in theſe caſes the alternative is offered to every man; "Either abſtain from this, or ſubmit to ſuch a penalty;" and

his conſcience will be clear whichever ſide of the alternative he thinks proper to embrace. Thus, by the ſtatutes for preſerving the game, a penalty is denounced againſt every unqualified perſon that kills a hare, and againſt every perſon who poſſeſſes a partridge in Auguſt. And ſo alſo, by other ſtatutes, pecuniary penalties are inflicted for exerciſing trades without ſerving an apprenticeſhip thereto, for erecting cottages without annexing four acres of land to each, for not burying the dead in woollen, for not performing ſtatute-work on the public roads, and for innumerable other poſitive miſdemeanors. Now theſe prohibitory laws do not make the tranſgreſſion a moral offence, or ſin; the only obligation in conſcience is to ſubmit to the penalty, if levied. It muſt, however, be obſerved, that we are here ſpeaking of laws that are ſimply and purely penal, where the thing forbidden or enjoined is wholly a matter of indifference, and where the penalty inflicted is an adequate puniſhment for the civil inconvenience ſuppoſed to riſe from the offence. But where diſobedience to the law involves in it alſo any degree of public miſchief or private injury, there it falls within our former diſtinction, and is alſo an offence againſt conſcience.

We have now gone through the definition laid down of a municipal law; and have ſhown that it is "A rule—of civil conduct—preſcribed—by the ſupreme power in a ſtate—commanding what is right, and prohibiting what is wrong:" in the explication of which we have endeavoured to interweave a few uſeful principles, concerning the nature of civil government, and the obligation of human laws. Before we conclude this part, it may not be amiſs to add a few obſervations concerning the interpretation of laws.

When any doubt aroſe upon the conſtruction of the Roman laws, the uſage was to ſtate the caſe to the emperor in writing, and take his opinion upon it. This was certainly a bad method of interpretation. To interrogate the legiſlature to decide particular diſputes, is not only endleſs, but affords great room for partiality and oppreſſion. The anſwers of the emperor were called his *reſcripts*, and theſe had in ſucceeding caſes the force of perpetual laws; though they ought to be carefully diſtinguiſhed, by every national civilian, from thoſe general conſtitutions which had only the nature of things for their guide. The emperor Macrinus, as his hiſtorian Capitolinus informs us, had once reſolved to aboliſh theſe reſcripts, and retain only the general edicts: he could not bear that the haſty and crude anſwers of ſuch princes as Commodus and Caracalla ſhould be reverenced as laws. But Juſtinian thought otherwiſe; and he has preſerved them all. In like manner the canon-laws, or decretal epiſtles of the popes, are all of them reſcripts in the ſtricteſt ſenſe. Contrary to all true forms of reaſoning, they argue from particulars to generals.

The faireſt and moſt rational method of interpreting the will of the legiſlator, is by exploring his intentions at the time when the law was made, by ſigns the moſt natural and probable. And theſe ſigns are either, 1. the word; 2. the context; 3. the ſubject-matter; 4. the effects and conſequence; or, 5. the ſpirit and reaſon of the law. Let us take a ſhort view of them all.

1. *Words* are generally to be underſtood in their uſual and moſt known ſignification; not ſo much regarding the propriety of grammar, as their general and popular uſe. Thus the law mentioned by Puffendorf, which forbade a layman to lay hands on a prieſt, was adjudged to extend to him who had hurt a prieſt with a weapon. Again: Terms of art, or technical terms, muſt be taken according to the acceptation of the learned in each art, trade, and ſcience. So in the act of ſettlement, where the crown of England is limited "to the princeſs Sophia, and the heirs of her body being proteſtants," it becomes neceſſary to call in the aſſiſtance of lawyers, to aſcertain the preciſe idea of the words "heirs of her body;" which in a legal ſenſe compriſe only certain of her lineal deſcendants. Laſtly, Where words are clearly repugnant in two laws, the later law takes place of the elder; *leges poſteriores priores contrarias abrogant*, is a maxim of univerſal law, as well as of our own conſtitutions. And accordingly it was laid down by a law of the twelve tables at Rome, *Quod populus poſtremum juſſit, id jus ratum eſto.*

2. If words happen to be ſtill dubious, we may eſtabliſh their meaning from the *context*; with which it may be of ſingular uſe to compare a word or a ſentence, whenever they are ambiguous, equivocal, or intricate. Thus the proëme, or preamble, is often called in to help the conſtruction of an act of parliament. Of the ſame nature and uſe is the compariſon of a law with other laws that are made by the ſame legiſlator, that have ſome affinity with the ſubject, or that expreſsly relate to the ſame point; for it is an eſtabliſhed rule of conſtruction, that ſtatutes in *pari materia*, or upon the ſame ſubject, muſt be conſtrued with reference to each other; that is, that what is clear in one ſtatute ſhall be called in aid, to explain what is obſcure and ambiguous in another. Thus, when the law of England declares murder to be felony without benefit of clergy, we muſt reſort to the ſame law of England to learn what the benefit of clergy is; and, when the common law cenſures ſimoniacal contracts, it affords great light to the ſubject to conſider what the canon law has adjudged to be ſimony.

3. As to the *ſubject-matter*, words are always to be underſtood as having a regard thereto; for that is always ſuppoſed to be in the eye of the legiſlator, and all his expreſſions directed to that end. Thus, when a law of Edward III. forbids all eccleſiaſtical perſons to purchaſe proviſions at Rome, it might ſeem to prohibit the buying of grain and other victual; but, when we conſider that the ſtatute was made to repreſs the uſurpations of the papal ſee, and that the nominations to benefices by the pope were called *proviſions*, we ſhall ſee that the reſtraint is intended to be laid upon ſuch proviſions only.

4. As to the effects and *conſequence*, the rule is, That, where words bear either none or a very abſurd ſignification, if literally underſtood, we muſt a little deviate from the received ſenſe of them. Therefore the Bolognian law, mentioned by Puffendorf, which enacted "that whoever drew blood in the ſtreets ſhould be puniſhed with the utmoſt ſeverity," was held, after long debate, not to extend to the ſurgeon who opened the vein of a perſon who fell down in the ſtreet with a fit.

5. But laſtly, The moſt univerſal and effectual way of diſcovering the true meaning of a law, when the words are dubious, is by conſidering the *reaſon* and *ſpirit* of it, or the cauſe which moved the legiſlator to enact it; for, when this reaſon ceaſes, the law itſelf ought likewiſe to ceaſe with it. An inſtance of this is given in a caſe put by Cicero, or whoever was the author of the rhetorical treatiſe inſcribed to Herennius. There was a law, That thoſe who in a ſtorm forſook the ſhip ſhould forfeit all property therein, and the ſhip and lading ſhould belong entirely to thoſe who ſtaid in it. In a dangerous tempeſt, all the mariners forſook the ſhip, except only one ſick paſſenger, who by reaſon of his diſeaſe was unable to get out and eſcape. By chance the ſhip came ſafe to port. The ſick man kept poſſeſſion, and claimed the benefit of the law. Now here all the learned agree, that the ſick man is not within the reaſon of the law; for the reaſon of making it was, to give encouragement to ſuch as ſhould venture their lives to ſave the veſſel; but this is a merit which he could never pretend to, who neither ſtaid in the ſhip upon that account, nor contributed any thing to its preſervation.

From this method of interpreting laws by the reaſon of them, ariſes what we call EQUITY: which is thus defined by Grotius; "The correction of that, wherein the law (by reaſon of its univerſality) is deficient." For, ſince in laws all caſes cannot be foreſeen or expreſſed, it is neceſſary, that, when the general decrees of the law come to be applied to particular caſes, there ſhould be ſomewhere a power veſted of defining thoſe circumſtances, which

(had they been foreſeen) the legiſlator himſelf would have expreſſed. And theſe are the caſes which, according to Grotius, *lex non exactè definit, ſed arbitrio beni viri permittit.*

Equity thus depending, eſſentially, upon the particular circumſtances of each individual caſe, there can be no eſtabliſhed rules and fixed precepts of equity laid down, without deſtroying its very eſſence, and reducing it to a poſitive law. And, on the other hand, the liberty of conſidering all caſes in an equitable light muſt not be indulged too far; leſt thereby we deſtroy all law, and leave the deciſion of every queſtion entirely in the breaſt of the judge. And law, without equity, though hard and diſagreeable, is much more deſirable for the public good, than equity without law; which would make every judge a legiſlator, and introduce infinite confuſion; as there would then be almoſt as many different rules of action laid down in our courts, as there are differences of capacity and ſentiment in the human mind.

In fine, every juſt law is dictated by *reaſon*, and the practice of every legal court is regulated by *equity*. It is the quality of reaſon to be invariable and conſtant; and of equity, to give to one man what in the ſame caſe is given to another. The advantage which humanity derives from law is this: that the law gives every man a rule of action, and preſcribes a mode of conduct, which ſhall entitle him to the ſupport and protection of ſociety. That the law may be a rule of action, it is *neceſſary* that it be known; it is neceſſary that it be permanent and ſtable. The law is the meaſure of civil right; but, if the meaſure be changeable, the extent of the thing meaſured never can be ſettled.

To permit a law to be modified at diſcretion, is to leave the community without law. It is to withdraw the direction of that public wiſdom by which the deficiencies of private underſtanding are to be ſupplied. It is to ſuffer the raſh and ignorant to act at diſcretion, and then to depend for the legality of that action on the ſentence of the judge. He that is thus governed, lives not by law, but by opinion; not by a certain rule, to which he can apply his intention before he acts, but by an uncertain and variable opinion, which he can never know but after he has committed the act on which that opinion ſhall be paſſed. He lives by a law (if a law it be) which he can never know before he has offended it. To this caſe may be juſtly applied that important principle, *Miſera eſt ſervitus ubi jus eſt aut incognitum aut vagum.*

The end of law is protection as well as vengeance; but vengeance is never uſed but to ſtrengthen protection.

That ſociety only is well governed where life is freed from danger and from ſuſpicion; where paſſion is ſo ſheltered by ſalutary prohibitions, that violation is prevented more frequently than puniſhed.

As the law has been ſometimes adminiſtered, it lays us open to wounds, becauſe it is imagined to have the power of healing. To puniſh fraud when it is detected is the proper act of vindictive juſtice; but to prevent frauds, and make puniſhment unneceſſary, is the great employment of legiſlative wiſdom.

As the law ſupplies the weak with adventitious ſtrength, it likewiſe enlightens the ignorant with extrinſic underſtanding; law teaches us to know when we commit injury, and when we ſuffer it. It fixes certain marks upon actions by which we are admoniſhed to do or to forbear them: *Quo ſibi bene temperat in licitis*, ſays one of the fathers, *nunquam cadet in illicita.*

It is neceſſary to diſtinguiſh the deficiencies and demands of the different conditions of human life, which, from a degree of ſavageneſs and independence in which all laws are vain, paſſes or may paſs, by innumerable gradations, to a ſtate of reciprocal benignity, in which laws ſhall be no longer neceſſary. Men are firſt wild and unſocial, living each man to himſelf, taking from the weak, and loſing to the ſtrong. In their firſt coalitions of ſociety, much of this original ſavageneſs is retained. Of general happineſs, the product of general confidence, there is yet no thought. Men continue to proſecute their own advantages by the neareſt way; and the utmoſt ſeverity of the civil law is neceſſary to reſtrain individuals from plundering each other. The reſtraints then neceſſary, are reſtraints from plunder, from acts of public violence, and undiſguiſed oppreſſion. The ferocity of our anceſtors, as of all other nations, produced not fraud, but rapine. They had not yet learned to cheat, and attempted only to rob. As manners grow more poliſhed, with the knowledge of good, men attain likewiſe dexterity in evil; open rapine becomes leſs frequent, and violence gives way to cunning. Thoſe who before invaded paſtures and ſtormed houſes, now begin to enrich themſelves by unequal contracts and fraudulent arts; and the increaſe of commerce, and the inceſſant ſtruggle for riches which commerce excites, gives us no proſpect of an end ſpeedily to be expected of artifice and fraud. Hence the conſtant neceſſity of new laws, and of reviſing the old.

Having thus conſidered the nature of law in general, we ſhall proceed to the following particulars: 1. Of the Law of Nations. 2. Of ſome Ancient Codes. 3. Of the Law of England. 4. Of the Law of Scotland. 5. Of the Law of Ireland. The firſt ſection, on the Law of Nations, has been preſented to this work by a barriſter of great experience and knowledge; in the ſecond, on Ancient Codes, we have largely availed ourſelves of Mr. Barrett's Introduction to the Code Napoleon; and the preceding general remarks, together with what we ſhall offer upon the Engliſh law, are chiefly compiled from Blackſtone; "whoſe Commentaries (ſaid the excellent ſir William Jones) are the moſt correct and beautiful outline that ever was exhibited of any human ſcience."

I. Of the LAW of NATIONS.

The law of nations is a ſyſtem of rules, deducible by natural reaſon, and eſtabliſhed by univerſal conſent among the civilized inhabitants of the world; in order to decide all diſputes, to regulate all ceremonies and civilities, and to enſure the obſervance of juſtice and good faith, in that intercourſe which muſt frequently occur between two or more independent ſtates, and the individuals belonging to each. See p. 317. This general law is founded upon this principle, that different nations ought in time of peace to do one another all the good they can; and, in time of war, as little harm as poſſible, without prejudice to their own real intereſts. And, as none of theſe ſtates will allow a ſuperiority in the other, therefore neither can dictate or preſcribe the rules of this law to the reſt; but ſuch rules muſt neceſſarily reſult from thoſe principles of natural juſtice, in which all the learned of every nation agree; or they depend upon mutual compacts or treaties between the reſpective communities; in the conſtruction of which there is alſo no judge to reſort to, but the law of nature and reaſon, being the only one in which all the contracting parties are equally converſant, and to which they are equally ſubject.

The law of nations being founded in a great meaſure upon the ſyſtems of morality, good or bad, purſued by certain ſets of claſſes of people; and religion being every where the ground-work of the morality obſerved; the Chriſtian religion may be ſuppoſed not merely to influence, but to be the chief guide of, the Chriſtian law of nations. It certainly has had ſo powerful an effect upon it, that, wherever it has exiſted, it has gone the fartheſt of all cauſes to introduce notions of humanity and true juſtice into the maxims of the world. The great proof of which is, that, if we compare the conduct of Chriſtian nations with that of nations profeſſing any other religion, (whatever may be their ſtages of improvement, or in whatever era of their glory,) the reſult will be uniform and univerſal, that the one will be eminent over the other for regularity, equity, and benevolence. In making the compariſon, it would be unfair to bring into the account any of thoſe nations that are ſtill approaching to a ſtate of nature, or who may yet be denominated ſavage. We

refer,

refer, therefore, to the moſt eminent alone of the nations of antiquity, and of the moderns who live under a perſuaſion different from ours.

The Greeks under the eras of Pericles, Socrates, Epaminondas, and Ageſilaus; and the Romans under the reign of Auguſtus, (which for poliſh and refinement has become proverbial;) had advanced, it will be owned, to their ſummit in every ſort of knowledge; the names of Socrates and Cicero would alone be ſufficient to prove it. One thing, however, was wanting to the perfection, which, had they poſſeſſed it, they would probably have acquired; and that was, the knowledge of the doctrines of a religion, which, whatever may be its points of controverſy, has had the uniform effect, wherever it has taken root, of producing a more equitable notion of things, and a milder ſyſtem of manners. Accordingly, from the want of this great advantage, we may obſerve that the people in queſtion, while they were in the firſt ſcale of eminence in almoſt all other reſpects, fall far ſhort of their poſterity in their ideas of the law we treat of. The want of a principle ſufficiently binding in their ſchemes of morality, had a palpable effect upon their characters in private life; and, as might be expected, it transferred itſelf into the ſpirit of their law of nations. However, therefore, we may be accuſtomed to hear of their politeneſs, their arts, their refinements in elegance, or their knowledge of laws, we find upon inquiry, that their politeneſs, while it ſharpened their underſtandings, had no effect upon their hearts; that their refinements were for the moſt part ſenſual; and, when we come to contemplate the general ſcope of their laws of war and peace, they will be found too often to reſemble the barbarians they deſpiſed.

If commerce and the acquiſition of riches, by viſiting every nation in the known world, could conduce to perfection in this law, the Carthaginians promiſed fair to be, in this reſpect, the moſt perfect people of antiquity. The ſavageneſs, rapacity, and injuſtice, however, of every kind, which marked their conduct towards all foreign nations, are too well known to detain us longer upon them.

If we look to the Mahometan and Turkiſh nations, (though their power has been equal to the greateſt, and their empire of conſiderable duration,) their ignorance and barbarity repreſs all examination; and, if they have received any improvement ſince the days when they firſt ſet foot in Europe, it is probably from their connection with the people profeſſing the very religion which they moſt hate and deſpiſe. The ſame inferiority in this ſort of conduct, is to be found even among the Chineſe, ſo famed for eminence in every other branch of knowledge, and in the ſcience of morals itſelf. Their wars have always been carried on with eaſtern barbarity; and their known laws againſt ſtrangers would alone demonſtrate the point. Among the Chriſtians, on the other hand, every thing is conducted, or at leaſt enjoined, by received and general laws, upon principles of the moſt extenſive humanity and the moſt regular juſtice.

The doctrine of the law of nations has been treated of very much at large by Grotius, Puffendorf, Wolf, Rutherforth, Vattel, Ward, and ſome others; but in this place the limited ſcope and deſign of the preſent work will not permit us to go farther than to ſhow the practice obſerved by different civilized powers in their exterior relations, 1ſt, In reſpect of commercial rights; 2dly, In reſpect of maritime rights; 3dly, In reſpect of their tranſactions with each other; which are neceſſarily divided into acts either of an amicable relationſhip or of an hoſtile nature: i. e. amicable relations, by conferences, treaties, and other acts, by parole or in writing; or hoſtile acts, by repriſals, war, or any other acts of public force, aggreſſion, or violence; 4thly, In reſpect of the allies; 5thly, In reſpect of neutrals; 6thly, In reſpect of making peace.

1. Commercial Rights. Commerce is that external trade or traffic which is carried on between foreign nations; and the eaſe, the riches, and even the power, of a nation, is chiefly dependent thereon. It conſiſts in ſelling the ſuperfluity, in purchaſing articles of neceſſity, as well productions as manufactures; in buying from one nation, and ſelling to another; or in tranſporting the merchandiſe from the ſeller to the buyer, to gain the freight.

As there is a reciprocal obligation in mankind to aſſiſt each other, there is a neceſſity for them to carry on commerce. This obligation, however, is only an imperfect one; it does not go to preclude a nation from providing for its ſeparate intereſts, by the adoption of rules and reſtraints in the commerce which it finds expedient to carry on. As, for inſtance, if one nation has for a long ſeries of years carried on commerce with another; it does not follow of courſe, that it muſt continue ſo to do, if there are no treaties which require it. Neither can one nation compel another to trade with it alone: by treaty, one nation may undertake not to trade with any other particular nation; and, if two nations think proper to trade with each other excluſively, a third has no right whatever to obſtruct or to prevent it. In this the *liberty of commerce* conſiſts, and it is in every reſpect conformable to perfect natural right.

In the dark and barbarous ages, little attention was paid to commerce, by the ſovereign ſtate or power. But in the progreſs of time, when the flouriſhing ſtate of ſome commercial cities became manifeſt, and the formidable league of the Hans Towns and ſome republics of Italy was entered into, the minds of men were turned to the ſolid and real importance of commerce. The diſcovery of America and the navigation to the Eaſt Indies following, moſt of the powers of Europe turned their attention to the encouragement of maritime commerce, and conſidered it as one of the moſt powerful and effective means of promoting national wealth, and augmenting and conſolidating their own external ſtrength, power, and aſcendency. Some ſucceeded in acquiring territorial poſſeſſions out of Europe, where they founded colonies almoſt entirely with commercial views. Others encouraged it, and procured for their ſubjects by treaties many rights, privileges, and advantages, which were equally beneficial to the ſtate, inaſmuch as their principal tendency was to leave a balance in its favour; and at this day the moſt important rights of commercial nations are founded upon poſitive treaties.

When there is no exiſting treaty, every ſtate has a natural right to lay, on ſuch commerce, whatever reſtriction it pleaſes; and conſequently a nation is fully authorized, 1. To prohibit the importation or exportation of certain merchandiſe. 2. To impoſe cuſtoms, exciſe, and other duties. 3. To preſcribe the manner in which the commerce with its dominions ſhall be carried on; as, for inſtance, the famous Navigation-act, firſt paſſed under Cromwell, and afterwards confirmed by Charles II. contained nothing contrary to the law of nations, though it was very embarraſſing to other countries. 4. To point out the places where it ſhall be carried on, or to exempt from it certain parts of its dominions. 5. To exerciſe freely its ſovereign power over the foreigners living in its territories. 6. To make whatever diſtinctions between the nations with whom it trades it may find convenient, or conducive to its welfare and intereſts.

But, with reſpect to the commerce with colonial poſſeſſions, 1. Every ſtate which hath colonized, or formed ſettlements abroad, hath ſo far ſecured the commerce of thoſe territorial acquiſitions to themſelves, either in permitting all their ſubjects to partake of it excluſively, or in granting a monopoly to trading companies, that the coloniſts can ſcarcely carry on any trade with other powers: hence the commerce in thoſe poſſeſſions is not free to foreign nations; they are not even ſuffered to land in the country, or to enter with their veſſels within cannon-ſhot of her ſhore, except only in caſes of extreme diſtreſs and the moſt urgent neceſſity. 2. Several Indian powers have entered into treaties with certain European and other powers, by force of which the latter poſſeſs an excluſive trade with them, and the former are reſtricted from

making any alterations towards favouring or opening a commerce with other powers. 3. There are inſtances of powers engaging by treaty not to carry on commerce, or not to extend their commerce, to the Eaſt Indies. 4. With the exception of theſe three reſtrictions, the commerce and navigation to the Eaſt Indies is entirely free to every nation.

The freedom of commerce in its general ſenſe being however too undefined to give to a nation all the advantages which it ought to derive from commercial intercourſe, the powers have been obliged from time to time to have recourſe to poſitive treaties for their mutual benefit; and, whatever difference there may be in the generality, they moſtly apply to the regulating of three points: 1. Commerce in time of peace. 2. The meaſures to be purſued with reſpect to commerce and commercial ſubjects in caſe of a rupture between the two ſtates. 3. The commerce of the contracting power that may happen to remain neuter while the other contracting party is at war with a third power.

With reſpect to theſe treaties of commerce, on the firſt point above ſtated it is cuſtomary, 1. To aſcertain in general the privileges that the contracting powers mutually grant to the reſpective ſubjects of the other; and a clauſe is very often inſerted, declaring that the other contracting power ſhall be conſidered and treated *as the moſt favoured nation*. 2. To enter into the particulars of the rights and privileges which ſhall be enjoyed by ſuch of their ſubjects who may happen to ſojourn or reſide in the territory of the other power, as well with regard to their property (and particularly as to impoſts, the *droit d'aubaine*, or eſcheat of the inheritance of a foreigner dying without leaving heirs in the country, confiſcations, ſequeſtrations, and the like) as to their perſonal rights; and particular care is conſtantly taken to provide for the free exerciſe of their religion; for their right to the benefit of the laws of the country, and for the ſecurity of their commercial books, papers, and writings. 3. To enumerate ſpecifically the different kinds of merchandiſe which are to be admitted to be imported or exported, and at what cuſtoms or other duties.

With reſpect to the privileges and immunities, in caſe of a war or rupture between the contracting powers, the great ſtipulations are or ought to be, 1. An exemption from ſeizure of the perſon or effects of the ſubjects reſiding in the territory of the other contracting power. 2. To ſettle within what time they ſhall remove with their property out of the territory; or fix, 3. The conditions under which they may be ſuffered to reſide in the enemy's country during the war, as was done by the ſecond article of the treaty between England and France in 1786.

In ſtipulating for the rights to be enjoyed by neutrals, it is expedient, 1. To exempt their veſſels from embargo. 2. To aſcertain with preciſion what kinds of merchandiſe ſhall be accounted contraband of war. 3. To agree as to the manner in which ſhips or veſſels may be ſearched at ſea; and, 4. Perhaps to declare whether neutral bottoms are to make neutral goods or not.

For the protection of commerce, nations frequently permit, either from uſage or cuſtom, or poſitive treaty, other nations to ſend *conſuls* into their territories; but the cuſtom of receiving them is not univerſally eſtabliſhed. The rights and powers of theſe conſuls, where they are admitted, differ very materially, in different ſtates. Many of the conſuls out of Europe exerciſe a very extenſive juriſdiction over the ſubjects of the ſovereign or ſtate by whom they are delegated. In Europe there are ſome parts where the conſuls exerciſe a civil juriſdiction, more or leſs limited, over their fellow-ſubjects reſiding there; in other parts they can exerciſe no more than a *voluntary* juriſdiction; while in others, and which ſeems to be the moſt general caſe, their functions are confined to watch over the commercial intereſts of the ſtate, and particularly the due obſervance of all treaties of commerce, and to aſſiſt with their advice, interpoſition, and good offices, thoſe of their nation whom commercial purſuits or connections have led to the place where they have to exerciſe their authority. They are authoriſed to execute thoſe functions ſometimes by virtue of credentials, but more frequently by ſimple letters of *proviſion*, and letters of recommendation. Theſe conſuls are under the particular protection of the law of nations; but they do not poſſeſs the high privileges and advantages that the eſtabliſhed cuſtom amongſt all civilized nations allows to ambaſſadors and public miniſters, either as to juriſdiction, impoſts, taxes, religion, or honours; ſo that it can be only in a very enlarged ſenſe of the expreſſion that they can be termed *public* miniſters. The greater number of the conſuls out of Europe approximate, however, more nearly to the rank of miniſters; and in fact ſome of them are in ſeveral inſtances miniſters and conſuls at the ſame time.

Conſuls-general are alſo in ſome caſes appointed: theſe are to officiate for ſeveral places at the ſame time, or elſe they are placed at the head of ſeveral conſuls. In other reſpects the functions of conſuls-general do not materially differ from thoſe of ſimple conſuls.

As *commerce*, in the ſtrictneſs of the term, is applied only to that trade or traffic which is carred on by ſea, in contradiſtinction to that carried on by land; it is now neceſſary to ſhow what the law of nations is in reſpect of maritime rights.

2. MARITIME RIGHTS. The ableſt writers on the law of nations, for the purpoſe of elucidating the rights of maritime powers on the ſeas and waters in general, have drawn a very eſſential diſtinction between property and empire. *Property*, they juſtly ſtate, is a right to enjoy a thing excluſively, with an abſolute power to diſpoſe of it. *Empire*, a right to demand obedience, reſpect, and honour, from thoſe who are ſubject to it.

Before the civilization of mankind and their ſeparation into diſtinct ſocieties and ſtates, they very reaſonably conceived that every thing, and conſequently the ſea, the rivers, and waters of every deſcription, belonged to all the people of the world in common. Then no one could call himſelf the ſole proprietor of any thing; for, to claim a ſole property, the party muſt, 1. Be able to hold it lawfully and have a good reaſon for his excluſive poſſeſſion; which reaſon may be founded on the inutility of the thing if its uſe remained in common, or on the ſecurity of the poſſeſſor's property, already lawfully acquired, which may require an excluſive poſſeſſion of ſomething, which, of itſelf, he otherwiſe would not want. 2. It muſt have been effectually poſſeſſed, that is to ſay, ſeized with an intention to be kept. 3. The claimant muſt be in a ſituation to maintain the poſſeſſion of the thing claimed.

Empire may be annexed to property, (as in the caſe with domains;) and it may alſo be ſeparated from it, and may extend over that which is the property of others, or which belongs to no one in particular, but remains in the primitive ſtate of poſſeſſion in common. But all empire, or dominion, when ſeparated from property, muſt be taken to have originated in the conſent, either expreſs or implied, of thoſe over whom it is to be exerciſed.

When a ſtate acquires a territorial poſſeſſion, and eſtabliſhes its empire over it, all that is comprehended in ſuch diſtrict belongs to the nation. The lakes, the rivers, the ſtreams which ſeparate the land, are then the property of the ſtate or nation, and under the empire of the ſovereign. A nation may alſo be underſtood as lawfully occupying the rivers on its frontiers, even to the oppoſite banks; but, if theſe banks are occupied by another ſtate or nation, and if it be impoſſible to aſcertain which of the two has had the prior poſſeſſion; each, in that caſe, having equal pretenſions; it ought to be preſumed that both took poſſeſſion at the ſame inſtant, and conſequently that they met in the middle. Every nation, therefore, has a right to property and dominion as far as the middle of all the lakes and rivers that are ſituated on its frontiers; at leaſt *ad medium filum aquæ*, till the contrary has been proved, or till another diviſion has been agreed on.

When

What is applicable to lakes and rivers will alſo hold with reſpect to ſtraits, which are not in general wider than the great rivers; viz. ſuch as thoſe, the middle of which may be reached by a cannon-ſhot fired from the ſhore. So alſo all thoſe parts of the ſea which are near land, may be looked on as lawfully acquired and maintained, as the property and under the dominion of the nation that is maſter of the coaſt.

A cuſtom, generally acknowledged, extends the authority of the ſtate poſſeſſing the coaſt to a cannon-ſhot from the ſhore, which is underſtood to be *three leagues*; and this diſtance is the leaſt that a nation ought now to claim as the extent of its dominion on the ſeas. And there are, in ſome inſtances, arbitrary diſtances eſtabliſhed by nations, to protect their commerce againſt ſmuggling, and a contraband traffic; which is the caſe of Great Britain, by various acts of interior legiſlation.

A nation may alſo occupy, and extend its dominion, beyond ſuch diſtance as aforeſaid, either on rivers, lakes, bays, ſtraits, or the ocean; and ſuch dominion may, if the national ſecurity requires it, be maintained by a fleet of armed veſſels. The empire of a nation on the ſeas may extend as far as it has been acknowledged to extend by the common conſent of other nations, and beyond the boundary of its territorial poſſeſſions. Among the bays, ſtraits, and gulfs, there are ſome that are generally acknowledged to be free: there are others which are conſidered as under the dominion, and in part even the property, of the maſters of the coaſt; and there are others, the property and dominion of which are ſtill diſputed.

The following are acknowledged as free: the Spaniſh Sea, the Aquitain Sea, the North Sea, the White Sea, the Mediterranean Sea, and the Straits of Gibraltar. The three ſtraits between Denmark and Sweden are under the dominion, and conſidered as the property, of the king of Denmark. St. George's Channel, between Scotland and Ireland, is under the dominion of Great Britain; the Straits of Sicily are under the dominion of the king of Sicily; the Gulf of Bothnia is under the dominion of the king of Sweden; the Black Sea, the Ægean Sea, the Boſphorus of Thrace, the Propontis, and the Helleſpont, are all under the dominion of the Turkiſh empire. Other nations have diſputed with England her claim to the dominion, and in part to the property, of the four ſeas that ſurround her, particularly the Britiſh Channel and the Straits of Dover; but the *ſovereignty* of the Britiſh ſeas hath been ably proved by records, and otherwiſe by Selden in his *Mare Clauſum*. See alſo in this work the article GOVERNMENT, vol. viii. p. 816.

As to the vaſt and immeaſurable ocean, and the ſeas of which it is compoſed, and particularly that of the Indian Sea, about which the moſt dreadful conflicts have ariſen, it is clear, from the enormous extent of each of thoſe ſeas, that it is not only extremely difficult, but abſolutely out of the power of any ſtate, even Great Britain with all her tranſcendent maritime ſtrength, to occupy, and maintain and defend the poſſeſſion of, it. The ocean, therefore, is free; and all the powers of Europe now acknowledge it to be exempt from all property and dominion, and to be the common poſſeſſion of all nations. A nation may however by treaty renounce the liberty of navigating in the Indian or any other ſea; and of this there are ſeveral examples given by Bouchard.

Rivers and lakes are uſeful for navigation, fiſhing, and other emoluments ariſing from their poſſeſſion; and therefore the powers that command the banks have a right to appropriate the uſe of them excluſively to themſelves. In general they prohibit foreigners from fiſhing in them; but, with reſpect to navigation, as ſuch an interdiction would produce retaliations, and as it is contrary to the commercial liberty generally introduced in Europe, foreigners are now permitted, in time of peace, to navigate freely and without reſtraint. This liberty is founded in part on treaties, and in ſome inferior ſtates on law: but, in every caſe where it is only founded upon cuſtom, that cuſtom does not prevent a nation from making whatever regulations or reſtrictions it thinks fit, or from exerciſing over ſuch parts of its territory all the rights of ſovereign dominion.

The ſea ſurrounding the coaſt, as well as thoſe parts of it which are land-locked, ſuch as the roads, bays, gulfs, and the like, ſituate within cannon-ſhot, that is, within three leagues of the ſhore, are ſo entirely the property, and ſubject to the dominion, of the ſovereign of the coaſt, that, 1ſt, He hath the excluſive right to all the produce of it, whether ordinary or incidental, as far as relates to things unclaimed by any other lawful proprietor. 2dly, He can prohibit or reſtrict the navigation of foreigners in his roads, and their entry into his ports; yet in time of peace this liberty is permitted to merchant-ſhips, and even to ſhips of war to a certain number. 3dly, He has a right to impoſe duties of cuſtoms, tonnage, fees of entry and of clearance, and alſo to inſtitute tolls for the ſupport of light-houſes, and other things beneficial to him. 4thly, He may require the maritime honours that cuſtom allows to thoſe who have dominion over any part of the ſeas. In fact, all thoſe parts of the ſea which ſurround the coaſt ought to be looked upon as forming a part of the territory of the ſovereign who is maſter of the ſhore.

In reſpect to wrecks of the ſea, the ſovereign, who is the maſter of the ſhore, cannot be conſidered to have a right to appropriate to his own uſe the wreck of any foreign veſſel caſt away on his coaſt, nor the goods that in a moment of danger have been thrown over-board, unleſs the owner thereof be wholly unknown. This pretended *ſtrand-right* againſt the claims of the owners, contrary moſt certainly to the laws of nature and the principles of humanity, was formerly exerciſed pretty generally; but it has been reſtrained from time to time, particularly ſince the thirteenth century, by privileges, laws, and a number of treaties; ſo that, at preſent, it may be conſidered as generally aboliſhed, except in caſes where no trace of ownerſhip, in the property wrecked, can by any means be diſcovered.

The ſovereign, who is maſter of the ſhore, or, as is generally the caſe, his vaſſal, as grantee of theſe *droits*, in engaging to take up and preſerve the ſhipwrecked property that may come within his reach, or to aſſiſt veſſels in danger, has a moſt unqueſtionable right to demand a compenſation for the expences he may incur in ſo doing, and even to detain a part of the property by way of indemnification. This right is every-where now exerciſed before reſtitution is made, even to thoſe who appear in the appointed time, and who can prove themſelves to be the lawful owners: the time allowed by law or cuſtom for reclaiming ſhipwrecked property, is generally a year, computed from the day on which the proprietor had notice of the accident.

The rights exerciſed on the ſea near the coaſt, are exerciſed alſo in thoſe ſtraits which do not exceed two cannon-ſhots in width; and, upon this ground, the king of Denmark, by poſſeſſing the property and dominion of the navigable part of the Sound, claims there not only the maritime honours due to him as ſovereign, but certain payments for the liberty of paſſing it; which payments are now fixed by treaties between that ſtate and other nations.

With reſpect to the rights exerciſed in the ſeas adjacent to the landed territory of the different powers; theſe are rights which, according to the diviſion of the great ſtates, from their local ſituation, into the northern, ſouthern, eaſtern, and weſtern, powers of Europe, can only be exerciſed by ſuch of them as are termed *maritime powers*, in contradiſtinction to thoſe that are not maritime.

It is common enough to call every ſtate maritime that is ſituated on the borders of the ſea, and is capable of carrying on commerce on that element; but a *maritime power*, properly ſpeaking, is a power that keeps up a fleet of ſhips of war; for neither fleets of merchantmen, nor a few ſhips of war, nor even a fleet of galleys, can ever be looked upon as conſtituting a maritime power.

In this acceptation of the term, there are only Great Britain, the ſeven United Provinces, Spain, Portugal, the Sicilies, Denmark, Sweden, Turkey, formerly the republic of Venice, latterly France, and ſince the beginning of the eighteenth century Ruſſia, which can be called maritime powers; the other powers have either never been maritime, or have ceaſed to be ſo.

Theſe rights of the maritime powers are thus exerciſed.

1. The Ottoman Porte exerciſes his right, as proprietor and ſovereign of the Black Sea, in ſuch manner as not to permit even the entry or navigation of it to any nation whatever, unleſs he has granted it by treaty.

2. Denmark, wiſhing to extend its empire and rights on the ſeas, adjacent to Iceland and Greenland, to the ſpace of four miles from Iceland and fifteen from Greenland, claims a right of excluding foreigners from fiſhing and even navigating in that ſpace; but this has been diſputed by many nations, and particularly Great Britain and the United Provinces, in what concerns the right of fiſhing.

3. Great Britain claims the property and empire of certain parts of the four ſeas that ſurround her; the empire over more diſtant parts; and maritime honours on all the ſeas. And her all-powerful and hitherto-invincible fleets have enabled her ſucceſsfully to maintain this maritime ſuperiority and aſcendency againſt all the world.

4. The republic of Venice claimed the empire, and particularly the maritime honours, on the Adriatic; but the neighbouring ſtates diſputed them with her, and latterly ſhe has not been in a ſituation to maintain any rights. The annual ceremony of the doge of Venice going to wed the Adriatic was thought important towards the ſupport of this right; but that is now laid aſide, as Venice has paſſed into other hands.

5. Genoa has no longer a naval force reſpectable enough to claim with effect the maritime honours which ſhe pretends to be entitled to on the Ligurian Sea.

6. After many diſputes with reſpect to the empire of the Baltic, and particularly with reſpect to the honours of the flag, ſome of the ſtates ſituated on its ſhore (as Denmark and Ruſſia by a treaty of 1730, and Ruſſia and Sweden by a treaty of 1743) have agreed to yield thoſe honours in certain diſtricts, and to omit them reciprocally in others.

The *maritime honours* about which there have been ſo many controverſies, and which have been productive of violent acts, and even of war, conſiſt, 1. In ſaluting with *cannon*; and on this point it is to be determined, who ſhall ſalute the firſt, at what diſtance the ſalute ſhall be given, with how many guns, and if the ſalute ſhall be returned gun for gun; in this reſpect all the powers of Europe ſalute by the odd numbers, 3, 5, 7, and ſo on, except Sweden, who only ſalutes by the even numbers. 2. In ſaluting with the *flag* or with the pendent; and here it is to be ſettled whether it ſhall be furled up, lowered, or hauled down. 3. In ſaluting with the *ſails*, by lowering or hauling down the fore top-ſail; this laſt way of ſaluting is uſually made uſe of by merchantmen, but veſſels of war ſometimes uſe it alſo.

All powers, whether monarchical or republican, may require all foreign veſſels, whatever be their number or their quality, 1. To ſalute with cannon and flag, as well before they enter their ports, as in paſſing under the cannon of their fortreſſes. In the latter caſe the fortreſſes return gun for gun; or elſe, after the ſalute is finiſhed, fire a ſalute adapted to the quality of the veſſels, or that of the commander. 2. Being on the ſeas under their dominion, to ſalute their ſhips of war with cannon, and even with flag; theſe points are generally acknowledged. England, and, after her example, France, will not give this mark of honour to republics, but require the republics to ſalute their admirals firſt.

On the parts of the ſea acknowledged to be free, or belonging to a third power, there is not, generally ſpeaking, any obligation for veſſels of war to ſalute each other; therefore it often happens that the ſalute is entirely omitted. However, 1. It is cuſtomary for a veſſel that carries no more than a pendent (for inſtance a captain's veſſel) to ſalute a veſſel carrying an admiral's flag; and, when the ſalute is finiſhed, for the admiral to return him ſix guns leſs than he has received, the vice-admiral four leſs, and the rear-admiral two leſs. 2. A detached veſſel ſalutes a ſquadron or a fleet. 3. Royal veſſels require republican ſhips to lower their flags or pendents, at the ſame time that they ſalute. 4. England, as the firſt and moſt diſtinguiſhed maritime power, requires that her admirals ſhall always receive the firſt ſalute from all foreign veſſels whatever, as well with cannon as with the flag; and, following the example of England, ſo did France previous to the late revolution.

Sometimes the honour of the firſt ſalute with cannon is given to perſons of diſtinction who happen to be on-board the foreign veſſel; as, to a ſovereign, a prince of the blood, or an ambaſſador.

Merchant-ſhips, even when they are unarmed, are obliged to ſalute all veſſels of war, fortreſſes, and ports, as well with their cannon as with their merchant-flag and their ſails.

3. Amicable Arrangements. It is cuſtomary with princes to announce to each other every important event, whether of an agreeable or diſagreeable nature, that happens in their family; ſuch as the death of the ſovereign, his conſort, the princes or princeſſes of the blood, the acceſſion to the throne, marriages, pregnancies, births, victories, or the like. Their notifications are made in writing, or by an ordinary or extraordinary miniſter. They are anſwered by a compliment, conveyed, between equals, in the ſame manner. Sometimes ſuch notifications produce other marks of reſpect, ſuch as that of a court going into mourning for ſome time after having received the notification of the deceaſe of one of another royal family; or theſe notifications are ſometimes followed by ſolemn devotional obſervances, and ſometimes by public thankſgivings, according to the importance or the nature of the event announced.

Amicable negociations are alſo frequently opened and carried on between ſovereign ſtates, touching matters of diſpute ariſing between them; and ſometimes with the aſſiſtance of a third power, who has interpoſed its good offices, or its mediation, or which has been fixed on as an intermediator. In both theſe caſes, the negociation may be carried on verbally (by the ſovereigns themſelves, or their miniſters,) or in writing. This laſt courſe is obſerved, where negociation is out of the queſtion, and where the object is to make known the rights or the will of a ſovereign, or to perpetuate the remembrance of what has been ſtipulated for or agreed on between ſovereigns and ſtates.

The letters made uſe of in diplomatic or ſtate correſpondencies are letters of council, letters of cabinet, or letters in the ſovereign's own hand.

Letters of council, of ceremony in chancery, are thoſe in which all the points of the ceremonial are moſt rigorouſly obſerved. 1. They are often written in the ſtate-language of the power that writes. 2. They begin, if written to equals or inferiors, with the titles of him who writes, which are followed by thoſe of him who is written to, or by the vocative: as, for inſtance, "Geo. III. by the grace of God king, &c. to the moſt high and mighty prince, &c. by the ſame grace king, &c. our good brother, friend, couſin, (and ally perhaps,) moſt high, moſt excellent, and moſt mighty, prince, &c." 3. In the body of the letter the writer ſpeaks of himſelf in the plural number, *We*, giving to the other the title of "majeſty, highneſs," or the like, or ſimple "you," according to the relative dignity of him who writes, and of him who is written to. 4. The letter cloſes with a ſalutation in form, ſuch as "We pray God, moſt high, moſt excellent, and moſt mighty, prince, that he will take you into his holy keeping;" then follows, ſeparated from the body of the letter, the date, mentioning the place, the day, the month, the year,

and the reign; as thus: "Given at ———, the —— day of ———, in the year of our Lord ——, and in the ——— year of our reign;" after which come the ſignature and counter-ſignature. Theſe letters are ſent from the chancery of the ſtate in a large form, without envelope, and ſealed with the great ſeal. The ſuperſcription contains all the titles of the ſovereign to whom it is ſent.

Cabinet-letters do not require ſo ſcrupulous a ceremonial as letters of council. Titles are often admitted in the former that are not in the latter. In general, 1. They are now written in French between ſovereigns where there are different languages. 2. The inſcription is much ſhortened, and without titles. 3. The writer ſpeaks of himſelf in the ſingular number, addreſſing the ſovereign to whom he writes, by the title of *majeſty*, *highneſs*, or ſimple *you*. 4. The ſtyle is leſs grave, and more reſpectful. 5. The ſignature is often joined to the body of the letter by a phraſe adapted to the purpoſe, and, between equal ſovereigns, by *Sir*, *my Brother*, *Your Majeſty's*, or *Your's*, *G.* 6. The letter has an envelope which is ſealed with a privy or ſmall ſeal, different from the great ſeal. 7. The ſuperſcription is abridged.

Sometimes the ſovereign writes letters *in his own hand*: theſe have no ceremonial at all affixed to them, either with reſpect to title or language.

The choice between theſe different kinds of letters depends much on circumſtances, and even the pleaſure of the ſovereigns who make uſe of them; yet it is to be obſerved, 1. That, in matters of ſtate-importance, and where much ceremonious attention is requiſite, and eſpecially between courts that are upon the reſerve with each other, letters of council are generally made uſe of, whether it be the caſe of equals or inferiors; but thoſe of a rank much inferior cannot make uſe of them in writing to crowned heads. 2. A letter of cabinet is not anſwered by a letter of council, and ſtill leſs is a letter of the third order, whether it comes from an inferior, an equal, or a ſuperior. 3. A prince very inferior in dignity does not often preſume to open a correſpondence with a ſuperior in a letter of the third order, if it be poſſible to ſend him one of the ſecond.

Memorials are of two ſorts; thoſe of the court, and thoſe of miniſters. The firſt a prince generally delivers to foreign miniſters reſiding at his court, or ſends to his own miniſters reſident at other courts. Of theſe memorials there are, 1. The circular notes ſent to the diplomatic body, and which are commonly ſigned by the ſecretary of ſtate. 2. The anſwers given to foreign miniſters, which are occaſionally in the form of decrees, ſometimes of ſignatures, reſolutions, notes, and the like. Of the memorials ſent to miniſters reſident at foreign courts, ſome are to be preſented by him; and theſe are commonly in the form of notes, and frequently without ſignature; others are intended as inſtructions to the miniſter. The diſpatches however ſent to inſtruct him, are much oftener in the form of letters, than in that of memorials or reſcripts.

The memorials drawn up by foreign miniſters are of different kinds. 1. Some are in the form of letters, with an inſcription, a ſubſcription, and a ſignature; in thoſe the miniſter ſpeaks of himſelf in the firſt perſon, and of his court in the ſecond perſon: this form is however out of practice at preſent. 2. In others the miniſter ſpeaks of himſelf in the third perſon, and of the court he addreſſes himſelf to in the ſecond perſon; theſe are always dated and ſigned, and generally have an inſcription: this form ſeems to be moſtly adopted at the preſent time. 3. There are modes in which the miniſter ſpeaks of himſelf, and alſo of the court to whom he addreſſes himſelf, in the third perſon, without inſcription, and ſometimes without ſignature. This is what is properly called a note.

Public acts, properly ſo called, run generally in the form of letters patent. Of this claſs are full powers, treaties, ratifications, guarantees, proteſts, paſſports, manifeſtoes, and the like: the explanations of motives, and other writings of that kind, intended to juſtify the conduct of one court towards another or others, have no preſcribed form at all.

Theſe negociations between ſovereign powers have given riſe to embaſſies by public miniſters.

By a *public miniſter* is intended the perſon whom the ſtate has charged with the ſuperintendence of its public affairs at ſome foreign court. This miniſter (*legatus*, an ambaſſador, in a general ſenſe) is that of which we are to ſpeak. The ſending of theſe miniſters is a neceſſary means of treating of ſtate-affairs; and the right to ſend them is one of the natural rights of ſovereignty; and thoſe, and thoſe only, who have a right to ſend miniſters, have a right to receive them.

Formerly there was but one claſs of public miniſters, who were all called *ambaſſadors*; but, in progreſs of time, others have been admitted to repreſent the reſpective ſtates from which they are ſent; and theſe are of three orders.

Miniſters of the firſt order are, 1. The cardinal legates, the nuncios of the pope, ambaſſadors properly ſo called, (*ambaſciatores*, *oratores*, *magni legati*, *bots-chafter*, *embaſadores*,) the bailo of Venice and Conſtantinople. At preſent there are perpetual ambaſſadors, who are alſo inveſted with the more diſtinguiſhed character of *extraordinary*. With reſpect to precedence, the character of repreſentative, which is common to them all, raiſes all the miniſters of the firſt order above thoſe of an inferior order, without reſpect to the rank or dignity of the ſtates they are ſent from. 2. Among the miniſters of the firſt order, the cardinal legates, and nuncios of the pope, take the lead of all the ambaſſadors of catholic ſtates; but thoſe of proteſtant ſtates do not yield to them in this point. 3. The extraordinary ambaſſador takes the lead of the ambaſſador in ordinary, when they are both from the ſame ſtate. 4. Among ambaſſadors of different courts no regard is paid to this diſtriction; they all claim a right to precedence, or yield it to others, as it is claimed or yielded by their ſovereigns.

Theſe miniſters are now employed, not only to negociate the affairs of the ſovereign by whom they are ſent, but on points of ceremony alſo: and ſometimes the principal buſineſs of ſuch a miniſter is, to watch over the intereſts of his ſovereign, and give him an exact account of every thing that paſſes, and of which it imports him to be informed.

Miniſters of the *ſecond order* are the envoys, (*inviati*, *ablegati*,) the miniſters plenipotentiary, the internuncios of the pope and the emperor. With reſpect to precedence, there is no diſtinction made between the envoys and plenipotentiaries: every one claims what is due to him according to the rank of his ſovereign.

The *third order* of miniſters is compoſed of miniſters reſident, reſidents, and miniſters *chargés d'affaires*. They claim among themſelves the rank that is due according to the dignity of their ſovereign. Among the miniſters of the third order ought to be reckoned, the ſimple *chargés d'affaires*, as well thoſe who are appointed *per interim* as thoſe who are permanent. They have not however the title of miniſters, and are generally introduced and admitted through a verbal preſentation of the miniſter at his departure, or through letters of credence addreſſed to the miniſter of ſtate of the court to which they are ſent.

Agents of private affairs, agents reſident, counſellors of legation, and titulary agents, are all excluded from the rank, title, and privileges, of miniſters.

Deputies are thoſe miniſters which are ſometimes ſent by a body, or aſſociation of ſtates, (ſuch as formerly the United Provinces or the Swiſs Cantons,) as alſo thoſe ſent by the different courts to congreſſes. This name neither adds to nor takes from the quality of miniſter, with which they may be veſted at the ſame time, neither does it of itſelf deſcribe any particular order of miniſters. There are ambaſſadors and other miniſters, who are at the ſame time deputies; and there are alſo ſimple deputies; but theſe laſt cannot claim the rights of embaſſy, becauſe they

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are not veſted with the character of miniſters: of theſe are thoſe whom ſubjects ſometimes ſend to their ſovereign, as in the caſe of ſome towns in Italy and Spain, who claim a right to ſend deputies to their own ſovereign.

Some miniſters again are called *commiſſaries*, (which, at times, happens when they are ſent to make limited treaties;) and they have during their functions a right to exerciſe the prerogatives of miniſters; but, ſtrictly ſpeaking, thoſe only ought to be ſtyled commiſſaries whom the ſovereign ſends to treat with his ſubjects.

Letters of credence, written by the ſovereign who ſends him to the ſovereign who is to receive him, muſt be produced before a miniſter can be acknowledged at a foreign court. This letter makes mention of the motives of the miſſion, the name and quality of the bearer, and prays the ſovereign to whom it is addreſſed to give full credit to what he ſhall ſay on the part of his court. The form of theſe letters varies according to circumſtances.

Simple *letters of recommendation*, which are occaſionally given to the miniſter, to recommend him to ſome prince or princeſs of the family to whom he is ſent, are not to be confounded with *letters of credence*. Theſe letters are ſometimes addreſſed to one of the principal miniſters of ſtate, or the chief magiſtrate of the place where he is to reſide.

Full powers, ſpecifying the degree of authority with which they are inveſted, muſt alſo be produced by the miniſters to whom a negociation is confided. Theſe full powers are either general or ſpecial, as circumſtances may require. A full power may be incloſed in the letter of credence; but, if it be ſeparated from it, it is commonly drawn up in the form of a letter patent. Miniſters, ſent to a congreſs, without being furniſhed with letters of credence to any court, produce only their full powers, which they exchange with each other, and which anſwer the purpoſe of letters of credence. Sometimes the full powers, produced at a congreſs, are put into the hands of the mediators.

Inſtructions are alſo furniſhed to the miniſter who is to carry on a negociation. Theſe inſtructions are to be his guide in his general conduct towards the court to which he is ſent, and towards the miniſters of other courts whom he may find there, and particularly in the manner of opening and conducting his negociation. Theſe, as well as thoſe which may be neceſſary to diſpatch to him in the courſe of his embaſſy, being intended for himſelf alone, are not uſually produced to the court where he is ſent, unleſs his own court orders it ſo, or unleſs he, from urgent motives and his own diſcretion, thinks himſelf juſtifiable in communicating certain parts of them. Sometimes he has two ſets of inſtructions, the one public, and the other ſecret, and in cipher; to which cipher of his court he muſt have a key.

Some embaſſies have nothing to do with *negociation*; ſuch as embaſſies of ceremony, thoſe that are ſent to give ſatisfaction, or explain miſtakes, and ſometimes even embaſſies in ordinary. The art of negociating cannot be reduced to any fixed rule or principle; and, when negociations are to be opened and carried on in form, the manner of doing this differs with different ſtates, and in particular in the practice of royal ſtates with thoſe of republics.

In monarchical ſtates, a miniſter ſometimes negociates with the ſovereign himſelf in private audiences, either verbally, or by preſenting memorials; ſometimes with the miniſter for foreign affairs, or with one or more commiſſaries, choſen by the ſovereign at the miniſter's requeſt. Theſe conferences are ſometimes held at the foreign miniſter's; ſometimes at the apartments of the miniſter of ſtate, or thoſe of the commiſſary; and ſometimes at the houſe of a third party.

In republican ſtates, it is cuſtomary to name deputies to open a conference with a foreign miniſter, and this conference is uſually opened at the houſe of the miniſter, or at that of a third perſon; the choice of theſe deputies depends of right on the will of the ſtate only; and it is an abuſe to permit the miniſter to reject them, as has been in ſome places practiſed.

The miniſter often preſents in writing the ſubſtance of what he has delivered by word of mouth; and there are ſeveral republics, which, according to their conſtitution, can enter into no deliberation, on any propoſition of a foreign miniſter, until ſuch propoſition be delivered in writing. It is, however, a point which has been much debated and diſputed, whether a foreign miniſter is obliged, on requiſition, to give in writing, or to ſign, a copy of what he has delivered verbally.

The cuſtom of making *preſents* in the courſe of a negociation, alſo prevails; and thus it becomes a queſtion whether a miniſter has a right to make uſe of corruption as a mean to ſucceed in his miſſion. Now it is clear that a miniſter may make what preſents he thinks proper to thoſe who are able to further his views, (not aſking any thing illicit of them,) without having *corruption* imputed to him; and, with reſpect to preſents given to a ſubject to prevail on him to fail in his duty, and betray his country, it is to be obſerved, that it is not unlawful to profit by the *offer* of a traitor; but, to endeavour to corrupt the fidelity of a ſubject, whether it be in prevailing on him to divulge ſecrets that his duty obliges him to keep, or to revolt againſt his ſovereign, is to violate the *perfect rights* of ſuch ſovereign, and even of the ſtate of which he is the head; and, upon this latter point, it may be ſaid that a ſtate which makes uſe of corruption, as a mode to ſucceed in its negociations with other ſtates, cannot complain if thoſe other ſtates retaliate whenever they may find it neceſſary.

But in a caſe of ſuch extreme neceſſity as would, generally ſpeaking, authorize and fully juſtify a ſtate to violate its poſitive and perfect obligations towards another, it might alſo be juſtified in making uſe of corruption; corruption, in a caſe where the ſalvation of a nation is at ſtake, may loſe part of its immorality; but theſe inſtances are ſo very rare, that the practice ought not to be too far extended.

Secret embaſſies are of ſeveral kinds: ſometimes a ſovereign ſends a perſon of confidence to treat in ſecret, touching ſome affair of importance, or which requires immediate diſpatch and attention, without giving him the quality of miniſter, or, at leaſt, without ſuffering him to aſſume it openly, till the object of his miſſion is out of danger. If the court to which he is ſent be informed of the object of his miſſion, he ought to be granted all the inviolability due to him as a miniſter; if not, he may be treated as a private perſon. But ſuch perſons can demand no part of the ceremonial due to them as miniſters, while they forbear to diſcover their quality as ſuch; and, in general, they are looked upon by all the other miniſters as private perſons.

State-meſſengers are the bearers, between ſovereigns and miniſters, of whatever they wiſh to convey with diſpatch. Theſe are very obviouſly diſtinguiſhable, on the one hand, from miniſters, whom they do not reſemble either in their quality or their functions, and, on the other, from a ſimple *courier*, who goes but from one poſt to another. Every ſovereign grants, in time of peace, a full and moſt complete inviolability to the perſons of meſſengers, as well as to the diſpatches of which they are the bearers, whether they are ſent to his own court, or are on the road to ſome other court; but then, in order to this, they muſt announce themſelves as ſuch, and produce, if required, the neceſſary paſſports. This inviolability has often been conferred by treaty; and to commit an act of violence againſt a meſſenger is now looked upon as a moſt enormous and unjuſtifiable offence. Further, they are granted an exemption from impoſts and the power of ſearch, ſo long as they do not abuſe this favour. In time of war, however, this inviolability is not much regarded. Belligerents have aſſumed the right of ſeizing the perſons of the meſſengers of their enemies, or of the allies of their enemies, where there are no treaties to the contrary. But it is ſometimes agreed to grant them paſſports; and this frequently

frequently occurs, as a preliminary toward one of the firſt objects of a negociation for peace.

4. *Hoſtilities.* In caſe of a difference between two ſovereign ſtates, that which complains of a violation of its natural or poſitive rights ought, unleſs ſuch violation is moſt obvious and indiſputable, ſufficiently to prove, before the commencement of actual hoſtilities, thoſe rights, as well as the violation of them. Having thus proceeded, if due ſatisfaction cannot be obtained by *amicable* means, or if it is ſo far clear that it would be of no avail to reſort to ſuch preliminary courſe, the aggrieved ſtate may, if it does not chooſe to renounce ſatisfaction altogether, have recourſe to forcible means, either in defence or purſuit of his rights. Hoſtilities are indeed, in ſuch caſes, the only means that are left to ſovereigns who acknowledge no co-equal or ſuperior judge.

Forcible means are of ſeveral degrees; and in all civilized ſtates a diſtinction ought conſtantly to be taken between the means of redreſs to be adopted in the caſe of a violation of an *imperfect* obligation, from thoſe which may be well juſtified in the caſe of a violation of a *perfect* obligation.

An *imperfect* obligation may be violated by divers means; but, in general, a ſovereign violates his *perfect* obligations, when he refuſes to permit or to do what natural juſtice and the principles of humanity require; 1. In refuſing to obſerve a point of ſimple cuſtom; 2. In introducing into his dominions ſome partial right, or law, to the prejudice of foreigners.

From the very nature of *imperfect* rights and obligations, it is clear, that no violation thereof can authorize the uſe of forcible means, or the infraction of perfect obligations, in the purſuit of redreſs; yet, it is equally clear that, for the purpoſe of obtaining ſuch redreſs, a ſovereign may make uſe of acts of retaliation: as, for example, he may refuſe to comply with the ſame cuſtom, with reſpect to another ſovereign, which that ſovereign has refuſed to ſubmit to with reſpect to him; or he may refuſe to comply with ſome other cuſtom which is equivalent to it: he may introduce a partial right or law, to the prejudice of ſuch foreigners as have done the ſame with regard to him or his ſubjects. By theſe means he reſtores reciprocal relations, and conſtrains unfriendly powers to change their ſyſtem: and theſe acts of retaliation are in the preſent age much reſorted to.

A ſovereign violates his *perfect* obligations, by violating the natural or acquired rights of another; and it matters not whether theſe rights are innate, or whether they have been acquired by an expreſs or implied contract, or otherwiſe. Where ſuch violation takes place, the injured ſovereign may refuſe to fulfil his perfect obligations towards the ſovereign by whom he is injured, or towards the ſubjects of ſuch ſovereign: he may alſo have recourſe to more violent means, till he has obliged the offending party to yield him ſatisfaction, or till he has taken ſuch ſatisfaction himſelf, and guarded himſelf againſt the like injuries in future.

Whether the ſtate or its ſubjects be the offending party, if the ſtate refuſe to make ſatisfaction, the property of the reſpective ſubjects coming within the reach of the injured ſtate is liable to ſeizure, and in that caſe ſuch ſubjects have a right to be indemnified by the ſtate to which they belong; and even the perſons of ſuch ſubjects may be ſeized; but the life of an innocent perſon cannot be taken, unleſs in extraordinary caſes, where there are no other means of obtaining the ſatisfaction due, and of preventing future violations. Thus, if the ambaſſador or meſſenger of a ſtate has been put to death by one ſtate, the other ſtate would not, on that account, have a right to put the ambaſſador or meſſenger of the other to death; but, in time of war, a priſoner of war may ſometimes be put to death, by way of retaliation, to puniſh a nation that has violated the laws of war. In the firſt caſe, the injured nation has other means of obtaining ſatisfaction, and of guarding againſt ſuch violations for the future; but, war being of itſelf the laſt ſtate of violence, there often remains no other means of guarding againſt future violations on the part of the enemy.

There are many acts by which a ſovereign refuſes to do or to ſuffer what he is under a *perfect* obligation to do or to ſuffer, or by which he does what he is ordinarily under a *perfect* obligation to omit, in order to obtain ſatisfaction for a real injury ſuſtained. All theſe acts are called *repriſals*; conſequently, repriſals are of many ſpecies. The *talio*, by which an injury received is returned by an injury exactly equal to it, is one ſort of repriſals; but the uſe of it is not indiſcriminately permitted on all occaſions. One of the ſpecies of repriſals, the moſt frequently employed, is the ſeizure of the property and perſons of the ſubjects belonging to the ſtate from whom an injury has been received. This is done with a view of obtaining ſatisfaction by the confiſcation of the property ſeized, if all endeavours ſhould fail of obtaining it from the offending ſtate.

Repriſals may be made by a ſtate for injuries committed againſt itſelf or againſt its ſubjects; but not in favour of a third power, even ſhould ſuch power requeſt it.

Formerly the ſubjects of one ſtate would make repriſals on thoſe of another; but the diſorders reſulting from ſuch a practice, and the dangers to which the ſtate itſelf was expoſed by leaving the uſe of ſuch violences in the hands of individuals, have induced, ſince the fourteenth century, the ſtates of Europe in general to withhold from their ſubjects the exerciſe of this dangerous right. Subjects, before they can now make repriſals on foreigners, are obliged to obtain *letters of marque*, or *of repriſal*.

Although there may be ſome difference in the various ſpecies of repriſals, yet they reſemble each other in this, that they are all poſitive acts of violence, and that they are exerciſed ſeparately; but, when all theſe ſpecies of repriſals are exerciſed at once, they form a ſort of warfare; in fact, they no longer differ from war.

War is that ſtate, in which men conſtantly exerciſe acts of indeterminate violence againſt each other. It is *private* or *public*: the firſt takes place between individuals in a ſtate of nature; the other is between men in ſociety.

Public war is of two ſorts, *civil* and *national*. *Civil war* is that in which ſubjects of the ſame ſtate turn the weapons of deſtruction againſt each other: this is never juſtifiable, in *ſimple* ſtates, but in caſes of the laſt extremity, as when the ſovereign is obliged to arm in order to puniſh his rebellious ſubjects, or when the ſubjects can diſſolve the ties of ſubmiſſion which hold them in obedience. In *compoſed* ſtates it is never lawful, except each has a right to act as a free ſtate, or except in the caſe of a war of execution. *National war* is a conflict carried on between nation and nation. It never can be undertaken or carried on but by the authority of the ſovereign.

The violences committed by the ſubjects of one ſtate againſt thoſe of another, without authority from their ſovereign, are now looked upon as robberies, and the perpetrators are excluded from the rights of lawful enemies. The ſovereign may, however, veſt the right of making war in ſuch of his ſubjects as he thinks proper. Thus, the Eaſt India company of England, who enjoy a territorial ſupremacy with reſpect to their poſſeſſions out of Europe, have obtained from their ſovereign the right of making war.

National wars are *offenſive* or *defenſive*. War is *offenſive* on the part of the ſovereign who commits the firſt act of violence againſt the other, whether in entering his territory with an armed force, attacking him on the high ſeas, or in the territory of a third power; it is *defenſive* on the part of him who receives the firſt act of violence. But it muſt be obſerved, that, if a ſovereign finds himſelf menaced with an attack, he may take up arms in order to ward off the blow; and may even commence the exerciſe of hoſtilities which his enemy is preparing to exerciſe

againſt him, without being chargeable with having begun an offenſive war. Such meaſures, in ſuch a caſe, are no more than the means of ſimple defence.

Nothing ſhort of the violation of a perfect right either committed, committing, or with which a nation is threatened in future, can juſtify the undertaking of a war. On the other hand, every ſuch violation, when proved, and when amicable meaſures have been tried in vain, or when it is evident that it would be uſeleſs to try ſuch means, juſtifies the injured ſtate in reſorting to arms.

It is impoſſible for the ſentiments of the belligerent parties not to be in direct oppoſition with regard to the juſtice or injuſtice of the war; yet, if it be not notoriouſly unjuſt, their own welfare induces them to conſider it as lawful, as far as reſpects the treatment of the enemy, and the validity of conventions and treaties of peace. Thus the Chriſtian powers are induced to treat as lawful enemies the barbarians of Africa, though the motive of the latter is often nothing but robbery; and thus policy often induces a ſovereign, in the courſe of a civil war, to treat his rebellious ſubjects as lawful enemies; but this it muſt be remembered, is not to be conſtrued into an acknowledgment of their independence.

There is no general obligation, under the univerſal law of nations, of making a declaration of war to the enemy, previous to a commencement of hoſtilities. Many of the ancient nations looked on ſuch a declaration as eſſential, and the practice of Europe was ſuch till the ſeventeenth century; but at preſent nations content themſelves with publiſhing a declaration of war through their own dominions, and explaining their motives to other powers by a manifeſto in writing; and declaring of war in this manner is deemed ſo far eſſential, that nations have often demanded a reſtitution of every thing taken from them by the enemy before ſuch declaration. Sometimes, however, nations get rid of ſuch demands by inſiſting that the war has been in effect declared.

From the inſtant a ſovereign is in a ſtate of war, he has a right to act as an enemy, not only with reſpect to the perſons and property found in the territory of the enemy, but alſo with reſpect to his enemy's ſubjects and their property which may happen to be ſituated in his own territory at the breaking out of the war. He has a right then to ſeize on their ſhips found in his ports, and on all their other property; to arreſt their perſons, and to declare null and void all the debts which his ſtate may have contracted with them. However, nations, for their mutual benefit, have been induced to moderate the rigour of this right. 1. In a great number of treaties nations have ſtipulated, in caſe of a rupture between them, to give to each other's ſubjects, reſiding in their territory at the breaking out of a war, or coming to it, not knowing of the declaration of war, a ſpecified time for the removal of themſelves and their property. 2. Sometimes it is agreed to let the ſubjects of an enemy remain during the whole courſe of the war, or ſo long as they live peaceably and quietly. 3. Beſides theſe precautions taken between nation and nation, many ſtates have provided, by particular laws and privileges, for the protection of the perſons and property of enemies' ſubjects. 4. And, in general, a nation does not venture to touch the capitals which the ſubjects of the enemy may have in itſf unds, that it may otherwiſe owe to ſuch ſubjects.

Where there are neither treaties nor laws touching thoſe points, nations continue ſtill to ſeize on all the property belonging to the enemy's ſubjects, which is carried into its territory after the declaration of war. Sometimes alſo a ſtate makes ſeizures *proviſionally*, till aſſurance is received that the ſtate which has done the injury is ready to make reparation or fulfil its obligations. But, whatever conduct may be obſerved towards the ſubjects of an enemy, his ambaſſadors, or other public miniſters, are always obliged to quit the ſtate as ſoon as a war breaks out; and they are allowed to depart, and remove their property, without the leaſt moleſtation. The Turks only have preſerved the barbarous cuſtom of impriſoning foreign miniſters in what they call the Seven Towers, as ſoon as a rupture, or even a diſpute that threatens a rupture, takes place between them and the powers by whom ſuch miniſters are ſent, holding them in the light of hoſtages.

Every ſovereign has a right to call home all thoſe ſubjects which may happen to be in an enemy's country, or in any other country, when he thinks their preſence neceſſary to the defence of the ſtate. He has an undoubted right to forbid his ſubjects to ſerve the enemy againſt their country, and to puniſh them in caſe of diſobedience. Ordinances are uſually iſſued in ſome ſtates at the beginning of a war, by virtue of which offenders in this reſpect are puniſhed by confiſcation of their property or otherwiſe. But the manner in which war is now carried on often induces a ſovereign to confine the effects of thoſe ordinances to his vaſſals, or to thoſe who are in his own ſervice or in that of the enemy.

Every ſovereign has a right to reſtrict his ſubjects from carrying on a correſpondence, or keeping up a communication, with the enemy; to prohibit all contraband commerce with him; the entry of merchandiſes which are produced or manufactured in his territory, and all inſurance on his veſſels: but policy and circumſtances uſually determine the degree of rigour with which theſe prohibitions are enforced.

As to the manner in which a war may be lawfully carried on; it is to be obſerved, that, by the law of nations, the uſe of all the means neceſſary to obtain the ſatisfaction ſought for is permitted; and circumſtances alone muſt determine on the means proper to be employed; and therefore war gives a nation an unlimited right of exerciſing of violence againſt its enemy. But the civilized powers of Europe, with a view to diminiſh the horrors inevitably attendant upon war, now acknowledge certain violences, which are equally deſtructive to both parties, and contrary to ſound policy, to be wholly unjuſtifiable, though not preciſely forbidden by the ſtrict rules of the law of nations; and hence have ariſen, what are at preſent called *the laws of war*. Theſe laws are now ſanctioned by cuſtom, and in ſome caſes even by treaty, and have been more ſtrictly obſerved ſince war has been carried on by the means of regular troops; nor does any civiliſed nation at the preſent time allow itſelf to be juſtifiable in departing from them, unleſs the enemy ſets the example, or unleſs an urgent neceſſity, ariſing from extraordinary circumſtances, admits of exceptions, authoriſed by reaſons of war.

According to the preſent uſage, every individual in a ſtate is not allowed to fall upon the enemy, although war has been declared againſt him; but ſoldiers by the order of their commanders, and ſuch other ſubjects as may obtain expreſs permiſſion for the purpoſe from their ſovereign, may lawfully exerciſe hoſtilities, and are to be looked upon by the enemy as lawful enemies. On the contrary, thoſe who are not ſo authorized, taking upon them to attack the enemy, are treated by him as a band of lawleſs ſpoliators; and even the ſtate to which they belong ought to puniſh them as ſuch. And it is for this reaſon, that thoſe who wiſh to arm privateers are obliged to obtain *letters of marque*; without them they would be deemed pirates; but, being furniſhed with ſuch, they became lawful enemies.

Among the arms, and other means of doing injury to an enemy, there are ſeveral, which according to the *laws of war* are deemed to be unlawful. 1. The ſecret means of *poiſon*: thus it is declared to be a violation of the laws of war, to poiſon wells or the like in order to deſtroy the enemy; and alſo to poiſon the commander-in-chief, or any other enemy of diſtinction; and, ever ſince the beginning of the ſeventeenth century, the uſe of poiſoned arms has been looked upon as unlawful. It is alſo againſt the laws of war, knowingly to ſend among the enemy perſons afflicted

flicted with the plague, or any other contagious and mortal diſeaſe. 2. Private aſſaſſination is alſo againſt the rules of war; and therefore it is groſs violation thereof to ſet a price on the head of a commander-in-chief, or other enemy of diſtinction; unleſs the example has firſt been ſet by the enemy. 3. It is alſo againſt the laws of maritime war, for the commander of a veſſel not to hoiſt the flag of his nation before he begins the combat. 4. Among the open means, certain arms, the uſe of which is too cruel, and which the object of the war does not render abſolutely neceſſary, are prohibited; thus, for inſtance, it is contrary to the laws of war to load cannon with nails, pieces of iron, or the like; to charge a muſket with two balls, or with diſfigured or irriguous balls; the firſt augmenting too much the number of ſufferers, and the latter wantonly increaſing pain. The uſe of red-hot ſhot, (invented in 1574 at the ſiege of Dantzic,) of chain and bar ſhot, of carcaſes filled with combuſtibles, boiling pitch, and the like, have ſometimes been proſcribed by particular conventions between maritime powers; but thoſe conventions extend no farther than the war for which they are made.

From the moment that war actually begins between one ſtate and another, all thoſe who belong to ſuch hoſtile ſtates are enemies, and have a right to act againſt each other as ſuch; but, their right to wound or kill being founded on ſelf-defence, or on the reſiſtance oppoſed to them, they cannot with juſtice wound or take the life of any except thoſe who take an active part in the war; ſo that, 1. Children, old men, women, and in general all thoſe who cannot carry arms, or who ought not to do it, are ſafe under the law of nations, unleſs they have exerciſed acts of violence againſt the enemy. 2. Retainers to the army, whoſe profeſſion is not to kill or directly injure the enemy, ſuch as chaplains, ſurgeons, and, to a certain degree, drummers, fifers, trumpeters, and the like, ought not to be wounded or killed deliberately. 3. Soldiers, on the contrary, being looked upon as ever ready for defence or attack, may at any time be wounded or killed, unleſs when it is manifeſt that they have not the will, or have loſt the power, to reſiſt. When that is the caſe; when wounded, ſurrounded, or when they lay down their arms and aſk for quarter; in ſhort, from the moment they are reduced to a ſtate in which it is impoſſible for them to exerciſe farther violence againſt the conqueror, he is obliged, by the laws of war, to ſpare their lives; except, however, 1. When ſparing their lives would be inconſiſtent with his own ſafety, as was the caſe at the battle of Agincourt; 2. In caſes where he has a right to exerciſe the *talio*, or to make repriſals for like acts done by the enemy; 3. When the crime committed by thoſe who fall into his hands juſtifies the taking of their lives. Upon this principle it is therefore always juſtifiable to make the vanquiſhed ſoldiers priſoners of war, and even thoſe who are not of the military profeſſion. When the conqueror receives the conquered as priſoners of war, it is conſidered that all hoſtilities between them have ceaſed. The conqueror generally keeps priſoners of war under a guard, till they are ranſomed, or exchanged by cartel, or till the peace. Officers are often releaſed on their parole of honour, by which they promiſe not to ſerve againſt the power which releaſes them, for a certain time, or during the war; and to appear at an appointed place as often as they ſhall be duly ſummoned. Thoſe who, regardleſs of their parole, take up arms, or the like, while the convention is obſerved on the other ſide, are looked upon as infamous; and, if they again fall into the hands of the enemy to whom they have given their parole, he is not by the laws of war obliged to give them quarter.

Thoſe who, unauthorized by their profeſſion or the order of their ſovereign, exerciſe hoſtilities againſt an enemy, and fall into the enemy's hands, have no right to expect the treatment due to priſoners of war; the enemy is juſtifiable in putting them to death as a lawleſs band. So alſo ſoldiers who employ means which are contrary to the laws of war, or who act without orders from their chief, may be puniſhed in conſequence by the enemy. Thoſe who, under a falſe name and diſguiſed character, enter the camp of the enemy, in order to ſerve as ſpies, as was the caſe of major André in the American war, or to poiſon, aſſaſſinate, or corrupt, are puniſhed by an ignominious death; being beſides looked upon as acting without the orders of their ſovereign.

Neither the ſovereign nor his family can be looked upon as ſheltered, by the law of nations, from the violences of the enemy. Thoſe of them who bear arms may be reſiſted or attacked, and conſequently wounded or killed; and thoſe who do not bear arms may be made priſoners of war. However, according to modern warfare, 1. It would be againſt the laws of war to aim deliberately at the perſon of a ſovereign, or of a prince of the blood royal. 2. The family of a vanquiſhed ſovereign is not only treated with more tenderneſs than other priſoners of war, but is uſually exempted from captivity. 3. In general ſovereigns endeavour to ſoften the rigours of war in every thing that has no influence with reſpect to its ſucceſs: thus, for inſtance, they grant a free paſſage to whatever is intended for each other's tables; and ſometimes even preſents and compliments paſs between them, upon the principle, that it is their ſtates, and not they, that are at war.

The conqueror has, ſtrictly ſpeaking, a right to make priſoners of war of all the ſubjects of the hoſtile ſtate that may fall into his power, though they have committed no violence againſt him; and of courſe he has a right to remove them to another country. But, in the preſent civilized ſtate of warfare, the conqueror generally carries his rights in this reſpect no farther than to ſubmit ſuch ſubjects to his domination, to make them ſwear fealty to him, to exerciſe certain rights of ſovereignty over them, ſuch as raiſing and quartering troops among them, making them pay taxes and obey his laws, and puniſhing as rebels all thoſe who attempt to betray him or ſhake off his yoke.

The intention with which a country or province is taken poſſeſſion of, generally determines the conqueror as to the alterations to be made in the form of government, if any are intended; and it is clear, that the conqueror is not obliged to preſerve the conſtitution of a conquered country or province, nor to leave the ſubjects in poſſeſſion of the rights and privileges granted them by their former ſovereign, unleſs he has made them a promiſe to that effect previous to their ſubmiſſion.

The conqueror has a right to ſeize on all the property of the enemy that comes within his power: it matters not whether it be moveable or immoveable. Theſe ſeizures may be made, 1. in order to obtain what he demands as his due, or an equivalent; 2. to defray the expenſes of the war; 3. to force the enemy to an equitable peace; 4. to deter him, or by reducing his ſtrength hinder him, from repeating in future the injuries which have been the cauſe of the war. And, with this laſt object in view, a power at war has a right to deſtroy the property and poſſeſſions of the enemy, for the expreſs purpoſe of doing him miſchief. The modern rules of war do not however permit the deſtruction of any thing except, 1. Such things as the enemy cannot be deprived of by any other means than thoſe of deſtruction, and which it is at the ſame time neceſſary to deprive him of. 2. Such things as, after being taken, cannot be kept, and which if not deſtroyed might ſtrengthen the enemy: thus it is lawful to raze fortreſſes, ſink veſſels, ſink or ſpike cannon, or blow up magazines. 3. Such things as cannot be preſerved without injury to the military operations: as, for inſtance, it is generally acknowledged that no depredations ought to be committed on gardens, vineyards, or the like, unleſs it be neceſſary to fix a camp in them, and then the obvious reaſons of war authorize their deſtruction. To all theſe may be added, 4. Whatever is deſtroyed by way of retaliation.

The victorious ſovereign claims the dominion over the provinces

provinces and countries conquered by his arms; he appropriates to himſelf the national domains, and all the property belonging to the diſpoſſeſſed ſovereign, and particularly all the fortreſſes, ſhips of war, arms, and implements of war. The reſt of the moveable property taken from the vanquiſhed is commonly given up as booty to the army, or the corps employed on the expedition: this diſtribution depends entirely on the military code of each reſpective ſtate, and does not belong to the law of nations.

With reſpect to the immoveable property of the enemy's ſubjects, and the moveable property of thoſe who have not taken up arms in the war, though the conqueror has a right, in ſtrictneſs, to appropriate the whole of it to himſelf, yet, according to the practice of modern times, it is left to the proprietors, and a contribution is exacted in its ſtead. This contribution once paid, whether in money, produce, or ſervice, the invaders ought to pay for all they afterwards receive from the conquered ſubjects, except it be for ſuch ſervices as every ſovereign has a right to require from his own ſubjects. Extraordinary caſes, where places are given up to pillage, which is ſometimes done to puniſh thoſe who are found in them for not yielding in time, or for having acted contrary to the laws of war; and ſometimes by way of retaliation; form exceptions in the above-mentioned practice.

In maritime wars, the private property of enemy's ſubjects is never ſpared. In order to encourage privateering, thoſe concerned in it are allowed to hold all the merchant-veſſels and merchandiſe they take from the enemy or his ſubjects, without any reſerve whatever with reſpect to the redemption of them by the proprictor.

War ſuſpends all the laws of property between the belligerents, but not between them and neutral powers; ſo that, although an enemy may ſeize on the property of an enemy, and diſpoſe of it with all its appurtenances, ſtill the right of the original proprietor does not ceaſe, as long as he has not expreſsly or impliedly renounced it, or as long as he has not given it up as loſt. He has, therefore, not only a right to recapture it from the enemy, but alſo to claim it from a third poſſeſſor. This right is alſo acknowledged with reſpect to all territorial conqueſts.

In reſpect of moveable property, it is a generally-received rule, that when property lawfully captured has been twenty-four hours in the hands of the captors; or, if captured at ſea, has been conducted into the middle of a fleet, or into a free port; the right of the original proprietor ceaſes, and a third party may lawfully make an acquiſition of it. In ſuch caſes, it is preſumed that the original proprietor conſiders his property as loſt, or has given up all intention of recapturing it.

As to the right of *poſtliminium*, it is to be obſerved, that, when a power ſucceeds in reconquering a country, or recapturing a veſſel, it ſhould ſeem, from the rigour of the law of nations, that the reconquered territory, or veſſel, as well as all property, of whatever deſcription, found therein, ought to return to the original proprietors. This principle is ſtrictly adhered to, with reſpect to national and immoveable property; for, 1. The national domains return to the ſovereign along with the ſovereignty; and the ſovereign ought, of courſe, to re-eſtabliſh the conſtitution exiſting previous to the conqueſt. 2. Such immoveable property belonging to the ſubjects as has been ſeized on by the enemy, returns by virtue of the right of *poſtliminium* to the original proprietors; but, as to moveable property taken in a land-war, the right of *poſtliminium* ceaſes when the booty has been twenty-four hours in the hands of the captors; and, on the contrary, the right of *poſtliminium* operates when the booty is retaken in leſs than twenty-four hours. In maritime war, 1. If the recapture be made by veſſels of the ſtate, the recaptured veſſels and merchandiſe return to the original proprietors, after a certain proportionate deduction to defray the expences of the recapture. 2. If the recapture be made by a privateer, neither the veſſel nor merchandiſe returns to the original proprietor, except, 1. when the recapture is made within twenty-four hours, and even then only upon condition that the proprietors give up a third for the expenſes of recapturing; 2. when the capture has been made by pirates; or, 3. when it has been made againſt the laws of wars in general, as, for inſtance, on a neutral ſea. But the exceptions do not hold good in the two laſt caſes, unleſs the recapture is made from the firſt captors.

Safeguards are ſometimes granted by the commander-in-chief, for the purpoſe of protecting, from the ravages of the invader's troops, certain villages, eſtates, or other detached poſſeſſions, as villas, farms, and the like, belonging to the ſubjects of the enemy or of neutral powers. Theſe ſafeguards are granted at the requeſt of the proprietors; conſequently, they ought to be proviſioned and paid by them; and, in caſe of a counter-invaſion, by which the firſt invaders are driven from the country, the inviolability of the ſafeguards ought ever to be reſpected by the victor; who ought beſides to ſend them in ſafety to the commander who has condeſcended to grant them.

Sometimes the invader grants letters of protection, or other tokens, certifying that ſuch or ſuch places are under his ſafeguard.

In *battles*, the laws of war ought to be adhered to with the utmoſt ſtrictneſs, as well with regard to the arms made uſe of, as to the treatment of the vanquiſhed.

The conqueror, or he who remains maſter of the field of battle, ought to take care of the wounded, and bury the dead; and it is againſt every principle of the laws of war, to refuſe or neglect to do either. But, as it is ſometimes a queſtion, who is maſter of the field; in ſuch a caſe, a truce is generally agreed on for ſome days, during which both ſides bring in their own wounded, and bury their own dead.

The taking of a *fortreſs*, or fortified town, is effected by *ſurpriſe*, by a *blockade*, or by a *ſiege*: in the two laſt caſes the place either ſurrenders by capitulation, or is taken by aſſault, after being ſummoned in vain; and, according to laws of war, this ſummons ought to precede the aſſault; and, indeed, it is repeated ſeveral times, before the aſſault is determined on. All the means neceſſary to the reduction of a fortreſs are juſtified by the laws of war; conſequently there are caſes, which may authoriſe the demolition or burning of the ſuburbs; but, except in caſes of neceſſity, it is now admitted that the beſiegers ought to direct their artillery againſt the fortifications only, and not intentionally againſt the public edifices. There are ſome caſes however which will juſtify the beſieger in threatening to burn the public edifices; for inſtance, to deter the beſieged from making ſignals from the towers or ſteeples, by the tolling of bells or the like.

If a fortreſs or fortified town ſurrenders by *capitulation*; on that capitulation depends the ſtate of the garriſon, arms, and warlike ſtores, and of the inhabitants and their property. The terms of a capitulation depend entirely upon circumſtances; but, if the place, after being duly ſummoned, refuſes to ſurrender, and is taken by aſſault, thoſe found in it are obliged to ſubmit to the diſcretion of the victor: all the garriſon can expect is, to have their lives ſpared, if they immediately lay down their arms. In this caſe it is not lawful to take the life of the governor nor of the garriſon; and no menaces of this ſort ought to be uſed in the ſummons; for their lives can only be juſtifiably taken, when the defence has been conducted againſt the rules of war. And it is cuſtomary for the victor on ſuch occaſions to forbid pillage.

Conventions are often entered into between belligerent powers, either at the beginning or in the courſe of the war, for general purpoſes. By theſe *general conventions* they may engage not to make uſe of particular arms, or certain means of injuring each other; or ſettle the conditions and manner to be obſerved in the exchange or redemption of priſoners of war; or make arrangements relative to paſſports, ſafe-conducts, flags of truce, contributions, and the like. The courſe of a war, of any extent, muſt ever furniſh occaſions for entering into *particular conventions*.

Such

Such are, 1. Capitulations, by virtue of which a body of troops, a fortreſs, a town, a province, or a country, ſubmits to the enemy on certain conditions. 2. Arrangements concerning paſſports, ſafe-conducts, ſafe-guards, the neutrality of certain places, provinces, and the like. 3. Suſpenſions of hoſtilities for a certain time, ſuch as take place between the beſiegers and beſieged after an expedition, and between armies after a battle. 4. Truces.

Truces, inaſmuch as they include ſuſpenſions of hoſtilities, import, in general, a ceſſation of all hoſtility, and a deſiſting from all enterpriſes which the enemy would have been able to hinder the execution of, if no truce had exiſted. Truces, properly ſo called, whether made for a definite or indefinite time, imply an obligation on the parties to revoke them, before they recommence hoſtilities; and, according to a generally-received practice, this revocation ought to take place three days at leaſt before the re-commencement thereof.

When a general truce is agreed on for ſeveral years, ſuch a truce differs from a peace in this reſpect only; that the diſpute, for which the war was undertaken, remains undecided, and that, the truce once expired, both parties may again have recourſe to arms, without the ceremonies that uſually precede a war. It is, however, very rarely that ſuch truces are made, though there are ſome examples; ſuch as the truce between Spain and the United Provinces in 1609, for twelve years: and between the emperor, France, and Spain, in 1684, for twenty years.

The manner of *treating* with the enemy is as follows. 1. According to modern practice, when the beſieged hoiſt a flag of truce, (a white flag,) they are underſtood to aſk thereby for a ceſſation of hoſtilities, and for a parley, in order to capitulate. In that caſe, after the beſiegers have anſwered their ſignal, hoſtilities immediately ceaſe on both ſides, and perſons of confidence are ſent to treat. 2. When a veſſel hoiſts a flag of truce, it is conſidered that ſhe has ſurrendered. 3. In conformity to long-eſtabliſhed cuſtom, the drums and trumpets, (which for ſome centuries paſt have, on theſe occaſions, ſupplanted the ancient heralds,) as well as the perſons ſent to treat, bearing the uſual ſignals of peace, are allowed to paſs in ſafety to the enemy, and, while with him, to enjoy an entire inviolability; that is, provided they do nothing beyond their functions, and contrary to the laws of war. 4. Paſſports and ſafe-conducts are granted on both ſides to thoſe who are ſent to treat, in order that they may paſs unmoleſted through the territory or camp of the enemy.

All the conventions entered into in the courſe of the war are full as obligatory as if they were made in time of profound peace. Were it otherwiſe, it would be ridiculous to make ſuch conventions; and it would moreover be impoſſible to treat with an enemy at all, and conſequently impoſſible to terminate a war. In ſhort, ſuch conventions are as ſacred as treaties; and a deviation from the former, can never be juſtifiable, but in caſes that would juſtify a deviation from the latter.

Hoſtages are alſo ſometimes delivered for the fulfilment of conventions; and, if the contracting party breaks his engagements, it is allowable to treat his hoſtages with ſeverity, but not to take their lives, unleſs for ſome crime that they have committed, or by way of retaliation.

4. Allies. The forces of a ſovereign may be under the neceſſity to join and act with thoſe of another: ſometimes in the performance of poſitive treaties of alliance, and ſometimes in conſequence of a particular connection exiſting between him and ſuch power; or he may do it from his own choice: in none of which caſes does he act againſt the law of nations, if the cauſe he eſpouſes be not unjuſt. To a ſovereign ſo ſituated there ariſe two ſorts of rights and obligations: 1. Relative to the power whom he aſſiſts. 2. Relative to the enemies of that power.

An alliance may be ſimply *defenſive*, but it is generally *offenſive* at the ſame time. An alliance is ſimply *defenſive*, when the allies promiſe to aſſiſt each other, in caſe either ſhould be attacked firſt, or be in danger of an attack from ſome other power. It is *offenſive and defenſive* when they promiſe to aſſiſt each other, not only in caſe of a firſt attack, but even ſhould either of them make the firſt attack on ſome other power. Both ſorts of alliances are either general or particular. They are *general*, when they extend to all wars in which either of the allies may be engaged; and *particular*, when directed againſt a particular power, or confined to a particular war.

Alliances are formed ſometimes before, and ſometimes after, the beginning of a war. As to their duration, it is ſometimes for a definite, and ſometimes for an indefinite, ſpace of time; and ſometimes for ever. The allies either promiſe a ſpecific number of troops or veſſels, or both; or they promiſe a certain aid in money; or to aſſiſt each other with all their forces; or, finally, to make a common cauſe.

Subſidies muſt be diſtinguiſhed from alliances. A treaty of ſubſidy is a convention by which one power engages, in conſideration of a certain ſum or ſums of money to bring into the field a certain number of troops, to be in the pay and ſervice of another power: the time for which ſuch troops are to remain in ſuch ſervice is ſometimes determinate, and ſometimes not. A power often receives a ſubſidy, in conſideration of which it engages to keep a certain number of troops in readineſs for ſervice, and ſometimes only to augment its own forces. And ſometimes treaties of ſubſidy have no other object than to engage a power, in conſideration of a ſum of money, to remain neuter.

At the breaking out of a war, diſputes frequently ariſe among the allied powers concerning the fulfilment of their treaties of alliance. Sometimes the power from which the promiſed aid is ſolicited denies or calls in queſtion the exiſtence of the caſe for which the treaty was made, (*caſus fœderis*;) and ſometimes alleges exceptions, which diſpenſe with the fulfilment: thus the promiſed aid of allies has been often ſolicited in vain. If the promiſed aid be given when demanded, it is then to be ſhown in what manner the war is to be carried on: and here there is an eſſential diſtinction between a war which the allies carry on in common, and a war in which one of them does no more than furniſh the other with a number of auxiliary troops. In a war carried on in common, 1. The allies act in concert in the appointment of a commander-in-chief; in planning the principal military operations; and, in ſhort, in all the arrangements concerning the war. 2. The allies ought to divide between them the booty and conqueſts made by their common arms. 3. The right of *poſtliminium* ought to be ſtrictly obſerved between them.

No ally is juſtifiable in making a ſeparate peace, or declaring himſelf neuter; unleſs, 1. that neceſſity obliges him ſo to do; 2. that the other ally has firſt failed of his engagements; or, 3. that this ally refuſes to make peace, though the enemy offers to conclude one on equitable terms. Still leſs is one ally juſtifiable in joining the enemy of the other; and this natural obligation not to deſert an ally, is uſually confirmed in expreſs terms in treaties of alliance.

In a war in which one ally does no more than furniſh the other with a number of troops, the former takes the name of *auxiliary*, and the latter that of *principal*, in the war. *Auxiliary troops*, though moſt commonly paid by an auxiliary power, are generally at the entire diſpoſition of the principal. The *auxiliary* has no right to any ſhare in the booty or conqueſts; and the principal has the ſole right of making peace, provided the auxiliary be included in it: the rights of both the principal and auxiliary powers however depend, in great part, on the treaties of alliance between them.

Subſidiary troops are thoſe ſent by one power to the aid of another, in conſequence of a treaty of ſubſidy made between them: ſuch troops, unleſs the treaty contains reſtrictions to the contrary, are entirely at the command of him to whoſe aid they are ſent; nor can he to whom they belong claim any ſhare in the booty or conqueſts, or any

right to interfere in the negociations for peace. In general, he who gives the aid may require of him who receives it to aid him in his turn, if he ſhould be in danger in conſequence of having given it; but a compenſation for loſſes is never made between allies who carry on the war in common.

An ally, of whatever deſcription, ought to commit no violence againſt his ally; and ought at leaſt to obſerve towards him the ſame friendly conduct that his duty requires him to obſerve towards a neutral power.

In ſtrictneſs, a belligerent power has a right to treat as his enemies all the powers which lend aſſiſtance to the enemy, from whatever motive, or in conſequence of whatever treaty. However, policy has induced the powers of Europe to depart from this rigorous principle. They now admit, 1. That a ſovereign who furniſhes troops in virtue of a treaty of ſubſidy, does not thereby become the enemy of the power againſt which theſe troops act. 2. That, as long as a ſovereign ſends to the aſſiſtance of his ally no more than the number of troops ſtipulated for in the treaty of alliance, and does not authorize them to ſerve upon any other footing than the one ſpecified in the treaty, ſuch ſovereign ought to be looked upon as an auxiliary, and not as the enemy of the power againſt which his troops make war; and, of courſe, that ſuch ſovereign ought to be permitted to enjoy his rights of neutrality. This is more eſpecially the caſe, when the aid of an auxiliary is the conſequence of a treaty of general *defenſive alliance* concluded before the beginning of a war.

Some powers have claimed the rights of neutrality, even while they were furniſhing the greateſt part of their troops, and contributing principally to the reſiſting of the enemy, and the continuation of the war. But imperative circumſtances and motives of policy alone can induce the enemy to treat ſuch powers as neuter; for, when two powers become allies in form, by carrying on the war in common, and with all their forces, it is clear that they may and ought to be treated as enemies by the adverſe party.

5. NEUTRALS. A ſtate not engaged to either of the belligerent powers by a treaty of alliance, or bound to them by the ties *vaſſalage*, aſſociation, or the like, is under no perfect obligation to take a part in the war. Provided, then, that ſuch ſtate obſerves what is required of it, by a ſtrict neutrality, it has a right to inſiſt upon being treated as neutral by the powers at war; and, conſequently, thoſe powers ought to deſiſt from all violences towards it, except ſuch as abſolute neceſſity may authorize.

To obſerve an *entire neutrality*, a ſtate muſt, 1. Abſtain from all participation in warlike expeditions. 2. It muſt grant or refuſe nothing to one of the belligerents, which may be uſeful or neceſſary to ſuch power in proſecuting the war, without granting or refuſing it to the adverſe party; or, at leaſt, it muſt not eſtabliſh an inequality in order to favour one of the parties more than the other. The moment a neutral power deviates from theſe rules, its neutrality is no longer *entire*, but *limited*; and indeed, though neutral ſtates ſometimes promiſe men, and enter into a ſort of conventional neutrality, a limited neutrality is all that the laws of neutrality impoſe. A ſovereign who lends aſſiſtance to one of the belligerents, either in troops or money, cannot in ſtrictneſs claim the treatment due to a neutral power.

Every ſovereign has a right, in time of peace, to grant or refuſe to another power the liberty of raiſing troops in his territory; of marching a body of troops into or through his territory; and may grant to one power what he refuſes to another. In time of war he may do the ſame. He has a right to grant or refuſe to the belligerents, and obſerve the ſame inequality towards them, as he did in time of peace, without thereby deviating from the diſpenſation of that impartiality which ought to be entertained by every neutral power.

In practice it is generally admitted, that it is no more lawful in time of war than in time of peace to enter with an armed force into a neutral territory, without previous permiſſion; but neceſſity is ſometimes pleaded in juſtification of a tranſgreſſion of this rule. Every inequality, obſerved by a neutral towards the belligerents, is looked upon as being, in fact, contrary to the laws of neutrality; and either of the belligerent powers looks upon itſelf as having a right to take by force what a neutral power refuſes to grant, if the neutral grants it to the other belligerent. An equality real or apparent, obſerved by a neutral power, does not always ſatisfy the belligerents; one of theſe ſometimes hinders by force the enemy from obtaining from a neutral what, if granted to both, would be more uſeful to the enemy than itſelf; ſo alſo, one of the belligerent powers procures, by force, what, if refuſed to both, would be more diſadvantageous to it than to the enemy; in both theſe caſes, an unreal impartiality is allegcd, or elſe the law of neceſſity.

Hoſtilities begun or continued in a neutral territory muſt violate the rights of ſovereignty of the neutral power; and therefore the law of nations forbids the belligerent powers to begin or continue hoſtilities in the territory, or on the parts of the ſea, under the dominion of a neutral power. This point is acknowledged by the cuſtoms and general practice of the nations of Europe, and is often confirmed by treaty: nothing is more common than ſtipulations not to commit or ſuffer hoſtilities in a neutral territory; and, though there are but too many examples of violations of this kind, yet they always produce complaints, and can only be juſtified by extreme neceſſity. It cannot, then, be lawful to take the property of an enemy in the territory of a neutral power; and, of courſe, the booty that a captor brings or ſends into a neutral territory cannot, on that account, be claimed by the original proprietor. The captor may even ſell ſuch booty in a neutral territory, if it has not been otherwiſe ſettled by treaty.

The property of a neutral power, whether movable or immovable, found in the territory of an enemy, ought to be exempt from hoſtilities; the belligerents have no right whatever to touch it. Accordingly, this rule is obſerved as much as the troubles and confuſion of war will permit.

It is doubtful if the law of nations authorizes a ſovereign, except in caſes of extreme neceſſity, to lay an embargo on the neutral veſſels that happen to be in his ports at the breaking out of a war, and to ſeize on them in order to employ them in the ſervices of his fleet, on paying them for their ſervices. Cuſtom has, it is true, introduced the exerciſe of this right; but it has been aboliſhed by a great number of treaties, as for inſtance between France and Holland in 1739, and between Ruſſia and England in 1734 and 1766.

One of the moſt important points to be conſidered in reſpect of the laws of neutrality, is the *commerce* carried on between neutral and belligerent nations.

The right that a nation enjoys, in time of peace, of ſelling and carrying all ſorts of merchandiſe to every nation that chooſes to trade with it, it enjoys alſo in time of war, provided that it remains neuter. It therefore follows, that a neutral nation may permit its ſubjects to carry all ſorts of merchandiſe, including arms and ammunition, to the powers at war, or to that with which this commerce may be carried on to the greateſt advantage. So long as the ſtate, that is the ſovereign power in a neutral nation, does not interfere, by prohibiting commerce with either or all the powers at war; ſo long, it would ſeem, the nation does not tranſgreſs the laws of neutrality. HOWEVER, *a power at war having a right to hinder its enemy from reinforcing itſelf, by the reception of warlike ſtores, neceſſity authorizes their ſeizure*, to prevent merchandiſe of this kind from being conveyed to the enemy by a neutral power; but, in all ſuch caſes, the captor ought to content himſelf with ſequeſtering ſuch merchandiſes till the end of the war; or, if he applies them to his own uſe, he ought to pay the full value to the neutral proprietor. The right of confiſcating ſuch merchandiſes, or the veſſel on-board of which they are found, ſeems not to belong to a belligerent,

rent, except when the neutral, from whom they are captured, has violated the laws of neutrality, or when this confiſcation is made in a place under the dominion of the ſovereign who makes it.

In conſequence of this laſt principle, and of the rights of ſovereignty in general, every ſovereign engaged in a war may prohibit all commerce whatever with the enemy, 1. In his own territory and maritime dominion; 2. In the places taken from the enemy; 3. In ſuch places as he is able to keep *ſo perfectly blockaded* as to prevent every foreigner from entering. In all theſe caſes he may attach penalties to the tranſgreſſion of his prohibitions; and thoſe penalties may extend to the confiſcation of goods or veſſel, or to the corporal puniſhment of thoſe who aſſiſt in carrying on ſuch prohibited commerce.

As it is lawful for a belligerent to confiſcate the goods and veſſels of an enemy; ſo alſo a belligerent cannot exerciſe hoſtilities in a neutral place, nor confiſcate property belonging to neutral ſubjects; yet, according to Grotius, (*lib.* iii. *c.* 6. § 26, n. 3.) and the beſt writers on the law of nations, he has full power to confiſcate the goods of an enemy found in a neutral veſſel, navigating on a free or neutral ſea.

A belligerent power has a right, even on a free ſea, *to bring a neutral veſſel to*, and inſiſt upon a proof of her neutrality. In caſe of a diſpute as to the lawfulneſs of a prize made on a free ſea, ſince neither the ſovereign of the captor, nor the ſovereign of the proprietor, has, according to the natural law, an excluſive right of judging in the cauſe; it muſt according to the law of nations be decided in the proper admiralty-court.

The modern law of nations differs in many reſpects, touching neutral commerce, from the univerſal law of nations.

It is generally admitted, that a neutral power ought not to tranſport to either of the belligerent powers merchandiſes unequivocally intended for warlike purpoſes, as arms, veſſels of war, and the like. The liſt of thoſe merchandiſes, commonly called *contraband of war*, has been differently ſettled in different treaties of commerce: ſometimes this liſt has compriſed ſhip-timber, cables, hemp, coined money, tobacco, proviſions, and the like; and at other times ſome of ſuch merchandiſes have been expreſsly declared not contraband. Beſides this, the maritime powers do uſually, at the beginning of a war, iſſue declarations, to notify to neutrals what merchandiſe they ſhall conſider as *contraband of war*, and to forewarn them of the penalties they intend to inflict on thoſe that ſhall be found conveying them to the enemy.

A nation that authoriſes contraband commerce is looked upon as having violated its obligations of neutrality; and the belligerent againſt which ſuch commerce operates confiſcates the contraband merchandiſe, and ſometimes the veſſel too. It ſeems to have been the rule formerly, and even now according to Bouchard, to confiſcate both, when the proprietor of the veſſel had knowingly and voluntarily loaded his veſſel with contraband merchandiſe, whether in whole or in part. At preſent this cuſtom is moſtly governed by treaties of commerce; and, where there are no treaties, the conduct of the belligerents is extremely various.

With reſpect to merchandiſes which are *not contraband*, it is generally acknowledged by the powers of Europe that neutral powers have a right to tranſport them to the enemy, except it be into places under a blockade, and with which all commerce is prohibited.

Neutral merchant-veſſels ought, when out at ſea, to ſubmit to the cuſtomary examination, which has been almoſt uniformly confirmed by treaties of commerce made between the different powers; and, if *a neutral merchant-veſſel* refuſe to be examined, it may be forced to it; and, if ſuch veſſel defend herſelf againſt a ſhip of war, ſhe incurs the penalty of confiſcation.

When a prize has been made, the captor cannot appropriate it to his own uſe till it has been condemned as a lawful prize in the court of admiralty. Every ſovereign is authorized to inſtitute courts of admiralty, and every other ſuperior tribunal, for the purpoſe of determining on the legality or illegality of all prizes made by his ſubjects. In trials of this kind, the original proprietors of the prize, or thoſe who claim in their ſtead, are required to prove that the prize is not a lawful one. And Great Britain has eſtabliſhed this as a principle, that, if a neutral veſſel does not produce to the captor, when met at ſea, a ſufficient proof of her neutrality, ſhe ſhall be obliged to pay all coſts of ſuit; and France would not, during the war of 1778, admit any other proof but ſuch as was on-board at the time of the firſt examination by the captor.

It was formerly a rule generally adopted by the nations of Europe, with reſpect to an enemy's goods found in neutral veſſels, *to return to the proprietors the neutral goods taken on-board of an enemy's veſſel, and to confiſcate the goods of an enemy found on-board of a neutral veſſel.* However, during the late wars between the great maritime powers, the neutrals complained, that the belligerents, and in particular Great Britain, had encroached on their rights of neutrality; and, in conſequence of theſe alleged encroachments, the empreſs of Ruſſia, at the head of the northern ſtates, in 1780, attempted to eſtabliſh a new principle, viz. *that neutral veſſels make neutral goods*; that is to ſay, *that an enemy's goods found in neutral veſſels ought not to be confiſcated.* This ſhe cauſed to be communicated to the belligerents, with a vain declaration, as to Great Britain, that ſhe would maintain ſuch new general principle by force of arms. This was termed *the armed neutrality*, the principles of which were deſigned to overthrow the moſt ancient and eſtabliſhed uſages of the great maritime powers. The rules attempted to be enforced by this novel ſyſtem of armed neutrality, are, 1. That neutral powers have a right to enjoy a free trade with the ports and roads of the belligerent powers. 2. That neutral veſſels make neutral goods; that is, as before obſerved, enemy's goods found in neutral veſſels ought not to be confiſcated. 3. That no merchandiſes ſhall be reputed contraband, which have not been declared ſo in treaties made with the belligerents or one of them. 4. That a place ſhall not be conſidered as blockaded, except when ſurrounded by the enemy's veſſels in ſuch a manner as renders all entrance manifeſtly dangerous. 5. That ſuch principles ſhall ſerve as the baſis of all deciſions touching the legality of prizes. Some of the ſmaller maritime ſtates acceded to theſe new principles; but Great Britain has not, nor can it be expected that ſhe ever will adopt any of them, being ſo obviouſly directed againſt her tranſcendent ſovereignity at ſea.

6. MAKING PEACE. A war ought in ſtrictneſs to be put an end to, as ſoon as the enemy has obtained, or can obtain, the ſatisfaction demanded, a compenſation for the expenſes of the war, and ſecurity for the future. The duration of war however depends on what is termed *ſtate-policy*. Sometimes the demanded ſatisfaction is never obtained; and, at other times, the war is carried on for vengeance or conqueſt's ſake, after the ſatisfaction is, or may be, obtained.

The firſt overtures for peace are ſometimes made by one of the belligerent powers to the other; and ſometimes by a neutral power, their common friend. The negociations are alſo ſometimes opened by the belligerent powers themſelves, and ſometimes by a neutral power that interpoſes its good offices, or becomes a mediator. The mere interpoſition of good offices differs from mediation. The latter ſuppoſes the conſent of the two parties; and this can only give a right of aſſiſting at the conferences. The good offices of a neutral power may therefore be accepted, and its mediation refuſed; as Ruſſia did with reſpect to France, in the war of 1742 with Sweden.

Theſe negociations for peace are carried on at the court of one of the belligerent powers, or at that of a mediator, or elſe at ſome other place, named by the parties as the place of aſſembly for the congreſs.

In treating for peace, *preliminary conventions* are ſometimes

times entered into; as, for inſtance, where one of the belligerents ſets up a claim, with reſpect to which a poſitive ſatisfaction is demanded before the claimant will liſten to the propoſitions of peace. Such was the claim of Great Britain with reſpect to the renunciation of Philip V. of the crown of France, and with reſpect to *Aſſiento* before the treaty of Utrecht.

Before a congreſs is aſſembled, the belligerent powers make arrangements with reſpect to the time and place of aſſembling, the powers that are to be admitted to aſſiſt at it; the neutrality of the place and its environs; the ſecurity of the miniſters, and their meſſengers; the ceremonial to be obſerved at the congreſs. Theſe ſometimes occaſion a ſecond ſort of preliminary conventions, and even preliminary congreſſes.

It is now the cuſtom, in order to avoid diſputes with reſpect to the ceremonial, to give the miniſters who are ſent to the congreſſes the title of plenipotentiaries only, and not that of ambaſſadors. Theſe miniſters interchange their full powers, or otherwiſe put them into the hands of the mediator.

The conferences are carried on by the miniſters alone, or with the participation of the mediator. Sometimes they are held in a public building; ſometimes in the dwelling of the mediator; and ſometimes at thoſe of the miniſters alternately; on which occaſions, the precedence is yielded to the mediator.

Theſe conferences are continued, either verbally or in writing, till the treaty is finiſhed, or till, after uſeleſs attempts to come to an amicable adjuſtment, the congreſs is diſſolved.

When a treaty is to be negociated by the belligerent powers, as the negociations can hardly ever be brought to a cloſe by writing, of which the negociation between France and England, in 1761, is an inſtance, both parties have recourſe to miniſters plenipotentiary; who in ſuch caſe ought, 1. to be ſent by the two powers at the ſame time; 2. to be furniſhed with full powers; 3. to carry with them letters of credence addreſſed to the ſecretary or miniſter of ſtate, as they do not uſually obtain an audience; 4. to be furniſhed with paſſports by the enemy. Thus, when their quality and character are authenticated, they enter into conferences with the ſecretary or miniſter of ſtate, or with the mediator if there be one, and continue them till the articles of the peace are concluded on, or till they are recalled or ſent away.

Preliminary articles of peace, are generally formed when the negociators have come to an agreement on the points which are to ſerve as the baſis of a treaty of peace, and there remain certain difficulties to be done away, which are not of importance enough to induce the parties to continue or renew the war. Thoſe treaties differ as to their form; ſometimes they are mere minutes; and ſometimes they have all the clauſes uſually found in formal treaties. In general, when ſigned and *ratified*, they are obligatory, even before the definitive treaty is concluded, and remain ſo if the definitive treaty ſhould not be concluded, unleſs it has been otherwiſe agreed on. When the preliminary articles are concluded upon, the parties continue to negociate on the points that remain unſettled, in order to conclude and ratify the definitive treaty.

In a *definitive treaty* of peace, the *general* articles, which bear a ſtrong reſemblance to each other in all treaties of peace, are diſtinguiſhable from the *particular* articles, which, being proper to the treaties in which they are inſerted, are not ſuſceptible of compariſon. After the introduction, uſually follow the *general* articles, reſpecting the reeſtabliſhment of peace and friendſhip, and at what periods of time hoſtilities ſhall ceaſe in different parts; alſo contributions, the exchange or releaſe of priſoners of war, and general amneſty. Then follow the principal *particular* articles, which, after having ſpecified and renewed the treaties that are to ſerve as the baſis of the peace, treat of the matters concerning the deciſion of the diſpute which occaſioned the war, and particularly of what concerns the poſſeſſions, whether there are conceſſions or compenſations to be made, or whether the *uti poſſedetis* is agreed on. The treaty concludes with preſcribing, the time when, and ſometimes the place where, the ratifications are to be exchanged.

Separate articles are ſometimes added to a treaty of peace. They are of two different deſcriptions; the firſt contains principal points relative to the treaty, and its execution, and are ſometimes *ſecret* and ſometimes public. The ſecond are general, and of the nature of a *proviſo*: ſuch are the articles concerning the titles and the language made uſe of in the treaty. It is agreed in ſuch articles, with reſpect to titles, that, thoſe made uſe of in the treaty not being acknowledged by all, their uſe on this occaſion ſhall not be drawn into a precedent, or have any influence on the future; and, with reſpect to the language, that the language made uſe of in the treaty is a matter of choice or convenience, and not the effect of obligation, and that therefore its uſe on this occaſion eſtabliſhes no cuſtom or right. The Latin language, which was formerly made uſe of by nations of different languages, has generally yielded to the French, which is now moſt uſually made uſe of by the powers of Europe, as well in the conferences as in the treaty itſelf; but nations of different languages do not acknowledge the obligation of making uſe of it.

In reſpect to *the ſignature of treaties*; 1. The parties endeavour to avoid as much as poſſible the diſputes which too often ariſe on the ſubject. When the point of precedence is not decided, they adopt the alternation, or elſe enter their proteſts, or make reſervations. 2. The ſignature, as well as the exchange of ratifications, is either without ceremony, or ſolemn; in the latter caſe, the miniſters plenipotentiary uſually aſſume the character of ambaſſadors, either for the ſignature or the ratification.

Other powers, beſides the principal contracting parties in a treaty of peace are often mentioned therein, as *comprehended*, as *acceding*, or as *guarantees*.

Powers *comprehended* in a treaty are, 1. The allies and auxiliaries of the principal contracting parties, or in general all who have taken part in the war, in order that the effects of the peace may be extended to all. 2. Sometimes other powers are comprehended or inſerted from other motives.

A power *accedes* to a treaty by a ſeparate act, accepted by the contracting parties. It accedes as a principal contracting party with all the rights and obligations of ſuch party; or merely to give its conſent, when the principal contracting parties have diſpoſed of ſome one of its rights, with reſpect to which its conſent may appear neceſſary; or elſe it accedes as a mark of honour.

The *guarantee* of a treaty by foreign powers is ſometimes called in. This guarantee may extend to the treaty in general, or be confined to ſome particular article or articles of it; in the firſt caſe, it is called general; in the other particular: it alſo may be for one of the contracting parties only, or for all of them. In general, the *guarantees* engage to maintain the treaty, in promiſing to lend aſſiſtance to the party who ſhall complain of an infraction of it, and who ſhall demand ſuch aſſiſtance. But a guarantee has no right to oppoſe the alterations that the contracting parties may afterwards make in their treaty by mutual conſent; and, conſequently, he is not obliged to guarantee the treaty when ſo altered.

As to the *execution* of a treaty; the treaty of peace being ſigned and ratified, it only remains to publiſh it and put it into execution. The firſt is generally done with ſolemnity; the latter very often meets with a great deal of difficulty, particularly when an invaded territory is to be evacuated, or provinces are to be ceded to a power that is not in poſſeſſion of them at the time of making the treaty of peace. Theſe difficulties ſometimes occaſion particular conventions, and even *congreſſes of execution*; and by ſuch means the recurrence to new hoſtilities may be prevented.

To conclude. When we ſee a nation, or its miniſter, refuſe to acknowledge authorities generally received by other ſtates; it is a clear ſign, that it means no longer to obey the old law of nations; in other words, that it means to withdraw itſelf from its ſet or claſs. Of this the French, throughout the progreſs of their revolution, have afforded repeated inſtances. We may juſt notice the correſpondence between the American government and the French envoy, Genet, in the year 1795. Being told that his proceedings were contrary to the ſpirit of the doctrines of Grotius and Vattel, he replied, that he knew nothing about Grotius or Vattel, but that his conduct was conformable to the doctrines of the French conſtitution. This was either ignorance or deſign: if the one, it can form no caſe; but, if the other, it was almoſt a direct notice, that the French meant to retire from the obedience they had paid to the code of European law. In the latter caſe, therefore, Genet was not a fool, as he has been called, but merely conſiſtent. Conſiſtent alſo they have remained, in this particular, throughout all their changes of governments and of rulers; ſo that we might notice a ſeries of acts wherein they have ſhown a total diſregard of good faith and of the law of nations; but, as we have given an early and avowed inſtance, it may be ſufficient to mention one more, equally avowed, and the lateſt that has come to our knowledge; namely that of ſeveral Ruſſians having been put to death, for no other crime than that of being faithful to the cauſe of their country, in endeavouring to render the poſſeſſion of Moſcow of as little avail as poſſible to the invaders, by deſtroying it. It now appears that this atrocious act was attempted to be covered by the mock ſolemnity of a military commiſſion, Sept. 24, 1812, at which the charge of ſetting fire to the city was formally made againſt twenty-ſix Ruſſians, ſeveral of whom were natives of Moſcow, and for which ten of them were ſentenced to death; and the remaining ſixteen, although it was acknowledged that there was not evidence ſufficient to convict them, were ordered to be detained in the priſons of Moſcow, to prevent the miſchief they might commit! The fact was announced in the French official bulletins; and the proceedings of the military commiſſion were detailed in the French newſpapers. Had it not been for their own records thus publiſhed to the world, it would perhaps have ſcarcely been believed that ſo wanton and barbarous a violation of every principle of juſtice had really been committed. A military commiſſion, conſiſting of French officers, is appointed to try twenty-ſix natives of Ruſſia, upon no other charge than that of the fair exerciſe of the rights of war againſt an invader; and by that military commiſſion ten of theſe individuals are condemned to death, and the reſt to linger in a priſon!

II. Of some ANCIENT CODES.

The civil laws of nations form the moſt inſtructive part of their domeſtic hiſtory; whilſt, from the general intereſt in their preſervation, they are the moſt authentic documents of the countries to which they relate. Hiſtorians, in their narratives of the various empires whoſe riſe, progreſs, or fall, they have recorded, have in general given a ſufficient account of the forms of government, and often of the worſhip, of each ſtate forming the ſubject of their hiſtories; but few have detailed their civil laws; here and there a cuſtom is to be gleaned, but political and military inſtitutions have more immediately attracted their notice. Various reaſons may account for this ſilence. The hiſtorian, in writing the hiſtory of his country, may have deemed it uſeleſs to give to his countrymen an account of their own laws, which all are generally ſuppoſed to know; and, in writing that of others, or even of his own, to have dived into and traced the multiplied and nice diſtinctions drawn in the judicial deciſions and laws of every country of cultivated intellect, would have been a taſk extremely laborious, and muſt often, from the difficulty of obtaining accurate information, be of very doubtful ſucceſs. The contempt among the Greeks for every thing not their own, except money or merchandiſe, might alſo deprive them of any ſerious intereſt in the civil laws of ſtrangers; and beyond the writings of the Greeks our records as to early hiſtory are few. Military men can ſee a wide difference in the detail of military operations when ſtated by one author who is familiar with the art of war and by another who is wholly unacquainted with it; the hiſtory of the civil laws of countries by a ſtranger to thoſe countries is, from the intricate nature of the ſubject, ſtill more liable to mis-ſtatements and error.

The poſitive laws handed down to us by the ſacred writings prior to the flood, or even to the delivery of the Decalogue and Jewiſh law, are few. We find the inſtitution of marriage, (Gen. ii. 24.) the authority of the huſband eſtabliſhed over the wife, (iii. 16.) the power of the elder brother over the younger, (iv. 79.) the abuſe of it arraigned, and the indignation of the divinity at murder, (v. 9.) the heſitation of the murderer ſhowing the conſciouſneſs and knowledge of guilt, and his own denunciation againſt himſelf of the neceſſary ſatisfaction of life for life, (iv. 14.) a ſatisfaction which after the deluge was again required in the commandment delivered to Noah, (ix. 5.) But, beyond theſe, other laws muſt have been delivered to or preſerved by this ſecond father of mankind; he deſcended from the favoured race among the ſons of Adam. Noah might perſonally have derived his inſtructions from the grandſons of Seth, and they from their anceſtor, who lived eight hundred years coeval with the firſt man. The Jews by tradition attribute to Adam ſix main precepts, viz. Not to worſhip idols, not to commit murder, not to commit adultery, not to blaſpheme, not to ſteal, and to adminiſter juſtice. Theſe form part of the oral law; moſt of them are to be found in different parts of Geneſis, but there are other precepts preſumed to be of equal antiquity. Honour to parents was no leſs a precept before the delivery of the Decalogue; and the irreverence of Ham was puniſhed by the curſe of his father, a curſe which the ſucceeding patriarchs of the race of Shem ſeem to have kept in view, in their anxiety leſt their children ſhould mix with an ignoble race, in the oath and aſſurance required by Abraham from his ſteward, the prohibition of Iſaac to Jacob, and the grief occaſioned to the former and Rebecca on the marriage of Eſau with one of the deſcendants of that degraded generation. Unnatural crimes were avenged by the immediate judgments of Heaven; and, in the puniſhment of four whole cities, man was again reminded, although Providence had aſſured him a ſecond univerſal deluge ſhould not take place, that general as well as individual iniquity ſhould not eſcape his viſitations. Rape is alſo numbered among the liſt of crimes, and puniſhed with the life of the offender. (Gen. ix. xxiv. xxvi. xxviii.)

The obligation upon the younger brother of marrying the widow of the elder to raiſe up a family in his name, and the puniſhment for incontinency, ſeem not wholly confined to the patriarchal race, though no inſtances out of it are given; but it is fair to infer, that other general ordinances exiſted in theſe primeval times, beyond the few recorded; for the Omnipotent beſtows his bleſſings upon Abraham *becauſe*, as the text ſays, *he obeyed my voice, and kept my charge, my commandments, my ſtatutes, and my laws*. Gen. xxvi. 5.

Upon the diſperſion of the various families over the earth, we begin to trace the title to, and property in, land. If one was chief of a family, his ſuperiority merely conſiſted in the government of the hive, without claiming any ſhare or right in the earnings or labour of others not of his family; each occupied and held for himſelf, and diſpoſed of his acquirements as he pleaſed, by gift to his children, or ſale even to a ſtranger. Abraham purchaſed his burial-place from an individual of Heth, whom he requeſted the people to entreat to ſell it to him; and Jacob purchaſed a field for a ſimilar purpoſe from the ſons of Hamor. The Egyptians held their lands in like manner

independently; and, not until they ſold themſelves and their properties to Joſeph in the name of Pharoah, do we find an univerſal right poſſeſſed or acquired by a ſovereign in the land and in the ſubject. If the firſt occupant held it till his death, it was divided generally among his male deſcendants; but in this diviſion, in the earlieſt times, the firſt born ſeems to have acquired an advantage from his primogeniture; though the younger ſons were not left unprovided for. The ſituation of the daughters was far from enviable. Job indeed gave his daughters a ſhare with his ſons, and the era of this venerable patriarch is ſuppoſed to be of the earlieſt date; but, except in this inſtance, they appear to have had no ſhare whatever in the ſucceſſion. There is but one way of ſolving this difficulty; that they were more generally ſold than portioned to the bridegroom.

The want of children has been ſupplied among moſt nations by adoption, but, whatever were the motives that actuated man on this head, the firſt inſtance recorded proceeded from the amiable emotions of pity and tenderneſs in a female breaſt for an expoſed and deſtitute infant.

Theſe, with the exception of ſervitude which will be ſpoken of hereafter, form the greater part of the civil or criminal inſtitutions that have reached us relating to man in the early ages of the world. Whether any body of laws was compiled before the delivery of the Decalogue is diſputed: the art of writing was known perhaps long prior to it, and it is as probable that it was invented within the many centuries prior to the flood as within the few that elapſed before its ſuppoſed invention after. Job ſpeaks of it more than once, and in a manner to ſuppoſe it in general uſe. The pillar of Seth alſo, mentioned by Joſephus, will give further colour to the ſuppoſition, though upon the confuſion of languages new modes of writing muſt have been adopted. See Gen. xxiii. xxiv. xxv. xxvii. xxix. xxxiii. xxxiv. Job xix. xxxi. xlii. and Joſephus Antiq. ch. ii. It is hardly neceſſary for us to continue theſe references, as the Scriptures are in the hands of every one.

Of the Jewish Law.

The Jewiſh law may be divided into the moral, the ceremonial, the civil, and the criminal; it is diſperſed through the books of the Pentateuch, and, except in that of Leviticus, exhibits no arrangement, and is but a ſort of comment upon the Decalogue, containing, according to the commentaries of the learned among the Jews, 365 affirmative and 248 negative precepts.

The liberty of the Jew, reduced to its juſt bounds, conſiſted, as Fleury has obſerved, in being permitted to do all that the written law delivered to him did not poſitively prohibit, and in being obliged to do no more than it commanded. He was not in other reſpects ſubject to the will or rule of any general governor. To make a right uſe of this liberty, reverence to parents was early inculcated; the child was commanded to honour his father and his mother; (Exod. xx. 12.) and this neceſſary honour and obedience might be enforced and the breach puniſhed by correction of the offender. His life was not abſolutely in the power of the parent, nor does it appear that he could be diſinherited, but the prodigal and rebellious ſon might, after all paternal correction had failed of effect, be carried by his father and mother before the elders, and there be ſtoned by the people. (Deut. xxi. 18.) Reſpect to age was alſo neceſſarily inculcated by a law which did not propoſe to the view of the ſubject the awe of power in the hands of a ſingle man. The youth was commanded to riſe up before the hoary head, and to honour the face of the old man. (Lev. xix. 32.) The want of this check has been felt in every government that has not made it a leading object; and the evils reſulting from the weakening or rather the almoſt intire annihilation of paternal power are every day to be witneſſed.

The Jewiſh law was not leſs attentive to the duties of parents in educating their children than in affording them the means for ſuch education. The ſabbath was appointed the day for reſt, and to be ſanctified; and in every principal town, beſides the eight-and-forty cities allotted to the Levites, one of the latter uſually reſided, for the convenience of reading in ſynagogue the law to the people, as they are enjoined by Moſes.

The Iſraelites were the only race whoſe firſt inſtructions tended to elevate man to the right knowledge of his divine author, and of his duties towards him. Whilſt the ſurrounding nations were reared in the midſt of fable, and the tales of their nurſes conſiſted in the abſurd or laſcivious ſtories of their heathen divinities, the Jew was inſtructed in the only true knowledge. The father was commanded to teach the law diligently to his children, to talk of it when he ſat in his houſe, when he walked by the way, when he lay down, and when he roſe up; even to write it upon the poſts and gates of his houſe; to explain to his progeny the ceremonies of his religion, and the mighty things his deliverer had done for him. From this law he learnt the hiſtory of the world to the eſtabliſhment of his fathers in their land, the origin of all the nations of the earth, and more intimately of thoſe with which it was material for him to be acquainted. In a word, from this law he learnt his own civil laws, the ceremonies of his worſhip, the moral code, and the eternal truth of the divinity.

In a country where barrenneſs was a curſe, and progeny an honour and a bleſſing, and marriage rendered eaſy by a ſufficiency to provide for the burdens it induced, we need not be ſurpriſed to find virginity to the end of life conſidered an affliction, and the childleſs father an object of pity; hence marriage was encouraged. The prohibition of it with ſtrangers was confined to the original Canaanitiſh inhabitants of the land; but, among their own nation, the number of wives was undefined. Between the Jews, marriage could not be contracted within certain degrees of kindred, ſuch as between a father and daughter, mother and ſon, ſon and a father's wife, brothers and ſiſters of the whole or half blood or by affinity, grandfathers and granddaughters, aunt and nephew paternal or maternal or by marriage with a paternal uncle, father and daughter-in-law. The Jew was alſo forbidden to marry a woman and her daughter or granddaughter, the ſiſter of his own wife in her life-time, and his own brother's wife. The ſuppoſed incapacity of ſecond couſins to contract marriage, and the permiſſion to firſt couſins ſo to do, is a vulgar error; neither is prohibited. No one could marry the widow of his deceaſed brother except where he had left no iſſue, in which caſe ſhe could not firſt marry a ſtranger, but ſome one of the brothers was obliged to take her to wife, and her firſt born was to ſucceed in the name of her deceaſed huſband, that he might not be forgotten. This was not the only marriage that was compulſory; the ſeducer who had enticed a virgin not betrothed was bound to repair the wrong by marrying the injured female; alſo daughters, being co-heireſſes, were compelled to marry within their own tribe, that the inheritance might not be ſevered from it. No particular ceremony of regiſtration or other act for legalizing the nuptial bond appears to have been required; it was accompanied with ſeven days of feaſting and joy, and the newly-married man was exempted from all burdens and military ſervice for a twelvemonth. The Levite was indeed ſubjected to a prohibition to which others were not, but, conſidering the nature of it, it cannot be conſidered as any grievous denial; he was alſo prohibited from marrying a woman who had been divorced. *Lev.* xxi. 7. Little danger could be apprehended of the loſs of chaſtity in the bride previous to her marriage, as the want of virginity was forfeiture of life. After marriage alſo the waters of jealouſy might be adminiſtered to the ſuſpected wife by deſire of her diſtruſtful huſband; and this ordeal aſcertained her chaſtity or infidelity. *Deut.* xxii. *Num.* v.

The cauſe of divorce ſeems very undefined. Matter of diſagreement or incompatibility of temper are not even hinted

hinted at in the Jewiſh code; and the better opinion would ſeem to be, that ſome diſeaſe with which the unhappy woman was afflicted was the true cauſe of divorce; as the poſſibility of her being divorced by a ſecond is ſuggeſted, as the Levite, in whom more than ordinary purity was required, is prohibited to marry her at all, and the firſt huſband to take her again. No divorce could be neceſſary in the caſe of adultery; the culprit was puniſhed with death. In the caſe of ſeduction too, it is ſaid, *the ſeduced virgin ſhall be his wife, and he may not put her away all his days.* Deut. xxii. 29. Lev. xx.

Upon the conqueſt of Canaan, the land was divided into lots; theſe lots were drawn by the different tribes, and by them ſubdivided and parcelled out to the different families compoſing each tribe in an equitable courſe of diſtribution. To a numerous family a greater inheritance was given than to a ſmaller, and, in the language of the book, to every one was his inheritance given *according to thoſe that were numbered of him*; (Lev. xxvi. 54.) and the land-marks were forbidden to be removed. In the diſtribution of a father's property, the eldeſt ſon born to him had a right to a double portion; and this the parent had it not in his power to deprive him of; the anceſtor, it ſeems, might allot the ſhares as he pleaſed, but a double portion was the birth-right of the eldeſt. The remainder was parcelled out among the younger ſons; and, if from ſuch a mode of ſucceſſion the land became the oftener divided, it merely required the greater induſtry to render each portion available, brought the whole to its intended ſtate of mediocrity, and filled the country with inhabitants.

For want of male iſſue, the inheritance deſcended to all the daughters equally: if the anceſtor left no daughter, the property paſſed to his brothers, and, for want of brothers, to his uncles, and for want of them to the neareſt kinſman of his family; the females were in other reſpects excluded from the poſſeſſion of the ſoil; and it would ſeem, that the huſband, whenever dowry was in queſtion, inſtead of receiving, actually paid a ſum to the father as the price of his daughter to wife. *Num.* xxvii. *Deut.* xxii.

The inheritances thus deſcending could never be completely parted with, except that portion of an inheritance which conſiſted of houſes in cities which were not included in the deſcendible land. The object of the law was to prevent any one from becoming too rich. By allowing irredeemable purchaſe, a fortunate family might acquire a large ſhare of property, and thereby deſtroy the univerſal equality of the nation, and that moderation of means which it was a principal object of the Moſaic inſtitutes to preſerve, as one of the beſt means of guarding its liberties and virtue.

When the Hebrew parted with his land, his alienation of it could effect no more than a diſpoſal for a certain number of years, though with the ownerſhip for the term, the poſſeſſion was actually delivered and kept; but the law, which did not allow of parting with the property for ever, equally diſcouraged this ſpecies of tenure; any brother of the mortgagor might redeem, or the mortgagee himſelf on paying an average price, according to the principal advanced, for the number of years unexpired between the period of redemption and the next jubilee year. In the mean while, the mortgagee was obliged to be contented with the uſufruct of the paſt years in lieu of the ſum deducted from the principal. If the mortgagor was unable to redeem, ſtill the fiftieth year ranſomed his inheritance. The fiftieth year was to be hallowed. The people were commanded to ſound the trumpet, to proclaim liberty throughout the land to the inhabitants; and every man was free to reclaim his poſſeſſion, and return to the boſom of his family. See JUBILEE, vol. xi. p. 473.

Uſury or intereſt upon loans was allowed to be taken from the ſtranger, but not from the Hebrew. The policy of this law appears to have been to prevent as much as poſſible any one from contracting debts; this was beſt effected by rendering the loan of money difficult to be obtained; and the allowing no intereſt upon it, and the releaſing the debt if not diſcharged before the ſabbatical year, ſeems a reaſonable way of obtaining the object in view. See the article JEW, vol. x. p. 815.

By the law of depoſit, the party was bound to reſtore the thing depoſited or the double, unleſs it appeared before the judges that he had not embezzled it, in which caſe he only paid the value. Where the depoſit conſiſted of cattle which died or were loſt by other accident without the fault of the party, he was freed from all reſtitution or return. In matter of hire he was holden to return in perfect condition the thing hired, unleſs accident happened to it in the preſence of the owner; in this event he was wholly acquitted. The raiment of the poor might be pledged, but muſt be returned before the night; that of the widow could never be taken in pawn, nor could a mill-ſtone. The pledge muſt have been purely voluntary; none could take it from the dwelling; and the party lending upon it muſt have ſtood abroad until the pledge was brought out and delivered.

Theft appears to have been conſidered more in the nature of a civil than a criminal offence. If the party ſtole an ox and killed it, he was compelled to reſtore the quintuple; of a ſheep, the quadruple; if found with the mainer, the double; the latter was alſo the reſtitution for other goods ſtolen; but, if the thief had nothing to pay with, he was ſold for the theft. In all caſes of wrong through a man's own fault, or the harm of his cattle, he was bound to make good the damage.

Of all the inſtitutions and cuſtoms of the world, that of *ſlavery* ſeems the moſt unjuſt, at the ſame time that it was the moſt general. Had the ſlave the power of redeeming himſelf, his condition would not be altogether hopeleſs; but, where it is otherwiſe, the miſery of man capable of reflecting thoroughly upon his degradation muſt be complete indeed. The more mental ability he poſſeſſes, the deeper muſt be his poignancy to know, that he is merely the moſt valuable, though perhaps not the moſt valued, animal in his maſter's ſtock. The inhuman and abominable traffic of man may be traced to very early times; and the curſe of Noah upon Ham and his deſcendants did not paſs unaccompliſhed. The firſt ſlave whoſe name we are acquainted with was Hagar the Egyptian, the bond-ſlave of Sarah; her miſtreſs diſpoſed of her perſon to her huſband, and afterwards compelled him to diſmiſs her with her child; and it is no leſs ſingular, that the firſt traders we hear of in human fleſh were the deſcendants of this ſame female ſlave, who actually bought the great grandchild of her miſtreſs from his own brethren. *Gen.* xxxvii. 27, 28.

Slavery was divided into two kinds, abſolute ſlavery and ſervitude; the ſtranger might be of either deſcription, but the Hebrew of the latter only. The life of the ſlave was not abſolutely in his maſter's power; if he killed him upon the ſpot, the ſlave was avenged; but, if the ſlave ſurvived a day or two, the maſter was unpuniſhed, for a reaſon, *(he is his money,)* the better interpretation of which would ſeem to be, that it could not be the maſter's intention to deſtroy his own property. The progeny of a ſlave on a wife given to him by his maſter belonged to the maſter. On the other hand, the law was extremely attentive to their condition. The captive or the ſlave taken to wife, or given to a ſon as ſuch, could not again be ſold *Deut.* xxi. 11. The Hebrew ſlave might redeem himſelf, or be redeemed by his kindred, on the ſame terms that he was enabled to redeem his land: he had the option of his freedom on the ſabbatical year; and, when diſcharged, could not be ſent away empty; he was to be furniſhed liberally out of his maſter's flock, his floor, and his winepreſs. The humanity of the legiſlator is no leſs remarkable in regard to others. If the ſlave was deſpoiled even of a tooth by his angry maſter, the injury was redeemed by his inſtant freedom. If he eſcaped to the roof of another, his protection was inſured, he could not be given

up,

up, he had a right to dwell with him under whoſe roof he had ſheltered himſelf; and to the new maſter it was commanded, that he ſhould not be oppreſſed. Upon the whole, the ſituation of the ſlave was by the Jewiſh law rendered as little grievous as it could be. *Lev.* xxxv. *Deut.* xv. xxiii. *Exod.* xxi.

The criminal law was by no means ſevere; and the eloquent and pathetic charity of the Jewiſh legiſlator can never be ſufficiently admired. *If there be among you a poor man of one of thy brethren within any of thy gates, in thy land which the Lord thy God giveth thee, thou ſhalt not harden thine heart, nor ſhut thine hand from thy poor brother, but thou ſhalt open thine hand wide unto him, and ſhalt ſurely lend him ſufficient for his need in that which he wanteth. Beware that there be not a thought in thy wicked heart, ſaying, the ſeventh year, the year of releaſe, is at hand, and thine eye be evil againſt thy poor brother, and thou giveſt him nought. Thou ſhalt ſurely give him, and thine heart ſhall not be grieved when thou giveſt unto him: becauſe that for this thing the Lord thy God ſhall bleſs thee in all thy works, and in all that thou putteſt thine hand unto.* Deut. xv. 7.

The kindneſs inculcated to ſtrangers and ſojourners is no leſs frequent and impreſſive. The judgment of the ſtranger was not to be perverted, his peace was guarded; if he dwelt in the land he was to be conſidered as one born among the Hebrews, who were commanded to love him as themſelves. The whole law breathes a ſpirit of benevolence; a ſpirit which, in ſpite of the obloquy thrown upon the Jewiſh people, has never been effaced from them. Their character is yet univerſally charitable and benevolent; and this and their other domeſtic virtues form the beſt cenſure upon the intolerant illiberality of refined and Chriſtian Europe in their regard. For the hiſtory of their perſecutions, and their preſent ſtate in different countries, ſee the article JEW, vol. x. p. 805 & ſeq. It remains only to obſerve, that upon the Moſaic civil inſtitutions and their principles have been founded the beſt of ſucceeding ordinances, having been interwoven with every Chriſtian body of laws. They contain, too, the code of the moſt ancient, as well as the moſt noble, race upon the earth: the moſt ancient of which we have any authentic unbroken records; and the moſt noble, if nobility conſiſt in tracing a long line of deſcent from the greateſt and beſt of men. Whilſt the origin of Perſia, of Greece, and of Rome, was clouded with fable, or loſt in the night of time, the pedigrees of the Jewiſh families were cautiouſly preſerved and handed down. Upwards of 5000 years after the creation, the Jew could trace his anceſtry and generations, marked at particular periods, to the head of his tribe, and from him through a long line of patriarchs to the firſt man; as a ſpecimen of which, ſee the pedigree of our Saviour, Luke iii. 23–38.

Of the Hindoo Laws.

From the Moſaic inſtitutes we paſs eaſtward to thoſe of *Menu*, the legiſlator of the Hindoos. No particulars concerning Menu himſelf remain; ſome have attempted to blend him with Minos, the legiſlator of Crete; but this ſuppoſition is hardly reconcileable with the poſitive obſervances commanded by him, which he muſt have violated to have been enabled to get there. Sir William Jones obſerves, that there is ſound reaſon for believing the Menu of the code was the Adam of Moſes. From the firſt Menu were produced ten lords, who again produced ſeven other Menus, and the ſeventh of them the Brahmins believe to have been preſerved in an ark from the general deluge; the date of their births is not ſtated, but the ſuppoſition of their being contemporaries, and not deſcendants one from the other, may in ſome manner be accounted for by the longevity of the human race prior to the deluge, allowing at the ſame time for the variations of tradition through many ages. The ſacred text reckons nine deſcents down to and including Noah, whoſe father, Lamech, lived ſixty-three years contemporary with Seth, the ſon of the firſt man.

To the indefatigable and invaluable reſearches of ſir William Jones we are indebted for a tranſlation of the Inſtitutes of the Hindoo Law; it was completed by him from the original Sanſkrit, and is filled up with the conciſe but luminous commentary of Colluca Bhatta of the Brahmin caſt. In the verſion of ſir William Jones, the tranſlation from the original Sanſkrit is printed in Roman letters, that of the commentary of Culluca in Italics. This the reader is requeſted to bear in mind, becauſe we ſhall preſerve this diſtinction in our quotations from it.

Viewing the Inſtitutes of Hindoo Law in the ſtate we now have them, either of two eras may be aſſigned for their antiquity; the higheſt places them about 1280 years before the birth of our Saviour, and the loweſt about 880 years before the ſame period. In the opinion of ſir William Jones the latter is the moſt probable date; though, upon peruſing the ordinances of Menu, many perſons will be inclined to think them of a date conſiderably later, becauſe they contain a ſyſtem of legiſlature for man in a very cultivated, nay almoſt perfect, ſtate of ſociety; but this will be found to be the better argument for its higher antiquity. Perſons well acquainted with the hiſtory of India, and the beſt writers upon it, have been of opinion, that it has for many ages been in a ſtate of decline, inſtead of advancement in ſcience, particularly ſince the irruptions of the Mahometans. The natives of India are in poſſeſſion of aſtronomical tables of various epochs, from a period as late as the year 1569 of the Chriſtian era, to as high as the year 3102 B.C. the famous date of the Cali Yuga, their fourth or preſent age of the world; and, the more remote the period for which theſe tables were conſtructed, the greater is found to be their accuracy. The oldeſt of theſe tables correſponds, upon examination by the ableſt aſtronomers of Europe, with their own calculations, to an aſtoniſhing degree of preciſion, even ſcrutinized as they were according to the moſt exact and beſt theories of our lateſt and moſt improved ſtate of aſtronomical ſcience. It is therefore fair to preſume, that ſociety was in a high ſtate of civilization at a very early period in Hindooſtan; and we may venture to reject the common opinion, that beyond the ſchools of Greece or Rome, the ſuppoſed wiſdom of Egypt, and the computations of Chaldea, the higher ſciences had anciently never flouriſhed elſewhere. See the article HINDOOSTAN, vol. x. p. 164.

The labours of the pandits, under the encouragement of Mr. Haſtings, were prior to ſir William Jones's obtaining a copy of the Book of Menu; the difference of their Digeſt in ſome points from the Inſtitutes, and the want of a more ample deſcription of the originals from which they compiled, may be accounted for from their religious ſcruples on the one hand, and the fear of promulgating, on the other, what might ſometimes excite the ſmile of European incredulity, and not actually bear the teſt of moral or juridical criticiſm. The long influence of Mahometan tyranny may likewiſe have effected a conſiderable change in the opinions and cuſtoms of the Hindoos. The Gentoo code is alſo compiled from no leſs than twenty different writers, though at the head of them appears the name of our legiſlator Menu. The law has been retouched by ſome hands at different times, as circumſtances have varied; and hence its contradictions in places. The reſearches of the learned Dr. Robertſon had ſuggeſted to him the exiſtence of theſe Inſtitutes among the Brahmins; and, from the intereſt he took in them, it is much to be lamented that they did not appear until after he had terminated his literary labours.

The Hindoo code opens not unlike the Moſaic. "MENU ſat reclined, with his attention fixed on one object, the ſupreme GOD. The divine ſages approached him, and begged to be appriſed of the ſacred laws and duties of man. He, whoſe powers were meaſureleſs, ſaluted them, and replied; Be it heard! This *univerſe* exiſted only *in the firſt divine idea yet unexpanded, as if involved* in darkneſs imperceptible, undefinable, undiſcoverable *by reaſon, and* undiſcoverable *by revelation*, as if it were

wholly immerſed in ſleep. Then the *ſole* ſelf-exiſting power, himſelf undiſcerned, but making this world diſcernible, with five elements and other principles *of nature*, appeared with undiminiſhed glory, *expanding his idea*, or diſpelling the gloom. He whom the mind alone can perceive, whoſe eſſence eludes the external organs, who has no viſible parts, who exiſts from eternity, even HE, the ſoul of all beings, whom no being can comprehend, ſhone forth in perſon. He, having willed to produce various beings from his own divine ſubſtance; firſt, with a thought, created the waters, and placed in them a productive ſeed; the *ſeed* became an egg, bright as gold, blazing like the luminary with a thouſand beams; and in that egg he was born himſelf, *in the form of* BRAHMA the great forefather of all ſpirits. The waters are called *Nára*, becauſe they were the production of NARA, *or the ſpirit of* GOD; and, ſince they were his firſt *Ayana*, or *place of motion*, he thence is named NARAYANA, or *moving on the waters*. From THAT WHICH IS, the firſt cauſe, not the object of ſenſe, exiſting *every where in ſubſtance*, not exiſting *to our perception*, without beginning or end, was produced the divine Male, famed in all worlds under the appellation of BRAHMA." *Inſt. of Menu*, chap. i. 1–10.

Having burſt the egg by his thought alone, he formed from its two diviſions the heaven above and the earth beneath. From the ſupreme ſoul he drew forth mind, exiſting *ſubſtantially*, though unperceived by ſenſe, *immaterial*; and, before mind, or the reaſoning power, he produced conſciouſneſs, the internal monitor, the ruler. And, before them both, he produced the great principle of the ſoul, or firſt expanſion of the divine idea; and all vital forms endued with the three qualities of goodneſs, paſſion, and darkneſs; and the five perceptions of ſenſe, and the five organs of ſenſation. Thus, having at once pervaded, with emanations from the ſupreme ſpirit, the minuteſt portions of ſix principles immenſely operative, HE willed the exiſtence of all creation. HE gave being to time and the diviſions of time, and for the diſtinguiſhing of actions made a total difference between right and wrong. *Inſt.* i. 11–16, 24, 26.

That the human race might be multiplied, HE cauſed the four *caſts*, the Brahmin, the Cſhatriya, the Vaiſya, and the Sudra, (ſo named from *ſcripture*, *protection*, *wealth*, *and labour*,) to proceed from his mouth, his arm, his thigh, and his foot. And, having further formed every animate and inanimate thing, he, whoſe powers were incomprehenſible, became again abſorbed in the ſupreme ſpirit, changing the time of energy for the time of repoſe. (31, 51.)

A full account of the above *caſts*, and of the *mixed claſſes* proceeding from them, has been given under HINDOOSTAN, vol. x. p. 121. It may not be amiſs to obſerve, that the diviſion or allotment of the human race into tribes or claſſes was an inſtitution adopted in almoſt all the early nations. In the Aſſyrian empire profeſſions were hereditary, and the children could not quit the occupation of their fathers for any other. *Goguet*, tom. i. p. 58. The Egyptians were divided into three claſſes, the ſacerdotal, the military, and the cultivator and artiſan. *Ibid.* 67. The ancient Parſees were divided in the ſame manner. Solon arranged the citizens of Athens into four orders, according to the extent of their property. Rome was alſo claſſed in a ſimilar manner.

All legiſlators have decreed puniſhments for crimes: but not all have propoſed rewards in this life for virtue. Menu, well acquainted with human nature, held out both; at the ſame time he did not expect that degree of perfection which in later ages Chriſtianity has introduced. He was contented that man ſhould do what was required of him from a motive of ſelf-love; and upon this he inculcates, that, though ſelf-love is no laudable motive, yet an exemption from it is not to be found in this world; eager deſire is the root of expectation, and not a ſingle act here below appears to be done by a man free from ſelf-love; whatever he performs, it is wrought from a deſire of reward; and Menu ſeems to admit it as a ſufficient principle, in the pupil, in ripened manhood, and in age. *Inſt.* ii. 2–6.

Reverence to age and to parents was ſtrictly inculcated; the father might chaſtiſe his ſon, but only with a cane or rope, and that not upon the face or any noble part. The youth was taught that the pain and care which a mother and father undergo in producing and rearing children, could not be compenſated in a hundred years; by honouring his mother, he would gain this world; by honouring his father, the intermediate or ethereal; and, by aſſiduous attention to his preceptor, even the celeſtial world of Brahma. *Inſt.* iv. vii. viii.

In the eighth year of the age of a Brahmin, the eleventh of a Cſhatriya, and in the twelfth of a Vaiſya, the father was to inveſt his ſon with the mark of his claſs; it might on emergency be done earlier. The ceremony of inveſtiture muſt not be delayed in a prieſt beyond his ſixteenth year, in a ſoldier beyond his twenty-ſecond, and in a merchant beyond the twenty-fourth year of his age, on pain of loſing his clafs and its conſequent advantages. It was performed by ſacrifice, and the putting on of a girdle compoſed of three cords, ſoft and ſmooth, made of *munja* upon the Brahmin, of one compoſed of bow-ſtrings of *murva* round the warrior, and of a triple thread of *ſana* round the merchant; and a ſacrificial thread of cotton in three ſtrings for a Brahmin, of ſana thread for a Cſhatriya, and of woollen thread for a Vaiſya, to be put on over the head; and ſeveral other ſmaller ceremonies. Women were not exempted from the neceſſity of being inveſted with their reſpective claſſes; but the ceremony of the ſacrificial thread, according to Culluca, was to be omitted. The actual birth from the mother, and the ligation of the zone, formed what is termed, throughout the code, the twice-born man. *Inſt.* ii. 36–44.

Education was in the hands of the Brahmin, excepting caſe of neceſſity. All the three upper claſſes were diligently to read and learn the Veda; but in general, except in the caſe of neceſſity before-mentioned, the Brahmin was the only perſon to teach it. The ſuperiority of this claſs over all earthly beings is in the higheſt degree inculcated; way muſt be made for him in preference to the female, the prince, or even the grey hairs of ninety. Upon the whole, the youth was well guarded in his morals, and formed to that placidity and poliſh of manners which every European, who has been in India, aſcribes in a ſuper-eminent degree to the Hindoo. Mildneſs in the tutor is commanded: "Good inſtruction muſt be given without pain to the inſtructed, and ſweet gentle ſpeech muſt be uſed by a preceptor who cheriſhes virtue. *Inſt.* ii. 159. The ſecond chapter concludes with a recommendation to the pupil to be liberal to his tutor, to the beſt of his power, upon quitting him. Nothing could be demanded as the price of tuition, though the pupil was recommended to give ſomething, according to his means, at the expiration of it. It might continue as far as thirty-ſix years of age, or even for life, in the tutor's houſe; and we muſt admire the law that provided for the equal education of the poor and the wealthy, and permitted man, without injuſtice to himſelf, to give a decided ſuperiority to his tutor in return for the invaluable and gratuitous benefit of inſtruction. *Inſt.* ii. iii.

The term of diſcipline being expired, the ſtudent, whoſe rules had not been violated, might aſſume the order of a married man; but even here the power or influence of his inſtructor follows him, and not without *his* conſent might he proceed to marriage. The early age allowed for the marriage of females was the conſequence of climate; but the mature age required for the male, was the ordinance of good policy. The male of twenty-four years ſhould marry the girl of eight years of age; the male of thirty the female of twelve. *Inſt.* iv. 94. Marriage was diſtinguiſhed into eight kinds; the four firſt, by different modes of giving the daughter, the fifth was a ſort of ſale, the ſixth proceeded from ſenſual inclinations, the ſeventh

was the act of military violence, the eighth the rape of a damsel asleep, intoxicated, or insane. The seventh was base; but the fifth and last were detestably so, and illegal. Parties of even class joined hands; but the Cshatriya damsel, on her marriage with a Brahmin, held an arrow in her hand; the Vaisya, in the same ceremony with a husband of higher rank, held a whip; the humble Sudra was led by the skirt of a mantle. Marriage could not be contracted within the sixth degree, paternal or maternal, nor with one who by her family-name was known to be of the same primitive stock with his father or mother. Several other descriptions of families and persons are to be avoided, for irreligion, want of male issue, disease, deformity, or defect. Among the characters to be avoided in the choice of a wife is a girl immoderately talkative; and it may excite the reader's curiosity to find out how it can be a qualification in the lady *to walk gracefully, like a young elephant. Inst.* iii. 7–10. The eight kinds of marriage have been noticed under our article HINDOOSTAN, vol. x. p. 142. The connection of this part of the Institutes with the original institution of marriage is very strong. "Then only is a man perfect, when he consists of *three persons united*, his wife, himself, and his son;" and thus have learned Brahmins announced the maxim, "The husband is even one person with his wife." (ix. 45–47.) "Neither by sale nor desertion can a wife be released from her husband: thus we fully acknowledge the law of old enacted by the Lord of creatures. Let mutual fidelity continue till death; this in few words may be considered the supreme law between husband and wife." (ix. 101. vii. 77.) One only consort is talked of for a king, and throughout the code with a few exceptions; and (v. 168) it is said, "Having thus kindled sacred fires, and performed funeral rites, to his wife who died before him, he may again marry; and, (169,) having taken a lawful consort, let him dwell in his house during the second period of his life."

Divorce was only permitted where the husband had been deceived by the father of the girl, and she proved blemished, afflicted with disease, or previously deflowered and given to him with fraud. Where indeed the widow was childless, the brother was to raise up a son to him, as among the Jews; but at other times the marriage of a widow is ever considered as a degraded practice, and wholly disapproved. The wife might acquire a property independently of her husband by gift before marriage or during it; and this property was her own, though the wealth she might earn was regularly acquired for the man to whom she belonged; but she was cautioned against making a hoard of her husband's property to gain a separate estate. *Inst.* v. viii. ix.

Upon his commencement in the career of life, the various duties of his class are allotted to each youth. Four lawful modes of livelihood are assigned to the Brahmin; he may live by gleaning and gathering, by what is given unasked, by what is asked in alms, and by tillage. The occupations of the warrior and the merchant, even money-lending, are permitted him in distress; but service for hire, and the gain of wealth by any art pleasing to the senses, are utterly prohibited. To attain happiness, he must check all desire of acquiring more than he possesses; for happiness is defined to have its root in content, and discontent to be root of misery. *Inst.* iv.

The precepts for a sovereign and the rules for the military class form a very prominent chapter (vii.) in the Institutes. The policy and conduct to be adopted by a sovereign in regard of his people, as well as with his neighbours, in peace and war, is admirable. The indolence, the extravagance of pleasure, the oppressive rapacity of servants, all the vices and misconduct, enormous or mean, that degrade the prince and wean the subject, are pointed out with no less truth than freedom. He must cherish peace where peace is his preservation, but be ever prepared for war; in the protection of his people is his main strength and duty, and in that protection, ever mindful of his military class, he must never brook the defiance of his enemy, nor turn his face from battle. The sovereign who shall observe the rules laid down for his government and conduct in this chapter, will find in them the best security of his throne. To the warrior-class in general, the instructions are no less noble; and the high principles of humanity and honour prescribed to him, even in the fury of the field, far surpass those of the proudest days of European chivalry.

To the prince, as to the father of the people, the Hindoo law commits the custody of that property which the owner is himself incapable of managing, and of that female who is incapable of protecting herself. The property of the student or the minor, whether acquired by descent or otherwise, until his studentship ceased, or the attainment of his sixteenth year, and the childless widow, or other female object of compassion, were equally confided to the disinterested care of the monarch. For three years he held the property which no one appeared to claim; if none appeared before the lapse of this time, it became his to confiscate; if owned, he had a sixth, a tenth, or a twelfth, for the care of it. The Brahmin was the lord of all; and, if he found a hidden treasure, he might appropriate it to himself; but, if another found it, the king might seize to his own use one half, having given the other half to the Brahmins. The king was declared the lord paramount of the soil, and might take one half of the precious minerals discovered; but, beyond this mere right of a moiety of treasure-trove and mines, his paramountcy no way extended; the actual and entire ownership belonged to the possessor; though the king, as protector, took a limited and easy proportion of the annual profits and gains of all his subjects. Ch. viii.

The civil and criminal part of the Hindoo law is regularly divided under eighteen distinct titles; and the principles laid down will in general be found not unworthy the most refined jurisprudence. The right of property is first derived from occupancy. "Sages," says the code, "who know former times, pronounce cultivated land to be the property of him who cut away the wood, or who cleared and tilled it; and the antelope, of the first hunter who mortally wounded it;" also the produce of the thing belongs to the owner, unless by agreement to the contrary. Property might also be virtuously acquired by seven other modes; viz. by succession, by donation, by purchase, or by exchange; these were common to all the classes; by conquest, which was peculiar to the military class; by lending at interest, by husbandry or commerce, which were the occupations of the mercantile class; and by acceptance of presents from respectable men, which was peculiar to the sacerdotal order. Almost any modes of livelihood were permitted in times of distress. Ch. viii. ix. x.

On the death of the father and mother, their estate was divided among the sons. The eldest took the entire patrimony so long as his younger brothers chose to live under him; if they demanded a separation, then among those born of mothers of equal class a portion equal to a twentieth of the heritage was first deducted for the eldest, with the best chattel and beast; for the middlemost, half of that, or a fortieth; for the youngest, a quarter of it, or an eightieth; but, if the eldest and youngest respectively take their just-mentioned portions, and if there were more than one between them, each of the intermediate sons took a mesne portion, or a fortieth first deducted, and the remainder was equally divided among all. Or, if no deduction was made, the eldest took a double share, the second son a share and a half, the others a share each; a single beast remaining belonged to the first born. Brothers were obliged to portion their sisters by the same mother, each with a fourth part of his share. The representative was not so far substituted in the right of the ancestor as to take his entire share; thus, the eldest dead, and the younger having raised up a son to him by his widow, such son only took an equal share with his natural father, which share of the son the natural father was obliged to deliver

deliver to him at the age of fifteen, according to Culluca; but ſuch ſon could only be raiſed to a brother where all his other brothers were devoid of male iſſue; for, by one brother having male iſſue, all the others are declared to have become fathers. In the ſame manner, where a man had no ſon, and his daughter ſhould, by her father's appointment, raiſe up a ſon to him, the ſon of ſuch daughter, and the ſons of her father by any after-taken wife, ſhould, if of the ſame claſs, all ſhare alike, becauſe there was no primogeniture for a woman; but, where there was no after-born ſon, the ſon of ſuch daughter took the whole. If the daughter appointed to raiſe up a ſon to her father died without iſſue, her huſband took the ſhare belonging to her, and the whole property of the father, if no other iſſue male were born to him. But the right of primogeniture did not take place in favour of a ſon by a mother of a lower claſs, as againſt the after-born ſon of an after-taken wife of a higher claſs. Thus, where there were children by different wives of different claſſes, the property was divided as follows. The ſon by a Brahmin firſt deducted the chief ſervant, the bull, the riding-horſe, the carriage, the ornaments, and the principal meſſuage; after this, the ſame ſon took three ſhares, the ſons of a Cſhatriya-wife two ſhares, the ſons of a Vaiſya-wife one ſhare and a half, and the ſon of a Sudra-wife one ſhare. If, as in conſequence of the eldeſt-born ſon of the firſt wife being of lower claſs, no deduction was made, the ſon of the Brahmin took four-tenths, the ſon of the Cſhatriya three-tenth ſhares, the ſon of the Vaiſya two-tenth ſhares; the remaining tenth went to the Sudra-ſon, who could never take more, nor inherit any thing as againſt a higher claſs. Among the children of Sudras all took alike; but among others it would ſeem the children took *per ſtirpes*, in right of the claſs of their reſpective mothers. The uterine brothers and ſiſters alſo took the property of their deceaſed mothers.

According to the Inſtitutes of Menu, there were no leſs than twelve ſorts of ſons. 1. The natural-born ſon of the father and mother. 2. The ſon by a mother impregnated by another perſon with the authority of the huſband, on his ſuppoſed incurable illneſs, or irremediable defect. 3. The ſon by gift, if of the ſame claſs. 4. By adoption, if of the ſame claſs; but ſuch adopted ſon loſt all ſhare in the inheritance of his natural father. 5. By birth in the maſter's manſion, where the real father could not be diſcovered. 6. The ſon deſerted by his father, and taken in by another. 7. The ſon of a daughter born in her father's houſe, if ſhe afterwards married her lover. 8. The ſon of a woman pregnant before marriage, but born after. 9. A ſon bought for the purpoſe of performing obſequies, whether equal or unequal. 10. The ſon of a woman forſaken, or a widow, or twice married. 11. The ſon who offered himſelf. 12. The ſon by a man's own female ſlave. The two firſt ſeverally inherited the eſtates of their natural fathers, the ſon of the ſecond deſcription being entitled to receive from him of the firſt a fifth or ſixth of his fictitious parent's eſtate; the others could claim no more than a maintenance, and could only ſucceed in order to the family duties, and their ſhares in the inheritance, the nobler claſs among them firſt dividing it. The ſix firſt might be heirs one to the other, but not the ſix laſt. The defects of reaſon, ſenſe, or limb, excluded the afflicted being from the ſucceſſion; food and raiment, without ſtint, was all his portion, which he received at the hand of the poſſeſſor of the heritage.

The ſon was next heir to the father, and the father to his ſon dying without a ſon or grandſon; in default of father or iſſue, his brothers; if no brother, his mother; if no mother, his grandmother; if none, his neareſt of kin ſeverally took the ſucceſſion; in default of them, his ſpiritual preceptor or pupil; in default of all, the Brahmins. But, among lower claſſes, the property, on failure of all heirs, eſcheated to the king. On the death of the mother, all her uterine children, male and female, divided, even in their father's lifetime, the maternal eſtate. If the father divided his property during his lifetime among his children, and had iſſue after this period, ſuch latter iſſue took the whole of his ſubſequent acquirements; or, upon the dividers again throwing all into a common ſtock, he took an even ſhare. Where brothers lived together in common for a time, and afterwards divided the property, in that caſe all took alike; but the rewards of learning, gifts, and what, without making uſe of the common ſtock, was ſeparately acquired, belonged ſolely to the party acquiring. Paſture-ground for cattle could not be divided.

The adminiſtration of juſtice was veſted in the ſovereign; but, when he could not attend to it in perſon, he might commit it to a Brahmin of eminent learning, who, accompanied by three aſſeſſors, alſo Brahmins, were to decide the controverſies of the ſubject. A ſingle Brahmin would ſuffice; and even perſons of the ſecond and third claſſes might fill the office; but a Sudra was ever excluded the honours of the bench. The ſeſſion opened by doing reverence to the deities who guard the world; and the judge was admoniſhed, that juſtice, being deſtroyed, would deſtroy; being preſerved, would preſerve; that it never, therefore, muſt be violated. "Beware, O judge! (ſays the text,) leſt juſtice, being overturned, overturn both us and thyſelf." Whenever falſe evidence ſhould have been given in any ſuit, the king was directed to reverſe the judgment; and whatever had been done was to be conſidered as undone. No plaint, however ſupported by evidence, could be received, where the cauſe was inconſiſtent with poſitive law or ſettled uſage. Ch. viii.

The right of the creditor to obtain his property was not to be interrupted by the ſovereign, whether he obtained it through the mediation of friends, by ſuit, by artful management, (ſee HINDOOSTAN, vol. x. p. 144.) by diſtreſs, or by legal force; and the refuſal of a debtor to pay was conſidered as an offence, and puniſhable by fine. The unjuſt claimant, and he who talked privately with a witneſs, were alſo fined to the full amount of what they pretended to claim or prove. If a debtor, equal or inferior in claſs to the creditor, had no other means, he muſt pay the debt with his perſonal labour; but time was allowed to a debtor of a higher claſs to pay from his income.

In the admiſſion of teſtimonial proof, (and ſuch was always required,) great attention was paid to the neceſſary reſpectability of witneſſes. The monarch, the prieſt, the ſtudent, and the anchoret, were not compellable to give teſtimony; but they were perfectly admiſſible if appearing. On the other hand, the degraded, the vicious, the intereſted, and the loweſt claſſes, were excluded, or to be received with great ſuſpicion; and upon that ſuſpicion an ordeal might be had recourſe to; (ſee vol. x. p. 146.) Three witneſſes were in general neceſſary before deciſion could be given; but the teſtimony of one man of extraordinary virtue might be admitted by a judge; and, where none could be had, he had the power of putting each to their oath, for the purpoſe of eliciting the truth. The previous admonitions to witneſſes are admirably drawn, and the inviolable ſanctity of an oath is ſtrongly enforced; even every vain oath is proſcribed, except indeed on ſome certain occaſions relating to a cow, a ſacrifice, or a Brahmin; and thoſe of lovers to their miſtreſſes, in tender conſideration of the frailty of human nature, were alſo declared to be no deadly ſin.

Every injury to the property of another gave damages to the injured, as well as being liable to a fine; but breach of promiſe ſealed with an oath, treſpaſs accompanied with violence, defamation and abuſe, were in the nature of public offences, and ſeverally puniſhable by baniſhment or fine, and ſometimes by both. The offending limb or member, in the caſe of aſſault or offer of indignity by a low-born man, was puniſhed by inciſion; and, if a man ſcratched the ſkin of his equal in claſs, or fetched blood from him, he was fined one hundred panas; if he broke a bone, he was baniſhed. Blows were puniſhed by retaliation; and the aſſailant, in the caſes of hurting a limb, wounding, or fetching blood, was further condemned to the

the expenſe of a perfect cure. Theft was puniſhed by fine, amputation of hand, or death, according to the extent of the theft; adultery, by baniſhment, fine, and in ſome caſes by death. Herdſmen were anſwerable for all accidents whilſt the cattle were under their care, even for a flock attacked by wolves; for every thing, except robbery and open plunder, where he purſued and proclaimed the thieves, and gave due notice to his maſter; but he was not reſponſible for the loſs of a ſingle ſheep killed by a wolf ſuddenly ſpringing out where the flock was kept together. On the death of cattle, he muſt give the ſkins, tendons, and greaſe exuding from the forehead, to his maſter. Three caſts of a ſtick, or four hundred cubits in breadth, was to be left round every village for paſture, and thrice that breadth round towns for the ſame purpoſe; within this circle the herdſman was reſponſible for no damage to uninclofed grounds. The farmer was fineable for deteriorations; land-marks were to ſet up; and all diſputes about boundaries to be determined on a view of the premiſes.

Thus far the eighth chapter.—The tenth relates to the mixed claſſes and the times of diſtreſs, during which the higher claſſes might deſcend to the occupations of the lower. The ſix mixed claſſes may beget fifteen ſtill lower, and theſe latter, fifteen more in progreſſion of degradation; the baſe producing yet baſer; and the Chandala might apparently beget even lower than himſelf, viz. the Antyavaſayin, employed in places for burning the dead, contemned even by the contemptible. The eleventh chapter contains the expiation for ſins and offences; and the twelfth and laſt, the different tranſmigrations and final beatitude. In a law teaching the doctrine of tranſmigration, we muſt expect humanity to ſentient creatures to form a very prominent feature; for this reaſon, except in ſacrifice, animals are prohibited to be killed and eaten. That "he who does hurt to animals that are not injurious to him, from a wiſh to give himſelf pleaſure, adds nothing to his own happineſs living or dead," every one muſt willingly agree: but that "no one exiſts more ſinful than he who without oblation to the manes or the gods deſires to enlarge his own fleſh with the fleſh of another creature," is a doctrine not very reliſhing to an European ſtomach. See chap. v.

Thus much of Hindoo or Gentoo law. We believe we have omitted no material point but what may be ſupplied by a reference to our article HINDOOSTAN, vol x. p. 115-147. The general principles for the guidance of man are well laid down, and the morality of the code is extremely good. Hoſpitality is much recommended; but it muſt ſeem unaccountable to an European, that the liberal profeſſion of phyſic is excluded, as profane, from the feaſts and oblations to the gods and manes of anceſtors. Man is taught never to be querulous even under pain, nor to injure another in deed or even in thought; to ſhun unlawful wealth and pleaſures, and even lawful acts which may cauſe future pain or be offenſive to mankind; to ſay what is true, but to ſay what is pleaſing; to ſpeak no diſagreeable truth nor agreeable falſehood. When an act gratifies the mind, then let him ſteadily purſue it; but let the purſuit ſpring from himſelf; *for all that depends on another gives pain, and all that depends on himſelf gives pleaſure.* He is not to be diſpirited by former miſcarriages, nor to loſe his fair confidence in himſelf, but purſue fortune until death, and never think her hard to be attained. He is taught to be charitable, and that his whole life ſhould be a practice of truth, juſtice, and purity, and be employed in collecting virtue as his beſt and only companion to another world. "Single is each man born, ſingle he dies; ſingle he receives the reward of his good, ſingle the puniſhment of his evil, deeds: when he leaves his corſe, his kindred retire, but his virtues accompany his ſoul. He who fully contemplates the boundleſs univerſe exiſting in the divine ſpirit, will never give his heart to iniquity. In the knowledge and adoration of one GOD is the whole rule of good conduct compriſed. In the performance of intereſted rites, the regions of the lower heaven are indeed attained; but he who performs them free from ſelf-love, equally perceiving the ſupreme ſoul in all beings, and all beings in the ſupreme ſoul, ſacrifices his own ſpirit by fixing it on the ſpirit of GOD, and approaches the nature of that ſole divinity who ſhines by his own effulgence!" Chap. iv.

The Inſtitutes of Hindoo Law appear to have been founded upon immemorial uſage and patriarchal tradition. It may contradict, perhaps offend, the opinions of many to advance the poſition, but there is ground for contending, that theſe Inſtitutes, not indeed in the exact form in which we now have them, but ſubject to conſiderable retrenchments, are of equal if not higher antiquity than the era of Jewiſh legiſlation. They differ from the Moſaic in the rule of deſcent; the preſervation of inheritances was not ſo much an object with Menu. They alſo ſeparated the people into a greater number of claſſes than the Jews were divided into. The materialiſm of the Hindoo legiſlator is a ſubject for the theologian to touch, and the doctrine of tranſmigration may excite his ſmile or his pity; but, with all its defects, the Code of Menu, in addition to the general and indiſputable equity of its civil ordinances, contains a ſublime and amiable philoſophy, perhaps unrivalled, but certainly not ſurpaſſed, in the writings of any heathen ſage whatever.

OF THE CHINESE LAWS.

From the country of Menu we proceed ſtill eaſtward to regions that have known no change from conqueſt, no improvement from foreign intercourſe. In the Inſtitutes of Menu, China is reckoned among the countries originally ſubject to its laws, its inhabitants being of the race of the Cſhatriyas, or ſecond claſs. See the Inſtitutes of Menu, ch. x. and our article CHINA, vol. iv. p. 436. However that may be, thus much is certain; that, governed for centuries before the Chriſtian era by the ſame fundamental rules with which it aroſe, the unvaried influence of paternal power and unaltered ſyſtem of education have borne the empire of China, without any material deviation, through the wear of years, the convulſions of domeſtic quarrel, and even the ſhock of conqueſt. Each new dynaſty has indeed *nominally* abrogated every thing eſtabliſhed by the authority of the preceding one; yet ſuch has been the ſimple, though active, principle of its policy, and ſo rivetted the habits and manners of its people, that none have thought it prudent, even where change ſeemed neceſſary, to make any other than ſupplementary ordinances for their own ſecurity; and their legiſlative labours in other reſpects ſeem to have conſiſted more in reviſing and retrenching the overgrown bulk of the then-exiſting laws, and in reſtoring the obſcured principles of its political ſyſtem all together, than in attempting any alteration of thoſe principles. Even their laſt conquerors merely profeſſed to reform the legiſlation of the dynaſty they had overthrown.

Notwithſtanding the immenſe commerce exiſting for upwards of a century between the weſtern world and the ſubjects of the Chineſe empire, its laws remained unknown to Europe; and inquirers were reduced to gleaning the few that are diſperſed through the general, but valuable, communications that have been made from time to time by the catholic miſſionaries. But, at length, our countryman ſir George Staunton has favoured the world with a tranſlation of its code, intitled TA TSING LEU LEE, or the Laws and Statutes of the Dynaſty of Tſing; a work the more valuable, as it may, on a compariſon with the laws and cuſtoms mentioned and to be gleaned in the annals and other public documents diſperſed through what Chineſe hiſtory and literature we are in poſſeſſion of, fairly be ſaid to contain the ancient as well as modern juriſprudence and policy of this immenſe and aged empire.

The exact nature of this volume will perhaps be moſt adequately conveyed to our readers, by the title-page to

the laſt edition of it that has been publiſhed at Pekin. It is in theſe words: "Recently engraved in the 10th year of Kia-king, a new edition of the Laws and Statutes of the Great Dynaſty of Tſing; compriſing, agreeably to the Univerſal Compendium promulgated by the Supreme Court of Judicature in the 6th year of Kia-king, all the additions and alterations which have been made of late years in the Supplementary Statutes; alſo compendious Abſtracts from the various Commentaries, and an Appendix, conſiſting of Two Books of Additional Supplementary Statutes." The terms here uſed are thus explained by ſir George Staunton in his preface: "The *Leu*, or Fundamental Laws, are thoſe of which the Penal Code, upon its formation ſoon after the acceſſion of the preſent dynaſty, appears originally to have conſiſted; and which, being, at leaſt nominally, permanent, are reprinted in each ſucceſſive edition, without either alteration or amendment. The *Lee*, or Supplementary Laws, are the modifications, extenſions, and reſtrictions, of the Fundamental Laws, which, after undergoing a deliberate examination in the ſupreme councils, and receiving the ſanction of the ſovereign, are inſerted in the form of clauſes at the end of each article or ſection of the code, in order that they might, together with the Fundamental Laws, be equally known and obſerved. They are generally, however, reviſed every fifth year, and ſubjected to ſuch alterations as the wiſdom of government determines to be expedient." "Under theſe two denominations," continues ſir George, "the whole body of Chineſe penal law is comprehended:" but he very juſtly farther obſerves that, "under a government in which every authenticated expreſſion of the will of the prince bears the character of a law, the actual number of laws muſt neceſſarily be unlimited." It appears, accordingly, that *new editions* of this code, adopting from time to time the *Lee*, or Supplementary Statutes, promulgated by the reigning monarch, are very frequently engraved, while the *Tſing-leu*, or Fundamental Laws eſtabliſhed by the preſent dynaſty of Tſing, remain unaltered; but, as the two combined occupy, in ſo conciſe a language as the Chineſe, no leſs than 2906 octavo pages, ſir George wiſely determined to give an entire tranſlation of the latter only; throwing into an Appendix ſome occaſional ſpecimens of the former, which are diverſified by ſeveral proclamations, and other documents of great intereſt.

The prefatory edict of the emperor Shun-Chee, the firſt of the preſent dynaſty, will ſhow in what manner the code was originally formed, and may ſerve as an example of a Chineſe imperial edict: "When we contemplate the progreſſive eſtabliſhment of our dominions in the Eaſt, by our royal anceſtors and immediate predeceſſors, we obſerve, that the ſimplicity of the people originally required but few laws; and that, with the exception of crimes of extraordinary enormity, no puniſhments were inflicted beſides thoſe of the whip and the bamboo. Since, however, the Divine Will has been graciouſly pleaſed to entruſt us with the adminiſtration of the empire of China, a multitude of judicial proceedings in civil and criminal caſes, ariſing out of the various diſpoſitions and irregular paſſions of mankind in a great and populous nation, have ſucceſſively occupied our royal attention. Hence we have ſuffered much inconvenience, from the neceſſity we have been almoſt conſtantly under of either aggravating or mitigating the erroneous ſentences of the magiſtrates; who, previous to the re-eſtabliſhment of a fixed code of penal laws, were not in poſſeſſion of any ſecure foundation, upon which they could build a juſt and equitable deciſion. A numerous body of magiſtrates was, therefore, aſſembled at the capital, by our command, for the purpoſe of reviſing the penal code, formerly in force under the late dynaſty of Ming, and of digeſting the ſame into a new code, by the excluſion of ſuch parts as were exceptionable, and the introduction of others, which were likely to contribute to the attainment of juſtice, and to the general perfection of the work. The reſult of their labours having been ſubmitted to our examination, we maturely weighed and conſidered the various matter it contained, and then inſtructed a ſelect number of our great officers of ſtate carefully to reviſe the whole, for the purpoſe of making ſuch alterations and emendations as might ſtill be found requiſite. As ſoon as this object was accompliſhed, we iſſued our royal authority for the impreſſion and publication of the work, under the title of *Ta Tſing Leu chee Kiay-foo Lee*; or, The general Laws of the Imperial Dynaſty, of Tſing, collected and explained, and accompanied by Supplementary Clauſes.

"Wherefore, officers and magiſtrates of the interior and exterior departments of our empire, be it your care diligently to obſerve the ſame, and to forbear in future to give any deciſion, or to paſs any ſentence, according to your private ſentiments, or upon your unſupported authority. Thus ſhall the magiſtrates and people look up with awe and ſubmiſſion to the juſtice of theſe inſtitutions, as they find themſelves reſpectively concerned in them; the tranſgreſſor will not fail to ſuffer a ſtrict expiation for his offences, and will be the inſtrument of deterring others from ſimilar miſconduct; and, finally, the government and the people will be equally ſecured for endleſs generations in the enjoyment of the happy effects of the great and noble virtues of our illuſtrious progenitors. Dated the 5th Moon, of the third year, of Shun-Chee; A. D. 1647."

Each of the four ſucceeding emperors prefixed an admonitory diſcourſe of ſimilar import to his own edition; and Yong-Tching in particular has given vent to his deſire "of adapting the penalties of the laws in a *juſt proportion* to the crimes againſt which they are denounced;" a principle which appears to be at the bottom of the whole of this penal ſyſtem.

The code compriſes ſeven diviſions, and each diviſion contains one or more books. The 1ſt diviſion conſiſts of general laws, or preliminary ordinances. The 2d contains the civil laws relative to the ſyſtem of government and the conduct of magiſtrates. The 3d, fiſcal laws, compriſing enrolment of the people, lands and tenements, marriage, public property, duties and cuſtoms, private property, ſales and markets. The 4th, ritual laws, containing ſacred rites, miſcellaneous obſervances. The 5th, military laws, compriſing the protection of the palace, the government of the army, the protection of the frontier, military horſes and cattle, expreſſes and public poſts. The 6th, criminal laws, viz. robbery and theft, homicide, quarrelling and fighting, abuſive language, indictments and informations, bribery and corruption, forgeries and frauds, inceſt and adultery, miſcellaneous offences, arreſts and eſcapes, impriſonment, judgment and execution. The 7th and laſt contains the laws relating to public works, and includes public buildings and public ways.

Theſe diviſions are preceded by various tables, eſtabliſhing a ſcale of puniſhment for the offences deſcribed, and defining the inſtruments with which it is by law to be inflicted; but the very firſt ſection of the Preliminary Regulations enacts a permanent reduction in the ſentence paſſed againſt offenders, as thus: "The loweſt degree of puniſhment is a moderate correction inflicted with the ſmaller bamboo, in order that the tranſgreſſor of the law may entertain a ſenſe of ſhame for his paſt, and receive a ſalutary admonition with reſpect to his future conduct." Of this ſpecies of puniſhment there are five degrees:

The firſt	nominally a puniſhment of	10 blows,	of which only	4	are to be inflicted.
The ſecond		20 blows,		5	
The third		30 blows,		10	
The fourth		40 blows,		15	
The fifth		50 blows,		20	

The ſecond degree, or diviſion of puniſhment, is inflicted with the larger bamboo, and is ſubdivided in the following manner:

The first, The second, The third, The fourth, The fifth — nominally a punishment of — 60 blows, 70 blows, 80 blows, 90 blows, 100 blows, — of which only — 20, 25, 30, 35, 40 — are to be inflicted.

The third division in the scale of punishments is, that of temporary banishment, to any distance not exceeding 500 *lee*, (150 miles,) with the view of affording an opportunity of repentance and amendment. Of this species of punishment there are also five gradations; namely,

Banishment for — 1 year, and 60 blows; 1½ year, and 70 blows; 2 years, and 80 blows; 2½ years, and 90 blows; 3 years, and 100 blows — with the greater bamboo, reduced as above.

The fourth scale is divided into three degrees of perpetual banishment, of 2000 lee, 2500, or 3000, and 100 blows. The fifth and last is divided into two modes of punishment with death, by strangulation and by decolation. To these may be added a sixth, by slow and painful death, in case of treason and some other offences.

All criminals capitally convicted, except such atrocious offenders as are expressly directed to be executed without delay, are retained in prison for execution at a particular period in the autumn; the sentence passed upon each individual being first duly reported to, and ratified by, the emperor. See the article CHINA, vol. iv. p. 490. But we are now informed that (as in ancient Rome) it is considered as a matter of eminent grace and favour to permit a capital convict to execute the sentence of death with his own hands. It will be noticed as a peculiarity, that imprisonment does not appear in the enumeration of penalties; but in some parts of the code it makes a part of capital sentences, as a kind of preparation for death.

It is a maxim of the Chinese government, that the state is one great family, and the prince the father of it; and, according to Confucius, the same principle that governs a well-regulated family is the basis and foundation of the wise government of a kingdom; that kings should have the same tenderness for their subjects as parents for their children; and that every father should have in his family the power of a king. Where paternal power, therefore, is the principle that governs the empire, we need not be surprised at the extent of authority allowed to the parent; particularly as the father, or the senior of the family, may become responsible for the act of a child; thus, in all cases, where the parties to an offence are members of the same family, the punishment falls upon the chief or senior member of that family, unless upwards of eighty years of age, or totally disabled; in which case the punishment falls upon the next in succession: nor need we wonder that parricide, which includes father, mother, uncle and aunt, grandfather and grandmother, is ranked among the *ten abominations*; nor that the child striking or abusing a father, mother, paternal grandfather or grandmother, should be punished with death. The parent who kills his offspring by severity of chastisement is punished with 100 blows; designedly killing him, if disobedient, subjects to 60 and a year's banishment; and he who kills his son or grandson, and attributes it to another person, is sentenced to 70 blows and a year and a half's banishment. The parent is not allowed to sell his child, either with or without consent, under a penalty of 80 blows in the latter case, and one degree less in the former; and this punishment is increased according to the remoteness of kindred or authority. Thus the punishment for sale of a younger brother, sister, nephew or niece, an inferior wife, or the principal wife of a son or grandson, is 80 blows and two years' banishment; the sale of a junior first cousin, junior second cousin, or a grand nephew, is 90 blows and two and a half years' banishment; but sale of a daughter in marriage is the usual mode of completing this contract by the parent.

By a law of considerate humanity and of reverence to age, the case of an only child, if under sentence of death, shall be submitted to the emperor, if his parents are infirm, sick, above seventy years of age, and have no other male child, or grandchild, to support them; and, in inculcation of the duties of filial piety, all offenders accused through the ill-will of junior relations and dependants, shall, in all cases not expressly stated, be pardoned, unless the crime cannot be repaired by restitution or compensation. The wretch informing against an elder relation in the first degree, such as father, mother, grandfather, grandmother, or their principal or even inferior wives, shall, even if the accusation be true, be punished with 100 blows, and the guilty parties, on surrender and acknowledgment of their crime, be pardoned. Persons playing upon any musical instrument, or partaking of feasts, whilst a husband, father, mother, grandfather, or grandmother, is in confinement on a capital charge, subjects them to 80 blows. Principal marriage during the same periods, or those of mourning, is also punished. The son who kills his wife for abusing or striking his father or mother, grandfather or grandmother, is merely subjected to 100 blows.

To the reasonable motives of every country for adoption by the childless parent, the Chinese added others of a similar nature to those instituted by Menu. The party adopting is bound to maintain his adopted son; but, if the adopter have afterwards other children, his natural family may demand the adopted back again. None are admitted to adopt the child of another family, unless a foundling under three years of age; but such foundling shall not share the inheritance of his fictitious parent. The paternal authority over the adopted is restricted; any permanent injury done to him by a father, mother, paternal grandfather or grandmother, is punished with 80 blows; and, if attended with total disability or irremediable infirmity, it is extended to 90.

No country in the world has given such encouragement to literature as China; literature is the only path to the highest dignities of the empire; and, though in its nature confined, and not so elevated as Europe can boast, yet all the honours ever conferred on science by the west fall far short of those bestowed by China on her philosopher and instructor. The only family in the empire that has borne perpetual hereditary nobility is that of CONFUCIUS, and his descendants exist as such to this day, a lasting monument of the gratitude of an immense people and of the extraordinary virtues and merit of their founder. See vol. v. p. 67.

The attention of the Chinese government to the education of its subjects is no less politic than commendable. Whilst the fair claims of ability are protected by punishment of 80 blows upon the party refusing to confer deserved degrees, the undue preferment of ignorance is equally visited on both the examiner and participator; unless indeed the invincible stupidity of the latter, in not being aware of his inadequacy or ineligibility, render him rather an object of pity than vengeance. All persons holding official situations are required to be perfect in the knowledge of the laws; and their deficiency, at their annual examination by their superiors, subjects them to the loss of a month's salary; and inferior officers to 40 blows. But the legislation of China, though it makes all amenable to the laws, does not ridiculously suppose that all are to know them. Small tracts are indeed published by the state for the general instruction; but, to excite a true knowledge of its ordinances, it enacts, that private individuals, capable of explaining their nature and comprehending their objects, shall be pardoned, in all cases, for offences of accident, or imputable from the guilt of others, unless implicated with any act of treason or rebellion.

No other rank of nobility exists in the empire, except that of imperial blood, and that acquired through letters. The poorest peasant may attain the highest employs. The privileges of these employs extend to the third generation, and hereditary dignities are sometimes granted by the crown,

crown, which are deſcendible in the right line to the eldeſt heir male, not incapacitated to ſucceed by incurable illneſs or miſconduct, in which caſe the next is called in; but they are reſumable at pleaſure. Such dignities, however, are not neceſſarily attended with the privilege of nobility, which is merely enjoyed by the imperial blood, by thoſe of the ſecond rank employed in any official capacity, and thoſe of the third whoſe office confers any civil or military command. Beyond this privilege, the honours of nobility ſink with the wearer, except in the memory of his family, and his children fall to that level to which their want of capacity or merit confines them; one only exception through the various revolutions of the empire exiſts in the family of Confucius mentioned above, which is perhaps the oldeſt and nobleſt upon earth.

One principal wife alone is permitted by the Ta Tſing Leu Lee; but concubines, under the polite denomination of *inferior wives*, are permitted in any number. No abatement can take place in the condition or rank of the former; nor, during her life, any amelioration of that of the latter, who are little better than the ſervants of the principal wife. The prohibited degrees are numerous. In a population equal to that of all Europe, there are not more than a hundred family-names; and none of the ſame name are permitted to intermarry. Marriage between perſons related within the fourth degree incluſive, or with the widow of any near relation, unleſs this latter connection had been previouſly broken by divorce or intervening marriage with a ſtranger, (in which caſe 80 blows are deemed ſufficient,) or between uterines, or that of the daughter of a wife by a former huſband, is inceſt, and puniſhable in different degrees: marrying a father or mother's ſiſter-in-law, the daughter of a father or mother's aunt, a ſon or daughter-in-law's ſiſter, or a grandſon's wife's ſiſter, or the daughter of a mother's brother or ſiſter, a female criminal abſconding, or a ſlave, are ſeverally puniſhed with a certain number of blows, to which baniſhment is in ſome caſes ſuperadded. In all theſe caſes the marriage is annulled, the marriage-preſents generally forfeited to government, the parties reſtored to their former rank, and the party giving or contracting on the part of the huſband ſuffers puniſhment, which however never extends to loſs of life, though nominally capital. Marriage with a female relation beyond the fourth degree, or with the widow of a male relation equally remote, is puniſhed with 100 blows; that with a widow of a relation in the fourth degree, or of a ſiſter's ſon, is puniſhable with 60, and a year's baniſhment; that with a father or grandfather's former wives, or with a father's ſiſter or a brother's widow, with death; the two former by decollation, the latter by ſtrangling. The marriages of officers belonging to the government of a town of the firſt, ſecond, or third, order, with the daughters of any inhabitant under their juriſdiction, or with female muſicians or comedians, are ſeverally annulled, and puniſhed with forfeiture and baniſhment; and in the former caſes, if the marriage is a compenſation for unjuſt deciſions, may amount to a capital crime. The parties are reſpectively reſtored to their former ſituations; but it ſeems unreaſonable that the female comedian ſhould be prevented again exerciſing her profeſſion. Marrying a female criminal abſconding, ſubjects the huſband to the offence of the wife; but abating his puniſhment two degrees if ſhe is only fugitive, and one degree if her crime is capital. The carrying off by violence and marrying the daughter of a freeman is death. *Ta Tſing Leu Lee*, § ci-cxvii.

The age for marriage in males is twenty complete; in females, it would appear, conſummation is not allowable before twelve. In this ſerious engagement, the objects of the marriage are never conſulted; the contractors are the eldeſt parents on each ſide. On the part of the intended huſband, the reſpectability of the family of the female is conſidered; and, on her's, the wealth of the family to whom ſhe is to be contracted, and how much can be obtained for the ſale of her. Other matters are alſo ordered by the code to be aſcertained previous to the marriage. The parties ſhall clearly underſtand whether thoſe for whom they are contracting, or either of them, is diſeaſed, infirm, under age, children by blood or by adoption; if either party then object, the treaty ceaſes; but, if they approve, the marriage-articles ſhall be drawn up, and the amount of the marriage-preſents, another term for the price of the female, ſhall be aſcertained. Acceptance of theſe preſents is ſufficient evidence of agreement. No cancelling is permitted after affiancing, and a ſubſequent engagement with another is puniſhed in the party ſwerving who has the power to contract or give away; the bride ſhall go to the bridegroom to whom ſhe was firſt contracted; but, where the fault is on the ſide of the female, and her marriage completed, that is, if ſhe has been perſonally preſented to and received by the firſt bridegroom, the party to whom ſhe was firſt contracted may claim or reject her as he pleaſes; and, if the ſecond bridegroom was conſcious of the prior contract, his marriage-preſents ſhall be forfeited to government. In a marriage thus contracted, where the objects of the contract are ſeen by neither, ſome regulation was neceſſary to guard againſt fraud; and, if the parties put together are not the ſame as thoſe concerning whom the contract originated, they are to be ſeparated, and the preſents returned or forfeited, according as the wrong may be on the ſide of the purchaſer or ſeller.

In caſe of adultery, *flagrante delicto*, the wife and the adulterer may be killed in any manner, but ſubſequent revenge is not warranted by the law; and, retiring to another room after commiſſion, they ſhall not be followed to be killed, but ſubjected to the puniſhments of the laws: the adultreſs ſhall be puniſhed with 100 blows, and ſold in marriage; the adulterer with 80. If ſhe contrive to procure her huſband's death, ſhe ſhall die by torture; if the adulterer, without her privity, kill him, ſhe ſhall be ſtrangled.

Divorce in the caſe of adultery ſeems to be required by the law; but there are ſeven other juſtifying cauſes to ground it; viz. ſtriking a huſband, barrenneſs, laſciviouſneſs, diſregard of her huſband's parents, talkativeneſs, thieviſh propenſities, envious and ſuſpicious temper, and inveterate infirmity. But againſt the juſtifying cauſes certain reaſons may alſo operate: thus, if the wife has mourned three years for her huſband's parents; if his family has become rich, having been poor at the time of marriage; if ſhe has no parents alive to take her back; in all theſe caſes, the huſband ſhall be compelled to receive her again. If the huſband refuſe to conſent to a divorce, and the wife abſcond, ſhe ſhall ſuffer 100 blows, and may be ſold; if, during his abſence, ſhe contract marriage with another, ſhe ſhall be put to death; even deſertion by the huſband will not warrant her quitting his roof, or abſconding, or re-marrying without notice to the tribunal. To render any act of her's a ſecond marriage, ſhe muſt be given away, and a delivery of marriage-preſents muſt alſo paſs; otherwiſe ſhe is guilty of adultery.

The very title of the law which we are about to tranſcribe will excite the aſtoniſhment of our countrymen, and the alarm of our readers of the ſofter ſex: "Lending wives or daughters on hire, &c." Both, however, will be happy to ſee that ſuch a traffic is expoſed to the ſevereſt chaſtiſement: "Whoever lends any one of his wives, to be hired as a temporary wife, ſhall be puniſhed with 80 blows; whoever lends his daughter in like manner, ſhall be puniſhed with 60 blows; the wife or daughter in ſuch caſes ſhall not be held reſponſible. Whoever, falſely repreſenting any of his wives as his ſiſter, gives her away in marriage, ſhall receive 100 blows; and the wife conſenting thereto ſhall be puniſhed with 80 blows. Thoſe who knowingly receive in marriage the wives, or hire for a limited time the wives or daughters, of others, ſhall participate equally in the aforeſaid puniſhment, and the parties

ties thus unlawfully connected ſhall be ſeparated; the daughter ſhall be returned to her parents, and the wife to the family to which ſhe originally belonged; the pecuniary conſideration in each caſe ſhall be forfeited to government. Thoſe who ignorantly receive ſuch perſons in marriage, contrary to the laws, ſhall be excuſed, and recover the amount of the marriage-preſents."

The Ta Tſing Leu Lee, and our own ſtatutes at large, afford juſt as much information, the one as the other, to an inquirer concerning the law of inheritance of the two countries; the code before us is barren and unſatisfactory upon the point; this main part of Chineſe law muſt therefore yet remain conjectural. The lands of China were formerly common property, allotted out to families by the magiſtrates of the ſeveral diſtricts, until the time of Tſin-chi-hoang, in whoſe reign they were put up to ſale, and thence became heritable property. This will account for the total ſilence of the Chineſe canonical books, and their early writers, as to any regulations concerning inheritance; and, from its being contrary to ancient uſage, the ſucceeding dynaſty, at the ſame time that common policy pointed out to it the danger of diſturbing the poſſeſſors in their new acquirements, might alſo deem it prudent to take no notice of it in the revived ſyſtem; and hence, probably, no rules were eſtabliſhed by authority for its government.

By the lxxxviith ſection of the code before us, it is to be collected, that the anceſtor may make a will; ſections xciii, cv, and cccxxxvi, ſpeak of ſale, exchange, and purchaſe, and the mode of mortgaging land; the former would ſeem to imply, at all events, ſome power of appointing particular parts of his property to, and deſignation of, one or more of his inheritors in preference to others; and the latter, an abſolute power of diſpoſal. We have before ſeen that a man can have but one principal wife at a time, but as many inferior wives as he pleaſes; it is alſo declared, that the children of ſuch principal wife ſhall firſt ſucceed; though thoſe by the inferior wives ſeem entitled to ſome ſhare in the ſucceſſion. Whoever appoints his heir and repreſentative unlawfully ſhall ſuffer 80 blows. The firſt or principal wife, having completed her fiftieth year without iſſue, the eldeſt ſon by the other wives muſt be appointed to the inheritance. A man having no male iſſue is directed to chooſe an heir and repreſentative from thoſe of the ſame name and known anceſtry as himſelf, beginning with his father's iſſue firſt; for want of theſe, from the ſecond degree, and ſo on from the third and fourth; on failure of all theſe, he may chooſe whom he will of the ſame family-name. If a ſon be afterwards born to him, ſuch ſon and the appointed heir ſhall participate equally in the family-property.

The law of mortgage is tolerably clear; it can only take place by a regular contract duly authenticated, and aſſeſſed to the legal duty; the mortgagee, taking poſſeſſion without ſuch formalities, renders himſelf liable to puniſhment, and the forfeiture of half the mortgage-money. The whole produce and poſſeſſion muſt be unreſervedly transferred to the mortgagee; in default, the land ſo illegally mortgaged is forfeited to the government. A ſecond mortgage is deemed fraudulent, and puniſhed as in ordinary caſes of theft; but that part of it which conſiſts in branding is now omitted, and the money reſtored to the bonâ-fide mortgagee; but, if he is privy, it is forfeited, and he and the negociator of the bargain, if alſo privy to the wrong, ſhall ſuffer like the mortgagor. If, after the term of the mortgage is expired, the mortgagor, being really able to pay, offer to redeem his eſtate, he is at liberty to do ſo, and the mortgagee muſt return the poſſeſſion. No mortgage or redemption of lands mortgaged ſhall be ſet aſide or reverſed after it has been ſigned by all the parties intereſted, or after it has been acquieſced in by them for five years; but a general power of redemption may be reſerved; and if, at the expiration of the period of mortgage, the party be unable to repay money, he may either releaſe his right to the mortgagee by way of abſolute ſale, on receiving a further ſum to be agreed on by the parties or by arbitrators, or the mortgagee may elect to continue in poſſeſſion or reimburſe himſelf by mortgaging over to another, the right of redemption continuing with the original mortgagor. Thoſe lands which have been allotted on the tenure of military ſervice cannot be pledged or mortgaged, but may be let for a term not exceeding three years. Holding-over ſubjects the mortgagee to puniſhment, and to account for the uſufruct during the period of unjuſt detention. Thirty year completes the right of poſſeſſion in a doubtful title without clauſe of redemption.

In the ordinances reſpecting the fraudulent poſſeſſion of lands, as well as in the caſe of the military tenure before-mentioned, we find the diſtinction between the land of the ſubject and that of the government. The fraudulent transfer or poſſeſſion of lands is puniſhable, according to the number of tenements or *meu* (1000 ſquare yards), with blows and baniſhment; and two degrees are ſuperadded where the property belongs to the government. Violent ſeizure ſubjects the offender to 100 blows and perpetual baniſhment to the extreme diſtance. Tilling without leave the lands of another is alſo puniſhable; and the produce belongs to the owner of the heritage. But it is not to be inferred from this that land is neglected; no empire has ſo ennobled agriculture; (ſee the article CHINA, vol. iv. p. 454.) The head of every townſhip is puniſhable to a certain extent of blows for the want of culture of the ſoil and mulberry-trees in his diſtrict, and the proprietor ſtill further.

Property found muſt within five days be delivered to the magiſtrate; if it belong to government, the finder ſhall have no benefit; if to an individual, the half; but, if no one prove his claim to it within thirty days, the finder ſhall have the whole. All buried property ſhall belong to the finder, if no owner can be found, except bells, vaſes, ancient utenſils, and ſeals of government, which muſt be delivered up within thirty days, under the penalty of 80 blows.

Intereſt in China is allowed as high as 3 per cent. per month, or 30 per cent. per annum; but ſuch intereſt ſhall in no caſe exceed the amount of the debt. Non-payment of it three months after the time ſtipulated, if ſhort by five *leang*, ſubjects the defaulter to 10 blows, and an increaſe of one degree for every month over, not exceeding 40 blows; if ſhort by fifty leang, 20 blows, and one degree more for every month, not exceeding 50 blows; if ſhort by one hundred leang, 30 blows, and one degree for every month after, beſides payment of the whole principal and the intereſt due upon it. Whether the perſon of the debtor may be ſeized does not appear by the code: if, however, the creditor accept his wives and children in pledge, he ſhall ſuffer 100 blows; if in this ſtate he is guilty of criminal intercourſe with them, he ſhall be puniſhed one degree more ſeverely; but, if he ſeize them by force, he ſhall be puniſhed two degrees beyond the former; and, if he violate them, with death; and, by the acceptance or ſeizure of ſuch a pledge, the debt ſhall be cancelled.

Some reſtrictions exiſt with regard to trade, which, however uſeful to prevent fraud, ſeem rather inconſiſtent with the ſpirit of free commerce; and ſome of which, for the want of knowing the actual ſtate and nature of trade in China, are difficult to be underſtood. The Chineſe code orders, that the commercial agents eſtabliſhed in cities, public markets, village-diſtricts, ports, and reaches of rivers, ſhall be ſelected from the inhabitants of the place, and keep a regiſter ſubject to the monthly inſpection of the board of the diſtrict; and the valuation of goods and merchandiſe ſhall be effected by them on fair and equitable terms. Any depreciation ſhall be deemed malverſation, and any money received by the agent beyond the appreciation, and appropriated to himſelf, is theft. If

one perſon, monopolizing, or uſing undue influence, compel another to pay an exorbitant price; or if by unwarrantable contrivances, ſuch as entering into a private underſtanding with the commercial agent, he raiſe his own goods of ſmall value, and depreciate thoſe of high value of his neighbour; the party offending ſhall ſuffer 80 blows.

The laws for the accurate keeping and auditing of the public accounts, are very ſtrict and laudable; as are thoſe for preventing the embezzlement of the public revenue. The following might be ſerviceable in countries to the weſt of China: "If any ſuperintending officer of government, having charge of a part of the produce of the revenue, whether in grain or the precious metals, borrows for his own uſe, or lends the ſame to others, although the acknowledgment and engagement in writing of the borrower ſhould have been duly obtained, ſuch ſuperintendant ſhall be puniſhed for every offence in proportion to the amount and value, according to the law concerning the embezzlement of the property of government. If any other perſon borrows for his own uſe, or lends, the produce of the revenues as aforeſaid, he ſhall be puniſhed in proportion to the amount and value, according to the law for puniſhing *theſts* committed upon the property of the ſtate."

There is nothing ſtrikes the reader of this code with more ſurpriſe, than the aſtoniſhing reſemblance which the *revenue-laws* it contains bear in all reſpects to the moſt perfect and recent ſyſtem which has been eſtabliſhed on that ſubject in Europe. We find not only the old gabelle, or tax and monopoly of ſalt, but a regular exciſe upon tea, alum, and almoſt every ſort of merchandiſe, with a ſyſtem of *permits*, exciſe-officers, inſpectors, licences to traders, and penalties upon *ſmuggling*, almoſt exactly as we have them at this day among ourſelves. The Chineſe laws, however, are, upon the whole, conſiderably more mild than the Engliſh. The ſmuggler forfeits only one half of the unlicenced goods, three-tenths going to the informer; and the perſonal pains are moderate. The carriage and horſes, however, or boat in which the goods are tranſported, are forfeited as with us. There is a duty on the ſale of cattle; and no purchaſe of that kind can be accompliſhed without a ſtamped licence from government. The coaſting-trade is alſo ſubjected to certain cuſtoms; and veſſels having falſe manifeſts of their cargo are forfeited.

Pretty ſevere penalties are awarded againſt magicians, and the irregular worſhip of ſectaries; but the law ſeems rather to have in view the tumults or conſpiracies to which ſuch practices may give encouragement, than the offence to religion. Families burning incenſe to the North Star *during the night* are to be puniſhed; and of magicians it is ſaid, that "If they, having in their poſſeſſion concealed images of their worſhip, burn incenſe in honour of them, and they aſſemble their followers *by night*, in order to inſtruct them in their doctrines, and by pretended powers and notices endeavour to inveigle and miſlead the multitude, the principal in the commiſſion of ſuch offences ſhall be ſtrangled, after remaining in priſon the uſual period, and the acceſſaries ſhall ſeverally receive 100 blows, and be perpetually baniſhed to the diſtance of 3000 *lee*. If at any time the people, whether ſoldiers or citizens, dreſs and ornament their idols, and, after accompanying them tumultuouſly with drums and gongs, perform oblations and other ſacred rites to their honour, the leader or inſtigator of ſuch meetings ſhall be puniſhed with 100 blows. Sir George Staunton obſerves, in a note, that this latter clauſe muſt be regarded as obſolete, ſince the alleged offence is daily committed in open day throughout the whole extent of the empire. There is nothing ſaid expreſsly on the ſubject of Chriſtianity, in the laws upon ſectarian worſhip, or elſewhere in the code; though ſir George has printed, in the Appendix, two edicts on the ſubject, iſſued in 1805, expreſſing great diſapprobation of their doctrines; and a *lee*, or ſupplementary edict, has been promulgated during the preſent year, by which it is made death for any perſon to introduce a Bible into any part of the empire. *Proceedings of the Weſtminſter Bible Society*, Dec. 17, 1812.

If the emperor's phyſician compound any medicine in a manner not ſanctioned by eſtabliſhed uſage, he ſhall receive 100 blows. If there be any dirt in his imperial majeſty's food, the cook ſhall receive 80 blows; and, if any diſh be ſent up without being previouſly taſted, he ſhall receive 50. Finally, if any unuſual ingredient be put into the food, the cook ſhall receive 100 blows, and be compelled to *ſwallow* the article!

There is a very long ſection on bribery, with a prodigious ſcale of puniſhments, as uſual, according as the bribe is large or ſmall, or taken for an innocent or a criminal object. The pains range from 60 blows with a bamboo, to death; that extreme puniſhment being inflicted for taking more than 80 ounces of ſilver (under 30l.) for an unlawful object, and 120 (or 60l.) for a lawful one. Agreeing to take a bribe has the ſame puniſhment as actually taking it; offering or giving it, a much lighter one; but, if aſked or extorted by an officer of government, no puniſhment at all.

Forging an imperial edict is death; or counterfeiting the copper coin, the only proper currency of the empire. There does not appear to be any preciſe regulation about the forgery of private writings.

Rape is puniſhed with death; adultery among private perſons with 100 blows; but much more ſeverely among perſons high in office; fornication with 70 blows; other offences of a more deteſtable nature only with the ſame puniſhment.

A perſon accidentally ſetting fire to his houſe, ſhall receive 40 blows; and, if the fire ſpread to the gate of an imperial palace, ſhall be put to death. Wilfully ſetting fire to one's own houſe, 100 blows; to any other houſe, public or private, death. Very ſevere penalties for neglecting the reparation of roads, bridges, and canals, and for damaging or encroaching on them.

Abuſive language between equals ſubjects each to 10 blows, but, if a quarrel enſue and either wound the other, whether in defence or otherwiſe, he ſhall ſuffer a certain number of blows, and puniſhment according to the nature of them; but that of him who defends himſelf ſhall be in all caſes mitigated one degree leſs than that of the party aſſaulting; and, as if the round of blows beſtowed ſo liberally upon every occaſion were inſufficient, and in order to provide effectually for every latent caſe, a ſweeping ordinance is added, that *Whoever is guilty of improper conduct, and ſuch as is contrary to the ſpirit of the laws, though not a breach of any ſpecific article, ſhall be puniſhed at the leaſt with* 40 *blows, and, when the impropriety is of a ſerious nature, with* 80.

The general ordinances of the code will be alternately approved and condemned by the juriſts of Europe. The whole code, it has been ſeen, is one ſyſtem of penal law, making the breach or neglect of every common duty or tranſaction a puniſhable offence. Theſe penalties are fundamental, and *fundamentally* applied too; but a woman is not bambooed on the naked poſteriors, like a man; ſhe is allowed to wear two petticoats in every caſe except adultery, when her covering is reduced to one.

Acceſſaries to crimes are puniſhed leſs ſeverely than the principals. Errors in judgment in the pronunciation of a ſentence of acquittal; inadvertent wrong and offences committed in a diſtrict, when without the knowledge of the officers, or their power of prevention; all theſe, as a ſtretch of the clauſe relative to improper conduct, are puniſhable as crimes; it may be ſaid they are offences redeemable by fine, but this makes no alteration in the juſtice or injuſtice of the enactment. On the other hand, it orders that five days ſhall be allowed to diſpatch buſineſs of ſmall importance, ten days for buſineſs of ordinary importance, twenty days for buſineſs of high importance;

and, where the law does not provide, a provifional ſentence may be pronounced, ſubject to the emperor's final deciſion. None ſhall bring up as a ſlave the child of a freeman. Unjuſt and falſe accuſations ſubject the party informing to all the guilt untruly alleged, and more than the puniſhment for ſuch guilt, but ſhort of life, unleſs life has been loſt by it. Excitements to proſecutions, and falſely drawing up informations, are puniſhed like falſe accuſations: anonymous informations are puniſhed with death.

We ſhall conclude with noticing ſome ſingular incidents, which the law of China attaches to the ſituation of ſtate-officers. The following clauſe is perhaps the ſtrongeſt demonſtration ever given of the truth of Tacitus's maxim, *Peſſimum genus inimicorum laudantes.* "When any officers of the civil department of government, who have not diſtinguiſhed themſelves by extraordinary and great ſervices to the ſtate, are recommended to the conſideration of the emperor, as deſerving of the higheſt hereditary honours; ſuch officers, and thoſe who recommend them, ſhall ſuffer death, by being beheaded, after remaining the uſual period in priſon. Nevertheleſs, thoſe who are recommended to ſuch honours in conſequence of their being the lineal deſcendants of diſtinguiſhed officers and magiſtrates, who by their valour and exertions had averted national calamities, protected the empire, and contributed to the eſtabliſhment of the imperial family, ſhall be free from any liability to the penalties of this law.

"If an officer belonging to any of the departments of government, or any private individual, ſhould addreſs the emperor in praiſe of the virtues, abilities, or ſucceſsful adminiſtration, of any of his majeſty's confidential miniſters of ſtate, it is to be conſidered as an evidence of the exiſtence of a treaſonable combination ſubverſive of government, and ſhall therefore be inveſtigated with the utmoſt ſtrictneſs and accuracy; the cauſe and origin of theſe intereſted praiſes of perſons high in rank and office being traced, the offending party ſhall ſuffer death, by being beheaded, after remaining in priſon the uſual period. His wives and children ſhall become ſlaves, and his property ſhall be confiſcated. If the confidential miniſter or great officer of the crown, to whom the addreſs related, was privy to the deſign, he ſhall participate in the puniſhment of the offence; but otherwiſe, ſhall be excuſed.

"If any officer of government, during the period of his adminiſtration, preſumes to raiſe, within the limits of his diſtrict, public monuments diſplaying inſcriptions in honour of himſelf, when he had in fact performed no ſervice to the ſtate worthy of ſuch commemoration, he ſhall be puniſhed with 100 blows. If an officer ſends any perſon to his ſuperior to ſolicit his ſanction to the elevation of honorary monuments as aforeſaid, upon the pretext of ſervices falſely alleged to have been performed by him, he ſhall be puniſhed with 80 blows, and the perſon who undertakes to convey the requeſt under ſuch circumſtances ſhall ſuffer puniſhment leſs by one degree. The monuments undeſervedly raiſed ſhall be deſtroyed, and the inſcriptions effaced."

Extended to our own country, ſuch laws would often inflict a capital puniſhment, not only on the editor of a miniſterial newſpaper, but on every member of his majeſty's cabinet-council; and we doubt whether the numerous pamphlets of the right honourable George Roſe, in commendation of Mr. Pitt's ſucceſsful management of public affairs, would not condemn their diſintereſted author to the block!

The reader may be deſirous to compare this ſummary of Chineſe law, as publiſhed by authority, with the leſs-authentic particulars we were able to glean from former writers before the appearance of the Ta Tſing Leu Lee. They will not be found to differ very materially, at leaſt not to contradict each other. See the article CHINA, vol. iv. p. 445–455, 486, 490. We ſhall conſtantly find, that the code of China exhibits the influence of paternal power and education, and affords ſtrong proof of the advantages which an uniformity of laws and manners throughout a country gives to the government of an immenſe empire. The rules of the Chou-king, ſome of them 2000 years and upwards before the Chriſtian era, yet ſubſiſt, and, diffuſed through the Ta Tſing Leu Lee, now govern three hundred millions of mankind.

Of the Zendavesta, or Laws of Zoroaster.

Whilſt China, India, and Chaldea, enjoyed all the advantages of civilized ſociety, Media and Perſia were labouring under all diſadvantages of its reverſe. The latter had gradually declined from a happier condition; and the law of the ſovereign, who is deſcribed as having been the benefactor of man, though exiſting perhaps in tradition among a few, was unknown, forgotten, or neglected by the multitude. Jemſcheed, from the antiquity which clouds him, was probably ſome one of the early deſcendants of Noah of the branch of Shem. He is ſaid to have found the world in an uncultivated and almoſt barren ſtate. He went abroad upon the earth; and, wherever he ſtuck his golden poignard into it, the grain and fruits ſprang forth, and men and cattle ſwarmed to the new abundance. In the fertile and favoured country of Ver injuſtice was unknown; and the government of Jemſcheed could boaſt what no modern civilized kingdom ever could, that there was neither an impoſtor nor a beggar to be found in it. But from this ſtate of happineſs man had been ſeduced by the malevolence of Arimanius, the independent ſpirit or principle of evil, and his miniſters the Deeves; and, to reſtore as far as poſſible the empire of Oromaſdes, or Ormuzd, the divine ſpirit or principle of goodneſs, was the object of Zerduſht, whom the ancient Perſians called Zerethoſchtro, or the Golden Star, and the Greeks *Zoroaſter.* The country where he firſt made his appearance ſeems to have been that of the Medes, at the court of Guſhtaſf, by ſome ſuppoſed the father of Darius Hyſtaſpes, (B. C. 520.) but more probably Cyaxares of Media, (B. C. 624.) In the preſence of this prince he opened his miſſion, and the attempt was as ſucceſsful as it was bold; Guſhtaſf approved and embraced the law.

We are indebted to M. d'Anquetil du Perron, a French writer, for a tranſlation of the *Zendaveſta*, or "Zendiſh Word," as he interprets it; but Prideaux tells us, that Zendaveſta "originally ſignifieth a fire-kindler, ſuch as is a *tinder-box* with us; which fantaſtical name the impoſtor gave it, becauſe, as he pretended, all that would read this book, and meditate thereon, might from thence, as from a fire-kindler, kindle in their hearts the fire of all true love for God and his holy religion. But it is to be obſerved, that in thoſe eaſtern countries their way of kindling fire is not with a tinder-box, as with us, but by rubbing two pieces of cane one againſt another, till one of them takes fire; and ſuch a fire-kindler of his religion in the hearts of men the impoſtor would have his book to be; and therefore called it by that name. The firſt part of it contains their liturgy, which is ſtill uſed among them in their oratories and fire-temples even to this day; the reſt treats of all other parts of their religion and of civil affairs. And, according as their actions agree or diſagree with this book, do they reckon them to be either good or evil. Thence, in their language, they call a righteous action *Zend-aver*, i.e. what the book Zend allows; and an evil action *Na-Zend-aver*, i.e. which the book Zend diſallows. This book Zoroaſter feigned to have received from heaven, as Mahomet afterwards (perchance following his pattern) pretended of his Alcoran. It is ſtill preſerved among them in the Pahlavi, or old Perſian language and character; and in every oratory and fire-temple, even to this day, there is a copy of it kept (in the ſame manner as there is with us of the Bible in every pariſh-church), out of which, on certain ſtated times, the prieſts read a portion of it to the people; but, as the Pahlavi language is entirely antiquated, the people do not underſtand a word

of

of what is ſaid, any more than many papiſts do of their maſs." See the article LANGUAGE, p. 164, 5, of this volume.

The Pahlavas are enumerated in the Code of Menu as having once belonged to the race of the Cſhatriyas, or ſecond claſs of Hindoos, from which, by their omiſſion of holy rites and by ſeeing no Brahmins, they had gradually ſunk. See Inſt. of Hindoo Law, ch. x. The Pehlvi, or Pahlavi, was a language, in the opinion of the Parſees themſelves, older than the Zendiſh, and its nation ſituated between the Dilem, the Mazendran, and the Farſiſtan. See d'Anquetil's Preface to the Vocab. of the ancient Languages of Perſia, tom. ii. p. 432. Probably it was of even antiquity; but ſee ſir William Jones's ſixth Anniverſary Diſcourſe. The proximity of this people to the country of the Brahmins renders it very probable they were under the ſame law, or might have borrowed part of its cuſtoms; but the law of the Zendaveſta is more like that of the Chineſe, though it has a reſemblance to both in ſome things, ſuch as the remembrance of departed anceſtry. The ſyſtem of puniſhment by ſtripes redeemable by fine, though the former are more ſevere and numerous than the Chineſe code inflicts, accords with the latter; that of prayers and expiations with the former. The Jews never exceeded 40 ſtripes, the Chineſe never exceed 100; but the Zendaveſta (as we ſhall preſently ſee) may vie with our own military code, as it proceeds ſometimes to 1000.

"Zoroaſter (continues Prideaux) was the greateſt impoſtor, except Mahomet, that ever appeared in the world, and had all the craft and enterpriſing boldneſs of that Arab, but much more knowledge; for he was excellently ſkilled in all the learning of the eaſt that was in his time; whereas the other could neither write nor read; and particularly he was thoroughly verſed in the Jewiſh religion, and in all the ſacred writings of the Old Teſtament that were then extant; which makes it moſt likely, that he was, as to his origin, a Jew. And it is generally ſaid that he had been a ſervant to one of the prophets of Iſrael, and that it was by this means that he came to be ſo well ſkilled in the holy ſcriptures, and all other Jewiſh knowledge; which is a farther proof that he was of that people; it not being likely, that a prophet of Iſrael ſhould entertain him as a ſervant, or inſtruct him as a diſciple, if he were not of the ſeed of Iſrael, as well as of the ſame religion.

"He did not found a new religion, as his ſucceſſor in impoſture Mahomet did, but only took upon him to revive and reform an old one, that of the Magians, which had been for many ages paſt the ancient national religion of the Medes, as well as of the Perſians. The chief reformation which he made in the Magian religion was in the Firſt Principle of it; for, whereas before they had held the being of two firſt cauſes, the firſt Light, or the good god, Oromaſdes, who was the author of all good; and the other Darkneſs, or the evil god, Arimanius, who was the author of all evil; he introduced a principle ſuperior to them both, one ſupreme GOD, who created both light and darkneſs, and out of theſe two, according to the pleaſure of his own will, made all things elſe, according to what is ſaid in the xlvth chapter of Iſaiah, ver. 5, 6, 7. "I am the Lord, and there is none elſe: there is no God beſides me; I girded thee, though thou haſt not known me; that they may know, from the riſing of the ſun, and from the weſt, that there is none beſides me. I am the Lord, and there is none elſe. I form the *light*, and create *darkneſs*; I make peace, and create evil. I the Lord do all theſe things." For theſe words, being directed to Cyrus king of Perſia, muſt be underſtood as ſpoken in reference to the Perſian ſect of the Magians, who then held light and darkneſs, or good and evil, to be the ſupreme beings, without acknowledging the great God who is ſuperior to both. And I doubt not it was from hence that Zoroaſter had the hint of mending this great abſurdity in their theology. But, to avoid making God the author of evil, his doctrine was, that God originally and directly created only light or good, and that darkneſs or evil followed it by conſequence, as the ſhadow doth the perſon; that light or good had only a real production from God, and the other afterwards reſulted from it, as the defect thereof. In ſum, his doctrine as to this particular was, That there was one Supreme Being independent and ſelf-exiſting from all eternity; that under him there were two angels, one the angel of light, who is the author and director of all good; and the other the angel of darkneſs, who is the author and director of all evil; and that theſe two, out of the mixture of light and darkneſs, made all things that are; that they are in a perpetual ſtruggle with each other; and that, where the angel of light prevails, there the moſt is good; and, where the angel of darkneſs prevails, there the moſt is evil; that this ſtruggle ſhall continue to the end of the world; that then there ſhall be a general reſurrection, and a day of judgment, wherein juſt retribution ſhall be rendered to all according to their works; after which the angel of darkneſs, and his diſciples, ſhall go into a world of their own, where they ſhall ſuffer in everlaſting darkneſs the puniſhments of their evil deeds; and the angel of light, and his diſciples, ſhall alſo go into a world of their own, where they ſhall receive in everlaſting light the reward due unto their good deeds; and that after this they ſhall remain ſeparated for ever, and light and darkneſs be no more mixed together to all eternity." *Prideaux's Conn.* book iv.

Thus much it ſeemed neceſſary to ſay as to Zoroaſter and his religious code, in order to clear the way for his civil and criminal enactments. He divided, or rather found, the people already claſſed into four orders; the *athornés*, or ſacerdotal order; the military; the cultivators of the land; and the working people. A regular gradation of power was eſtabliſhed by him; every place, every ſtreet, every town, every province, every claſs, had its chief; he who beſt knew the law of the Meheſtans, or followers of the law, was to be chief of the prieſts; and the chief of theſe chiefs, who did moſt good, was of the greateſt veracity, the moſt elevated of ſoul, and the moſt intelligent; but above all theſe was Zoroaſter himſelf, their *deſtour*, or chief counſellor and great pontiff; and in this capacity he poſſeſſed all the power, though not the name, of royalty.

He taught that the obſervance of his law inſured abundance from the earth. Gifts of cattle to the prieſt recommended man to the favour of Oromaſdes; and the beſtowing of a new garment, a good piece of land, or a beautiful virgin in marriage, on the pure and holy man, effected the purification of the devout donor; the very land given to him rejoiced. The multitude of prayers, ceremonies, and purifications, required by the law, all tended to render the prieſt as neceſſary to the ſubject as he was dangerous to the ſovereign. Darius Hyſtaſpes, wiſer than his predeceſſors, could not fail to obſerve an order of his ſubjects abſolutely above the monarch; he therefore, upon the death of their high-prieſt, aſſumed to himſelf the office of pontiff; and his ſucceſſors were ever after initiated into the ſacerdotal order.

The ſame obſervances were required of all claſſes. Zoroaſter prays for the king, that he may live long in health of body and ſoul, great, active, pure, victorious, vigilant, overwhelming his enemies, and exterminating liars and evil doers, loving the juſt, repreſſing the bad, and protecting and nouriſhing the poor, beating down all oppoſers of the law. It is inculcated, that, when the juſt man complained, the earth itſelf grieved; that to increaſe villages, to render them abundant and rich, was an action worthy of a man of good ſenſe. To the military was aſſigned the devout act of exterminating the enemies of the prophet. The armour of the warrior appears to have been very complete: viz. the lance, which in the Pahlavi is tranſlated the *ſword*; the poignard, the club, the bow, the poliſhed ſaddle ornamented with a ſilver pommel;

mel; the bow, of the length of a *baſou*, (little more than a yard,) ſet with ſtones and ornamented at each end; the coat of mail; the jointed cuiraſs; the penom (a piece of linen to cover the mouth); the cap, the girdle, and the long trowſers.

As the ſupport and beſt wealth of a country depends upon the culture of it, tillage ſeems to have been an object of peculiar ſolicitude with Zoroaſter; he never ſpeaks of the cultivator but with the addition of "the principle of abundance," the "ſource of wealth," or ſome ſimilar expreſſion; indeed it appears, that from them were derived the ſole riches of Perſia. To refuſe therefore the domeſtic animal or the villager the juſt recompence of their labours was deemed a heavy offence, and the guilty refuſer was puniſhed with 800 or 1000 laſhes in this life, and as many years of hell in the next. Every attention appears to have been paid to the ſecurity of the cultivator; the fields were guarded before harveſt, and the flocks upon the roads.

The value of the dog is highly celebrated; ſtriking him was a puniſhable offence. The dog was on many accounts uſeful. According to a law of Zoroaſter, the burying of a dead body was prohibited under pain of death, as ſuch an act would have rendered the earth impure; it was not to be burnt, for that would have ſullied the purity of fire; nor could it be thrown into the water for the ſame reaſon; the corpſe was therefore placed in a high walled cemetery at a diſtance from the public roads, and was there left to be devoured by the birds of prey and the dogs. The beſt dog for this purpoſe is deſcribed as being yellow or tan-eyed, with eyebrows of a ſimilar colour, and white and tan or yellow ears. *Zendaveſta*, tom. i. part 2.

To ſow grain and herbs, to plant trees, to irrigate the ſoil, to feed flocks, and to increaſe and propagate them and domeſtic animals, gave pleaſure to the earth. A ſilver or golden bell, the fine for and expiation of crime, was hung at the neck of the labouring ox, given alſo in part of expiation; their utenſils are to be made with care, and to be hard. Agriculture and turning the land is compared to a man embracing his friend, a father and his children; it was the pureſt act of the law; and Zoroaſter declared, that he who ſowed the earth with good grain, and did it with purity, fulfilled the whole extent of it, and was as great in the ſight of Ormuzd, as if he had given being to 100 creatures, 1000 productions, or repeated 10,000 prayers.

In a country ſo poor as that of Zoroaſter appears to have been, and where agriculture was ſo much recommended, marriage was a principal object for his encoument; he declared it holy and honourable; and, in the prayers for thoſe things which he had neareſt at heart, we find a petition to Oromaſdes for a huſband to the unmarried girl; he even commands that every woman ſhould have one. Marriage among kindred was deemed the moſt honourable, and the girl who raiſed up children to the deceaſed deſerved the protection and commendation of the ſpirit of goodneſs. To render the obedience of wives to huſbands a greater matter of duty, Zoroaſter particularly enjoins it to his own daughter. Multiplicity of children was alſo the prayer of the Perſian prophet; but that multiplicity could only be the offspring of one partner: polygamy is no-where countenanced or even hinted at in the Zendiſh Word. Children were the glory of the celeſtial ſpirits, and helped their parents after death over the bridge that joined the heaven to the earth. On the other hand, every oppoſite vice was prohibited and puniſhed; the unnatural crime with death, and an extraordinary merit attached to him who puniſhed it. No particular puniſhment is mentioned for adultery; but, from that which followed illicit commerce even with a common woman, rape, and ſeduction, we may preſume it was not very mild. That of ſeduction or unchaſtity in the woman was even criminally ſevere; the firſt of theſe three was followed by 800 laſhes; the ſecond by the death of the raviſher; the laſt not only by the death of the offending man and woman, but even her aunt or guardian, as well as the illicit offspring, if any born, were all utterly cut off.

Throughout the Zendaveſta nothing like civil law is to be met with; there was no action whatever between man and man, and every wrong was ultimately reduced to a criminal offence; for every wrong was againſt religion, and religion was identified by Zoroaſter with the ſtate. The penances enjoined muſt be ſubmitted to, however unmeaſureable; and excommunication was denounced againſt him who refuſed to abide the law, which ſentence was followed up by a direction to cut off the diſobedient. Breach of word and breach of contract were puniſhable with from 300 to 1000 laſhes, and as many years in hell. The refuſal to pay what had been borrowed was conſidered a theft, and the refuſer, the magician, in almoſt every code the victim of the ignorance of others or of his own pretenſions, and he who buried a corpſe, were to be ſeparated from the faithful and cut limb from limb. The ſcale of puniſhment was far from juſt or reaſonable; whilſt the man who had refuſed to pay what he had borrowed was puniſhed as a thief, the man who aſſaulted and actually deprived another of a limb, was only liable to a puniſhment of 90 ſtripes. On the other hand, theſe puniſhments are moſtly redeemable by proper offerings, and fines of as many *derems* as laſhes with ox or camel ſinews.

The morality of the Zendaveſta is good, if it could but be reconciled as always poſſible with the two principles of good and evil unavoidable. Purity of thought, purity of word, and purity of action, is the threefold meaſure of the conduct of man. The deteſtation of a lie is ſtrongly inculcated; it is puniſhed with 300 laſhes, and, as uſual, a ſimilar number of years in hell. The practice of charity is highly commended; and the follower of the law who ſhould generouſly deſire only the good of others was promiſed the dwelling of immortality. Had this charity extended to all the world, it might have deſerved the praiſes of the philoſopher and chriſtian; but it appears throughout ſolely to be confined to the faithful.

The phyſician was ordered to commence practice upon the followers of the deeves; and, if three unfortunate infidels ſucceſſively died under his hands, he was never after to riſk his ſkill upon the followers of the law; if he did, his unſkilful practice was viſited upon him by being cut in pieces. Were he thrice together ſucceſsful upon the followers of the deeves, he was encouraged to follow his profeſſion among the faithful; and the ſcale of reward for cure, meaſured by the diſtinction of the claſſes, was extremely liberal, but always paid in kind, except by the prieſt, whoſe prayers were deemed an ample recompence.

The people for whom Zoroaſter legiſlated appear to have been a poor and uncivilized race. Among the puniſhable offences is that of not recompenſing the maſter for inſtruction, and the offending party is ſubjected to 900 years in hell, and as many laſhes; but what ſort of inſtruction is here meant is left to be conjectured. Cotton and wool or hair formed the materials for clothing in uſe. Pottery, the melting and purifying of lacca, and the knowledge of working at the forge in gold, ſilver, copper, iron, and tin, ſeem the only arts known among them. It does not appear they had any mines; if they had, the law of Zoroaſter, prohibiting the diſturbing of the earth, would apparently have prevented the working of them. Tillage and paſture were their principal occupations, and certainly the moſt honourable that man can follow. To aſſiſt theſe ſeems to have been his main object. There is not a ſingle word in all the Zendaveſta to induce us to ſuppoſe any commerce was known among them; and the ſea is never once mentioned by him. On the other hand, the name or idea of ſlavery no-where diſgraces the Zendiſh Word.

This is the ſum of the famous code of the prophet and lawgiver of the Parſees: and this law, materially indeed improved, though ſtill very imperfect, yet ſubſiſts in Surat and its neighbourhood, among the deſcendants of the

Perſians

Perſians who fled thither from the ſword of the ſecond Arabian khalif.

Of the Laws of Greece.

Upon this ſubject little remains to be ſaid, having been anticipated in the article Greece, in our eighth volume. The two principal forms of government which prevailed were thoſe of Lycurgus, (ſee p. 837–841.) and of Solon, (ſee p. 871.) We ſhall, however, introduce a few particulars which have been omitted or but ſlightly touched upon in that volume.

The government of Lacedæmon, was originally monarchical; and, though the kings had ſome ſubordinate magiſtrates, choſen by themſelves, of whoſe counſel they occaſionally availed themſelves, yet the will of the ſovereign was the ſupreme law. Thus the ſovereign power paſſed through a ſucceſſion of twelve princes, from Lacedæmon, the ſon-in-law of Eurotas, and founder of this monarchy. Under Euryſthenes and Procles the government took a new form; and, inſtead of having one ſovereign, it became ſubject to *two*. Theſe two brothers governed jointly, and with equal power and authority, each bearing the title of king of Lacedæmon, and being acknowledged and obeyed as ſuch. In this bipartite condition the government continued under a ſucceſſion of thirty princes of the line of Euryſthenes, and twenty-ſeven of that of Procles; and it terminated in both about the ſame time. Diſcords ſoon commenced. Two parties were formed, and they became turbulent and unmanageable. By the diviſions that were thus occaſioned, the regal dignity ſunk into ſuch contempt, that the government was upon the brink of falling into anarchy and confuſion, when Lycurgus, B.C. 884, undertook the management of it, during ſome part of his nephew Charilaus's minority. During the period of his voluntary abſence, when he had travelled through Crete, Aſia, and Egypt, the government had become ſo corrupt, that not only his friends, but even thoſe who had been his moſt zealous enemies, were glad to repeat their embaſſies, entreating him to return and ſave his country from ruin. Theſe were the inevitable conſequences of that fatal diviſion of the regal authority between two competitors; yet Lycurgus did not confine it again to either of the lines. The plan he adopted was that of reducing their authority, by conſtituting a ſenate, endowed with the ſupreme power in all civil matters; and leaving to the kings, beſides the title and honour, only the management of military and religious affairs. The *ſenate*, conſiſting of the two kings and twenty-eight aged perſons, were the ſupreme council, in which were diſcuſſed, in the firſt inſtance, all queſtions relative to declaring war, concluding peace, entering into alliances, and other high and important affairs of ſtate. On this tribunal depended not only the lives, but the honours, of the citizens. When a king was accuſed of having violated the laws, or betrayed the intereſts of the ſtate, the tribunal which acquitted or condemned him was compoſed of the twenty-eight ſenators, the five ephori, and the king of the other family. However, he might appeal from them to the general aſſembly of the people. The *ephori* were elected by the people from among the citizens of every rank; they were five in number, and changed every year, to prevent their abuſing their authority.

Lycurgus ordained, that the magiſtrates ſhould not be appointed by lot, but elected by ſuffrages. He deprived riches of the influence and reſpect annexed to them. Honour was the moſt valuable reward, and reproach the moſt cruel puniſhment. Death was ſometimes inflicted, but a ſentence of this kind followed a very careful and rigorous examination, for nothing was regarded ſo precious as the life of a citizen. Execution was performed in the priſon, and during the night, that the firmneſs of the criminal might not move the commiſeration of the people; and his life was taken away by the cord, that the ſufferings of the guilty might not be multiplied.

Of all the inſtitutions of Lycurgus, the diviſion of lands was that which required, on his part, the greateſt degree of firmneſs and reſolution, becauſe it was likely to be much oppoſed, and to occaſion various and violent conteſts. He thought it, however, neceſſary for eſtabliſhing peace and good order in the commonwealth. With a view of baniſhing from the community inſolence, envy, fraud, luxury, and, at the ſame time, extreme poverty and exceſſive wealth, he perſuaded the citizens to ſurrender all their lands to the ſtate, and to allow a new diviſion of them, that they might live together in a perfect equality, and that virtue and merit ſhould eſtabliſh the only claim to pre-eminence and honours. After Lycurgus had made this diſtribution, he thought it adviſeable to abſent himſelf, that the paſſions of the people might have leiſure to ſubſide and cool. On his return, he found the fields of Laconia covered with cluſters of ſheaves, all of the ſame ſize, and placed at diſtances nearly equal. Accordingly he ſeemed to behold a large domain, the productions of which had been divided among brethren; while the Lacedæmonians believed they ſaw in him a father, who had manifeſted no more fondneſs for one than the reſt of his children. After having divided their immovables, he undertook likewiſe to make the ſame equal diviſion of all their movable goods and chattels, that he might utterly baniſh from among them every kind of inequality. But, apprehending invincible oppoſition to this meaſure, he endeavoured to accompliſh his object by ſapping the foundations of avarice. With this view he cried down all gold and ſilver money, and ordained that no other ſhould be current beſides that of iron; which he made ſo heavy, and fixed at ſo low a rate, that a cart and two oxen were neceſſary to carry home a ſum of ten minas (equal to about 20l. ſterling,) and a whole chamber to keep it in. He next baniſhed all uſeleſs and ſuperfluous arts from Sparta. But, without doing this, moſt of them muſt have ſunk of themſelves, and diſappeared with the gold and ſilver money; becauſe the tradeſmen and artificers would have found no vent for their commodities; and this iron money had no currency among the other Grecian ſtates, which, ſo far from eſteeming it, made it the ſubject of their banter and ridicule. The importation of all foreign money was prohibited, that corruption might not enter under the name of commerce. Barter or exchange of one commodity for another was preſerved by law in Sparta long after it had been diſcontinued in every other ſtate. Intereſt was alſo forbidden in the Spartan commonwealth. According to the laws of Lycurgus, the head of a family could neither buy nor ſell a portion of land; he could neither give it during his life, nor bequeath it by will to whom he pleaſed. He was not even permitted to divide it. The eldeſt of his children was entitled to the inheritance, in the ſame manner as, in the royal family, the eldeſt ſon ſucceeded by right to the crown. In order to provide for the other children, he eſtabliſhed other regulations. The land, as well as the perſons, of the Spartans, were free from all impoſitions. The ſtate had no treaſure. On certain occaſions the citizens contributed according to their abilities, and on others they had recourſe to means which evince their exceſſive poverty. The deputies of Samos once came to Lacedæmon to ſolicit the loan of a ſum of money. The aſſembly of the people, having no other reſource, ordered a general faſt to be obſerved by the free citizens, ſlaves, and domeſtic animals; and gave the ſum thus ſaved to the Samians.

Another regulation of Lycurgus, was that of public meals. That he might entirely ſuppreſs the magnificence and extravagance of public tables, he ordained that all the citizens ſhould eat together of the ſame common victuals, which the law preſcribed, and expreſsly forbade all private eating at their own houſes. By this ſettlement of public and common meals, and by this frugality and ſimplicity in eating, he depreciated the value of riches, and made them of no uſe as means of procuring the luxuries of life. This regulation, however, was very offenſive to the opulent. At theſe meals, each table accommodated

about fifteen perſons; and every perſon furniſhed every month a buſhel of flour, eight meaſures of wine, five pounds of cheeſe, two and a half of figs, and a ſmall ſum of money for preparing and cooking the victuals. Every perſon, without diſcrimination, was obliged to attend at the common meal. At theſe public tables the children obtained inſtruction and improvement; they were likewiſe trained and accuſtomed to great ſecrecy; for, as ſoon as a young man came into the room, the eldeſt perſon of the company uſed to ſay to him, pointing to the door, "Nothing ſpoken here muſt ever go out there." The moſt exquiſite of all their eatables was that which they called their "black broth;" and the old men preferred it to every thing elſe upon the table. Dionyſius the tyrant, however, thought otherwiſe, and complained of it as inſipid; upon which he was told that the ſeaſoning was wanting. When the tyrant inquired, What ſeaſoning? he was told, Running, ſweating, fatigue, hunger, and thirſt. As they were moderate in their eating, they were no leſs abſtemious in their drinking; the Lacedæmonians only drank to quench thirſt; drunkenneſs was reckoned infamous among them, and ſeverely puniſhed; and, that young men might conceive the greater abhorrence of this ſpecies of debauchery, ſlaves were ſometimes compelled to drink to exceſs, that the beaſtlineſs of the vice might appear. When they retired from the public meal, they were not allowed any torches or lights, becauſe it was expected, that men who were perfectly ſober ſhould be able to find their way in the dark; beſides, this practice gave them a facility of marching without light, a quality very uſeful to them in time of war.

As to dreſs, there was no diſtinction between the rich and poor. Their garments were made for uſe, and not for ſhow; and they were taught betimes to diſtinguiſh themſelves by their virtue, rather than by their robes. Boys were always uſed to go without ſhoes, nor were they permitted to cut or trim their hair. Baths and anointing were not much in uſe among the Lacedæmonians; the river Eurotas ſupplied the former, and exerciſe the latter. Young women wore their veſts, or jerkins, only to their knees, or, as ſome ſay, not ſo low; a cuſtom which has been cenſured both by Greeks and Romans as indecent. Gold, precious ſtones, and coſtly ornaments, were permitted only to common women; which permiſſion was the ſtrongeſt prohibition to women of virtue, or ſuch as valued their reputation. Virgins went abroad without veils; with which, on the contrary, married women were always covered. In certain public exerciſes, to which girls were admitted, they, as well as the young men, were obliged to perform naked.

Lycurgus conſidered the education of youth, in every ſtage of it, from the earlieſt infancy to maturity, as the moſt important object of a legiſlator's care. His grand principle was, that children belonged more to the ſtate than to their parents; and therefore he ordered the ſtate to be entruſted with the general care of their education, that they might be formed on conſtant and uniform principles, by which they might be inſpired with the love of their country, and of virtue. As ſoon as a boy was born, the elders of each tribe viſited him; and if they found him well made, ſtrong, and vigorous, they ordered him to be brought up at the public charge; but if, on the contrary, they found him deformed, tender, and weakly, he was caſt into a gulf near Mount Taygetus. At his earlieſt age the child was accuſtomed to the moſt hardy treatment in his food, dreſs, reſt, and general mode of life. He was to be uſed to ſolitude and darkneſs, and to be brought up a ſtranger to impreſſions of terror, uſeleſs reſtraints, and unjuſt reproaches. At the age of ſeven years his education according to the laws commenced, and he was trained up under the diſcipline appointed by the ſtate. Education, indeed, in the whole courſe of it, was, properly ſpeaking, an apprenticeſhip of obedience. While they were at table, the maſter inſtructed the boys by aſking them queſtions, to which they were to give a quick and conciſe, or *laconic*, anſwer. Lycurgus, it is ſaid, was for having the money bulky and heavy, and of little value; but their language very pithy and ſhort, compriſing much ſenſe in few words. To literature they paid little attention; for all the ſciences were baniſhed from the country. The principal objects of their ſtudy were obedience, the patient enduring of hardſhip and fatigue, and victory in battle. The ſuperintendant of their education was one of the moſt honourable men of the city, and of the firſt rank and erudition, or one of the ephori, who appointed over every claſs of boys, into which they were initiated, maſters of the moſt approved wiſdom and probity. Strict obedience, and great reſpect to their elders and ſuperiors, were matters ſedulouſly inculcated in the Spartan ſyſtem of education. To the old men the youth roſe up, whenever they came into any public place; when they met them in the ſtreets, they gave way; and they were ſilent, whenever their elders ſpoke. All the old men were deemed to have the authority of parents, and warranted in the exerciſe of it; and thus Lycurgus provided, that, as youth are every where too apt to offend, they might be no where without a monitor. The laws went ſtill farther; for, if an old man was preſent when any youth committed a fault, and did not reprove him, he was puniſhed equally with the delinquent. Amongſt the youths there was one of their own body, or, at moſt, two years older than the reſt, who was denominated *iren*; he had authority to queſtion all their actions, to watch their behaviour, and to puniſh them if they did amiſs; and their puniſhments were not ſlight, but ſevere. Silence was highly commended at Sparta, where modeſty, not only in words and actions, but in looks and geſtures, was held to be a moſt becoming virtue in young people. An inconſiderate perſon, who would not liſten to inſtruction, and who ſeemed to diſregard what the world might think or ſay of him, was treated by the Lacedæmonians as a diſgrace to human nature.

Occupations among the Spartans that were neceſſary for the benefit of the community, ſuch as agriculture and the like, were left to the Helotes, or ſlaves; but arts ſubſervient to luxury were wholly interdicted. Thus orators or rhetoricians, augurs, bankers, and dealers in money, were excluded. The Spartans admitted no theatrical diverſions among them; but other kinds of poetry were allowed, provided the magiſtrates had the peruſal of pieces before they were introduced to the public. Muſic was much encouraged, provided that it was ſuch as had been in favour with their anceſtors; and they would not permit their ſlaves to learn either the air or the words of their moſt admired pieces.

Hunting was made a part of the education of the Lacedæmonians, becauſe it had a tendency to prevent corpulence, which incurred public contempt, and to ſtrengthen their limbs, and to render thoſe who practiſed it ſupple and fleet. They had a kind of public dances, in which they much delighted, common alike to virgins and young men. Indeed, in all their ſports, girls were allowed to divert themſelves with the other youths; inſomuch that, at darting, throwing the quoit, pitching the bar, and the like robuſt diverſions, the women were as dextrous as the men. For this cuſtom Lycurgus aſſigned no other reaſon, than that he ſought to render women, as well as men, ſtrong and healthy, that their children might reſemble them.

As to the laws relating to religion, they preſcribed that the ſtatues of all the gods and goddeſſes worſhipped by the Spartans, ſhould be repreſented armed, even Venus herſelf; that the people might regard a military life the moſt noble and honourable; and not attribute, as other nations did, ſloth and luxury to the gods. Their ſacrifices conſiſted of things of ſmall value; that indigence might never hinder them from worſhipping the gods. They were forbidden to make long or raſh prayers to the heavenly powers; and were enjoined to aſk no more than that they might live honeſtly, and diſcharge their duty. Graves were allowed in their city; and they buried cloſe

to

to the temples, that all people might be familiar with death, and not conceive of it as a thing dreadful in itself, or that dead bodies defiled the living. Magnificent ſepulchres were forbidden; nor was the plaineſt or moſt modeſt inſcription permitted, except for ſuch as were ſlain in the wars, or for women who had devoted themſelves to a religious life. Tears, ſighs, and outcries, were not permitted in public, becauſe they diſhonoured Spartans, who ought to bear all things with equanimity. Mournings were reſtricted to ſeven days.

Celibacy in men was regarded as infamous, and puniſhed by various tokens of contempt. If a man did not marry when at full age, he was liable to an action; as thoſe alſo were who married above or below themſelves. Such as had three children had certain immunities, and thoſe who had four were free from all taxes. Virgins were married without portions; huſbands were allowed to beat their wives; and there were ſome other laws which we ſhall not here recite. The men of Sparta are generally ſaid to have been diſtinguiſhed for their virtue; but the Spartan women have been as generally decried for their boldneſs, and contempt of decency.

At Sparta, it has been ſaid, every thing tended to inſpire the love of virtue, and the hatred of vice; the actions of the citizens, their converſations and mutual intercourſe which frequently occurred, their public monuments, and their inſcriptions. Accordingly Lycurgus would not allow all ſorts of perſons to travel, leſt they ſhould bring home foreign manners, and return infected with the licentious cuſtoms of other countries, and thus become averſe from the life and maxims of Lacedæmon. On the other hand, he would ſuffer no ſtrangers to remain in the city, who did not come thither to ſome uſeful or profitable end, leſt they ſhould diſſeminate the vices of their own countries. A ſoldier was the only reputable profeſſion in Sparta; a mechanic or huſbandman was looked upon with contempt. War, indeed, was the trade and buſineſs of the Lacedæmonians; and the firſt law of war with them was never to fly, or turn their backs upon their enemies, however ſuperior in number; never to quit their poſt; never to deliver up their arms; in a word, either to conquer, or to die upon the ſpot. When their enemies began to fly, they purſued no longer than till victory was aſcertained; becauſe they would ſeem to fight rather for the honour of conquering than of putting their enemies to death. After forty years' ſervice, a man was, by law, no longer required to go into the field; and conſequently, if the military age was thirty, the Spartans were not held invalids till they were ſeventy.

The inſtitutions of Lycurgus have been much extolled both by ancients and moderns, but they are unqueſtionably liable to many objections. The legiſlator himſelf, when he framed them, muſt have been in a great degree devoid of that comprehenſion and ſenſibility of mind, which takes an enlarged view of the frame and condition of men, and which duly attends to the feelings of human nature; particularly thoſe of parents and children. The underſtanding was left in a great degree uncultivated; decency was proſcribed, barbarity rendered familiar; and all thoſe tender ſenſations that humanize ſociety were ſmothered, as it were, in the birth. The conſtitution was a moſt unnatural effect of ſpeculation, founded upon the miſery of the individuals that compoſed the community; for, if the Spartans were free with reſpect to other nations, they were ſlaves to their own legiſlature. In a word, ſay the authors of the Univerſal Hiſtory, "it was a diſcipline calculated, not for a free people who had a right to cultivate the powers of reaſon, and taſte the nobleſt enjoyments of life, but for the deſperate militia of a deſpotic tyrant, who wants to extinguiſh every ſentiment of humanity, and produce a contempt of life by ſtripping it of all its comforts."

The laws of Lycurgus remained in force among the Lacedæmonians long after the Athenians had received and rejected thoſe of SOLON; ſo that theſe two codes may be compared together, which has been done under the article GREECE, vol. viii. p. 961. But the laws of Solon are more peculiarly intereſting to us, becauſe they became partly the model of the decemviral enactments, the *fons omnis publici privatique juris*, according to Livy, the ſource of the Roman law, from which every European country has borrowed more or leſs, in order to complete their ſubſequent ſyſtems.

About the year 562 B. C. according to ſir Iſaac Newton, but 594 according to Blair and Dufreſnoy, the Athenian people ſeem to have reached the laſt ſtage of bad government; that ſtate which nothing could apparently render worſe, and almoſt any thing could improve. See the article ATTICA, vol. ii. p. 501. In this emergency, all eyes were fixed upon Solon, and to him were referred the common grievances of all.

In undertaking the redreſs of wrongs, and the civil regulation of the ſtate, Solon ſeems to have avoided a general abrogation of all laws then in force, and to have confined himſelf to the repeal of ſuch as were more particularly grievous, and to the depriving others of their paſt effect, without annulling them as to the future. Thus he cleared the debtor, and enacted that none ſhould in future take his perſon as ſecurity. He ſwept the then exiſting mortgage from his lands; but it does not appear that he annihilated, or in other reſpects altered, the laws of mortgage, except in the abolition of the intereſt already incurred, the future rate of which he left completely arbitrary between the debtor and creditor, according to the ſufficiency or inſufficiency of the ſecurity upon which the money was to be borrowed. In Athens the rate of intereſt afterwards fixed itſelf at 12 per cent. on effects, and 18 per cent. where payment appeared doubtful; whoever took more was conſidered vile and ignominious, although there was no law againſt it.

The citizens he divided into four claſſes, as explained under the article GREECE, vol. viii. p. 870. (See alſo ATTICA, vol. ii. p. 536.) And, to divert as much as poſſible the public mind from the factions that muſt ever attend republican government, he was anxious to keep every part of the community in employ; for this purpoſe, (differing widely from Lycurgus,) he not only ordered that all trades ſhould be accounted honourable, but commanded that all who had not the means of following the higher occupations of muſic, riding, philoſophy, and gymnaſtic exerciſes, ſhould learn and follow ſome trade, manufacture, or huſbandry; and to the areopagus, as the chief council of the ſtate, he committed the inſpection of the people, the enquiry how each one procured his ſubſiſtence, and the puniſhment of the idle. The law even ſet aſide the rights of nature, by decreeing that ſon acquitted from maintaining his parent who had not procured his being taught ſome trade or occupation. To complete the whole, he who ſhould be thrice convicted of idleneſs was declared infamous, and liable to the criminal puniſhments attached to infamy, and to be proſecuted for it by any perſon. Socrates afterwards deemed theſe laws againſt idleneſs to be inconſiſtent with liberty; but a Chineſe emperor, who had probably never heard of ſuch a thing as liberty, thought much better: "When," ſays he, "any one in the empire paſſes a day in idleneſs, ſome one or other of my people ſuffers hunger or cold." The country of Attica itſelf rendered the law neceſſary; it was ſo poor, and afforded ſo little food, that no product except oil was allowed to be exported.

Where all might be judges, it was neceſſary they ſhould poſſeſs ſome portion of general knowledge; hence Solon ordered that all ſhould be inſtructed in the rudiments of literature; and, for the preſervation of the lives of ſeamen and ſoldiers, all were to be taught to ſwim. So valuable was the life of every ſubject in a ſmall republic, that in after-times, the unfounded accuſation of following up victory in preference to delaying, for the purpoſe of ſaving thoſe who, in a great naval fight, had fallen into the ſea, was ſufficient to deprive ſix out of eight ill-fated admirals

mirals of their lives. The reader will continually notice certain points of reſemblance, as well as of oppoſition, between this code and that of Lycurgus, which was now flouriſhing in the rival ſtate of Lacedæmon. Among the more wealthy citizens, the child paſſed from the hands of his mother and nurſe to the tuition of the ſchools. Here the mind was opened to the very different numbers of muſic and arithmetic, and great attention was paid to his writing and pronouncing his native language with truth and accuracy. The ſayings of the wiſe were taught, and the actions of the former great recounted to him; and, that the memory of the ſcholar might the better retain, and treaſure up for the period of maturer recollection, the leſſons of early youth, the aid of poetry was called in, and theſe leſſons were chiefly ſelected from the ſongs of Heſiod and Homer.

The ſtudy of the laws formed the next period of education; theſe being open to the reading of all, it was within the reach of every one to know what was to be done, and what to be avoided. The next gradation was that of entering among the followers of the ſophiſts and philoſophers, with whom Athens, more happily than any other ſtate, abounded. What the ſtudent had hitherto learnt was now put to the trial, and the learning to ſpeak juſtly on ſubjects was the fruit of his liſtenings and diſputations; but the action muſt be ſuited to the word, and the word to the action. The theatre was the ſchool for both; and here all his prior acquirements were called to memory in the mimic ſcene, and his leſſons in ſome ſort renewed in the repreſentations of the vices and virtues, the amiable qualifications and the paſſions, that diſgrace or adorn mankind in every ſituation of life. The exerciſes of the body kept pace with thoſe of the mind; and the young Athenian entered the career of life, of politics, and of war, with a fund of acquirements ſufficient to render him an uſeful friend or a dangerous enemy to his country.

Lawful marriage could only be contracted between free citizens; and the offspring of ſuch marriages alone were declared free. As to what we call levitical degrees, there exiſted no prohibition at Athens, except between lineal aſcendants and deſcendants, and uterine brothers and ſiſters; the latter to prevent the union of inheritances. Brothers and ſiſters of the whole blood might intermarry; and the great Cimon is an illuſtrious example of legaliſed inceſt. To obviate the cruel expoſure of female infants by rendering their apportionment no burthen to the parent, Solon enacted that no dowry ſhould be given in marriage; the only portion the bride was allowed to bring, conſiſted of three ſuits of clothes and ſome houſehold ſtuff of ſmall value. The adulterer might be puniſhed with death by the offended huſband, if ſurpriſed *flagrante delicto*, and the huſband continuing to live with the adultereſs afterwards was deemed infamous; but the frailty of the Athenian lady was reſpected ſo far as her life, though ſhe was ſubjected to a puniſhment not a little ſevere to a woman who could have no other mode of livelihood afterwards than what the expoſure of her perſon afforded; ſhe was forbidden to adorn herſelf, and any one finding her ſo, might with impunity tear the clothes off her back, and add the further chaſtiſement of a beating.

The laws of Solon with regard to females, exhibit an inconſiſtent mixture of laxity and harſhneſs. A man might deviſe his wife, as well as his daughter and property; and, if he did not, the unfortunate female, even the widow, if an heireſs without male iſſue, was diſpoſable by the neareſt kinſman, and, in default, by the archon; and, when her ſons attained their ſixteenth year, the eſtate was taken from her again. An heireſs could not marry out of her own family, and her neareſt kinſman might claim her of right; and this right extended ſo far, that, if a father gave his daughter in marriage to a perſon not his neareſt kinſman, and afterwards died inteſtate and without iſſue male, ſuch neareſt kinſman might actually take her from her huſband, and marry her himſelf; a caſe by no means unfrequent.

In the diſſipation of Athens, where, as in London or Paris, "all the varied hours are day," Solon was determined at leaſt to preſerve appearances, and to expoſe vice, though he did little towards the reſtoration of virtue. In order therefore to prevent the midnight revels of the Athenian dames from paſſing unnoticed, or elſe for the purpoſe of apprizing the parties moſt intereſted, he enacted, that no woman ſhould go abroad by night but in a chariot with a torch borne before her. It could be little ſatisfaction to the unmarried daughter of a free citizen to know, that ſhe could not be ſold for a ſlave by her father or brother, unleſs ſhe had by her unchaſtity diſhonoured her family; the only effect of ſuch a law would be, to keep that woman virtuous from whoſe incontinency leaſt miſchief was to be dreaded. It is true, ſhe might marry whom ſhe pleaſed if not an heireſs, and without parents or brothers, and if the relation in the ſituation of guardian refuſed to marry her himſelf; but where, in a city which preferred wealth to virtue, which actually offered ſacrifices and prayers to the god of riches, was ſhe to find an huſband? and ſhe could not marry a ſtranger. But Solon, as if willing to make ſome amends to thoſe women who were not heireſſes for the privileges allowed to thoſe that were, and to reduce the oppreſſion of the laſt-mentioned law, ordered, that he who forced a free woman ſhould be puniſhed by a fine of 100 drachmas, about 3l. 10s. 10d. ſterling, and he who ſeduced the wife be fined 20 drachmas; by this means incontinency was covered under the denomination of rape; the honour of a virgin fixed at 3l. 10s. 10d. and at the rate of 14s. 2d. every married woman enjoyed the envied privileges of an heireſs. It is ſingular that the number of free citizens of Athens was never increaſed by marriage. Was it want of peace, or want of morals, or want of both, that occaſioned this ſtationary population? How different was early Rome!

Indeed that part of the legiſlation of Solon which regards morals is leaſt to be admired; we may even ſay it abounds with defect and abſurdity. By prohibiting the men from entering the ſchools of youth, he made an effort to protect the riſing generation from the abominable perverſion of inſtinct ſo prevalent among the Greeks; yet, by the ſtrangeſt contradiction, he approves it as honourable in thoſe grown up. See Du Pauw on the Greeks, §. ii. and the ſpeech of Eſchines againſt Timarchus. He puniſhes incontinency in the virgin with ſlavery; but what woman would incur ſlavery whilſt the mode of ſinning by rape preſented ſuch an eaſy acquittal? or what adulterer would not prefer the moderate fine of ſeduction, to the hazard of life in the huſband's houſe? Xenophon, the grey-headed and ſober diſciple of Socrates, has revealed to the world the faſhionable latitude allowed to the Grecian matrons by the pliant liberality of their huſbands; provided peace and friendſhip reigned in families, every indulgence was diſcovered for them, by ſympathiſing with all their natural defects; and, even where the lady chanced to yield to the irreſiſtible tyranny of her paſſions, it was uſual to pardon the firſt act of weakneſs, and forget the ſecond. *Xenophon. Hiero & Simonides.*

Though divorce was commanded by Solon in the caſe of adultery, and the Athenian huſbands ſeem to have been afraid of exerciſing their prerogative, the Athenian ladies were not always ſo timid, and, from the irregularities and infidelities of their lords, were ſometimes tempted to demand a divorce. In order to acquire this legal ſeparation, the wife muſt have appeared perſonally before the archon, and given in to him a bill of divorce with her own hand; for the doing it through another was inſufficient. Upon ſuch an occaſion, either the apprehenſion of expoſure, or inability to reſtore the portion, induced Alcibiades to carry off his wife by force from the market-place to her home again, where, as Plutarch informs us,

he afterwards quietly continued; but the hiſtorian gives us no proof of the ſincere amendment in the morals of this eccentric genius.

In the new legiſlation of Athens, an unlimited extent was not allowed to paternal power over males. They continued, indeed, dependent upon the father to a certain extent through life, if not manumitted, which was ſeldom the caſe except for the purpoſe of marrying an heireſs. Where alſo the fathers were diſtreſſed, it was cuſtomary to emancipate their children that they might eſcape the ignominy of their parents' misfortunes; but the duties of a father and ſon were in other reſpects very properly made reciprocal. The child was bound to ſupport his parents; but, if the father did not provide him with a trade, he was exempted from furniſhing him with maintenance; and the illegitimate child, as the offspring of no honourable motive, was equally freed from this filial obligation. The monſter who beat his parents was declared infamous; and diſobedience was a ſufficient cauſe for rejection from the dignity of archon. In a *laocracy*, where every thing was determined by the aggregate voice of the people, reverence and reſpect to age could not be too ſtrongly inculcated. On the other hand, the father could not diſinherit his children from paſſion or ſlight prejudices; he muſt previouſly go before the judges, and there lodge his complaint; and, on proof of ſufficient cauſe, the crier was ordered to proclaim, that ſuch a citizen rejected the unworthy wretch. If the parent, from dotage, indolence, or other cauſe, became incapable of managing his eſtate and property, the ſon might impeach him before his fellow-citizens of the ſame ward, and obtain from them the inveſtment of that inheritance which the incapacity of the parent would have ſquandered or reduced; and ſuch a diſſipation of property by ſpendthrifts ſubjected them to the charge and puniſhment of infamy.

A principal feature in the laws of Solon is the providing for deſolate heritages; for the care of heireſſes and orphans, whom he entruſted to the archons; and that power which enabled an Athenian, devoid of male iſſue, to preſerve his name among his fellow-citizens, and beſtow on ſome adopted male ſtranger who might deſerve it the portion which otherwiſe would be divided among an ungrateful or inattentive kindred. This right alſo ſecured to the manes of the deceaſed the accuſtomed rites which Greece, as well as the nations of the eaſtern world, paid to the tombs of departed anceſtry. But the parent was at the ſame time excluded from depriving his own ſons of their inheritance, though he who ſhould be previouſly adopted could not be excluded, but ſhared equally with the after-born male children. A conſequence of adoption was, that the ſon manumitted loſt all right in the inheritance of his natural father, but not of his natural mother; for every man continued to have the ſame mother. The child adopted could not afterwards abandon his fictitious parent, unleſs he left him a ſon to ſupply his own place; and, this done, he might again return to his own family; but, if the adopted failed in the main condition, that of raiſing a family to his legal parent, the eſtate reverted; the adopted had no power of deviſing it himſelf; but no adoption by a man who had legitimate ſons then born ſhould be valid.

Solon was the firſt that introduced the law of *wills* at Athens; but he did not think man was to live entirely for himſelf, nor ſolely to enjoy the property he poſſeſſed; his children had a fair claim upon his eſtate; for want of them only, or their attaining the age of ſixteen, could he deviſe it. If he left no will, it deſcended among his neareſt relations, as it had been accuſtomed previouſly, namely, by lot. *Iliad*, xiv. But, whilſt Solon gave the power of deviſe in default of children, he allowed it not under every circumſtance; and, if the bequeſt was obtained by improper means, either violence or fraud, the will was ſet aſide; even the perſuaſions of a wife were a cauſe of nullity. Deceit, ſays his biographer, was conſidered by him in the ſame light as compulſion; and pleaſure as great a pervertor as pain. If a man had legitimate daughters even, he might deviſe his eſtates; but, in ſuch caſe, it muſt be on condition the deviſees took them in marriage. The deſcent of eſtates, where no will was allowed, remained as theretofore. The inheritance could not lineally aſcend, and it appears to have been partible among all the ſons, and, in default of ſons, among the daughters. Sir William Jones has briefly put together the laws of inheritance, as follows: "The adopted ſon, and the after-born ſons of the perſon who adopted him, ſhall be coheirs of the eſtate. If a citizen die inteſtate and leave daughters, the neareſt kinſmen who marry them ſhall inherit the eſtate; but, if he die childleſs, his brothers, by the ſame father, ſhall be his heirs; and the legitimate ſons of thoſe brothers ſhall ſucceed to the ſhare of their fathers. If there be no brothers, the ſiſters on the father's ſide and their children ſhall inherit. On failure of ſiſters and nephews, the couſins on the father's ſide ſhall be heirs in the ſame manner; but males and children of males ſhall be preferred, although in a remoter degree, provided that they belong to the ſame branch. If there be no kinſman on the father's ſide ſo near as the ſecond couſins, then let thoſe on the mother's ſide ſucceed to the eſtate in the ſame order. Should there be no maternal kinſman within the degree above limited, the next paternal kinſman ſhall be the heir." But firſt couſins, once removed, took the ſhares only their reſpective parents would have had; and the ſon of an heireſs took his mother's eſtate on attaining the age of ſixteen years, as has been mentioned before. *Attic Law*, xi. xii.

Solon ſeems to have been particularly attentive to the boundaries and ſecurity of each man's property, for the prevention of diſpute and miſchief, and thoſe little conteſts ſo frequently occurring from too near a neighbourhood. No one could dig a ditch or trench but at the ſame diſtance from his neighbour's ground that the trench or ditch was deep; he who would raiſe a ſtock of bees muſt hive them three hundred feet from thoſe raiſed by another. Common trees might be planted nine, but olives ten, feet from the boundary, that neither the root nor the branching might be an injury to the land of another; no wall could be built under one foot from a neighbour's ground; if a houſe were built, it muſt be two feet diſtant; he that built one in a field muſt erect it a bow-ſhot from his neighbour. As water was ſcarce in Attica, Solon ordered that, where there was a public well, all within the diſtance of four furlongs might make uſe of it; where the diſtance was greater, parties muſt dig their own; but, if they dug ten fathoms without reaching water, they had liberty to fill a veſſel of ſix gallons twice a-day at their neighbours'.

Theft, as in the Jewiſh law, ſeems mixed by Solon as a criminal and civil offence: the double might be reſtored, and a fine paid to the ſtate. From the laws againſt defaming and reviling perſons dead and alive, we may diſcern, from the commencement, the light flippant character of the Athenian people, (Acts xvii. 21.) and their almoſt innate diſpoſition to abuſe; and from thoſe prohibiting the next heir from becoming guardian to the minor, and the guardian from marrying the mother of the ward, we may collect the opinion entertained by Solon of the want of principle among his countrymen. The ſame want that dictated the eternal perjuries, forgeries of wills, frauds, ſeizures, and unjuſt claims of ſucceſſion, and abuſe of guardianſhip, ſo ſtrongly marked throughout the ſpeeches of Iſeus; the ſame want that made Alcibiades reply in anſwer to a queſtion, whether he would not truſt his country with his life; "No, not even my mother, leſt ſhe ſhould miſtake a black bean for a white one." We may admire the very ſplendid abilities of the great men of her republic in arms, in arts, and in letters, and the few virtuous ſages amongſt them; but the very treaſures of literature and philoſophy with which the ſchool of Athens has ſtored the world, have alſo moſt unbluſhingly handed down the teſtimony of thoſe vices her inſtitutions

ſanctioned or induced. "Such a height," it has been well obſerved, "did ſhe attain both in good and in evil, that poſterity has ſcarcely been able to add any thing new either to her virtues or vices." *De Pauw*, § v. See alſo Plutarch's Life of Solon; Sir W. Jones's Iſeus; and Potter's Archæologia, vol. i.

Of the Laws of Rome.

The primitive government of Rome was compoſed with ſome political ſkill, of an elective king, a council of nobles, and a general aſſembly of the people. War and religion were adminiſtered by the ſupreme magiſtrate; and he alone propoſed the laws, which were debated in the ſenate, and finally ratified or rejected by a majority of votes in the thirty *curiæ* or pariſhes of the city. Romulus, Numa, and Servius Tullius, are celebrated as the moſt ancient legiſlators; and each of them claims his peculiar part in the threefold diviſion of juriſprudence. 1. The laws of marriage, the education of children, and the authority of parents, which may ſeem to draw their origin from *nature* itſelf, are aſcribed to the untutored wiſdom of Romulus. 2. The law of *nations* and of religious worſhip, which Numa introduced, was derived from his nocturnal converſe with the nymph Egeria. 3. The *civil* law is attributed to the experience of Servius: he balanced the rights and fortunes of the ſeven claſſes of citizens; and guarded, by fifty new regulations, the obſervance of contracts and the puniſhment of crimes. The ſtate, which he had inclined towards a democracy, was changed by the laſt Tarquin into lawleſs deſpotiſm; and, when the kingly office was aboliſhed, the patricians engroſſed the benefits of freedom. The *royal laws* became odious and obſolete; the myſterious depoſit was ſilently preſerved by the prieſts and nobles; and, at the end of ſixty years, the citizens of Rome ſtill complained that they were ruled by the arbitrary ſentence of the magiſtrates. At length the ſimilarity of ſituation between the Athenian people at the time of the legiſlation of Solon, and that of the Romans, about 454 B. C. of Rome 302, was not improbably a principal cauſe of the latter having recourſe for remedy to the ſame fountain, among others, that had afforded relief to the former.

But the original ſource of the laws of the decemvirs, or of the Twelve Tables, is diſputed. The moſt probable account is, that a wiſe Epheſian, named Hermodorus, was driven by envy from his native country; before he could reach the ſhores of Latium, he had obſerved the various forms of human nature and civil ſociety; he imparted his knowledge to the decemviri of Rome, and a ſtatue was erected in the forum to his memory. But Livy and Dionyſius are willing to believe, that the deputies of Rome viſited Athens under the wiſe and ſplendid adminiſtration of Pericles; and that the laws of Solon were transfuſed into the Twelve Tables. If ſuch an embaſſy had indeed been received, the Roman name would have been familiar to the Greeks before the reign of Alexander; and the faineſt evidence would have been explored and celebrated by the curioſity of ſucceeding times. But the Athenian monuments are ſilent; nor will it ſeem credible that the patricians ſhould undertake a long and perilous navigation to copy the pureſt model of democracy. In the compariſon of the laws of Solon with thoſe of the decemvirs, ſome caſual reſemblance may be found; ſome rules which nature and reaſon have revealed to every ſociety; ſome proofs of a common deſcent from Egypt or Phœnicia. But, in all the great lines of public and private juriſprudence, the legiſlators of Rome and Athens appear to be ſtrangers or adverſe to each other.

Whatever might be the origin or the merit of the Twelve Tables, they obtained among the Romans that blind and partial reverence which the lawyers of every country delight to beſtow on their own municipal inſtitutions. The ſtudy is recommended by Cicero as equally pleaſant and inſtructive: "They amuſe the mind by the remembrance of old words and the portrait of ancient manners; they inculcate the ſoundeſt principles of government and morals; and I am not afraid to affirm, that the brief compoſition of the decemvirs ſurpaſſes in genuine value the libraries of Grecian philoſophy. How admirable is the wiſdom of our anceſtors! We alone are the maſters of civil prudence; and our ſuperiority is the more conſpicuous, if we deign to caſt our eyes on the rude and almoſt ridiculous juriſprudence of Draco, of Solon, and of Lycurgus." *De Leg.* ii. 23. The Twelve Tables were committed to the memory of the young and the meditation of the old; they were tranſcribed and illuſtrated with learned diligence; they had eſcaped the flames of the Gauls, and ſubſiſted in the age of Juſtinian, nine hundred and eighty years after their enactment; but nothing except a few fragments have ſurvived the improved, though ſtill voluminous, juriſprudence of the Code, the Pandects, and the Inſtitutes, of that emperor. The learning and induſtry of James Gothofred, or Godefroi, has reſtored its collected relics to their proper order, founding his arrangement upon authorities the learned have univerſally admitted; and his *Quatuor Fontes Juris Civilis* is not the leaſt valuable of the works with which literature has been enriched by his learned family. See Godefroi, vol. viii. p. 654.

Yet theſe laws, thus highly praiſed and prized, were written (ſays Gibbon,) like thoſe of Draco, in characters of blood. They approve the inhuman and unequal principle of retaliation; and the forfeit of an eye for an eye, a tooth for a tooth, a limb for a limb, is rigorouſly exacted, unleſs the offender can redeem his pardon by a fine of three hundred pounds of copper. The decemvirs diſtributed with much liberality the ſlighter chaſtiſements of flagellation and ſervitude; and nine crimes of a very different complexion are adjudged worthy of death. 1. Any act of treaſon againſt the ſtate, or of correſpondence with the public enemy. The mode of execution was painful and ignominious; the head of the degenerate Roman was ſhrouded in a veil, his hands were tied behind his back, and, after he had been ſcourged by the lictor, he was ſuſpended in the midſt of the forum on a croſs, or inauſpicious tree. 2. Nocturnal meetings in the city; whatever might be the pretence, of pleaſure, or religion, or the public good. 3. The murder of a citizen; for which the common feelings of mankind demand the blood of the murderer. Poiſon is ſtill more odious than the ſword or dagger; and we are ſurpriſed to diſcover, in two flagitious events, how early ſuch ſubtle wickedneſs had infected the ſimplicity of the republic, and the chaſte virtues of the Roman matrons. *Livy* xl. 43. viii. 18. The parricide, who violated the duties of nature and gratitude, was caſt into the river or the ſea, incloſed in a ſack; and a cock, a viper, a dog, and a monkey, were ſucceſſively added as the moſt ſuitable companions. Italy however produces no monkeys; but the want could never be felt, till the middle of the ſixth century firſt revealed the guilt of a parricide. The firſt parricide at Rome was L. Oſtius, after the ſecond Punic war. *Plutarch in Romulo.* During the Cimbric war, P. Malleolus was guilty of the firſt matricide. *Livy* lxviii. 4. The malice of an incendiary. After the previous ceremony of whipping, he himſelf was delivered to the flames; and in this example our reaſon is tempted to approve the juſtice of retaliation, 5. Judicial perjury. The corrupt or malicious witneſs was thrown headlong from the Tarpeian rock to expiate his falſehood, which was rendered ſtill more fatal by the ſeverity of the penal laws and the deficiency of written evidence. 6. The corruption of a judge who accepted bribes to pronounce an iniquitous ſentence. 7. Libels and ſatires, whoſe rude ſtrains ſometimes diſturbed the peace of an illiterate city. The author was beaten with clubs, a worthy chaſtiſement; but it is not certain that he was left to expire under the blows of the executioner. 8. The nocturnal miſchief of damaging or deſtroying a neighbour's corn. The criminal was ſuſpended as a grateful victim to Ceres. But the ſylvan deities were leſs implacable,

placable, and the extirpation of a more valuable tree was compenſated by the moderate fine of twenty-five pounds of copper. 9. Magical incantations; which had power, in the opinion of the Latian ſhepherds, to exhauſt the ſtrength of an enemy, to extinguiſh his life, and actually to entice a whole field of corn from its root. We may ſmile at ſuch an apprehenſion; but, not two centuries ſince, we were equally as credulous ourſelves. See 1 *Ja.* 12. and the caſes cited in the margin of the act.

The cruelty of the Twelve Tables againſt inſolvent debtors ſtill remains to be told; and we muſt prefer the literal ſenſe of antiquity to the ſpecious refinements of modern criticiſm. After the judicial proof or confeſſion of the debt, thirty days of grace were allowed before a Roman was delivered into the power of his fellow-citizen. In this private priſon, twelve ounces of rice were his daily food; he might be bound with a chain of fifteen pounds weight; and his miſery was thrice expoſed in the market-place, to ſolicit the compaſſion of his friends and countrymen. At the expiration of ſixty days, the debt was diſcharged by the loſs of liberty or life; the inſolvent debtor was either put to death, or ſold in foreign ſlavery beyond the Tyber; but, if ſeveral creditors were alike obſtinate and unrelenting, they might legally *diſmember his body*, and ſatiate their revenge by this horrid partition. The advocates for this ſavage law have inſiſted, that it muſt ſtrongly operate in deterring idleneſs and fraud from contracting debts which they were unable to diſcharge; but experience would diſſipate this ſalutary terror, by proving, that no creditor could be found to exact this unprofitable penalty of life or limb. As the manners of Rome were inſenſibly poliſhed, the criminal code of the decemvirs was aboliſhed by the humanity of accuſers, witneſſes, and judges; and impunity became the conſequence of immoderate rigour.

We proceed to matters of leſs importance, and of leſs cruelty.—Polygamy was unknown at Rome, as well as at Athens; but nothing remains from which it can be learnt within what degrees marriage was permitted or prohibited according to the Roman Tables; like thoſe of Solon, they probably left them as they had theretofore been accuſtomed to be contracted. Ulpian, who does not quote the Tables upon this point, ſays that formerly marriage was prohibited between parties as far as the fourth degree of kindred, which excluded that of firſt couſins; probably this was the law, as we do not find the Romans marrying ſiſters, or allying ſo nearly as was practiſed by the Greeks. The invidious prohibition of marriage between the patrician and plebeian families was abrogated within ſix years after its enactment by the decemvirs. The only other remaining law of the Twelve Tables concerning marriage is one, by which that woman was declared married of right who had remained in the houſe of her huſband a whole twelvemonth, without abſence for three nights during this period; in which caſe, like every movable acquired, a twelvemonth's poſſeſſion made her by preſcription the property of the acquirer; but other forms and deſcriptions of nuptials exiſted from the time of the Roman kings, and continued, ſome to the laſt days of the republic, others beyond the golden days of the empire.

Marriage was twofold; the *juſtæ nuptiæ* and the *injuſtæ*. The former was ſubdivided into three kinds: 1. That by confarreation, or the eating bread and flour together after the regular eſpouſals with the conſent of parents; the gift to the damſel of a golden ring by a ſenator or patrician, and an iron one by a plebeian, and the kiſs of ratification; ſo far the parties were affianced. Solemn ſacrifice and other ceremonies ſucceeded, among which, that of carrying the wife by force over the threſhold, in remembrance of the Sabine rape, was not forgotten; and a variety of other cuſtoms to complete the nuptial tie. 2. That by coëmption; where, by payment of three pieces of copper money, the wife purchaſed a fictitious right of heirſhip in her huſband's ſucceſſion. The third, by uſucaption, has already been ſpoken of; and the wife of the laſt deſcription was, properly ſpeaking, the *Roman matron*. Thoſe of the two former were the more honourable, and termed *matres familias*; and were entitled, when widows, to an equal ſhare in the diſtribution of their deceaſed huſbands' eſtates for life, as a recompence for what they had loſt on quitting the roof and power of their fathers. No reaſon ſeemed to require this ſhare being allowed to the wife of the third deſcription until ſhe had been actually acquired by another, for until this period ſhe had not abandoned her right in the inheritance of her own family; but, this right once loſt, there ſeems no reaſon nor no law to exclude her from the ſame proviſion out of her huſband's eſtate to which the other wives were entitled.

The *injuſtæ nuptiæ* were twofold; *injuſtæ legitimæ*, and *injuſtæ et illegitimæ*; both were the marriage of concubines; the one of a ſlave, the other of a free-born Roman woman; and both were legaliſed, or, more properly ſpeaking, tolerated, by a law of Numa; but, after the time of the decemvirs, the free-born daughter of Rome could enter into none but honourable nuptials. However, neither the wives nor the iſſue of ſuch marriages acquired any right of ſucceſſion, though the children of concubines bore no perſonal diſhonour from their birth.

Marriage thus contracted might be diſſolved; the law was ſuch from the beginning of Rome. The power of divorce ſeems to have reſted with the huſband. Romulus allowed it to the huſband, but refuſed to liſten to the complaints of the wife. The grounds of it, as related by Plutarch, were, the poiſoning his children, falſe keys, and adultery. The firſt would hardly ever occur where the means of procuring ſubſiſtence were eaſy. As to the ſecond, the fondneſs of the fair ſex of Rome for wine was a vice, probably introduced into the luxurious climate of Italy with the follies of Grecian worſhip; and, though it might not afterwards be general, it muſt have exiſted in ſome degree, or the law prohibiting the uſe of wine among women under pain of death, would never have been made, nor afterwards much ſpoken of. From the time of Romulus, both this offence and adultery had ſubjected the offending female to the judgment of the huſband's domeſtic tribunal, who in theſe caſes had the power of life and death, if he thought proper to inflict it. In early times, the party repudiating muſt have aſſigned grounds for the divorce; he was alſo compelled to it by the laws of the Tables, and to return to the wife her property; but, notwithſtanding this permiſſion, to the honour of Roman morals it is recorded, that no one divorce occurred from the time of the foundation to beyond the five hundredth year of the city. Carvilius, as a plea for ſo novel an exerciſe of prerogative, alleged the want of offſpring; but the right, once exerciſed, ſet an example which even the greateſt were not aſhamed to copy without alleging any reaſon whatever. The great Emilius not long after divorced the noble and virtuous Papiria, who had borne him children not unworthy of himſelf; and in the decline of Roman virtue the matter became purely optional. Plutarch alſo relates, that a certain Roman, in anſwer to the ſurpriſe expreſſed by his wife's relatives at his procedure, and their natural inquiries of "Was ſhe not fair? was ſhe not chaſte? was ſhe not fruitful?" made no other reply, than, holding out his ſhoe, "Is it not handſome? is it not new? yet none knows where it pinches but the wearer."

Gibbon gives us a different idea upon this ſubject: "The warmeſt applauſe (ſays he) has been laviſhed on the virtue of the Romans, who abſtained from the exerciſe of this tempting privilege above five hundred years; but the ſame fact evinces the unequal terms of a connection, in which the ſlave was unable to renounce her tyrant, and the tyrant was unwilling to relinquiſh his ſlave. When the Roman matrons became the equal and voluntary companions of their lords, a new juriſprudence was introduced; and marriage, like other partnerſhips, might be diſſolved by the abdication of one of the aſſociates. In three centuries of proſperity and corruption, this principle

ciple was enlarged to frequent practice and pernicious abuſe. Paſſions, intereſt, or caprice, ſuggeſted daily motives for the diſſolution of marriage; a word, a ſign, a meſſage, a letter, the mandate of a freedman, declared the ſeparation; the moſt tender of human connections was degraded to a tranſient ſociety of profit or pleaſure. According to the various conditions of life, both ſexes alternately felt the diſgrace and injury; an inconſtant ſpouſe transferred her wealth to a new family, abandoning a numerous, perhaps a ſpurious, progeny to the paternal authority and care of her late huſband; a beautiful virgin might be diſmiſſed to the world, old, indigent, and friendleſs; but the reluctance of the Romans, when they were preſſed to marriage by Auguſtus, ſufficiently marks, that the prevailing inſtitutions were leaſt favourable to the males. A ſpecious theory is confuted by this free and perfect experiment, which demonſtrates, that the liberty of divorce does not contribute to happineſs and virtue. The facility of ſeparation would deſtroy all mutual confidence, and inflame every trifling diſpute; the minute difference between a huſband and a ſtranger, which might ſo eaſily be removed, might ſtill more eaſily be forgotten; and the matron, who in five years can ſubmit to the embraces of eight huſbands, muſt ceaſe to reverence the chaſtity of her own perſon.

——Sic fiunt octo mariti
Quinque per autumnos. *Juvenal, Sat.* vi. 20.

A rapid ſucceſſion, which may yet be credible, as well as the *non conſulum numero, ſed maritorum, annos ſuos computant*, of Seneca de Beneficiis, iii. 16. Jerome ſaw at Rome a triumphant huſband bury his twenty-firſt wife, who had interred twenty-two of his leſs ſturdy predeceſſors. But the ten huſbands in a month of the poet Martial, is an extravagant hyperbole; (l. vi. epigram 7.)" *Gibbon.* ch. xliv.

In giving an unlimited extent to the exerciſe of paternal power, the decemvirs were juſtified by the law of their founder, and examples in their hiſtory. The abſolute power of life and death over children was not peculiar to the Roman father. In various countries and in different climates, the civilized being and the ſavage, the well-regulated ſtate and the tribe without laws, written or unwritten, have alike exerciſed an unlimited power over their families. But the chain that bound the Roman child, though the ſon of the free, was ſtronger than even that of the ſlave, and could only be broken by a triple emancipation, which ſo far only was peculiar to Rome. If the child was ſold by his father and obtained his freedom from his maſter, he again fell under the parent's power; if again ſold and again free, he returned a ſecond time to his original ſubſervience; and not until after a third ſale and a third manumiſſion, did he obtain his complete liberty, and freedom from paternal authority. Even to the time of Juſtinian, the mode allowed by the Tables of manumitting a child, continued the only one in uſe. The ceremonies of weighing the money, and delivering over the child to the purchaſer, were ſcrupulouſly adhered to; on the third ſale, the father declared that he ſold his ſon upon the confidence that the purchaſer would reſtore him to him; which done, the father emancipated him. But, whilſt by this act he acquired his freedom, he loſt at the ſame time every expectant right in the inheritance of an inteſtate father; his children hitherto born to him continued in the power of their grandfather, though a ſingle manumiſſion was ſufficient to liberate any one of them, or a daughter. The liberty and the life, if the term may be uſed, thus acquired, was again liable to forfeiture for impiety to the parent; and every perſon was at liberty to ſlay the irreverent ſon who had dared to ſtrike the author of his days, a crime which the founder of Rome left it not in the power of parental affection to forgive.

No law of the Tables is preſerved relative to adoption, nor is any certain mention made of it in Roman hiſtory prior to the period of the Tables; yet it might form a part of the latter, as a reſcript of Gordian ſays, that none can be adopted but through thoſe who, according to the *jus civile* (a term often uſed for the ancient law) have the *legis actio.* Adoption was either before the pretor or the people; and either *arrogative*, as where the adopted had no natural father, in which caſe the parties mutually aſked each other if they were willing, the one to be the father, the other to become the ſon, and the aſſent confirmed it; or *adoptive*, where one father beſtowed his ſon upon another. The adopted was entitled to all the rights and ſubjected to all the diſabilities of a natural ſon, and, as to his natural family, became wholly a ſtranger to it. In the time of Ulpian he ſucceeded as a *conſanguineus*, and even as an *agnatus*, in his fictitious family. Women could not adopt, becauſe they could have no heirs. The power of the father extended beyond the grave in the right of nominating guardians, or even abſolutely bequeathing by will his family to a ſtranger. Though the father had the power of thus appointing a guardian to his children, and of enfranchiſing them himſelf; nothing in the Tables tells us what was the age of puberty fixed by the law for ſons upon the anceſtor's deceaſe. Until majority, the neareſt male kinſman on the father's ſide became the guardian in caſe of inteſtacy. A cuſtom, if not a law, is preſerved, which regulates the care of ſingle women; if no guardian had been appointed to them by the father, they continued until marriage to be the wards of their brothers, or neareſt male relations on the father's ſide. The care of lunatics and ſpendthrifts, whom the decemvirs very properly conſidered to be in equal degree of mental imbecility, was alſo provided for; and, if no keeper had been appointed to them, the care and management of their perſons and eſtates was confided to their neareſt paternal kindred and family.

The power of making a will would ſeem to reſult as a conſequence from that of abſolute parental authority, and as ſuch to have been always the cuſtom of Rome, and not the conſequence of any enabling law of the Tables derived from Solon. By the ancient law it would appear, that all who were not under the power of a father might make a will. Numa decreed one only exception in favour of the veſtal, who was priviledged to do ſo even in the parent's life-time; other females, if twelve years of age, and not in the father's power, might alſo make teſtamentary diſpoſitions with the authority of their guardians. If a father had not the means of depriving his ſon of a ſhare of his inheritance, his vengeance might be eaſily eluded; the youth had only to go a few miles to reach the borders of the Roman territory, from whence he might at any time return on the death of his father, to claim his ſhare in the inheritance, unleſs he apprehended the public judgment of his fellow-citizens. The Tables therefore gave the father the right of diſpoſing of all his property in whatever manner he thought proper. Teſtaments were of three kinds; that *per æs et libram* was in the nature of a ſale of the ſucceſſion, publiſhed with all the formalities of completing a regular contract. The money of the purchaſer was weighed; and the tranſaction atteſted by ſeven witneſſes, including the man who weighed the money and the purchaſer. This mode was probably invented to ſupply the difficulty that muſt almoſt generally have occurred in making a will according to the other two forms; and, like the mode of ſale of a child, was in all likelihood fictitious, and upon a confidence that could not be ſo well explained by writing. Of the other two, one was *comitiis calatis*, when all the people were called together in time of peace by a herald, and the will was then atteſted by the whole Roman people; the other *in procinctu*, or in the field in time of war. The former, from the infrequency of peace, could ſeldom be uſed; the latter was inconvenient; both had fallen into deſuetude by the time of Ulpian; and the teſtament *per æs et libram* alone then remained; the latter mode had alſo become nearly extinct in the time of Juſtinian by the introduction of two more recent forms. The truſt repoſed by a will

muſt

muſt have been religiouſly executed; the unfaithful guardian might be proſecuted by any individual citizen; and, if guilty of deceit, fraud, or circumvention, he was declared infamous; his embezzlement of the effects of his ward was even deemed a theft, and puniſhed by reſtitution of the double.

On the death of an inteſtate, his property deſcended to his heirs living at his deceaſe, or born within ten months after. *Heirs* were thoſe perſons who were in his power, excluſive of ſlaves, at the time of his death, and thoſe who were in the place of children to him at the ſame period. Thus the ſons, the daughters, and the widow, of the deceaſed, ſhared his eſtate in even and equal proportions; but, if any of his ſons had been emancipated by him, or died during his life-time without having been emancipated, leaving iſſue male or female, ſuch iſſue, born before ſuch emancipation or death, or within ten months after ſuch death, and the widow of ſuch ſon ſo dying, took *per ſtirpes* of their reſpective fathers or huſbands; that is, they divided equally amongſt them the reſpective ſhares their deceaſed fathers or huſbands would have had if they had lived to ſurvive their deceaſed parent, or which they would have been entitled to in the ſame manner if they had not been emancipated. Daughters married before the parent's death, being out of the power of ſuch parent, took nothing in his ſucceſſion. For want of ſuch iſſue, the brothers and unmarried ſiſters, by the ſame father, of the inteſtate living at his deceaſe, were called to the inheritance, and divided it in even and equal portions; but, if the deceaſed left no ſuch brothers nor ſiſters, his eſtate devolved to all his kindred in the neareſt degree on his father's ſide, deſcending through males, equally *per capita*, or ſhare and ſhare alike. Thus, if the inteſtate left a brother, and nephews the children of another brother, the brother alive at the time of the deceaſe of the inteſtate took the whole in excluſion of the nephews, becauſe he alone was *proximus*, or the neareſt; and a ſingle ſurviving ſiſter in like manner would have taken the whole, unleſs married as before-mentioned; but, if the inteſtate left neither brothers nor ſiſters, but two nephews by one ſiſter, three by a brother, and four by another brother, the nephews by the brothers would have divided the eſtate *per capita*, or ſhare and ſhare alike, becauſe they were all in the ſame degree, and all equally near, claiming though males; but the nephews by the ſiſter would have been excluded, becauſe no inheritance could deſcend through a female. For the ſame reaſon the ſon could not ſucceed through his mother by deſcent, but on her deceaſe inteſtate her eſtate was ſhared by her paternal kindred in the manner before-mentioned of the eſtate of a perſon dying without a will; it being the policy of the legiſlature to keep the inheritance or eſtate in the family which firſt poſſeſſed it. The mother could take nothing in the ſucceſſion of her ſon. For want of kindred, the eſtate devolved to the neareſt branch of the ſame family. The property of an inteſtate and childleſs freedman was conferred on the patron, and this right devolved upon his children, the patron being deemed in the nature of a *proximus agnatus* to him; and it was immaterial whether the patron was male or female. By a conſequence of this law, though the ſon manumitted could not ſucceed to his father, yet the father ſucceeded to his inteſtate and childleſs ſon emancipated by himſelf. The ſolitary veſtals could neither be heirs nor legally have heirs. In the event of their inteſtacy, their property devolved to the ſtate. The inheritance muſt have been claimed by children and kindred within a year from the time of notice of the ſucceſſion opened; by all other perſons within a hundred days; in default, the unclaimed ſhare devolved as *ab inteſtato*, to the neareſt paternal kindred, in the way above ſet forth. If the heirs of the inteſtate choſe to divide the inheritance, three arbitrators were ordered by the pretor to carry the partition into effect; he allotted to each his ſhare, who thenceforth became ſeparate owner of it; but at all times the heirs were only anſwerable for the debts of the deceaſed proportionably to the amount of, and according to, the ſhares they actually received in the ſucceſſion; the legatees were not holden to the debts.

Roadways in a direct line were to be eight feet; in an angle, ſixteen feet wide; and, if not fenced, any perſon might drive his cattle on either ſide of them. By no conveyance of rain or other water was the property of another to be injured. On complaint, the pretor ordered three arbitrators to remove the nuiſance, the damage occaſioned hy which was at the coſt of the party creating it. A ſpace of two feet and a half was to be left between buildings all round, and in the fields a ſpace of five feet between every man and his neighbour. The hedge muſt not exceed the boundary; a wall muſt be a foot; an edifice two feet; a well a pace; and a ditch or pit its depth within the boundary-line. Olives and fig-trees muſt be planted nine feet, all other trees five feet, from the ſame line. All theſe laws relating to boundaries were taken from thoſe of Solon. If by its growth a tree overſhadowed a neighbour's property, he might ſtrip it to the height of fifteen feet; but he who deſtroyed or cut down his neighbour's tree through malice, or carried it away, was liable to a penalty of twenty-five pieces of copper to the injured party. No one could looſen his pole or prop from a wall or vine, belonging to or planted by another; he who had wrongfully taken it and ſet it up was liable to pay double its value; and, on the houſe being pulled down, or the prop pulled up from the vine, the owner might again claim his property. The fruit falling upon adjoining property might be gathered from off it by the owner of the tree. If diſpute aroſe between parties upon any thing relating to boundaries, it was referred by the pretor to the deciſion of three indifferent arbitrators.

Servius Tullius enacted no leſs than fifty laws relative to contracts, which were collected in the Papyrian code. All have periſhed but one, which for its plain equity has formed the ground-work, not only of the decemviral laws, but of every other body of enactments on the ſubject: "Let good faith be the baſis of all contracts, and let none violate that faith." The Tables rendered every parole-agreement binding, and fixed a penalty upon the party refuſing to abide his engagement, of double the value of the object of the contract. In the ſame manner, the depoſitary fraudulently pretending loſs or damage to the thing confided to him, was condemned to pay double the value of what he pretended to have loſt or to have been damaged.

That profit upon the loan of money, which under the name of *uſury* the fathers have condemned, and under that of *intereſt* every government allows, was fixed by the Roman Tables at one per cent. per month, a rate ſufficient to eat up any capital, not fructifying by commerce, in a very ſhort time, as the daily experience of annuities granted at the ſame rate in this country ſufficiently proves; but this was moderate compared with the prior and ſubſequent grindings of the uſurers, though, even in the former caſe, if the law relating to the incumbent debtor was inforced to its utmoſt, we need hardly wonder at the revolt of a whole people. The intereſt was reduced by ſubſequent laws, and at one time aboliſhed; but, like the laws of the decemvirs, theſe ſubſequent enactments extended not beyond the city of Rome; and the uſurer aſſigned his bond to a Latin ally, who was not bound by theſe *plebiſcita*. The Sempronian law, therefore, extended the abolition to Latin allies: upon this, the uſurer added the intereſt to the debt, and made it one ſum in the bond. The luxury of a court increaſed the extravagance and debauchery of the youth of Rome, ſighing for the enjoyment of their parents' properties; and the uſurer was ever prowling and at hand to alleviate their wants, and miniſter to their gratifications, at the immoderate rate of ſixty per cent. In the time of Veſpaſian the poſt-obits of Macedo had deprived by anticipation the youth of Rome of all they could derive from their parents' ſucceſſions. Like Solon with the mortgages of Athens, this great and wiſe emperor found

found palliatives vain; he therefore ſwept them away by one *ſenatus conſultum*, declaring them all illegal. A law that (ſome think) would be no leſs uſeful here than at Rome.

Open theft in the day-time was both a private and a public wrong; as to the perſon of the injured, the ſatisfaction of the freeman was private; as to the community, it was public; he was ſcourged and delivered over in ſlavery to the perſon from whom he had ſtolen; but, if already a ſlave, he was thrown from the Tarpeian rock. Privately ſtealing was only puniſhed by reſtoring the double. Commentators are at a loſs to account for this difference. All will blame the law which allowed any thief to compound, if the injured party would receive the compoſition, as not being very conducive to public order.

Preſcription was acquired by one year's poſſeſſion of movable, and two years of immovable, property; but no time could give preſcription to a ſtranger againſt the free citizen of Rome; nor of the thing ſtolen, by a principle of excellent juſtice, that the right in nothing was acquired, whether by ſale or delivery, until paid for. Upon any perſon being accuſed of having obtained a wrongful poſſeſſion of property, the pretor nominated three arbitrators to inquire into the matter; and the wrongful poſſeſſor was condemned to pay double the profits he had taken. In all matters in diſpute, the preſumption was declared to be in favour of the poſſeſſor; but, where the liberty or ſlavery of the party was in queſtion, the poſſeſſion was always deemed to belong to the party claiming the freedom.

Plutarch records a ſingular inſtitution of Numa. His predeceſſor had built and ſucceſſively enlarged the city of Rome and its boundaries, by incorporation of ſtrangers and by conqueſt. For the uniting this confuſed maſs, and rendering it leſs inclined to a military life, and at the ſame time for the encouragement of induſtry, Numa parcelled out the conquered lands to ſome of them, and claſſed the various artificers of every deſcription, according to their trades, into *colleges*, or, as we ſhould now term them, into companies, aſſigning to each body a hall, courts, and certain religious ceremonies. What was the nature of the courts, it is now impoſſible to ſay; but their reſpective cuſtoms in their trades, and their mode of conducting them, were regulated among themſelves. The decemvirs, with a view to their protection, poſſibly too diſdaining the minutiæ of legiſlation into which ſo wide a field muſt have led them, enacted, that whatever rules they made among themſelves ſhould be binding upon them ſo far as they in nothing derogated from or contradicted the public law. In after-times we find theſe colleges differing in nothing from our corporate bodies; they could have common property; had a common cheſt, and a manager or maſter; could manumit ſlaves, accept a legacy, and do every other act of a modern company. From theſe colleges, formed in towns as ſome of them muſt have been for the purpoſes of trade, coupled with the ſeparate laws and juriſdiction in cities, allowed to the Romans, by their ſubſequent conquerors, the Goths, Franks, &c. we may clearly deduce the origin of our own corporate bodies, and the municipal magiſtracy and government of the towns upon the continent. However, in the ſtate of Rome at the time of Numa and the Decemvirs, it may be contended that the legiſlature had no further view than to protect the little rules which artificers muſt always have among themſelves, and which, being too minute for the interference of legiſlation, were wiſely left to be governed by thoſe whom alone they could affect. *Roſinus Antiq. Roman.* lib. viii.

Such are laws of the Twelve Tables upon which all the ſubſequent laws of Rome were grafted and multiplied, until the venerable ſtock became hardly diſcernible under the innumerable additions, ſubſtitutes, and refinements, which the complicated mixture of fraud and oppreſſion, of luxury and miſery, of chicane and evaſion, at various times occaſioned. Livy, in the days of Auguſtus, ſtates the voluminous immenſity to which the ſimple code of the republic had ſwelled; and it continued to increaſe from the time of Livy, under the multiplied burthen of conſtitutions, reſcripts, decrees, and edicts, added by ſucceſſive emperors, until the time of Juſtinian, who attained an empire loaded with a law which few had time to read, and ſtill fewer the ability to underſtand, or even conveniently to purchaſe.

Among ſavage nations, the want of letters is imperfectly ſupplied by the uſe of viſible ſigns, which awaken attention, and perpetuate the remembrance of any public or private tranſaction. The juriſprudence of the firſt Romans exhibited the ſcenes of a pantomime; the words were adapted to the geſtures, and the ſlighteſt error or neglect in the *forms* of proceeding was ſufficient to annul the *ſubſtance* of the faireſt claim. The communion of the marriage-life was denoted by the neceſſary elements of fire and water; and the divorced wife reſigned the bunch of keys, by the delivery of which ſhe had been inveſted with the government of the family. The manumiſſion of a ſon, or a ſlave, was performed by turning him round with a gentle blow on the cheek; a work was prohibited by the caſting of a ſtone; preſcription was interrupted by the breaking of a branch; the clenched fiſt was the ſymbol of a pledge or depoſit; the right hand was the gift of faith and confidence. The indenture of covenants was a broken ſtraw; weights and ſcales were introduced into every payment; and the heir who accepted a teſtament was ſometimes obliged to ſnap his fingers, to caſt away his garments, and to leap and dance with real or affected tranſport. If a citizen purſued any ſtolen goods into a neighbour's houſe, he concealed his nakedneſs with a linen towel, and hid his face with a maſk or baſon, leſt he ſhould encounter the eyes of a virgin or a matron. In a civil action, the plaintiff touched the ear of his witneſs, ſeized his reluctant adverſary by the neck, and implored, in ſolemn lamentation, the aid of his fellow-citizens. The two competitors graſped each other's hand as if they ſtood prepared for combat before the tribunal of the pretor; he commanded them to produce the object of the diſpute; they went, they returned with meaſured ſteps, and a clod of earth was caſt at his feet to repreſent the field for which they contended. This occult ſcience of the words and actions of law was the inheritance of the pontiffs and patricians: like Chaldean aſtrologers, they announced to their clients the days of buſineſs and repoſe. Theſe important trifles were interwoven with the religion of Numa; and, after the publication of the Twelve Tables, the Roman people was ſtill enſlaved by the ignorance of judicial proceedings. The treachery of ſome plebeian officers at length revealed the profitable myſtery; in a more enlightened age, the legal actions were derided and obſerved; and the ſame antiquity which ſanctified the practice, obliterated the uſe and meaning, of this primitive language.

A more liberal art was cultivated, however, by the ſages of Rome, who, in a ſtricter ſenſe, may be conſidered as the authors of the civil law. The alteration of the idiom and manners of the Romans, rendered the ſtyle of the Twelve Tables leſs familiar to each riſing generation; and the doubtful paſſages were imperfectly explained by the ſtudy of legal antiquarians. To define the ambiguities, to circumſcribe the latitude, to apply the principles, to extend the conſequences, to reconcile the real or apparent contradictions, was a much nobler and more important taſk; and the province of legiſlation was ſilently invaded by the expounders of ancient ſtatutes. Their ſubtle interpretations concurred with the equity of the pretor, to reform the tyranny of the darker ages; however ſtrange or intricate the means, it was the aim of artificial juriſprudence to reſtore the ſimple dictates of nature and reaſon; and the ſkill of private citizens was uſefully employed to undermine the public inſtitutions of their country.

The revolution of almoſt one thouſand years, from the Twelve Tables to the reign of Juſtinian, may be divided

into three periods almoſt equal in duration, and diſtinguiſhed from each other by the mode of inſtruction and the character of the civilians.

Pride and ignorance contributed, during the firſt period, to confine within narrow limits the ſcience of the Roman law. On the public days of the market or aſſembly, the maſters of the art were ſeen walking in the forum, ready to impart the needful advice to the meaneſt of their fellow-citizens, from whoſe votes, on a future occaſion, they might ſolicit a grateful return. As their years and honours increaſed, they ſeated themſelves at home on a chair or throne, to expect with patient gravity the viſits of their clients, who, at the dawn of day, from the town and country, began to thunder at their door. The duties of ſocial life, and the incidents of judicial proceedings, were the ordinary ſubject of theſe conſultations; and the verbal or written opinion of the *juriſconſults* was framed according to the rules of prudence and law. The youths of their own order and family were permitted to liſten; their children enjoyed the benefit of more private leſſons, and the Mucian race was long renowned for the hereditary knowledge of the civil law.

The ſecond period, the learned and ſplendid age of juriſprudence, may be extended from the birth of Cicero to the reign of Alexander Severus. A ſyſtem was formed, ſchools were inſtituted, books were compoſed, and both the living and the dead became ſubſervient to the inſtruction of the ſtudent. The *Tripartite* of Ælius Pætus, ſurnamed *Catus*, or the Cunning, was preſerved, as the oldeſt work of juriſprudence. Cato the Cenſor derived ſome additional fame from his legal ſtudies, and thoſe of his ſon; the kindred appellation of Mucius Scævola was illuſtrated by three ſages of the law; but the perfection of the ſcience was aſcribed to Servius Sulpicius their diſciple, and the friend of Tully; and the long ſucceſſion, which ſhone with equal luſtre under the republic and under the Cæſars, is finally cloſed by the reſpectable characters of Papinian, of Paul, and of Ulpian. Their names, and the various titles of their productions, have been minutely preſerved, and the example of Labeo may ſuggeſt ſome idea of their diligence and fecundity. That eminent lawyer of the Auguſtan age, divided the year between the city and country, between buſineſs and compoſition; and four hundred books are enumerated as the fruit of his retirement. Of the collections of his rival Capito, the two hundred and fifty-ninth book is expreſsly quoted; and few teachers could deliver their opinions in leſs than a century of volumes.

In the third period, between the reigns of Alexander and Juſtinian, the oracles of juriſprudence were almoſt mute. The meaſure of curioſity had been filled; the throne was occupied by tyrants and barbarians; the active ſpirits were diverted by religious diſputes, and the profeſſors of Rome, Conſtantinople, and Berytus, were humbly content to repeat the leſſons of their more enlightened predeceſſors. From the ſlow advances and rapid decay of theſe legal ſtudies, it may be inferred that they require a ſtate of peace and refinement. From the multitude and voluminous civilians who fill the intermediate ſpace, it is evident, that ſuch ſtudies may be purſued, and ſuch works may be performed, with a common ſhare of judgment, experience, and induſtry. The genius of Cicero and Virgil was more ſenſibly felt, as each revolving age had been found incapable of producing a ſimilar or a ſecond; but the moſt eminent teachers of the law were aſſured of leaving diſciples equal or ſuperior to themſelves in merit and reputation.

When JUSTINIAN aſcended the throne, the reformation of the Roman juriſprudence was an arduous but indiſpenſable taſk. In the ſpace of ten centuries, the infinite variety of laws and legal opinions had filled many thouſand volumes, which no fortune could purchaſe and no capacity could digeſt. Books could not eaſily be found; and the judges, poor in the midſt of riches, were reduced to the exerciſe of their illiterate diſcretion. The ſubjects of the Greek provinces were ignorant of the language that diſpoſed of their lives and properties; and the *barbarous* dialect of the Latins was imperfectly ſtudied in the academies of Berytus and Conſtantinople. As an Illyrian ſoldier, that idiom was familiar to the infancy of Juſtinian; his youth had been inſtructed by the leſſons of juriſprudence, and his imperial choice ſelected the moſt learned civilians of the Eaſt, to labour with their ſovereign in the work of reformation. The theory of profeſſors was aſſiſted by the practice of advocates, and the experience of magiſtrates; and the whole undertaking was animated by the ſpirit of Tribonian.

This extraordinary man, the object of ſo much praiſe and cenſure, was a native of Side in Pamphylia; and his genius, like that of Bacon, embraced, as his own, all the buſineſs and knowledge of the age. Tribonian compoſed, both in proſe and verſe, on a ſtrange diverſity of curious and abſtruſe ſubjects; a double panegyric of Juſtinian, and the life of the philoſopher Theodotus; the nature of happineſs, and the duties of government; Homer's catalogue, and the four-and-twenty ſorts of metre; the aſtronomical canon of Ptolemy; the changes of the months; the houſes of the planets; and the harmonic ſyſtem of the world. To the literature of Greece he added the uſe of the Latin tongue; the Roman civilians were depoſited in the library and in his mind; and he moſt aſſiduouſly cultivated thoſe arts which opened the road of wealth and preferment. From the bar of the prætorian præfects, he raiſed himſelf to the honours of quæſtor, of conſul, and of maſter of the offices; the council of Juſtinian liſtened to his eloquence and wiſdom, and envy was mitigated by the gentleneſs and affability of his manners. But the reproaches of impiety and avarice have ſtained the virtues or the reputation of Tribonian. In a bigoted and perſecuting court, the principal miniſter was accuſed of a ſecret averſion to the Chriſtian faith, and was ſuppoſed to entertain the ſentiments of an atheiſt and a pagan, which have been imputed, inconſiſtently enough, to the laſt philoſophers of Greece. His avarice was more clearly proved and more ſenſibly felt. If he were ſwayed by gifts in the adminiſtration of juſtice, the example of Bacon will again occur; nor can the merit of Tribonian atone for his baſeneſs, if he degraded the ſanctity of his profeſſion; and if laws were every day enacted, modified, or repealed, for the baſe conſideration of his private emolument. In the ſedition of Conſtantinople, his removal was granted to the clamours, perhaps to the juſt indignation, of the people; but the quæſtor was ſpeedily reſtored, and, till the hour of his death, he poſſeſſed, above twenty years, the favour and confidence of the emperor. His paſſive and dutiful ſubmiſſion has been honoured with the praiſe of Juſtinian himſelf, whoſe vanity was incapable of diſcerning how often that ſubmiſſion degenerated into the groſſeſt adulation. Tribonian adored the virtues of his gracious maſter; the earth was unworthy of ſuch a prince; and he affected a pious fear, that Juſtinian, like Elijah or Romulus, would be ſnatched into the air, and tranſlated alive to the manſions of cœleſtial glory!

Inſtead of a ſtatue caſt in a ſimple mould by the hand of an artiſt, the works of Juſtinian repreſent a teſſelated pavement of antique and coſtly, but too often of incoherent, fragments. In the firſt year of his reign, he directed the faithful Tribonian, and nine learned aſſociates, to reviſe the ordinances of his predeceſſors, as they were contained, ſince the time of Adrian, in the Gregorian, Hermogenian, and Theodoſian, codes; to purge the errors and contradictions, to retrench whatever was obſolete or ſuperfluous, and to ſelect the wiſe and ſalutary laws beſt adapted to the practice of the tribunals and the uſe of his ſubjects. The work was accompliſhed in fourteen months; and the twelve books, or *tables*, which the new decemvirs produced, might be deſigned to imitate the labours of their Roman predeceſſors. The new CODE of Juſtinian was honoured with his name, and confirmed by his royal ſignature; authentic tranſcripts were multiplied by the pens of

of notaries and ſcribes; they were tranſmitted to the magiſtrates of the European, the Aſiatic, and afterwards the African, provinces; and the law of the empire was proclaimed on ſolemn feſtivals at the doors of churches.

A more arduous operation was ſtill behind; to extract the ſpirit of juriſprudence from the deciſions and conjectures, the queſtions and diſputes, of the Roman civilians. Seventeen lawyers, with Tribonian at their head, were appointed by the emperor to exerciſe an abſolute juriſdiction over the works of their predeceſſors. If they had obeyed his commands in ten years, Juſtinian would have been ſatisfied with their diligence; and the rapid compoſition of the DIGEST, or PANDECTS, in three years, will deſerve praiſe or cenſure, according to the merit of the execution. From the library of Tribonian, they choſe forty, the moſt eminent civilians of former times; two thouſand treatiſes were compriſed in an abridgment of fifty books; and it has been carefully recorded, that three millions of lines, or ſentences, were reduced in this abſtract, to the moderate number of one hundred and fifty thouſand. The edition of this great work was delayed a month after that of the INSTITUTES; and it ſeemed reaſonable that the elements ſhould precede the digeſt of the Roman law. As ſoon as the emperor had approved their labours, he ratified, by his legiſlative power, the ſpeculations of theſe private citizens; their commentaries on the Twelve Tables, the Perpetual Edict, the laws of the people, and the decrees of the ſenate, ſucceeded to the authority of the text; and the text was abandoned, as an uſeleſs, though venerable, relic of antiquity. The *Code*, the *Pandects*, and the *Inſtitutes*, were declared to be the legitimate ſyſtem of civil juriſprudence; they alone were admitted in the tribunals, and they alone were taught in the academies of Rome, Conſtantinople, and Berytus. Juſtinian addreſſed to the ſenate and provinces, his eternal oracles; and his pride, under the maſk of piety, aſcribed the conſummation of this great deſign to the ſupport and inſpiration of the Deity.

Since the emperor declined the fame and envy of original compoſition, we can only require at his hands, method, choice, and fidelity, the humble, though indiſpenſable, virtues of a compiler. Among the various combinations of ideas, it is difficult to aſſign any reaſonable preference; but, as the order of Juſtinian is different in his three works, it is poſſible that all may be wrong; and it is certain that two cannot be right. In the ſelection of ancient laws, he ſeems to have viewed his predeceſſors without jealouſy, and with equal regard; the ſeries could not aſcend above the reign of Adrian, and the narrow diſtinction of Paganiſm and Chriſtianity, introduced by the ſuperſtition of Theodoſius, had been aboliſhed by the conſent of mankind. But the juriſprudence of the Pandects is circumſcribed within a period of an hundred years, from the Perpetual Edict to the death of Alexander Severus; the civilians who lived under the firſt Cæſars are ſeldom permitted to ſpeak, and only three names can be attributed to the age of the republic. The favourite of Juſtinian (it has been fiercely urged) was fearful of encountering the light of freedom and the gravity of Roman ſages. Tribonian condemned to oblivion the genuine and native wiſdom of Cato, the Scævolas, and Sulpicius; while he invoked ſpirits more congenial to his own, the Syrians, Greeks, and Africans, who flocked to the imperial court to ſtudy Latin as a foreign tongue, and juriſprudence as a lucrative profeſſion. But the miniſters of Juſtinian were inſtructed to labour, not for the curioſity of antiquarians, but for the immediate benefit of his ſubjects. It was their duty to ſelect the uſeful and practical parts of the Roman law; and the writings of the old republicans, however curious or excellent, were no longer ſuited to the new ſyſtem of manners, religion, and government. Perhaps, if the preceptors and friends of Cicero were ſtill alive, our candour would acknowledge, that, except in purity of language, their intrinſic merit was excelled by the ſchool of Papinian and Ulpian.

It is the firſt care of a reformer to prevent any future reformation. To maintain the texts of the Pandects, the Inſtitutes, and the Code, the uſe of ciphers and abbreviations was rigorouſly proſcribed; and, as Juſtinian recollected that the Twelve Tables had been buried under the weight of commentators, he denounced the puniſhment of forgery againſt the raſh civilians who ſhould preſume to interpret or pervert the will of their ſovereign. The ſcholars of Accurſius, of Bartolus, of Cujacius, ſhould bluſh for their accumulated guilt, unleſs they dare to diſpute his right, of binding the authority of his ſucceſſors, and the native freedom of the mind. But the emperor was unable to fix his own inconſtancy; and, while he boaſted of renewing the exchange of Diomede, of tranſmuting braſs into gold, he diſcovered the neceſſity of purifying his gold from the mixture of baſer alloy. Six years had not elapſed from the publication of the Code, before he condemned the imperfect attempt, by a new and more accurate edition of the ſame work; which he enriched with two hundred of his own laws, and fifty deciſions of the darkeſt and moſt intricate points of juriſprudence. Every year, or, according to Procopius, each day, of his long reign, was marked by ſome legal innovation. Many of his acts were reſcinded by himſelf; many were rejected by his ſucceſſors, many have been obliterated by time; but the number of ſixteen EDICTS, and one hundred and ſixty-eight NOVELS, has been admitted into the authentic body of the civil juriſprudence.

The penal ſtatutes form a very ſmall proportion of the ſixty-two books of the Code and Pandects; and, in all judicial proceeding, the life or death of a citizen is determined with leſs caution and delay than the moſt ordinary queſtion of covenant or inheritance. This ſingular diſtinction, though ſomething may be allowed for the urgent neceſſity of defending the peace of ſociety, is derived from the nature of criminal and civil juriſprudence. Our duties to the ſtate are ſimple and uniform; the law by which he is condemned, is inſcribed not only on braſs or marble, but on the conſcience of the offender, and his guilt is commonly proved by the teſtimony of a ſingle fact. But our relations to each other are various and infinite; our obligations are created, annulled, and modified, by injuries, benefits, and promiſes; and the interpretation of voluntary contracts and teſtaments, which are often dictated by fraud or ignorance, affords a long and laborious exerciſe to the ſagacity of the judge. The buſineſs of life is multiplied by the extent of commerce and dominion, and the reſidence of the parties in the diſtant provinces of an empire, is productive of doubt, delay, and inevitable appeals from the local to the ſupreme magiſtrate. Juſtinian, the Greek emperor of Conſtantinople and the Eaſt, was the legal ſucceſſor of the Latin ſhepherd who had planted a colony on the banks of the Tyber. In a period of thirteen hundred years, the laws had reluctantly followed the changes of government and manners; and the laudable deſire of conciliating ancient names with recent inſtitutions, deſtroyed the harmony, and ſwelled the magnitude, of the obſcure and irregular ſyſtem. The laws which excuſe on any occaſions the ignorance of their ſubjects, confeſs their own imperfections; the civil juriſprudence, as it was abridged by Juſtinian, ſtill continued a myſterious ſcience and a profitable trade, and the innate perplexity of the ſtudy was involved in tenfold darkneſs by the private induſtry of the practitioners. The expenſe of the purſuit ſometimes exceeded the value of the prize, and the faireſt rights were abandoned by the poverty or prudence of the claimants. Such coſtly juſtice might tend to abate the ſpirit of litigation, but the unequal preſſure ſerves only to increaſe the influence of the rich, and to aggravate the miſery of the poor. By theſe dilatory and expenſive proceedings, the wealthy pleader obtains a more certain advantage than he could hope from the accidental corruption of his judge. The experience of an abuſe, from which our own age and country are not perfectly exempt, may ſometimes provoke a generous

a generous indignation, and extort the haſty wiſh of exchanging our elaborate juriſprudence for the ſimple and ſummary decrees of a Turkiſh cadi. Our calmer reflection will ſuggeſt, that ſuch forms and delays are neceſſary to guard the perſon and property of the citizen; that the diſcretion of the judge is the firſt engine of tyranny, and that the laws of a free people ſhould foreſee and determine every queſtion that may probably ariſe in the exerciſe of power and the tranſactions of induſtry. And accordingly the proviſions of the Juſtinian code have been adopted, generally or partially, by every European nation. The work was completed in about four years; the Inſtitutes are divided into four parts, ſomething ſimilar to the arrangement of Blackſtone's Commentaries; and the whole may about equal in quantity the four volumes of that excellent work.

Such is the ſum of the civil laws contained in the written codes, or fragments of codes, of the more ancient or extended nations of the world, which have reached our time. In tracing thoſe laws, we are neceſſarily accompanied by the hiſtory of the countries to which they relate; and we cannot help contemplating the different fates of empires, and of their ordinances; the ſuperiority of cuſtom over power, and of reaſon or of religious tenet over political rule. Of the empire and its nations originally ſubjected to the word of Brahma, no record is remaining. Perſia, Greece, and Rome, have ſucceſſively fallen. The laſt claims and inſignia of feudal Rome have been abdicated, and its vaſſals acquitted of their homage and ſervices, in our times; the different ſettlers from the north are melted down in the new empire of France; China is tottering in all the decrepitude of age and wear of internal diſeaſe; and the waning creſcent of Mahometan power is ſinking into night. Yet ſome of the laws or inſtitutions of Solon, of the decemvirs, Brahma, and even of Zoroaſter, have ſubſiſted, after the power that enacted or reared them has given way. The Jewiſh code has proved the moſt perfect, as might be expected from the wiſdom of its author. Formed for a people about to take poſſeſſion of a country, it has the ſingularity of not being founded upon any preciſe cuſtoms exiſting among thoſe for whom it was framed, but of having formed their manners by its ordinances. Needing no alteration from times or circumſtances, it was equally adapted to the poverty of a new ſettlement, and to the glory and magnificence of the reign of Solomon. Unerring in its principles, its wiſe and equitable proviſions, and the Decalogue dictated by the eternal truth, have formed the baſis of every Chriſtian code. Its ceremonial too, in part, and in ſome caſes alſo its civil ordinances, yet form the law of a venerable remnant which the Omnipotent, in ſpite of every effort of Pagan, Mahometan, and *un*-Chriſtian, perſecution, has preſerved for the manifeſtation of his decrees. In the Twelve Tables, as well as in the early hiſtory of republican Rome, may be traced the few but ſteady rules of a virtuous people; and the fragments that have been collected are evidence of a ſolid and reflecting legiſlation. Reaſoning from the few we poſſeſs, judging alſo from the exclamation of Tully, how great is our regret at the loſs of the remainder. The regal and decemviral enactments, as we have juſt ſeen, formed the baſis of the labours of Juſtinian, but he did not always confine himſelf to their principles; and, under a loaded ſyſtem, we would hold up to all the world the example of Juſtinian, who effected by his wiſdom, without danger to the ſtate, a reviſal and correction of its laws; but upon our own country we would more particularly preſs it. We are not deficient in high profeſſional characters animated with the ſpirit and induſtry of Ulpian, of Caius, and of Tribonian, poſſeſſed of all the acquirements and advantages to be derived from the improved ſtate of ſcience and literature; and we look forward with confidence to a period of more temper and diſcernment, when our own juriſprudence may derive its wanted amendment from their ſplendid and united abilities.

III. Of the LAW of ENGLAND.

The municipal law of England, or the rule of civil conduct preſcribed to the inhabitants of that kingdom, may with ſufficient propriety be divided into two kinds: *lex non ſcripta*, the unwritten or common law; and *lex ſcripta*, the written or ſtatute law.

The *lex non ſcripta*, or unwritten law, includes not only general cuſtoms, or the common law properly ſo called; but alſo the particular cuſtoms of certain parts of the kingdom, and likewiſe thoſe particular laws that are by cuſtom obſerved only in certain courts and juriſdictions.

In calling theſe parts of the law *leges non ſcriptæ*, we would not be underſtood as if all thoſe laws were at preſent merely oral, or communicated from the former ages to the preſent ſolely by word of mouth. It is true, indeed, that, in the profound ignorance of letters which formerly overſpread the whole weſtern world, all laws were entirely traditional; for this plain reaſon, that the nations among which they prevailed had but little idea of writing. Thus the Britiſh as well as the Gallic druids committed all their laws, as well as all their learning, to memory; and it is ſaid of the primitive Saxons here, as well as their brethren on the continent, that *leges ſola memoria et uſu retinebant*. But, with us at preſent, the monuments and evidences of our legal cuſtoms are contained in the records of the ſeveral courts of juſtice, in books of reports and judicial deciſions, and in the treatiſes of learned ſages of the profeſſion, preſerved and handed down to us from times of the higheſt antiquity. We therefore ſtyle theſe parts of our law *leges non ſcriptæ*, becauſe their original inſtitution and authority are not ſet down in writing, as acts of parliament are; but they receive their binding power, and the force of laws, by long and immemorial uſage, and by their univerſal reception throughout the kingdom; in like manner as Aulus Gellius defines the *jus non ſcriptum* to be that which is *tacito et illiterato hominum conſenſu et moribus expreſſum*.

Our ancient lawyers, and particularly Forteſcue, inſiſt with abundance of warmth, that theſe cuſtoms are as old as the primitive Britons, and continued down, through the ſeveral mutations of government and inhabitants, to the preſent time, unchanged and unadulterated. This may be the caſe as to ſome. But in general, as Mr. Selden in his notes obſerves, this aſſertion muſt be underſtood with many grains of allowance; and ought only to ſignify, as the truth ſeems to be, that there never was any formal exchange of one ſyſtem of laws for another; though doubtleſs, by the intermixture of adventitious nations, the Romans, the Picts, the Saxons, the Danes, and the Normans, they muſt have inſenſibly introduced and incorporated many of their own cuſtoms with thoſe that were before eſtabliſhed; thereby, in all probability, improving the texture and wiſdom of the whole, by the accumulated wiſdom of divers particular countries.

Mr. Spence, on the other hand, (Eſſay on the Origin of the Engliſh Laws,) would derive almoſt the whole of our conſtitution from the Romans; he is at leaſt of opinion, "that much more of what is called Engliſh is truly Roman than is generally admitted, and that any thing which may call the attention of the profeſſors of the Engliſh law to the Juſtinian collections muſt be uſeful." *Pref.* iii. Mr. Spence proceeds to make out his caſe in the following terms:

"Of the ſtate of Britain prior to the arrival of Cæſar we have little information, but that little is all perhaps that it were uſeful to know. There were two ſpecies of authority recognized among the Britons, the military and the ſacerdotal. Military authority had formerly been enjoyed by kings; but, the form of government having been changed, the general was choſen, in caſe of neceſſity, by the voice of the people. The prieſts, or druids, were in a manner ſecluded from the reſt of the inhabitants, they having the ſole power of electing the members of their body. In their breaſts alone were depoſited the few maxims to which experience had given the force of

laws, of which alſo they were the ſole diſpenſers. The people were totally employed in agricultural purſuits or war.

"Cæſar arrived about one hundred years before the Chriſtian era; he conquered the rude and unprotected courage of the natives, but left the iſland with the character of having diſcovered rather than conquered it. Britain was neglected by Auguſtus and Tiberius. Caligula proceeded no further than to threats. Under Claudius and Nero, about ſixty years after Chriſt, aroſe Caractacus and Boadicea, the avengers and protectors, for a while, of the liberties of their country; but, when they were extinguiſhed, the doom of Britain was fixed, and, after a ſucceſſion of ineffectual but deſperate ſtruggles, the emperors ſucceeded, by the ſame means as had proved ſucceſsful in regard to the countries already under their yoke, in reducing into the form of a Roman province the whole of the iſland ſouth of the Grampian mountains.

"Let us obſerve how far the meaſures purſued by the Romans, for the reducing and preſerving in ſubjection the provinces of their empire, affected the laws and conſtitution of the country ſubdued. It was a cuſtom among the Romans, from the commencement of their conqueſts, as ſoon as a nation was ſubdued, to allot a part of their territory to a number of Roman citizens. Theſe built a town, if one were not already conſtructed, to ſerve for their habitation, and as a refuge in caſe of attack. Theſe towns, or colonies, were placed at convenient diſtances about the frontier; and became, as they were intended to be, defences againſt the incurſions of enemies on the territory of the mother-country. At firſt, when every man was a ſoldier, the colonies were ſupplied from the bulk of the Roman people indiſcriminately. Shortly after the deſtruction of Carthage, when, from the extent of the Roman dominions, ſtanding armies became neceſſary, veterans were placed in the colonies, and it became neceſſary for the Romans to adopt other meaſures for preſerving their conqueſts, one of theſe was by quartering their legionaries or regular troops on the inhabitants. A chapter in the code of the emperor Theodoſius, which has for title "The Rights of Hoſpitality," directs, that, whereſoever a Roman army might be ſtationed, one-third of the accommodations of every houſeholder ſhould be allotted to the ſoldier quartered upon him; a general was entitled to enjoy two-thirds. A new ſyſtem of colonization alſo was adopted; whole legions, with their tribunes, centurions, and ſubordinate officers, were placed in colonies, and tilled the land committed to them for their ſupport: the emperors ſometimes added ſlaves and implements of huſbandry. The condition of theſe grants was to preſerve the colony from being invaded by any enemy to the empire. A colony thus organized, by a ſimilarity of habits, and by their mutual harmony, formed, as it is remarked by Tacitus, a ſpecies of republic; and from them the principal cities in modern Europe have to date their origin. No ſooner was a tract of land conquered, and ſtrong holds eſtabliſhed, than the general contrived all poſſible means to diſſeminate the Roman language and laws among the inhabitants. Tacitus and Cæſar mention that Gaul was not ſubdued until Roman manners, arts, and connections, had been introduced among the natives. In Germany, Germanicus, under Auguſtus and Tiberius; in Britain, Suetonius Paullinus, under Claudius and Nero; and Agricola, under Veſpaſian, Titus, and Domitian, ſucceeded in completely ſubduing their reſpective provinces, by accompliſhing what remained to be perfected, namely, the eſtabliſhing among the natives Roman arts, cuſtoms, and laws. The Britons, (ſays Tacitus,) warlike from their fierce and uncivilized mode of life, were tamed by the introduction of luxury and eaſe. Agricola was ſeen exhorting them to employ themſelves in the conſtruction of halls and temples, and exciting emulation in the work by praiſe or cenſure. He took care that the children of their princes ſhould be inſtructed in Roman arts and ſciences, and urged them to the taſk by commending the genius of the Britons as ſuperior to that of the Gauls, their rivals; and ſo completely did he ſucceed, that at length the nation, who had deteſted the language of the Romans, was found vying with their conquerors for the palm of eloquence.

"At the conqueſt of Britain, the druids were almoſt wholly exterminated; and the Roman general or prefect here, as in the other provinces of the empire, became the ſole diſtributor of juſtice. The ſtrict adminiſtration of juſtice in the provinces was rigidly enforced by the emperors; few but thoſe who had filled with honour a judicial capacity in Rome were appointed to a command, and the juſt complaints of the provincials were ſeldom diſregarded; more frequently they were avenged by the emperors in the moſt ferocious manner.

"Britain continued, from the departure of Agricola to the year 448, when the Romans took their final leave, tranquil, and accommodated to the Roman yoke. They were defended by the Roman ſoldiers, who were quartered on them as gueſts, in the manner before deſcribed; their own youth were ſerving in the armies of diſtant provinces; and, more particularly to turn the attention of thoſe at home from military employments by the appearance of ſecurity, the emperors Adrian and Severus built for them the two walls or defences acroſs the iſland, the remains of which are now to be ſeen. From the conqueſt completed by Agricola, until the departure of the Romans, Roman lawyers, as prefects and aſſeſſors, or inferior judges, adminiſtered juſtice in the principal colonies and towns. Among the reſt, it is recorded that Papinian, who was ſtyled the Prince of Roman Lawyers, held his forum, as pretorian prefect under the emperor Severus, at York; to him we may add, on the authority of our diſtinguiſhed Selden, Ulpian and Paullus, names as famous with the Romans as Coke or Hale with us. The laws of Rome then were *uninterruptedly adminiſtered in Britain* for a period of three hundred years; and, when we call to mind the few traces of judicial polity which exiſted among the Britons in their original rude and unſettled ſtate, the character of the Roman laws, and the length of time that they were here adminiſtered, we can hardly heſitate in pronouncing, that the Roman laws muſt have been, at the period of Saxon conqueſt, the common or general law of the iſland.

"The ſtate of the inhabitants of Britain, on the departure of the Roman troops from among them, furniſhes an inſtructive leſſon as to the miſerable ſtate of national degradation, which follows on the extinction of thoſe turbulent but manly virtues, which are called forth by times of danger and war. The Picts and Scots, without diſcipline, and ſcarcely armed but with their ferocity, maſſacred, at their will, the poliſhed and effeminate inhabitants, whom I no longer call Britons, becauſe of the intermixture of Romans which a period of three hundred years' ſubjection muſt have introduced among them, particularly in times when no man, who was at all diſtinguiſhed by his property, his virtues, or his vices, was ſafe in the Roman capital. Content to be ſlaves, but terrified at the continual proſpect of torture and death, the inhabitants, about the year 660, following the example of ſome of their continental neighbours, called to their aſſiſtance the Saxons, and other northern hordes, dwelling on the coaſts of the Baltic. Theſe delivered Britain from its ravagers, and ultimately ſeized on the ſovereignty as the reward of their ſervices; giving to the nation the name of *England*. Not that the Saxons at firſt diſpoſſeſſed the natives of all their land or property. Their original claim was the ſame that was made by the Goths and Burgundians, their former neighbours, in the conqueſt of the continent of Europe; they had executed the office the Roman ſoldiers had uſed to perform; they claimed therefore a ſimilar recompence, namely, to be received as gueſts in the houſes of the landed proprietors; however, they do not appear to have been content with *one-third* only of the accommodations; the Burgundians, Oſtrogoths, and Viſigoths, univerſally claimed *two-thirds*. In the abſence of teſtimony as to the preciſe amount, we may conclude that the Angles and Saxons took nearly the ſame. When

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the country was cleared of its ravagers, the ſoldiers began to look for a permanent ſettlement, and the Anglo-Saxon, like the Goth and the Burgundian, claimed and received, in full ownerſhip, the ſhare of the houſe, land, and ſlaves, which he had enjoyed as a gueſt; and this he took as his right, free from all conditions, excepting thoſe to which every ſubject muſt be liable, unleſs the tacit compact, that he was to defend the Romano-Britons from the ravages of the Picts and Scots, may be called a *condition*. This was a mode in which the Goths, Burgundians, and the greater part of the other continental ſettlers, founded their ſeveral kingdoms, as may be ſeen from their codes, and which, we may remark, contain ſcarcely any thing in the ſhape of legiſlation that is not clearly Roman. The Anglo-Saxon laws are not quite ſo explicit, and the ſtruggle which enſued in conſequence of the encroachments of the Saxons may be the cauſe of this; but, from the extraordinary ſimilarity in the tenor of the continental and Anglo-Saxon laws and chronicles, it is clear that the ſame ſyſtem in their ſettlements was purſued by all the conquerors of Europe.

"I am aware that it has been maintained by ſome of the moſt diſtinguiſhed of our writers, particularly by the eloquent and learned ſir William Blackſtone, that the conquerors of Europe ſeized on the conquered lands, and parcelled them out among the officers and ſoldiers, in the various ſtages of ſubordination, annexing to the grant a condition of military ſervice; and this ſuppoſed diviſion of lands has been made uſe of moſt ably, and, were it true, moſt ſucceſsfully, to account for and explain the laws which, under the denomination of the feudal ſyſtem, were eſtabliſhed in Europe four hundred years after the general conqueſt by the northern hordes. The codes of all the conquerors prove that this was not the caſe; and the leſs ingenious but moſt true account of the origin of the feudal ſyſtem is to be drawn, I apprehend, from the ſtate of manners and ſentiments introduced among the provinces of the empire, by the general diffuſion of the Roman ſyſtem of patronage.

"In the general ſettlement I have juſt mentioned, the victorious leader became a præſes, or proconſul, in authority; with this difference, that he acknowledged no ſuperior. Clovis, the founder of the French monarchy, even accepted from Juſtinian the proconſular robe. Content, perhaps, at firſt, with forming a court ſimilar to that of a Roman proconſul, the general, after he had aſſumed the title of king, ſurrounded himſelf alſo with the officers of royalty; and his more intimate adherents were rewarded with a part of his domain, and were dignified with the ſame, or offices ſimilar to thoſe, which were exerciſed about the perſon of the emperor. From this ſource principally has flowed the preſent conſtitution of Britain." *Eſſay*, 6–17.

Notwithſtanding this ſuppoſed uniformity of law, the local cuſtoms of the ſeveral provinces of the kingdom were grown ſo various in the time of king Alfred, that he found it expedient to compile his dome-book, or *liber judicialis*, for the general uſe of the whole kingdom. This book is ſaid to have been extant ſo late as the reign of Edward IV. but is now unfortunately loſt. It contained, we may probably ſuppoſe, the principal maxims of the common law, the penalties for miſdemeanors, and the forms of judicial proceedings. Thus much may at leaſt be collected from that injunction to obſerve it, which we find in the laws of king Edward the Elder, the ſon of Alfred: *Omnibus qui reipublicæ præſunt etiam atque etiam mando, ut omnibus æquos ſe præbeant judices perinde ac in judiciali libro ſcriptum habetur: nec quiquam formident quin jus commune audacter liberèque dicant.*

But the irruption and eſtabliſhment of the Danes in England, which followed ſoon after, introduced new cuſtoms, and cauſed this code of Alfred in many provinces to fall into diſuſe, or at leaſt to be mixed and debaſed with other laws of a coarſer alloy. So that, about the beginning of the 11th century there were three principal ſyſtems of laws prevailing in different diſtricts. 1. The *Mercen Lage*, or Mercian Laws, which were obſerved in many of the inland counties, and thoſe bordering on the principality of Wales, the retreat of the ancient Britons; and therefore very probably intermixed with the Britiſh or Druidical cuſtoms. 2. The *Weſt-Saxon Lage*, or Laws of the Weſt-Saxons, which obtained in the counties to the ſouth and weſt of the iſland, from Kent to Devonſhire. Theſe were probably much the ſame with the laws of Alfred above-mentioned, being the municipal law of the far moſt conſiderable part of his dominions, and particularly including Berkſhire, the ſeat of his peculiar reſidence. 3. The *Dane Lage*, or Daniſh Law, the very name of which ſpeaks its original and compoſition. This was principally maintained in the reſt of the midland counties, and alſo on the eaſtern coaſt, the part moſt expoſed to the viſits of that piratical people. As for the very northern provinces, they were at that time under a diſtinct government.

Out of theſe three laws, Roger Hoveden and Ranulphus Ceſtrenſis inform us, king Edward the Confeſſor extracted one uniform law, or digeſt of laws, to be obſerved throughout the whole kingdom; though Hoveden and the author of an old manuſcript chronicle aſſure us likewiſe, that this work was projected and begun by his grandfather king Edgar. And indeed a general digeſt of the ſame nature has been conſtantly found expedient, and therefore put in practice, by other great nations, which were formed from an aſſemblage of little provinces, governed by peculiar cuſtoms. As in Portugal, under king Edward, about the beginning of the 15th century; in Spain, under Alonzo X. who about the year 1250 executed the plan of his father St. Ferdinand, and collected all the provincial cuſtoms into one uniform law, in the celebrated code entitled *Las Partidas*; and in Sweden, about the ſame era, a univerſal body of common law was compiled out of the particular cuſtoms eſtabliſhed by the laghman of every province, and entitled the *Land's Lagh*, being analogous to the common law of England.

Both theſe undertakings, of king Edgar and of Edward the Confeſſor, ſeem to have been no more than a new edition, or freſh promulgation, of Alfred's code, or dome-book, with ſuch additions and improvements as the experience of a century and a half had ſuggeſted. For Alfred is generally ſtyled by the ſame hiſtorians the *legum Anglicanarum conditor*, as Edward the Confeſſor is the *reſtitutor*. Theſe, however, are the laws which our hiſtories ſo often mention under the name of the *Laws of Edward the Confeſſor*; which our anceſtors ſtruggled ſo hard to maintain, under the firſt princes of the Norman line; and which ſubſequent princes ſo frequently promiſed to keep and to reſtore, as the moſt popular act they could do, when preſſed by foreign emergencies or domeſtic diſcontents. Theſe are the laws, that ſo vigorouſly withſtood the repeated attacks of the civil law; which eſtabliſhed in the 12th century a new Roman empire over the moſt of the ſtates on the continent; ſtates that have loſt, and perhaps upon that account, their political liberties; while the free conſtitution of England, perhaps upon the ſame account, has been rather improved than debaſed. Theſe, in ſhort, are the laws which gave riſe and origin to that collection of maxims and cuſtoms which is now known by the name of the *common law*: a name either given to it in contradiſtinction to other laws, as the ſtatute-law, the civil-law, the law-merchant, and the like; or, more probably, as a law *common* to all the realm, the *jus commune*, or *folcright*, mentioned by king Edward the Elder, after the abolition of the ſeveral provincial cuſtoms and particular laws before-mentioned.

But, though this is the moſt likely foundation of this collection of maxims and cuſtoms, yet the maxims and cuſtoms ſo collected are of higher antiquity than memory or hiſtory can reach; nothing being more difficult than to aſcertain the preciſe beginning and firſt ſpring of an ancient and long-eſtabliſhed cuſtom. Whence it is, that in our law the goodneſs of a cuſtom depends upon its having been uſed time out of mind; or, in the ſolemnity of

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our legal phraſe, time whereof *the memory of man runneth not to the contrary*. And what lord Hale ſays, in his Hiſtory of the Common Law, p. 55, is undoubtedly true, that "the original of the common law is as undiſcoverable as the head of the Nile." This it is that gives it weight and authority; and of this nature are the maxims and cuſtoms which compoſe the common law, or *lex non ſcripta*, of this kingdom.

This (unwritten or) COMMON LAW is properly diſtinguiſhable in three kinds: 1. General cuſtoms; which are the univerſal rule of the whole kingdom, and form the common law in its ſtricter and more uſual ſignification. 2. Particular cuſtoms; which for the moſt part affect only the inhabitants of particular diſtricts. 3. Certain particular laws; which by cuſtom are adopted and uſed by ſome particular courts, of pretty general and extenſive juriſdiction.

I. As to *general cuſtoms*, or the common law properly ſo called; this is that law, by which proceedings and determinations in the king's ordinary courts of juſtice are guided and directed. This, for the moſt part, ſettles the courſe in which lands deſcend by inheritance; the manner and form of acquiring and transferring property; the ſolemnities and obligation of contracts; the rules of expounding wills, deeds, and acts of parliament; the reſpective remedies of civil injuries; the ſeveral ſpecies of temporal offences, with the manner and degree of puniſhment, and an infinite number of minuter particulars, which diffuſe themſelves as extenſively as the ordinary diſtribution of common juſtice requires. Thus, for example, that there ſhall be four ſuperior courts of record, the Chancery, the King's Bench, the Common Pleas, and the Exchequer; that the eldeſt ſon alone is heir to his anceſtor; that property may be acquired and transferred by writing; that a deed is of no validity unleſs ſealed and delivered; that wills ſhall be conſtrued more favourably, and deeds more ſtrictly; that money lent upon bond is recoverable by action of debt; that breaking the public peace is an offence, and puniſhable by fine and impriſonment: all theſe are doctrines that are not ſet down in any written ſtatute or ordinance; but depend merely upon immemorial uſage, that is, upon common law, for their ſupport.

Some have divided the common law into two principal grounds or foundations: 1. Eſtabliſhed cuſtoms; ſuch as that, where there are three brothers, the eldeſt brother ſhall be heir to the ſecond, in excluſion of the youngeſt; and, 2. Eſtabliſhed rules and maxims; as, "that the king can do no wrong, that no man ſhall be bound to accuſe himſelf," and the like. But theſe ſeem to be one and the ſame thing. For the authority of theſe maxims reſts entirely upon general reception and uſage; and the only method of proving that this or that maxim is a rule of the common law, is by ſhowing that it hath been always the cuſtom to obſerve it.

But here a very natural, and very material, queſtion ariſes: How are theſe cuſtoms or maxims to be known, and by whom is their validity to be determined? The anſwer is, By the judges in the ſeveral courts of juſtice. They are the depoſitaries of the laws; the living oracles who muſt decide in all caſes of doubt, and who are bound by an oath to decide according to the law of the land. Their knowledge of that law is derived from experience and ſtudy; from the *viginti annorum lucubrationes*, which Forteſcue mentions; and from being long perſonally accuſtomed to the judicial deciſions of their predeceſſors. And indeed theſe judicial deciſions are the principal and moſt authoritative evidence, that can be given, of the exiſtence of ſuch a cuſtom as ſhall form a part of the common law. The judgment itſelf, and all the proceedings previous thereto, are carefully regiſtered, and preſerved, under the name of *records*, in public repoſitories ſet apart for that particular purpoſe; and to them frequent recourſe is had, when any critical queſtion ariſes, in the determination of which former precedents may give light or aſſiſtance. And therefore, even ſo early as the conqueſt, we find the *præteritorum memoria eventorum* reckoned up as one of the chief qualifications of thoſe who were held to be *legibus patriæ optime inſtituti*. For it is an eſtabliſhed rule, to abide by former precedents, where the ſame points come again in litigation, as well to keep the ſcale of juſtice even and ſteady, and not liable to waver with every new judge's opinion; as alſo becauſe the law in that caſe being ſolemnly declared and determined, what before was uncertain, and perhaps indifferent, is now become a permanent rule, which is not in the breaſt of any ſubſequent judge to alter or vary from according to his private ſentiments: he being ſworn to determine, not according to his own private judgment, but according to the known laws and cuſtoms of the land; not delegated to pronounce a new law, but to maintain and expound the old one. Yet this rule admits of exception, where the former determination is moſt evidently contrary to reaſon; much more if it be contrary to the divine law. But even in ſuch caſes the ſubſequent judges do not pretend to make a new law, but to vindicate the old one from miſrepreſentation. For, if it be found that the former deciſion is manifeſtly abſurd or unjuſt, it is declared, not that ſuch a ſentence was bad law, but that it was *not law*; that is, that it is not the eſtabliſhed cuſtom of the realm, as has been erroneouſly determined. And hence it is that our lawyers are with juſtice ſo copious in their encomiums on the *reaſon* of the common law; that they tell us, that the law is the *perfection of reaſon*, that it always intends to conform thereto, and that what is not reaſon is not law. Not that the particular reaſon of every rule in the law can at this diſtance of time be always preciſely aſſigned; but it is ſufficient that there be nothing in the rule flatly contradictory to reaſon, and then the law will preſume it to be well founded. And it hath been an ancient obſervation in the laws of England, that whenever a ſtanding rule of law, of which the reaſon perhaps could not be remembered or diſcerned, hath been wantonly broke in upon by ſtatutes or new reſolutions, the wiſdom of the rule hath in the end appeared from the inconveniences that have followed the innovation.

The doctrine of the law then is this: That precedents and rules muſt be followed, unleſs flatly abſurd or unjuſt; for, though their reaſon be not obvious at firſt view, yet we owe ſuch a deference to former times as not to ſuppoſe they acted wholly without conſideration. To illuſtrate this doctrine by examples. It has been determined, time out of mind, that a brother of the half-blood ſhall never ſucceed as heir to the eſtate of his half-brother, but it ſhall rather eſcheat to the king, or other ſuperior lord. Now this is a poſitive law, fixed and eſtabliſhed by cuſtom; which cuſtom is proved by judicial deciſions; and therefore can never be departed from by any modern judge without a breach of his oath and the law. For herein there is nothing repugnant to natural juſtice; though the artificial reaſon of it, drawn from the feodal law, may not be quite obvious to every body. And therefore, on account of a ſuppoſed hardſhip upon the half-brother, a modern judge might wiſh it had been otherwiſe ſettled; yet it is not in his power to alter it; and, if any court were now to determine, that an elder brother of the half-blood might enter upon and ſeize any lands that were purchaſed by his younger brother, no ſubſequent judges would ſcruple to declare that ſuch prior determination was unjuſt, was unreaſonable, and therefore was not law. So that the law, and the opinion of the judge, are not always convertible terms, or one and the ſame thing; ſince it ſometimes may happen that the judge may miſtake the law. Upon the whole, however, we may take it as a general rule, "That the deciſions of courts of juſtice are the evidence of what is common law;" in the ſame manner as, in the civil law, what the emperor had once determined was to ſerve as a guide for the future.

The deciſions therefore of courts are held in the higheſt regard; and are not only preſerved as authentic records in the treaſuries of the ſeveral courts, but are handed out to public view in the numerous volumes of reports which furniſh the lawyers' library. Theſe reports are hiſtories

of the ſeveral caſes, with a ſhort ſummary of the proceedings, which are preſerved at large in the record; the arguments on both ſides, and the reaſons the court gave for its judgment: taken down in ſhort notes by perſons preſent at the determination. And theſe ſerve as indexes to, and alſo to explain, the records; which always, in matters of conſequence and nicety, the judges direct to be ſearched. The reports are extant in a regular ſeries from the reign of king Edward II. incluſive; and from his time to that of Henry VIII. were taken by the prothonotaries, or chief ſcribes of the court, at the expenſe of the crown, and publiſhed annually, whence they are known under the denomination of the *Year-books*. And it is much to be wiſhed that this beneficial cuſtom had, under proper regulations, been continued to this day; for, though king James I. at the inſtance of lord Bacon, appointed two reporters, with a handſome ſtipend, for this purpoſe; yet that wiſe inſtitution was ſoon neglected; and, from the reign of Henry VIII. to the preſent time, this taſk has been executed by many private and contemporary hands; who, ſometimes through haſte and inaccuracy, ſometimes through miſtake and want of ſkill, have publiſhed very crude and imperfect (perhaps contradictory) accounts of one and the ſame determination. Some of the moſt valuable of the ancient reports are thoſe publiſhed by lord chief-juſtice Coke; a man of infinite learning in his profeſſion, though not a little infected with the pedantry and quaintneſs of the times he lived in, which appear ſtrongly in all his works. However, his writings are ſo highly eſteemed, that they are generally cited without the author's name. His Reports, for inſtance, are ſtyled, "The Reports;" and in quoting them we uſually ſay, 1 or 2 *Rep.* not 1 or 2 *Coke's Rep.* as in citing other authors. The reports of judge Croke are alſo cited in a peculiar manner, by the name of thoſe princes in whoſe reigns the caſes reported in his three volumes were determined; viz. queen Elizabeth, king James, king Charles I. as well as by the number of each volume. For ſometimes we call them 1, 2, and 3, *Cro.* but more commonly *Cro. Eliz. Cro. Jac.* or *Cro. Car.* Theſe remarks are neceſſary for the better underſtanding the references contained in the various law-articles in this Encyclopædia.

Beſides theſe reporters, there are alſo other authors to whom great veneration and reſpect are paid by the ſtudents of the common law. Such are Glanvil and Bracton, Britton and Fleta, Littleton and Fitzherbert, with ſome others of ancient date, whoſe treatiſes are cited as authority; and are evidence that caſes have formerly happened in which ſuch and ſuch points were determined, which are now become ſettled and firſt principles. One of the laſt of theſe methodical writers in point of time, whoſe works are of any intrinſic authority in the courts of juſtice, and do not entirely depend on the ſtrength of their quotations from older authors, is the ſame learned judge we have juſt mentioned, ſir Edward Coke; who hath written four volumes of Inſtitutes, as he is pleaſed to call them, though they have little of the inſtitutional method to warrant ſuch a title. The firſt volume is a very extenſive comment upon an excellent little treatiſe of tenures, compiled by judge Littleton in the reign of Edward IV. This comment is a rich mine of valuable common-law learning, collected and heaped together from the ancient reports and year-books, but greatly defective in method. It is uſually cited either by the name of *Co. Litt.* or as 1 *Inſt.* The ſecond volume is a comment upon many old acts of parliament, without any ſyſtematical order; the third, a more methodical treatiſe of the pleas of the crown; and the fourth, an account of the ſeveral ſpecies of courts. Theſe are cited as 2, 3, or 4, *Inſt.* without any author's name. An honorary diſtinction, which, as we obſerved, is paid to the works of no other writer; the generality of reports and other tracts being quoted in the name of the compiler, as 2 *Ventris*, 4 *Leonard*, 1 *Sideriin*, and the like.

And thus much for the firſt ground and chief corner-ſtone of the laws of England; which is generally immemorial cuſtom, or common law, from time to time declared in the deciſions of the courts of juſtice.

The Roman law, as practiſed in the times of its liberty, paid alſo a great regard to cuſtom; but not ſo much as our law; it only then adopting it when the written law was deficient; though the reaſons alleged in the Digeſt will fully juſtify our practice in making it of equal authority with, when it is not contradicted by, the written law. "For, ſince (ſays Julianus) the written law binds us for no other reaſon but becauſe it is approved by the judgment of the people, therefore thoſe laws which the people have approved without writing ought alſo to bind every body. For where is the difference, whether the people declare their aſſent to a law by ſuffrage, or by a uniform courſe of acting accordingly?" Thus did they reaſon while Rome had ſome remains of her freedom; but, when, the imperial tyranny came to be fully eſtabliſhed, the civil laws ſpeak a very different language. *Quod principi placuit legis habet vigorem, cum populus ei et in eum omne ſuum imperium et poteſtatem conferat*, ſays Ulpian. *Imperator ſolus et conditor et interpres legis exiſtimatur*, ſays the Code. And again, *Sacrilegii inſtar eſt reſcripto principis obviari.* And indeed it is one of the characteriſtic marks of Britiſh liberty, that the common law depends upon cuſtom; which carries this internal evidence of freedom along with it, that it probably was introduced by the voluntary conſent of the people.

II. The ſecond branch of the unwritten laws of England are *particular cuſtoms*, or laws which affect only the inhabitants of particular diſtricts.

Theſe particular cuſtoms, or ſome of them, are without doubt the remains of that multitude of local cuſtoms before mentioned, out of which the common law, as it now ſtands, was collected, at firſt by king Alfred, and afterwards by king Edgar and by Edward the Confeſſor; each diſtrict mutually ſacrificing ſome of its own ſpecial uſages, in order that the whole kingdom might enjoy the benefit of one uniform and univerſal ſyſtem of laws. But, for reaſons that have been now long forgotten, particular counties, cities, towns, manors, and lordſhips, were indulged with the privilege of abiding by their own cuſtoms, in contradiſtinction to the reſt of the nation at large: which privilege is confirmed to them by ſeveral acts of parliament.

Such is the cuſtom of *gavelkind* in Kent and ſome other parts of the kingdom, (though perhaps it was alſo general till the Norman conqueſt;) which ordains, among other things, that not the eldeſt ſon only of the father ſhall ſucceed to his inheritance, but all the ſons alike; and that, though the anceſtor be attainted and hanged, yet the heir ſhall ſucceed to his eſtate, without any eſcheat to the lord. Such is the cuſtom that prevails in divers ancient boroughs, and therefore called *borough Engliſh*, that the youngeſt ſon ſhall inherit the eſtate, in preference to all his elder brothers. Such is the cuſtom in other boroughs, that a widow ſhall be entitled, for her dower, to all her huſband's lands; whereas at the common law ſhe ſhall be endowed of one-third part only. Such alſo are the ſpecial and particular cuſtoms of manors, of which every one has more or leſs, and which bind all the copyhold tenants that hold of the ſaid manors. Such likewiſe is the cuſtom of holding divers inferior courts, with power of trying cauſes, in cities and trading towns; the right of holding which, when no royal grant can be ſhown, depends entirely upon immemorial and eſtabliſhed uſage. Such, laſtly, are many particular cuſtoms within the city of London, with regard to trade, apprentices, widows, orphans, and a variety of other matters. All theſe are contrary to the general law of the land, and are good only by ſpecial uſage; though the cuſtoms of London are alſo confirmed by act of parliament.

To this head may moſt properly be referred a particular ſyſtem of cuſtoms uſed only among one ſet of the king's ſubjects, called the cuſtom of merchants, or *lex mercatoria*; which, however different from the general rules of

the common law, is yet ingrafted into it, and made a part of it; being allowed, for the benefit of trade, to be of the utmoſt validity in all commercial tranſactions; for it is a maxim of law, that *cuilibet in ſua arte credendum eſt.*

The *lex mercatoria*, or the cuſtom of merchants, like the *lex et conſuetudo parliamenti*, however, deſcribes only a great diviſion of the law of England. The laws relating to bills of exchange, inſurance, and all mercantile contracts, are as much the general law of the land as the laws relating to marriage or murder; but the merchants have been frequently led to ſuppoſe, that all their new faſhions and devices immediately became the law of the land: they ought however to take their law from the courts, and not the courts from the merchants; and, when the law is found inconvenient for the purpoſes of extended commerce, application ought to be made to parliament for redreſs; for, as Mr. Juſtice Foſter has obſerved, (2 Burr. 1226.) the cuſtom of merchants is the general law of the kingdom, and therefore ought not to be left to a jury after it has been ſettled by judicial determinations.

The rules relating to particular cuſtoms regard either the *proof* of their exiſtence; their *legality* when proved; or their uſual method of *allowance*. And firſt we will conſider the rules of *proof*.

As to gavelkind and borough Engliſh, the law takes particular notice of them; and there is no occaſion to prove that ſuch cuſtoms actually exiſt, but only that the lands in queſtion are ſubject thereto. All other private cuſtoms muſt be particularly pleaded; and as well as the exiſtence of ſuch cuſtoms muſt be ſhown, as that the thing in diſpute is within the cuſtoms alleged. The trial in both caſes (both to ſhow the exiſtence of the cuſtom, as, "That in the manor of Dale lands ſhall deſcend only to the heirs male, and never to the heirs female;" and alſo to ſhow "that the lands in queſtion are within that manor") is by a jury of twelve men, and not by the judges; except the ſame particular cuſtom has been before tried, determined, and recorded, in the ſame court.

The cuſtoms of London differ from all others in point of trial; for, if the exiſtence of the cuſtom be brought in queſtion, it ſhall not be tried by a jury, but by a certificate from the lord mayor and aldermen by the mouth of their recorder; unleſs it be ſuch a cuſtom as the corporation is itſelf intereſted in, as a right of taking toll, &c. for then the law permits them not to certify on their own behalf. And, when a cuſtom has been once certified by the recorder, the judges will take notice of it, and not ſuffer it to be certified a ſecond time.

When a cuſtom is actually proved to exiſt, the next inquiry is into the *legality* of it; for, if it is not a good cuſtom, it ought to be no longer uſed. *Malus uſus abolendus eſt*, is an eſtabliſhed maxim of the law. To make a particular cuſtom good, the following are neceſſary requiſites:

1. That it have been uſed ſo long, that the *memory of man runneth not to the contrary*. So that if any one can ſhow the beginning of it within legal memory, that is, within any time ſince the firſt year of the reign of Richard I. it is no good cuſtom. For which reaſon no cuſtom can prevail againſt an act of parliament; as, if it be pleaded as a cuſtom that every pound of butter ſhall weigh 18 ounces inſtead of 16, it is bad, becauſe the 13 and 14 Car. II. c. 26, directs that every pound throughout the kingdom ſhall weigh 16 ounces only.

2. It muſt have been *continued*. Any interruption would cauſe a temporary ceaſing; the revival gives it a new beginning, which will be within time of memory, and thereupon the cuſtom will be void. But this muſt be underſtood with regard to an interruption of the poſſeſſion only for ten or twenty years will not deſtroy the cuſtom. As if the inhabitants of a pariſh have a cuſtomary right of watering their cattle at certain pool, the cuſtom is not deſtroyed, though they do not uſe it for ten years; it only becomes more difficult to prove; but, if the right be any how *diſcontinued* for a day, the cuſtom is quite at an end.

3. It muſt have been *peaceable*, and acquieſced in; not ſubject to contention and diſpute. For, as cuſtoms owe their original to common conſent, their being immemorially diſputed, either at law or otherwiſe, is a proof that ſuch conſent was wanting.

4. Cuſtoms muſt be *reaſonable*; or rather, taken negatively, they muſt not be unreaſonable. Which is not always, as ſir Edward Coke ſays, to be underſtood of every unlearned man's reaſon; but of artificial and legal reaſon, warranted by authority of law. Upon which account a cuſtom may be good, though the particular reaſon of it cannot be aſſigned; for it ſufficeth, if no good legal reaſon can be aſſigned againſt it. Thus a cuſtom in a pariſh, that no man ſhall put his beaſts into the common till the third of October, would be good; and yet it would be hard to ſhow the reaſon why that day in particular is fixed upon rather than the day before or after. But a cuſtom, that no cattle ſhall be put in till the lord of the manor has firſt put in his, is unreaſonable, and therefore bad; for peradventure the lord will never put in his; and then the tenants will loſe all their profits.

5. Cuſtoms ought to be *certain*. A cuſtom, that lands ſhall deſcend to the moſt worthy of the owner's blood, is void; for how ſhall this worth be determined? but a cuſtom to deſcend to the next male of the blood, excluſive of females, is certain, and therefore good. A cuſtom to pay twopence an acre in lieu of tithes, is good; but to pay ſometimes twopence and ſometimes threepence, as the occupier of the land pleaſes, is bad for its uncertainty. Yet a cuſtom, to pay a year's improved value for a fine on a copyhold eſtate, is good; though the value is a thing uncertain; for the value may at any time be aſcertained; and the maxim of law is, *Id certum eſt, quod certum reddi poteſt*. But a cuſtom that poor houſekeepers ſhall carry away rotten wood in a chaſe is bad, being too vague and uncertain. 2 *T. R.* 758. To which we may add, that a cuſtom that poor people ſhall carry away every thing they can lay their hands on is bad; *yet the memory of man runneth not to the contrary*.

6. Cuſtoms, though eſtabliſhed by conſent, muſt be (when eſtabliſhed) *compulſory*; and not left to the option of every man, whether he will uſe them or no. Therefore a cuſtom that all the inhabitants ſhall be rated toward the maintenance of a bridge, will be good; but a cuſtom, that every man is to contribute thereto at his own pleaſure, is idle and abſurd, and indeed no cuſtom at all.

7. Laſtly, Cuſtoms muſt be *conſiſtent* with each other. One cuſtom cannot be ſet up in oppoſition to another. For, if both are really cuſtoms, then both are of equal antiquity, and both eſtabliſhed by mutual conſent; which, to ſay of contradictory cuſtoms, is abſurd. Therefore, if one man preſcribes that by cuſtom he has a right to have windows looking into another's garden, the other cannot claim a right by cuſtom to ſtop up or obſtruct thoſe windows; for theſe two contradictory cuſtoms cannot both be good, nor both ſtand together. He ought rather to deny the exiſtence of the former cuſtom.

Next, as to the *allowance* of ſpecial cuſtoms. Cuſtoms, in derogation of the common law, muſt be conſtrued ſtrictly: and this rule is founded upon the conſideration, that a variety of cuſtoms in different places upon the ſame ſubject is a general inconvenience; the courts therefore will not admit ſuch cuſtoms but upon the cleareſt proof. Thus, by the cuſtom of gavelkind, an infant of fifteen years may by one ſpecies of conveyance (called *a deed of feoffment*) convey away his lands in fee ſimple, or for ever. Yet this cuſtom does not empower him to uſe any other conveyance, or even to leaſe them for ſeven years; for the cuſtom muſt be ſtrictly purſued. So, where there is a cuſtom that lands ſhall deſcend to the eldeſt ſiſter, the courts will not extend this cuſtom to the eldeſt niece, or to any other eldeſt female relation, but upon the ſame authority by which the cuſtom between ſiſters is ſupported.

1 *T. R.* 466. And, moreover, all ſpecial cuſtoms muſt ſubmit to the king's prerogative. Therefore, if the king purchaſes lands of the nature of gavelkind, where all the ſons inherit equally; yet, upon the king's demiſe, his eldeſt ſon ſhall ſucceed to thoſe lands alone. And thus much for the ſecond part of the *leges non ſcriptæ*, or thoſe particular cuſtoms which affect particular perſons or diſtricts only.

III. The third branch of them are thoſe peculiar laws which by cuſtom are adopted and uſed only in certain peculiar courts and juriſdictions. And by theſe are underſtood the *civil and canon laws*.

It may ſeem a little improper, at firſt view, to rank theſe laws under the head of *leges non ſcriptæ*, or unwritten laws, ſeeing they are ſet forth by authority in their pandects, their codes, and their inſtitutions; their councils, decrees, and decretals; and enforced by an immenſe number of expoſitions, deciſions, and treatiſes of the learned in both branches of the law. But this is done after the example of ſir Matthew Hale, becauſe it is moſt plain, that it is not on account of their being written laws, that either the canon law or the civil law have any obligation within this kingdom; neither do their force and efficacy depend upon their own intrinſic authority; which is the caſe of our written laws, or acts of parliament. They bind not the ſubjects of England becauſe their materials were collected from popes or emperors, were digeſted by Juſtinian, or declared to be authentic by Gregory: theſe conſiderations give them no authority here; for the legiſlature of England doth not, nor ever did, recognize any foreign power, as ſuperior or equal to it in this kingdom; or as having the right to give law to any the meaneſt of its ſubjects. But all the ſtrength that either the papal or imperial laws have obtained in this realm (or indeed in any other kingdom in Europe) is only becauſe they have been admitted and received by immemorial uſage and cuſtom in ſome particular caſes, and ſome particular courts; and then they form a branch of the *leges non ſcriptæ*, or cuſtomary law; or elſe, becauſe they are in ſome other caſes introduced by conſent of parliament, and then they owe their validity to the *leges ſcriptæ*, or ſtatute-law. This is expreſsly declared in thoſe remarkable words of the ſtatute 25 Hen. VIII. c. 21. addreſſed to the king's majeſty: "This your grace's realm, recognizing no ſuperior under God but only your grace, hath been and is free from ſubjection to any man's laws, but only to ſuch as have been deviſed, made, and ordained, within this realm, for the wealth of the ſame; or to ſuch other as, by ſufferance of your grace and your progenitors, the people of this your realm have taken at their free liberty, by their own conſent, to be uſed among them; and have bound themſelves by long uſe and cuſtom to the obſervance of the ſame; not as to the obſervance of the laws of any foreign prince, potentate, or prelate; but as to the cuſtomed and ancient laws of this realm, originally eſtabliſhed as laws of the ſame, by the ſaid ſufferance, conſents, and cuſtom; and none otherwiſe."

The hiſtory of the Roman law, and of the various degrees of favour with which it has been received in different countries, is a curious and entertaining ſubject. In England, its introduction was attempted by the biſhops and clergy, and was reſiſted by the nobility and laity, who never relinquiſhed their attachment to the common law. When the eccleſiaſtics withdrew themſelves from the temporal courts in this country, in conſequence of their averſion to the municipal law, which they were unable to ſuperſede by the civil and canon law, they introduced the laws of ancient and modern Rome into the ſpiritual courts of all denominations; in which, as well as in the high courts of Chancery, and in the courts of the two univerſities, the proceedings are, even now, conformable to the courſe of the civil law. Though it does not poſſeſs the force of authority in the courts of Weſtminſter-hall, it is frequently followed, when an expreſs rule of the common law is wanting; and, when both laws concur, ſupport and explanation have been received from the words of the civil law. Similar, in a great meaſure, are the nature and extent of its incorporation into the Scotch code. But we muſt ſpeak of the two branches ſeparately.

1. By the *civil law*, abſolutely taken, is generally underſtood the civil or municipal law of the Roman empire, as compriſed in the Inſtitutes, the Code, and the Digeſt, of the emperor Juſtinian, and the Novel Conſtitutions of himſelf and ſome of his ſucceſſors; of which we have given a general account at p. 363–365. This ſyſtem, ſuch as we have deſcribed it, ſoon fell into neglect and oblivion, till about the year 1130, when a copy of the Digeſts was found at Amalfi in Italy; which accident, concurring with the policy of the Roman eccleſiaſtics, ſuddenly gave new vogue and authority to the civil law, introduced it into ſeveral nations, and occaſioned that mighty inundation of voluminous comments, with which this ſyſtem of law, more than any other, is now loaded, and which, from their rapid increaſe, promiſe, at no diſtant period, to acquire a bulk equal to that maſs of legal learning, from which Tribonian and his aſſociates compiled the Inſtitutes, the Digeſt, and the Code. *Spence's Eſſay*, iii.

2. The *canon-law* is a body of Roman eccleſiaſtical law, relative to ſuch matters as that church either has, or pretends to have, the proper juriſdiction over. This is compiled from the opinions of the ancient Latin fathers, the decrees of general councils, the decretal epiſtles and bulls of the holy ſee. All which lay in the ſame diſorder and confuſion as the Roman civil law; till, about the year 1151, one Gratian, an Italian monk, animated by the diſcovery of Juſtinian's Pandects, reduced the Eccleſiaſtical Conſtitutions alſo into ſome method, in three books; which he entitled *Concordia diſcordantium Canonum*, but which are generally known by the name of *Decretum Gratiani*. Theſe reached as low as the time of pope Alexander III. The ſubſequent papal decrees, to the pontificate of Gregory IX. were publiſhed in much the ſame method under the auſpices of that pope, about the year 1230, in five books; entitled *Decretalia Gregorii Noni*. A ſixth book was added by Boniface VIII. about the year 1298, which is called *Sextus Decretalium*. The Clementine Conſtitutions, or Decrees of Clement V. were in like manner authenticated in 1317 by his ſucceſſor John XXII. who alſo publiſhed twenty conſtitutions of his own, called *Extravagantes Joannis*; all which in ſome meaſure anſwer to the Novels of the civil law. To theſe have been ſince added ſome decrees of latter popes, in five books, called *Extravagantes Communes*. And all theſe together, Gratian's Decree, Gregory's Decretals, the Sixth Decretal, the Clementine Conſtitutions, and the Extravagants of John and his ſucceſſors, form the *corpus juris canonici*, or body of the Roman canon law.

Beſides theſe pontifical collections, which during the times of popery were received as authentic in this iſland, as well as in other parts of Chriſtendom, there is alſo a kind of national canon-law, compoſed of legatine and provincial conſtitutions, and adapted only to the exigencies of this church and kingdom. The Legatine Conſtitutions were eccleſiaſtical laws, enacted in national ſynods, held under the cardinals Otho and Othobon, legates from pope Gregory IX. and pope Clement IV. in the reign of king Henry III. about the years 1220 and 1268. The Provincial Conſtitutions are principally the decrees of provincial ſynods, held under divers archbiſhops of Canterbury, from Stephen Langton in the reign of Henry III. to Henry Chichele in the reign of Henry V. and adopted alſo by the province of York in the reign of Henry VI. At the dawn of the reformation, in the reign of Henry VIII. it was enacted in parliament, that a review ſhould be had of the canon-law; and, till ſuch review ſhould be made, all canons, conſtitutions, ordinances, and ſynodals provincial, being then already made, and not repugnant to the law of the land or the king's prerogative, ſhould ſtill be uſed and executed. And, as no ſuch

review

review has yet been perfected, upon this ſtatute now depends the authority of the canon-law in England.

As for the canons enacted by the clergy under James I. in the year 1603, and never confirmed in parliament, it has been ſolemnly adjudged, upon the principles of law and the conſtitution, that, where they are not merely declaratory of the ancient canon-law, but are introductory of new regulations, they do not bind the laity, whatever regard the clergy may think proper to pay them.

There are four ſpecies of courts, in which the civil and canon laws are permitted, under different reſtrictions, to be uſed. 1. The courts of the archbiſhop and biſhops, and their derivative officers; uſually called Courts Chriſtian, *Curiæ Chriſtianitatis*, or eccleſiaſtical courts. 2. The military courts. 3. The courts of admiralty. 4. The courts of the two univerſities. In all, their reception in general, and the different degrees of that reception are grounded entirely upon cuſtom; corroborated in the latter inſtance by act of parliament, ratifying thoſe charters which confirm the cuſtomary law of the univerſities. The more minute conſideration of them has been given under the head COURTS OF LAW, vol. v. p. 297. It will ſuffice at preſent to remark a few particulars relative to them all, which may ſerve to inculcate more ſtrongly the doctrine laid down concerning them.

And firſt, The courts of common law have the ſuperintendency over theſe courts; to keep them within their juriſdictions; to determine wherein they exceed them; to reſtrain and prohibit ſuch exceſs; and (in caſe of contumacy) to puniſh the officer who executes, and in ſome caſes the judge who enforces, the ſentence ſo declared to be illegal.

The common law has reſerved to itſelf the expoſition of all ſuch acts of parliament as concern either the extent of theſe courts or the matters depending before them. And therefore, if theſe courts either refuſe to allow theſe acts of parliament, or will expound them in any other ſenſe than what the common law puts upon them, the king's courts at Weſtminſter will grant prohibitions to reſtrain and controul them. See KING'S BENCH, vol. xi.

An appeal lies from all theſe courts to the king, in the laſt reſort; which proves that the juriſdiction exerciſed in them is derived from the crown of England, and not from any foreign potentate, or intrinſic authority of their own. And, from theſe three ſtrong marks and enſigns of ſuperiority, it appears beyond a doubt, that the civil and canon laws, though admitted in ſome caſes by cuſtom in ſome courts, are only ſubordinate; and *leges ſub graviori lege*; and that, thus admitted, reſtrained, altered, new-modelled, and amended, they are by no means with us a diſtinct independent ſpecies of laws, but are inferior branches of the cuſtomary or unwritten laws of England, properly called the *king's eccleſiaſtical, the king's military, the king's maritime, or the king's academical, laws.*

OF STATUTE LAW.—The *leges ſcriptæ*, or written laws of the kingdom, are the ſtatutes, acts, or edicts, made by the king's majeſty, by and with the advice of the lords ſpiritual and temporal, and commons, in parliament aſſembled. The oldeſt of theſe now extant, and printed in our ſtatute-books, is the famous Magna Charta, as confirmed in parliament 9 Hen. III. though doubtleſs there were many acts before that time, the records of which are now loſt, and the determinations of them perhaps at preſent currently received for the maxims of the old common law.

The method of citing acts of parliament is various. Many of the ancient ſtatutes are called after the name of the place where the parliament was held that made them; as the *ſtatutes of Merton* and *Marleberge*, of *Weſtminſter*, *Glouceſter*, and *Wincheſter*. Others are denominated entirely from their ſubject; as the ſtatutes of *Wales* and *Ireland*, the *articuli cleri*, and the *prerogativa regis*. Some are diſtinguiſhed by their initial words, a method of citing very ancient; being uſed by the Jews, in denominating the books of the Pentateuch; by the Chriſtian church, in diſtinguiſhing their hymns and divine offices; by the Romaniſts, in deſcribing their papal bulls; and, in ſhort, by the whole body of ancient civilians and canoniſts, among whom this method of citation generally prevailed, not only with regard to chapters, but inferior ſections alſo: in imitation of all which we ſtill call ſome of the old ſtatutes by their initial words, as the ſtatute of *Quia emptores*, and that of *Circumſpecte agatis*. But the moſt uſual method of citing them, eſpecially ſince the time of Edward II. is by naming the year of the king's reign in which the ſtatute was made, together with the chapter or particular act, according to its numeral order; as, 9 *Geo.* II. *c.* 4. For all the acts of one ſeſſion of parliament taken together make properly but one ſtatute; and therefore, when two ſeſſions have been held in one year, we uſually mention *ſtat.* 1. *or* 2. Thus the bill of rights is cited, as 1 *W. & M. ſt.* 2. *c.* 2. ſignifying that it is the ſecond chapter or act of the ſecond ſtatute, or the laws made in the ſecond ſeſſions of parliament held in the firſt year of king William and queen Mary.

As the manner of making ſtatutes will be explained under the article PARLIAMENT, we ſhall here only take notice of the different kinds of ſtatutes; and of ſome general rules with regard to their conſtruction.

Firſt, As to their ſeveral kinds. Statutes are either general or ſpecial, public or private. *A general or public act* is an univerſal rule that regards the whole community; and of this the courts of law are bound to take notice judicially and *ex officio*, without the ſtatute being particularly pleaded, or formally ſet forth, by the party who claims an advantage under it. *Special or private acts* are rather exceptions than rules, being thoſe which only operate upon particular perſons and private concerns; ſuch as the Romans entitled *ſenatus decreta*, in contradiſtinction to the *ſenatus conſulta*, which regarded the whole community; and of theſe the judges are not bound to take notice, unleſs they be formally ſhown and pleaded. To ſhow the diſtinction: the ſtat. 13 Eliz. c. 10. to prevent ſpiritual perſons from making leaſes for longer terms than twenty-one years or three lives, is a *public act*; it being a rule preſcribed to the whole body of ſpiritual perſons in the nation; but an act to enable the biſhop of Cheſter to make a leaſe to A. B. for ſixty years, is an exception to this rule; it concerns only the parties and the biſhop's ſucceſſors, and is therefore a *private act*.

Statutes alſo are either declaratory of the common law, or remedial of ſome defects therein. *Declaratory*, where the old cuſtom of the kingdom is almoſt fallen into diſuſe, or become diſputable; in which caſe the parliament has thought proper, *in perpetuum rei teſtimonium*, and for avoiding all doubts and difficulties, to declare what the common law is and ever hath been. Thus, the ſtatute of treaſons, 25 Edw. III. c. 2. doth not make any new ſpecies of treaſon; but only, for the benefit of the ſubject, declares and enumerates thoſe ſeveral kinds of offence which before were treaſon at the common law. *Remedial* ſtatutes are thoſe which are made to ſupply ſuch defects, and abridge ſuch ſuperfluities, in the common law, as ariſe either from the general imperfection of all human laws, from change of time and circumſtances, from the miſtakes and unadviſed determinations of unlearned judges, of from any other cauſe whatſoever. And this, being done either by enlarging the common law where it was too narrow and circumſcribed, or by reſtraining it where it was too lax and luxuriant, hath occaſioned another ſubordinate diviſion of remedial acts of parliament into *enlarging* and *reſtraining* ſtatutes. To inſtance again in the caſe of treaſon. Clipping the current coin of the kingdom was an offence not ſufficiently guarded againſt by the common law: therefore it was thought expedient by ſtatute 5 Eliz. c. 11. to make it high treaſon, which it was not at the common law; ſo that this was an *enlarging* ſtatute. At common law, alſo, ſpiritual corporations might leaſe out

their eſtates for any term of years, till prevented by the ſtatute 13 Eliz. before-mentioned: this was therefore a *reſtraining* ſtatute.

Secondly, The rules to be obſerved with regard to the conſtruction of ſtatutes are principally theſe which follow.

1. There are three points to be conſidered in the conſtruction of all remedial ſtatutes; the old law, the miſchief, and the remedy: that is, how the common law ſtood at the making of the act; what the miſchief was, for which the common law did not provide; and what remedy the parliament hath provided to cure this miſchief. And it is the buſineſs of the judges ſo to conſtrue the act, as to ſuppreſs the miſchief and advance the remedy. Let us inſtance again in the ſame reſtraining ſtatute of 13 Eliz. c. 10. By the common law, eccleſiaſtical corporations might let as long leaſes as they thought proper; the miſchief was, that they let long and unreaſonable leaſes, to the impoveriſhment of their ſucceſſors; the remedy applied by the ſtatute was by making void all leaſes by eccleſiaſtical bodies for longer terms than three lives, or twenty-one years. Now in the conſtruction of this ſtatute it is held, that leaſes, though for a longer term, if made by a biſhop, are not void during the biſhop's continuance in his ſee; or, if made by a dean and chapter, they are not void during the continuance of the dean; for the act was made for the benefit and protection of the ſucceſſor. The miſchief is therefore ſufficiently ſuppreſſed by vacating them after the determination of the intereſt of the granters; but the leaſes, during their continuance, being not within the miſchief, are not within the remedy.

2. To make a penal law reaſonable and juſt, two conditions are neceſſary, and two proper. It is *neceſſary* that the law ſhould be adequate to its end; that, if it be obſerved, it ſhall prevent the evil againſt which it is directed. It is, ſecondly, neceſſary that the end of the law be of ſuch importance as to deſerve the ſecurity of a penal ſanction. The other conditions of a penal law, which, though not abſolutely neceſſary, are to a very high degree *proper*, are, that to the penal violation of the law there are many temptations, and that of the phyſical obſervance there is great facility; for, if temptations were rare, a penal law might be deemed unneceſſary; and, on the other hand, if the duty enjoined by the law were of difficult performance, omiſſion, though it could not be juſtified, might admit of conſiderable excuſe.

3. A ſtatute, which treats of things or perſons of an inferior rank, cannot by any *general words* be extended to thoſe of a ſuperior. So a ſtatute, treating of "deans, prebendaries, parſons, vicars, *and others having ſpiritual promotion*," is held not to extend to biſhops, though they have ſpiritual promotion; deans being the higheſt perſons named, and biſhops being of a ſtill higher order.

4. Penal ſtatutes muſt be conſtrued ſtrictly. Thus, the ſtat. 1 Edw. VI. c. 12. having enacted that thoſe who are convicted of ſtealing *horſes* ſhould not have the benefit of clergy, the judges conceived that this did not extend to him who ſhould ſteal but *one horſe*, and therefore procured a new act for that purpoſe in the following year. And, to come nearer to our own times, by the ſtat. 14 Geo. II. c. 6. ſtealing ſheep, *or other cattle*, was made felony without benefit of clergy. But theſe general words, "or other cattle," being looked upon as much too looſe to create a capital offence, the act was held to extend to nothing but mere ſheep. And therefore, in the next ſeſſions, it was found neceſſary to make another ſtatute, 15 Geo. II. c. 34. extending the former to bulls, cows, oxen, ſteers, bullocks, heifers, calves, and lambs, by name.

5. Statutes againſt frauds are to be liberally and beneficially expounded. This may ſeem a contradiction to the laſt rule; moſt ſtatutes againſt frauds being in their conſequences penal. But this difference is here to be taken; where the ſtatute acts upon the offender, and inflicts a penalty, as the pillory or a fine, it is then to be taken ſtrictly; but, when the ſtatute acts upon the offence, by ſetting aſide the fraudulent tranſaction, here it is to be conſtrued liberally. Upon this footing the ſtatute of 13 Eliz. c. 5. which voids all gifts of goods, &c. made to defraud creditors *and others*, was held to extend, by the general words, to a gift made to defraud the queen of a forfeiture.

6. One part of a ſtatute muſt be ſo conſtrued by another, that the whole may (if poſſible) ſtand; *ut res magis valeat quam pereat*. As if land be veſted in the king and his heirs by act of parliament, ſaving the right of A; and A has at that time a leaſe of it for three years; here A ſhall hold it for his term of three years, and afterwards it ſhall go to the king. For this interpretation furniſhes matter for every clauſe of the ſtatute to work and operate upon. But,

7. A ſaving, totally repugnant to the body of the act, is void. If therefore an act of parliament veſts land in the king and his heirs, ſaving the right of all perſons whatſoever; or veſts the land of A in the king, ſaving the right of A; in either of theſe caſes the ſaving is totally repugnant to the body of the ſtatute, and (if good) would render the ſtatute of no effect or operation; and therefore the ſaving is void, and the land veſts abſolutely in the king.

8. Where the common law and a ſtatute differ, the common law gives place to the ſtatute; and an old ſtatute gives place to a new one. And this upon the general principle laid down in the laſt ſection, that *leges poſteriores priores contrarias abrogant*. But this is to be underſtood only when the latter ſtatute is couched in negative terms, or by its matter neceſſarily implies a negative. As, if a former act ſays, that a juror upon ſuch a trial ſhall have twenty pounds a-year, and a new ſtatute comes and ſays he ſhall have twenty marks; here the latter ſtatute, though it does not expreſs, yet neceſſarily implies, a negative, and virtually repeals the former. For, if twenty marks be made qualification ſufficient, the former ſtatute which requires twenty pounds is at an end. But, if both the acts be merely affirmative, and the ſubſtance ſuch that both may ſtand together, here the latter does not repeal the former, but they ſhall both have a concurrent efficacy. If by a former law an offence be indictable at the quarter ſeſſions, and a latter law makes the ſame offence indictable at the aſſiſes; here the juriſdiction of the ſeſſions is not taken away, but both have a concurrent juriſdiction, and the offender may be proſecuted at either; unleſs the new ſtatute ſubjoins expreſs negative words; as, that the offence ſhall be indictable at the aſſiſes, *and not elſewhere*.

9. If a ſtatute, that repeals another, is itſelf repealed afterwards, the firſt ſtatute is hereby revived, without any formal words for that purpoſe. So, when the ſtatutes of 26 and 35 Henry VIII. declaring the king to be the ſupreme head of the church, were repealed by a ſtatute 1 and 2 Philip and Mary, and this latter ſtatute was afterwards repealed by an act of 1 Eliz. there needed not any expreſs words of revival in queen Elizabeth's ſtatute, but theſe acts of king Henry were impliedly and virtually revived.

10. Acts of parliament derogatory from the power of ſubſequent parliaments bind not. So the ſtat. 11 Hen. VII. c. 1. which directs, that no perſon for aſſiſting a king *de facto* ſhall be attainted of treaſon by act of parliament or otherwiſe, is held to be good only as to common proſecutions for high treaſon; but will not reſtrain or clog any parliamentary attainder. Becauſe the legiſlature, being in truth the ſovereign power, is always of equal, always of abſolute, authority; it acknowledges no ſuperior upon earth, which the prior legiſlature muſt have been if its ordinances could bind the preſent parliament. And upon the ſame principle Cicero, in his letters to Atticus, treats with a proper contempt theſe reſtraining clauſes, which endeavour to tie up the hand of ſucceeding legiſlatures: "When you repeal the law itſelf (ſays he), you at the ſame time repeal the prohibitory clauſe which guards againſt ſuch repeal."

11. Laſtly, Acts of parliament that are impoſſible to be

performed are of no validity; and, if there ariſe out of them collaterally any abſurd conſequences, manifeſtly contradictory to common reaſon, they are, with regard to thoſe collateral conſequences, void. We lay down the rule with theſe reſtrictions; though we know it is generally laid down more largely, that acts of parliament contrary to reaſon are void. But, if the parliament will poſitively enact a thing to be done which is unreaſonable, we know of no power that can controul it; and the examples uſually alleged in ſupport of this ſenſe of the rule do none of them prove, that, where the main object of a ſtatute is unreaſonable, the judges are at liberty to reject it; for that were to ſet the judicial power above that of the legiſlature, which would be ſubverſive of all government. But, where ſome collateral matter ariſes out of the general words, and happens to be unreaſonable; there the judges are in decency to conclude that this conſequence was not foreſeen by the parliament, and therefore they are at liberty to expound the ſtatute by equity, and only *quoad hoc* diſregard it. Thus, if an act of parliament gives a man power to try all cauſes that ariſe within his manor of Dale; yet, if a cauſe ſhould ariſe in which he himſelf is party, the act is conſtrued not to extend to that, becauſe it is unreaſonable that any man ſhould determine his own quarrel. But, if we could conceive it poſſible for the parliament to enact, that he ſhould try as well his own cauſes as thoſe of other perſons, there is no court that has power to defeat the intent of the legiſlature, when couched in ſuch evident and expreſs words as leave no doubt whether it was the intent of the legiſlature or not.

Theſe are the ſeveral grounds of the laws of England; over and above which, equity is alſo frequently called in to aſſiſt, to moderate, and to explain, them. What equity is, and how impoſſible in its very eſſence to be reduced to ſtated rules, hath been ſhown above. It may be ſufficient, therefore, to add in this place, that, beſides the liberality of ſentiment with which our common-law judges interpret acts of parliament, and ſuch rules of the unwritten law as are not of a poſitive kind, there are alſo courts of equity eſtabliſhed for the benefit of the ſubject, to detect latent frauds and concealments, which the proceſs of the courts of law is not adapted to reach; to enforce the execution of ſuch matters of truſt and confidence, as are binding in conſcience, though not cognizable in a court of law; to deliver from ſuch dangers as are owing to misfortune or overſight; and to give a more ſpecific relief, and more adapted to the circumſtances of the caſe, than can always be obtained by the generality of the rules of the poſitive or common law. This is the buſineſs of the courts of equity, which however are only converſant in matters of property; for the freedom of our conſtitution will not permit, that in criminal caſes a power ſhould be lodged in any judge to conſtrue the law otherwiſe than according to the letter. This caution, while it admirably protects the public liberty, can never bear hard upon individuals. A man cannot ſuffer *more* puniſhment than the law aſſigns, but he may ſuffer *leſs*. The laws cannot be ſtrained by partiality to inflict a penalty beyond what the letter will warrant; but, in caſes where the letter induces any apparent hardſhip, the crown has the power to pardon.

Of the Study of the Law of England, as to its Riſe, Progreſs, and Preſent State.

The ſcience of the laws and conſtitution of our own country is a ſpecies of knowledge, in which the gentlemen of England, as Blackſtone obſerves, have been more deficient than thoſe of all Europe beſides. In moſt of the nations on the continent, where the civil or imperial law, under different modifications, is cloſely interwoven with the municipal laws of the land, no gentleman, or at leaſt no ſcholar, thinks his education is completed, till he has attended a courſe or two of lectures both upon the Inſtitutes of Juſtinian and the local conſtitutions of his native ſoil, under the very eminent profeſſors that abound in their ſeveral univerſities. And, in the northern parts of our own iſland, where alſo the municipal laws are frequently connected with the civil, it is difficult to meet with a perſon of liberal education, who is deſtitute of a competent knowledge in that ſcience, which is to be the guardian of his natural rights, and the rule of his civil conduct.

Nor have the imperial laws been totally neglected even in the Engliſh nation. A general acquaintance with their deciſions has ever been deſervedly conſidered as no ſmall accompliſhment of a gentleman; and a faſhion has prevailed of tranſporting the growing hopes of this iſland to foreign univerſities, in Swiſſerland, Germany, and Holland; which, though infinitely inferior to our own in every other conſideration, have been looked upon as better nurſeries of the civil or (which is nearly the ſame) of their own municipal law. In the mean time, it has been the peculiar lot of our admirable ſyſtem of laws to be neglected, and even unknown, by all but one practical profeſſion; though built upon the ſoundeſt foundations, and approved by the experience of ages.

Far from derogating from the ſtudy of the civil law, conſidered apart from any binding authority, as a collection of written reaſon, we ought to be thoroughly perſuaded of the general excellence of its rules, the uſual equity of its deciſions, and its uſe as well as ornament to the ſcholar, the divine, the ſtateſman, and even the common lawyer. But we muſt not carry our veneration ſo far as to ſacrifice our Alfred and Edward to the manes of Theodoſius and Juſtinian: we muſt not prefer the edict of the pretor, or the reſcript of the Roman emperor, to our own immemorial cuſtoms, or the ſanctions of an Engliſh parliament; unleſs we can alſo prefer the deſpotic monarchy of Rome and Byzantium, for whoſe meridians the former were calculated, to the free conſtitution of Britain, which the latter are adapted to perpetuate.

Without detracting, therefore, from the real merit which abounds in the imperial law, it may with good reaſon be aſſerted, that, if an Engliſhman muſt be ignorant of either the one or the other, he had better be a ſtranger to the Roman than the Engliſh inſtitutions. For it may well be thought an undeniable poſition, that a competent knowledge of the laws of that ſociety in which we live is the proper accompliſhment of every gentleman and ſcholar; an highly-uſeful and perhaps eſſential part of liberal and polite education. And in this we are warranted by the example of ancient Rome; where, as Cicero informs us, the very boys were obliged to learn the Twelve Tables by heart, as a *carmen neceſſarium*, or indiſpenſable leſſon, to imprint on their tender minds an early knowledge of the laws and conſtitutions of their country.

To demonſtrate the utility of ſome acquaintance with the laws of the land, let us only reflect a moment on the ſingular frame and polity of that land which is governed by this ſyſtem of laws. A land, perhaps the only one in the univerſe, in which political or civil liberty is the very end and ſcope of the conſtitution. This liberty, rightly underſtood, conſiſts in the power of doing whatever the laws permit; which is only to be effected by a general conformity of all orders and degrees to thoſe equitable rules of action, by which the meaneſt individual is protected from the inſults and oppreſſion of the greateſt. As therefore every ſubject is intereſted in the preſervation of the laws, it is incumbent upon every man to be acquainted with thoſe at leaſt with which he is immediately concerned, leſt he incur the cenſure, as well as inconvenience, of living in ſociety without knowing the obligations which it lays him under. And thus much may ſuffice for perſons of inferior condition, who have neither time nor capacity to enlarge their views beyond that contracted ſphere in which they are appointed to move. But thoſe, on whom nature and fortune have beſtowed more abilities and greater leiſure, cannot be ſo eaſily excuſed. Theſe advantages are given them, not for the benefit of themſelves only, but alſo of the public; and yet they cannot,

not, in any ſcene of life, diſcharge properly their duty either to the public or themſelves, without ſome degree of knowledge in the laws.

And firſt, as to gentlemen of independent eſtates and fortune, the moſt uſeful as well as conſiderable body of men in the nation; whom even to ſuppoſe ignorant in this branch of learning is treated by Mr. Locke as a ſtrange abſurdity. It is their landed property, with its long and voluminous train of deſcents and conveyances, ſettlements, entails, and incumbrances, that forms the moſt intricate and moſt extenſive object of legal knowledge. The thorough comprehenſion of theſe, in all their minute diſtinctions, is perhaps too laborious a taſk for any but a lawyer by profeſſion; yet ſtill the underſtanding of a few leading principles, relating to eſtates and conveyancing, may form ſome check and guard upon a gentleman's inferior agents, and preſerve him at leaſt from very groſs and notorious impoſition.

Again, the policy of all laws has made ſome forms neceſſary in the wording of laſt wills and teſtaments, and more with regard to their atteſtation. An ignorance in theſe muſt always be of dangerous conſequence, to ſuch as by chance or neceſſity compile their own teſtaments without any technical aſſiſtance. Thoſe who have attended the courts of juſtice are often witneſſes of the confuſion and diſtreſſes that are hereby occaſioned in families; and of the difficulties that ariſe in diſcerning the true meaning of the teſtator, or ſometimes in diſcovering any meaning at all; ſo that in the end his eſtate may often be veſted quite contrary to theſe his enigmatical intentions, becauſe perhaps he has omitted one or two formal words, which are neceſſary to aſcertain the ſenſe with legal preciſion; or has executed his will in the preſence of fewer witneſſes than the law requires.

To proceed from private concerns to thoſe of a more public conſideration. All gentlemen of fortune are, in conſequence of their property, liable to be called upon to eſtabliſh the rights, to eſtimate the injuries, to weigh the accuſations, and ſometimes to diſpoſe of the lives, of their fellow-ſubjects, by ſerving upon juries. In this ſituation they are frequently to decide, and that upon their oaths, queſtions of nice importance, in the ſolution of which ſome legal ſkill is requiſite; eſpecially where the law and the fact, as it often happens, are intimately blended together. And the general incapacity, even of our beſt juries, to do this with any tolerable propriety, has greatly debaſed their authority; and has unavoidably thrown more power into the hands of the judges, to direct, controul, and even reverſe, their verdicts, than perhaps the conſtitution intended.

But it is not as a juror only that the Engliſh gentleman is called upon to determine queſtions of right, and diſtribute juſtice to his fellow-ſubjects: it is principally with this order of men that the commiſſion of the peace is filled. And here a very ample field is opened for a gentleman to exert his talents, by maintaining good order in his neighbourhood; by puniſhing the diſſolute and idle; by protecting the peaceable and induſtrious; and, above all, by healing petty differences and preventing vexatious proſecutions. But, in order to attain theſe deſirable ends, it is neceſſary that the magiſtrate ſhould underſtand his buſineſs, and have not only the will, but the power alſo, (under which muſt be included the knowledge,) of adminiſtering legal and effectual juſtice. Elſe, when he has miſtaken his authority, through paſſion, ignorance, or abſurdity, he will be the object of contempt from his inferiors, and of cenſure from thoſe to whom he is accountable for his conduct.

Farther; moſt gentlemen of conſiderable property, at ſome period or other in their lives, are ambitious of repreſenting their country in parliament; and thoſe, who are deſirous of receiving ſo high a truſt, would alſo do well to remember its nature and importance. They are not thus honourably diſtinguiſhed from the reſt of their fellow-ſubjects merely that they may frank letters, and avoid paying their debts by the privilege which they acquire for their perſons, their eſtates, or their domeſtics; that they may liſt under party-banners; may grant or withhold ſupplies; may vote with or againſt a popular or unpopular adminiſtration; but upon conſiderations far more intereſting and important. They are the guardians of the Engliſh conſtitution; the makers, repealers, and interpreters, of the Engliſh laws; delegated to watch, to check, and to avert, every dangerous innovation; to propoſe, to adopt, and to cheriſh, any ſolid and well-weighed improvement; bound by every tie of nature, of honour, and of religion, to tranſmit that conſtitution and thoſe laws to their poſterity, amended if poſſible, at leaſt without any derogation. And how unbecoming muſt it appear in a member of the legiſlature to vote for a new law, who is utterly ignorant of the old! What kind of interpretation can he be enabled to give, who is a ſtranger to the text upon which he comments!

Indeed it is really amazing, that there ſhould be no other ſtate of life, no other occupation, art, or ſcience, in which ſome method of inſtruction is not looked upon as requiſite, except only the ſcience of legiſlation, the nobleſt and moſt difficult of any. Apprenticeſhips are held neceſſary to almoſt every art, commercial or mechanical: a long courſe of reading and ſtudy muſt form the divine, the phyſician, and the practical profeſſor of the laws; but every man of ſuperior fortune thinks himſelf born a legiſlator. Yet Tully was of a different opinion: "It is neceſſary, ſays he, for a ſenator to be thoroughly acquainted with the conſtitution;" and this, he declares, is a knowledge of the moſt extenſive nature; a matter of ſcience, of diligence; without which no ſenator can poſſibly be fit for his office.

What is ſaid of our gentlemen in general, and the propriety of their application to the ſtudy of the laws of their country, will hold equally ſtrong, or ſtill ſtronger, with regard to the nobility of this realm, except only in the article of ſerving on juries. But, inſtead of this, they have ſeveral peculiar provinces of ſtill greater conſequence and concern; being not only by birth hereditary counſellors of the crown, and judges, upon their honour, of the lives of their brother-peers, but alſo arbiters of the property of all their fellow-ſubjects, and that in the laſt reſort. In this their judicial capacity they are bound to decide the niceſt and moſt critical points of the law; to examine and correct ſuch errors as have eſcaped the moſt experienced ſages of the profeſſion, the lord-chancellor and the judges of the courts of Weſtminſter. Their ſentence is final, deciſive, irrevocable: no appeal, no correction, not even a review, can be had. And to their determination, whatever it be, the inferior courts of juſtice muſt conform; otherwiſe the rule of property would no longer be uniform and ſteady.

Should a judge, in the moſt ſubordinate juriſdiction, be deficient in the knowledge of the law, it would reflect infinite contempt upon himſelf, and diſgrace upon thoſe who employ him. And yet the conſequence of his ignorance is comparatively ſmall and trifling: his judgment may be examined, and his errors rectified, by other courts: but how much more ſerious and affecting is the caſe of a ſuperior judge, if, without any ſkill in the laws, he will boldly venture to decide a queſtion, upon which the welfare and ſubſiſtence of whole families may depend! where the chance of his judging right or wrong is barely equal; and where, if he chances to judge wrong, he does an injury of the moſt alarming nature, an injury without poſſibility of redreſs!

Yet, vaſt as this truſt is, it can no-where be ſo properly repoſed as in the noble hands where our excellent conſtitution has placed it; and therefore placed it, becauſe, from the independence of their fortune, and the dignity of their ſtation, they are preſumed to employ that leiſure which is the conſequence of both, in attaining a more extenſive knowledge of the laws than perſons of inferior rank: and becauſe the founders of our polity relied upon

that delicacy of ſentiment, ſo peculiar to noble birth; which, as on the one hand it will prevent either intereſt or affection from interfering in queſtions of right, ſo on the other, it will bind a peer in honour, an obligation which the law eſteems equal to another's oath, to be maſter of thoſe points upon which it is his birthright to decide.

The Roman pandects will furniſh us with a piece of hiſtory not inapplicable to this point. Servius Sulpicius, a gentleman of the patrician order, and a celebrated orator, had occaſion to take the opinion of Quintus Mutius Scævola, the oracle of the Roman law; but, for want of ſome knowledge in that ſcience, could not ſo much as underſtand even the technical terms which his friend was obliged to make uſe of. Upon which Mutius Scævola could not forbear to upbraid him with this memorable reproof; "That it was a ſhame for a patrician, a nobleman, and an orator of cauſes, to be ignorant of that law in which he was ſo peculiarly concerned." This reproach made ſo deep an impreſſion on Sulpicius, that he immediately applied himſelf to the ſtudy of the law, wherein he arrived to ſuch a proficiency, that he left behind him about a hundred and eighty volumes of his own compiling upon the ſubject; and became, in the opinion of Cicero, a more complete lawyer than even Mutius Scævola himſelf.

The inference which ariſes from this ſtory is this, that ignorance of the laws of the land hath ever been eſteemed diſhonourable, in thoſe who are entruſted by their country to maintain, to adminiſter, and to amend, them.

Nor will ſome degree of legal knowledge be found ſuperfluous to perſons of inferior rank, eſpecially thoſe of the learned profeſſions. The clergy in particular, beſides the common obligations they are under in proportion to their rank and fortune, have alſo abundant reaſon, conſidered merely as clergymen, to be acquainted with many branches of the law, which are almoſt peculiar and appropriated to themſelves alone. Such are the laws relating to advowſons, inſtitutions, and inductions; to ſimony and ſimoniacal contracts; to uniformity, reſidence, and pluralities; to tithes and other eccleſiaſtical dues; to marriages (more eſpecially of late), and to a variety of other ſubjects, which are conſigned to the care of their order by the proviſions of particular ſtatutes. To underſtand theſe aright, to diſcern what is warranted or enjoined, and what is forbidden, by law, demands a ſort of legal apprehenſion; which is no otherwiſe to be acquired than by uſe, and a familiar acquaintance with legal writers.

The ſeveral periods under which the ſtate of our legal polity may be ſtudied are the following: 1. From the earlieſt times to the Norman conqueſt. 2. From the Norman conqueſt to the reign of king Edward I. 3. From thence to the reformation. 4. From the reformation to the reſtoration of king Charles II. 5. From thence to the revolution in 1688. 6. From the revolution to the preſent time.

1. With regard to the ancient Britons, the aborigines of our iſlands, ſo little is handed down to us concerning them with any tolerable certainty, that inquiries here muſt be very fruitleſs and defective. However, from Cæſar's account of the tenets and diſcipline of the ancient Druids in Gaul, in whom centered all the learning of theſe weſtern parts, and who were, as he tells us, ſent over to Britain, (i. e. to the iſland of Mona or Angleſey,) to be inſtructed; we may collect a few points, which bear a great affinity and reſemblance to ſome of the modern doctrines of our Engliſh law. Particularly, the very notion itſelf of an oral unwritten law, delivered from age to age, by cuſtom and tradition merely, ſeems derived from the practice of the Druids, who never committed any of their inſtructions to writing; poſſibly for want of letters; ſince it is remarkable, that in all the antiquities, unqueſtionably Britiſh, which the induſtry of the moderns has diſcovered, there is not in any of them the leaſt trace of any character or letter to be found. The partible quality alſo of lands, by the cuſtom of gavelkind, which ſtill obtains in many parts of England, and did univerſally over Wales till the reign of Henry VIII. is undoubtedly of Britiſh original. So likewiſe is the ancient diviſion of the goods of an inteſtate between his widow and children, or next of kin; which has ſince been revived by the ſtatute of diſtributions. And the cuſtom, which had continued from Cæſar's time until altered by ſtat. 30 Geo. III. c. 48. of burning a woman guilty of the crime of petit treaſon by killing her huſband.

The great variety of nations, that ſucceſſively broke in upon and deſtroyed both the Britiſh inhabitants and conſtitution, the Romans, the Picts, and, after them, the various clans of Saxons and Danes, muſt neceſſarily have cauſed great confuſion and uncertainty in the laws and antiquities of the kingdom; as they were very ſoon incorporated and blended together, and therefore, we may ſuppoſe, mutually communicated to each other their reſpective uſages, in regard to the rights of property and the puniſhment of crimes. So that it is morally impoſſible to trace out, with any degree of accuracy, when the ſeveral mutations of the common law were made, or what was the reſpective original of thoſe ſeveral cuſtoms we at preſent uſe, by any analyzation or reſolution of them to their firſt and component principles. We can ſeldom pronounce, that *this* cuſtom was derived from the Britons, *that* was left behind by the Romans; *this* was a neceſſary precaution againſt the Picts, *that* was introduced by the Saxons, diſcontinued by the Danes, but afterwards reſtored by the Normans.

Wherever this can be done, it is matter of great curioſity, and ſome uſe; but this can very rarely be the caſe; not only from the reaſon above-mentioned, but alſo from many others. Firſt, from the nature of traditional laws in general; which, being accommodated to the exigencies of the times, ſuffer by degrees inſenſible variations in practice; ſo that, though upon compariſon we plainly diſcern the alteration of the law from what it was five hundred years ago, yet it is impoſſible to define the preciſe period in which that alteration accrued, any more than we can diſcern the changes of the bed of a river, which varies its ſhores by continual decreaſes and alluvions. Secondly, this becomes impracticable from the antiquity of the kingdom and its government; which alone, though it had been diſturbed by no foreign invaſions, would make it impoſſible to ſearch out the origin of its laws; unleſs we had as authentic monuments thereof as the Jews had by the hand of Moſes. Thirdly, this uncertainty of the true origin of particular cuſtoms muſt alſo in part have ariſen from the means whereby Chriſtianity was propagated among our Saxon anceſtors in this iſland, by learned foreigners brought over from Rome and other countries; who undoubtedly imported with them many of their own national cuſtoms; and probably prevailed upon the ſtate to abrogate ſuch uſages as were inconſiſtent with our holy religion, and to introduce many others that were more conformable thereto. And this perhaps may have partly been the cauſe, that we find not only ſome rules of the moſaical, but alſo of the imperial and pontifical, laws, blended and adopted into our own ſyſtem.

A farther reaſon may alſo be given for the great variety, and of courſe the uncertain original, of our ancient eſtabliſhed cuſtoms; even after the Saxon government was firmly eſtabliſhed in this iſland: viz. the ſubdiviſion of the kingdom into an heptarchy, conſiſting of ſeven independent kingdoms, peopled and governed by different clans and colonies. This muſt neceſſarily create an infinite diverſity of laws; even though all thoſe colonies, of Jutes, Angles, Anglo-Saxons, and the like, originally ſprang from the ſame mother-country, the great northern hive; which poured forth its warlike progeny, and ſwarmed all over Europe, in the ſixth and ſeventh centuries. This multiplicity of laws will neceſſarily be the caſe in ſome degree, where any kingdom is cantoned out into provincial eſtabliſhments; and not under one common diſpenſation of laws, though under the ſame ſove-

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reign power. Much more will it happen where ſeven unconnected ſtates are to form their own conſtitution and ſuperſtructure of government, though they all begin to build upon the ſame or ſimilar foundations.

When, therefore, the Weſt Saxons had ſwallowed up all the reſt, and king Alfred ſucceeded to the monarchy of England, whereof his grandfather Egbert was the founder, his mighty genius prompted him to undertake a moſt great and neceſſary work, which he is ſaid to have executed in as maſterly a manner: no leſs than to new-model the conſtitution; to rebuild it on a plan that ſhould endure for ages; and, out of its old diſcordant materials, which were heaped upon each other in a vaſt and rude irregularity, to form one uniform and well-connected whole. This he effected, by reducing the whole kingdom under one regular and gradual ſubordination of government, wherein each man was anſwerable to his immediate ſuperior for his own conduct and that of his neareſt neighbours; for to him we owe that maſterpiece of judicial polity, the ſubdiviſion of England into tithings and hundreds, if not into counties; all under the influence and adminiſtration of one ſupreme magiſtrate, the king; in whom, as in a general reſervoir, all the executive authority of the law was lodged, and from whom juſtice was diſperſed to every part of the nation by diſtinct, yet communicating, ducts and channels; which wiſe inſtitution has been perſerved for near a thouſand years unchanged, from Alfred's to the preſent time. He alſo, like another Theodoſius, collected the various cuſtoms that he found diſperſed in the kingdom, and reduced and digeſted them into one uniform ſyſtem or code of laws, in his *Dom-boc*, or *Liber Judicialis*. This he compiled for the uſe of the court-baron, hundred, and county-court, the court-leet, and ſheriff's tourn; tribunals, which he eſtabliſhed, for the trial of all cauſes civil and criminal, in the very diſtricts wherein the complaint aroſe; all of them ſubject however to be inſpected, controlled, and kept within the bounds of the univerſal or common law, by the king's own courts; which were then *itinerant*, being kept in the king's palace, and removing with his houſehold in thoſe royal progreſſes which he continually made from one end of the kingdom to the other.

The Daniſh invaſion and conqueſt, which introduced new foreign cuſtoms, was a ſevere blow to this noble fabric; but a plan, ſo excellently concerted, could never be long thrown aſide. So that, upon the expulſion of theſe intruders, the Engliſh returned to their ancient law; retaining however ſome few of the cuſtoms of their late viſitants; which went under the name of *Dane-Lage*; as the code compiled by Alfred was called the *Weſt-Saxon Lage*; and the local conſtitutions of the ancient kingdom of Mercia, which obtained in the counties neareſt to Wales, and probably abounded with many Britiſh cuſtoms, were called the *Mercen-Lage*. And theſe three laws were, about the beginning of the eleventh century, in uſe in different counties of the realm; the provincial polity of counties, and their ſubdiviſions, having never been altered or diſcontinued, through all the ſhocks and mutations of government, from the time of its firſt inſtitution; though the laws and cuſtoms therein uſed have often ſuffered conſiderable changes.

For king Edgar, (who, beſides his military merit as founder of the Engliſh navy, was alſo a moſt excellent civil governor,) obſerving the ill effects of three diſtinct bodies of laws, prevailing at once in ſeparate parts of his dominions, projected and began what his grandſon king Edward the Confeſſor afterwards completed, viz. one uniform digeſt or body of laws to be obſerved throughout the whole kingdom; being probably no more than a revival of king Alfred's code, with ſome improvements ſuggeſted by neceſſity and experience; particularly the incorporating ſome of the Britiſh or rather Mercian cuſtoms, and alſo ſuch of the Daniſh as were reaſonable and approved, into the Weſt-Saxon Lage, which was ſtill the groundwork of the whole. And this appears to be the beſt ſupported and moſt plauſible conjecture (for certainty is not to be expected) of the riſe and origin of that admirable ſyſtem of maxims and unwritten cuſtoms, which is now known by the name of the *common-law*, as extending its authority univerſally over all the realm; and which is doubtleſs of Saxon parentage.

Among the moſt remarkable of the Saxon laws we may reckon, 1. The conſtitution of parliaments, or, rather, general aſſemblies of the principal and wiſeſt men in the nation; the *wittena-gemote*, or *commune-conſilium* of the ancient Germans; which was not yet reduced to the forms and diſtinctions of our modern parliament; without whoſe concurrence, however, no new law could be made, or old one altered. 2. The election of their magiſtrates by the people; originally even that of their kings, till dear-bought experience evinced the convenience and neceſſity of eſtabliſhing an hereditary ſucceſſion to the crown. But that of all ſubordinate magiſtrates, their military officers or heretochs, their ſheriffs, their conſervators of the peace, their coroners, their port-reeves, (ſince changed into mayors and bailiffs,) and even their tithing-men and borſholders at the leet, continued, ſome till the Norman conqueſt, others for two centuries after, and ſome remain to this day. 3. The deſcent of the crown, when once a royal family was eſtabliſhed, upon nearly the ſame hereditary principles upon which it has ever ſince continued; only that, perhaps, in caſe of minority, the next of kin of full age would aſcend the throne, as king, and not as protector; though, after his death, the crown immediately reverted back to the heir. 4. The great paucity of capital puniſhments for the firſt offence; even the moſt notorious offenders being allowed to commute it for a fine or *were-gild*, or, in default of payment, perpetual bondage; to which our benefit of clergy has now in ſome meaſure ſucceeded. 5. The prevalence of certain cuſtoms, as heriots and military ſervices in proportion to every man's land, which much reſembled the feodal conſtitution, but yet were exempt from all its rigorous hardſhips; and which may be well enough accounted for, by ſuppoſing them to be brought from the continent by the firſt Saxon invaders, in the primitive moderation and ſimplicity of the feodal law; before it got into the hands of the Norman juriſts, who extracted the moſt ſlaviſh doctrines and oppreſſive conſequences out of what was originally intended as a law of liberty. 6. That their eſtates were liable to forfeiture for treaſon; but that the doctrine of eſcheats and corruption of blood for felony, or any other cauſe, was utterly unknown amongſt them. 7. The deſcent of their lands to all the males equally, without any right of primogeniture; a cuſtom which obtained among the Britons, was agreeable to the Roman law, and continued among the Saxons till the Norman conqueſt; though really inconvenient, and more eſpecially deſtructive to ancient families; which are in monarchies neceſſary to be ſupported, in order to form and keep up a nobility, or intermediate ſtate between the prince and the common people. 8. The courts of juſtice conſiſted principally of the county-courts; and, in caſes of weight or nicety, the king's court, held before himſelf in perſon, at the time of his parliaments; which were uſually holden in different places, according as he kept the three great feſtivals of Chriſtmas, Eaſter, and Whitſuntide. An inſtitution which was adopted by king Alonſo VII. of Caſtile, about a century after the conqueſt; who at the ſame three great feaſts was accuſtomed to aſſemble his nobility and prelates in his court, who there heard and decided all controverſies, and then, having received his inſtructions, departed home. Theſe county-courts, however, differed from the modern ones, in that the eccleſiaſtical and civil juriſdiction were blended together, the biſhop and the ealdorman, or ſheriff, ſitting in the ſame county-court; and alſo that the deciſions and proceedings therein were much more ſimple and unembarraſſed; an advantage which will always attend the infancy of any laws, but wear off as they gradually advance to antiquity. 9. Trials, among a people who had a very ſtrong tincture of ſuperſtition, were permitted

to be by ordeal, by the corſned, or morſel of execration, or by wager of law with compurgators, if the party choſe it; but frequently they were alſo by jury: whether or not their juries conſiſted preciſely of twelve men, or were bound to a ſtrict unanimity, is not certain; but the general conſtitution of this admirable criterion of truth, and moſt important guardian both of public and private liberty, we owe to our Saxon anceſtors. Thus ſtood the general frame of our polity at the time of the Norman invaſion, when the ſecond period of our legal hiſtory commences.

II. This remarkable event wrought as great an alteration in our laws as it did in our ancient line of kings; and, though the alteration of the former was effected rather by the conſent of the people than any right of conqueſt, yet that conſent ſeems to have been partly extorted by fear, and partly given without any apprehenſion of the conſequences which afterwards enſued.

1. Among the firſt of theſe alterations we may reckon the ſeparation of the eccleſiaſtical courts from the civil; effected in order to ingratiate the new king with the popiſh clergy, who for ſome time before had been endeavouring all over Europe to exempt themſelves from the ſecular power; and whoſe demands the conqueror, like a politic prince, thought it prudent to comply with, by reaſon that their reputed ſanctity had a great influence over the minds of the people; and becauſe all the little learning of the times was engroſſed into their hands, which made them neceſſary men, and by all means to be gained over to his intereſts. And this was the more eaſily effected, becauſe, the diſpoſal of all the epiſcopal ſees being then in the breaſt of the king, he had taken care to fill them with Italian and Norman prelates.

2. Another violent alteration of the Engliſh conſtitution conſiſted in the depopulation of whole countries for the purpoſes of the king's royal diverſion; and ſubjecting both them, and all the ancient foreſts of the kingdom, to the unreaſonable ſeverities of foreſt-laws imported from the continent, whereby the ſlaughter of a beaſt was made almoſt as penal as the death of a man. In the Saxon times, though no man was allowed to kill or chaſe the king's deer, yet he might ſtart any game, purſue, and kill it, upon his own eſtate. But the rigour of theſe new conſtitutions veſted the ſole property of all the game in England in the king alone; and no man was entitled to diſturb any fowl of the air, or any beaſt of the field, of ſuch kinds as were ſpecially reſerved for the royal amuſement of the ſovereign, without expreſs licence from the king, by a grant of a chaſe or free warren: and thoſe franchiſes were granted as much with a view to preſerve the breed of animals as to indulge the ſubject. See the article GAME, vol. viii.

3. A third alteration in the Engliſh laws was by narrowing the remedial influence of the county-courts, the great ſeats of Saxon juſtice, and extending the original juriſdiction of the king's juſtices to all kinds of cauſes ariſing in all parts of the kingdom. To this end the *aula regis*, with all its multifarious authority, was erected; and a *capital juſticiary* appointed, with powers ſo large and boundleſs, that he became at length a tyrant to the people, and formidable to the crown itſelf. The conſtitution of this court, and the judges themſelves who preſided there, were derived from the duchy of Normandy; and the conſequence naturally was, the ordaining that all proceedings in the king's courts ſhould be carried on in the Norman, inſtead of the Engliſh, language. A proviſion the more neceſſary, becauſe none of his Norman juſticiers underſtood Engliſh; but as evident a badge of ſlavery as ever was impoſed upon a conquered people. This laſted till king Edward the Third obtained a double victory, over the armies of France in their own country, and their language in our courts here at home. But there was one miſchief too deeply rooted thereby, and which this caution of king Edward came too late to eradicate. Inſtead of the plain and eaſy method of determining ſuits in the county-courts, the chicanes and ſubtilties of Norman juriſprudence had taken poſſeſſion of the king's courts, to which every cauſe of conſequence was drawn. Indeed, that age, and thoſe immediately ſucceeding it, were the era of refinement and ſubtilty. There is an active principle in the human ſoul, that will ever be exerting its faculties to the utmoſt ſtretch, in whatever employment, by the accidents of time and place, the general plan of education, or the cuſtoms and manners of the age and country, it may happen to find itſelf engaged. The northern conquerors of Europe were then emerging from the groſſeſt ignorance in point of literature; and thoſe who had leiſure to cultivate its progreſs, were ſuch only as were cloiſtered in monaſteries, the reſt being all ſoldiers or peaſants. And, unfortunately, the firſt rudiments of ſcience which they imbibed were thoſe of Ariſtotle's philoſophy, conveyed through the medium of his Arabian commentators; which were brought from the eaſt by the Saracens into Paleſtine and Spain, and tranſlated into barbarous Latin. So that, though the materials upon which they were naturally employed, in the infancy of a riſing ſtate, were thoſe of the nobleſt kind, the eſtabliſhment of religion, and the regulations of civil polity, yet, having only ſuch tools to work with, their execution was trifling and flimſy. Both the divinity and the law of thoſe times were therefore frittered into logical diſtinctions, and drawn out into metaphyſical ſubtilties, with a ſkill moſt amazingly artificial; but which ſerved no other purpoſe, than to ſhow the vaſt powers of the human intellect, however vainly or prepoſterouſly employed. Hence law in particular, which (being intended for univerſal reception) ought to be a plain rule of action, became a ſcience of the greateſt intricacy; eſpecially when blended with the new refinements engrafted on feodal property; which refinements were from time to time gradually introduced by the Norman practitioners, with a view to ſuperſede (as they did in great meaſure) the more homely, but more intelligible, maxims of diſtributive juſtice among the Saxons. And, to ſay the truth, theſe ſcholaſtic reformers have tranſmitted their dialect and fineſſes to poſterity ſo interwoven in the body of our legal polity, that they cannot now be taken out without a manifeſt injury to the ſubſtance. Statute after ſtatute has in later times been made, to pare off theſe troubleſome excreſcences, and reſtore the common law to its priſtine ſimplicity and vigour; and the endeavour has greatly ſucceeded; but ſtill the ſcars are deep and viſible; and the liberality of our modern courts of juſtice is frequently obliged to have recourſe to unaccountable fictions and circuities, in order to recover that equitable and ſubſtantial juſtice, which for a long time was totally buried under the narrow rules and fanciful niceties of metaphyſical and Norman juriſprudence.

4. A fourth innovation was the introduction of the trial by combat, for the deciſion of all civil and criminal queſtions of fact in the laſt reſort. This was the immemorial practice of all the northern nations; but firſt reduced to regular and ſtated forms among the Burgundi, about the cloſe of the fifth century; and from them it paſſed to other nations, particularly the Franks and the Normans; which laſt had the honour to eſtabliſh it here, though clearly an un-Chriſtian as well as moſt uncertain method of trial. But it was a ſufficient recommendation of it to the conqueror, and his warlike countrymen, that it was the uſage of their native duchy of Normandy.

5. But the laſt and moſt important alteration, both in our civil and military polity, was the engrafting on all landed eſtates, a few only excepted, the fiction of *feodal tenure*, (ſee the article TENURE,) which drew after it a numerous and oppreſſive train of ſervile fruits and appendages; aids, reliefs, primer ſeiſins, wardſhips, marriages, eſcheats, and fines for alienation; the genuine conſequences of the maxim then adopted, that all the lands in England were derived from and holden, mediately or immediately, of the crown.

The nation at this period ſeems to have groaned under as abſolute a ſlavery as was in the power of a warlike, an

ambitious, and a politic, prince to create. The conſciences of men were enſlaved by four eccleſiaſtics, devoted to a foreign power, and unconnected with the civil ſtate under which they lived; who now imported from Rome for the firſt time the whole *farrago* of ſuperſtitious novelties, which had been engendered, by the blindneſs and corruption of the times, between the firſt miſſion of Auguſtine the monk and the Norman conqueſt; ſuch as tranſubſtantiation, purgatory, communion in one kind, and the worſhip of ſaints and images; not forgetting the univerſal ſupremacy and dogmatical infallibility of the holy ſee. The laws too, as well as the prayers, were adminiſtered in an unknown tongue. The ancient trial by jury gave way to the impious deciſion by battle. The foreſt-laws totally reſtrained all rural pleaſures and manly recreations. And in cities and towns the caſe was no better; all company being obliged to diſperſe, and fire and candle to be extinguiſhed, by eight at night, at the ſound of the melancholy *curfeu*. The ultimate property of all lands, and a conſiderable ſhare of the preſent profits, were veſted in the king, or by him granted out to his Norman favourites; who, by a gradual progreſſion of ſlavery, were abſolute vaſſals to the crown, and as abſolute tyrants to the commons. Unheard-of forfeitures, talliages, aids, and fines, were arbitrarily extracted from the pillaged land-holders, in purſuance of the new ſyſtem of tenure. And to crown all, as a conſequence of the tenure by knight-ſervice, the king had always ready at his command, an army of ſixty thouſand knights, or *milites*; who were bound, upon pain of confiſcating their eſtates, to attend him in time of invaſion, or to quell any domeſtic inſurrection. Trade or foreign merchandiſe, ſuch as it then was, was carried on by the Jews and Lombards; and the very name of an Engliſh fleet, which king Edgar had rendered ſo formidable, was utterly unknown to Europe; the nation conſiſting wholly of the clergy, who were alſo the lawyers, the barons, or great lords of the land; the knights, or ſoldiery, who were the ſubordinate land-holders; and the burghers, or inferior tradeſmen, who from their inſignificancy happily retained, in their ſocage and hurgage tenure, ſome points of their ancient freedom. All the reſt were villains, or bondman.

From ſo complete and well-concerted a ſcheme of ſervility, it has been the work of generations for our anceſtors to redeem themſelves and their poſterity into that ſtate of liberty which we now enjoy; and which therefore is not to be looked upon as conſiſting of mere encroachments on the crown, and infringements on the prerogative, as ſome ſlaviſh and narrow-minded writers in the 17th century endeavoured to maintain; but as, in general, a gradual reſtoration of that ancient conſtitution, whereof our Saxon forefathers had been unjuſtly deprived, partly by the policy, and partly by the force, of the Norman. How that reſtoration has, in a long ſeries of years, been ſtep by ſtep effected, we now proceed to inquire.

William Rufus proceeded on his father's plan, and in ſome points extended it, particularly with regard to the foreſt-laws. But his brother and ſucceſſor Henry I. found it expedient, when he firſt came to the crown, to ingratiate himſelf with the people; by reſtoring (as our monkiſh hiſtorians tell us) the laws of king Edward the Confeſſor. The ground whereof is this; that by charter he gave up the great grievances of marriage, ward, and relief, the beneficial pecuniary fruits of his feodal tenures; but reſerved the tenures themſelves, for the ſame military purpoſes that his father introduced them. He alſo aboliſhed the *curfeu*; for, though it is mentioned in our laws a full century afterwards, yet it is rather ſpoken of as a known time of night (ſo denominated from that abrogated uſage) than as a ſtill-ſubſiſting cuſtom. There is extant a code of laws in his name, conſiſting partly of thoſe of the Confeſſor, but with great additions and alterations of his own; and chiefly calculated for the regulation of the county-courts. It contains ſome directions as to crimes and their puniſhments, (that of theft being made capital in his reign,) and a few things relating to eſtates, particularly as to the deſcent of lands, which, being by the Saxon laws equally to all the ſons, by the feodal or Norman to the eldeſt only, king Henry here moderated the difference; directing the eldeſt ſon to have only the principal eſtate, *primum patris feudum*, the reſt of his eſtates, if he had any others, being equally divided among them all. On the other hand, he gave up to the clergy the free election of biſhops and mitred abbots; reſerving however theſe enſigns of patronage, *congé d'élire*, cuſtody of the temporalties when vacant, and homage upon their reſtitution. He laſtly united again for a time the civil and eccleſiaſtical courts, which union was ſoon diſſolved by his Norman clergy; and, upon that final diſſolution, the cognizance of teſtamentary cauſes ſeems to have been firſt given to the eccleſiaſtical court. The reſt remained as in his father's time; from whence we may eaſily perceive how far ſhort this was of a thorough reſtitution of king Edward's or the Saxon laws.

The uſurper Stephen, as the manner of uſurpers is, promiſed much at his acceſſion, eſpecially with regard to redreſſing the grievances of the foreſt-laws; but performed no great matter in that or in any other point. It is from his reign, however, that we are to date the introduction of the Roman civil and canon laws into this realm; and at the ſame time was imported the doctrine of appeals to the court of Rome, as a branch of the canon-law.

By the time of king Henry II. if not earlier, the charter of Henry I. ſeems to have been forgotten; for we find the claim of marriage, ward, and relief, then flouriſhing in full vigour. The right of primogeniture ſeems alſo to have tacitly revived, being found more convenient for the public than the parcelling of eſtates into a multitude of minute ſubdiviſions. However in this prince's reign much was done to methodiſe the laws, and reduce them into a regular order; as appears from that excellent treatiſe of Glanvil; which, though ſome of it be now antiquated and altered, yet, when compared with the code of Henry I. it carries a manifeſt ſuperiority. Throughout his reign alſo was continued the important ſtruggle which we have had occaſion ſo often to mention, between the laws of England and Rome; the former ſupported by the ſtrength of the temporal nobility, when endeavoured to be ſupplanted in favour of the latter by the popiſh clergy. Which diſpute was kept on foot till the reign Edward I. when the laws of England, under the new diſcipline introduced by that ſkilful commander, obtained a complete and permanent victory.

In the preſent reign of Henry II. there are four things which peculiarly merit the attention of a legal antiquarian. 1. The conſtitutions of the parliament at Clarendon, A. D. 1164, whereby the king checked the power of the pope and his clergy, and greatly narrowed the total exemption they claimed from the ſecular juriſdiction; though his farther progreſs was unhappily ſtopped, by the fatal event of the diſputes between him and archbiſhop Becket. 2. The inſtitution of the juſtices in eyre, *in itinere*; the king having divided the kingdom into ſix circuits, (a little different from the preſent,) and commiſſioned theſe new-created judges to adminiſter juſtice, and try writs of aſſiſe, in the ſeveral counties. Theſe remedies are ſaid to have been then firſt invented, before which all cauſes were uſually terminated in the county-courts, according to the Saxon cuſtom; or before the king's juſticiaries in the *aula regis*, in purſuance of the Norman regulations. The latter of which tribunals, travelling about with the king's perſon, occaſioned intolerable expenſe and delay to the ſuitors; and the former, however proper for little debts and minute actions, where even injuſtice is better than procraſtination, were now become liable to too much ignorance of the law, and too much partiality as to facts, to determine matters of conſiderable moment. 3. The introduction and eſtabliſhment of the grand aſſiſe, or trial by a ſpecial kind of jury in a writ of right at the option of the tenant or defendant, inſtead of the barbarous and

Norman

Norman trial by battle. 4. To this time muſt alſo be referred the introduction of eſcuage, or pecuniary commutation for perſonal military ſervice; which in proceſs of time was the parent of the ancient ſubſidies granted to the crown by parliament, and the land-tax of later times.

Richard I. a brave and magnanimous prince, was a ſportſman as well as a ſoldier; and therefore enforced the foreſt-laws with ſome rigour, which occaſioned many diſcontents among his people, though (according to Matthew Paris) he repealed the penalties of caſtration, loſs of eyes, cutting off the hands and feet, before inflicted on ſuch as tranſgreſſed in hunting; probably finding that their ſeverity prevented proſecutions. He alſo, when abroad, compoſed a body of naval laws at the iſle of Oleron; which are ſtill extant, and of high authority; for in his time we began again to diſcover, that (as an iſland) we were naturally a maritime power. But, with regard to civil proceedings, we find nothing very remarkable in this reign, except a few regulations regarding the Jews, and the juſtices in eyre; the king's thoughts being chiefly taken up by the knight-errantry of a croiſade againſt the Saracens in the holy land.

In king John's time, and that of his ſon Henry III. the rigours of the feodal tenures and the foreſt-laws were ſo warmly kept up, that they occaſioned many inſurrections of the barons, or principal feudatories; which at laſt had this effect, that firſt king John, and afterwards his ſon, conſented to the two famous charters of Engliſh liberties, Magna Charta and Charta de Foreſta. Of theſe, the latter was well calculated to redreſs many grievances, and encroachments of the crown, in the exertion of foreſt-law; and the former confirmed many liberties of the church, and redreſſed many grievances incident to feodal tenures, of no ſmall moment at the time; though now, unleſs conſidered attentively and with this retroſpect, they ſeem but of trifling concern. But, beſides theſe feodal proviſions, care was alſo taken therein to protect the ſubject againſt other oppreſſions, then frequently ariſing from unreaſonable amercements, from illegal diſtreſſes or other proceſs for debts or ſervices due to the crown, and from the tyrannical abuſe of the prerogative of purveyance and preemption. It fixed the forfeiture of lands for felony in the ſame manner as it ſtill remains; prohibited for the future the grants of excluſive fiſheries; and the erection of new bridges ſo as to oppreſs the neighbourhood. With reſpect to private rights, it eſtabliſhed the teſtamentary power of the ſubject over *part* of his perſonal eſtate, the reſt being diſtributed among his wife and children; it laid down the law of dower, as it hath continued ever ſince; and prohibited the appeals of women, unleſs for the death of their huſbands. In matters of public police and national concern, it enjoined an uniformity of weights and meaſures, gave new encouragements to commerce, by the protection of merchant-ſtrangers, and forbad the alienation of lands in mortmain. With regard to the adminiſtration of juſtice, beſides prohibiting all denials or delays of it, it fixed the court of Common Pleas at Weſtminſter, that the ſuitors might no longer be haraſſed with following the king's perſon in all his progreſſes; and at the ſame time brought the trial of iſſues home to the very doors of the freeholders, by directing aſſiſes to be taken in the proper counties, and eſtabliſhing annual circuits; it alſo corrected ſome abuſes then incident to the trials by wager of law and of battle; directed the regular awarding of inqueſt for life or member; prohibited the king's inferior miniſters from holding pleas of the crown, or trying any criminal charge, whereby many forfeitures might otherwiſe have unjuſtly accrued to the exchequer; and, regulated the time and place of holding the inferior tribunals of juſtice, the county-court, ſheriff's tourn, and court-leet. It confirmed and eſtabliſhed the liberties of the city of London, and all other cities, boroughs, towns, and ports, of the kingdom. And, laſtly, (which alone would have merited the title that it bears, of the Great Charter,) it protected every individual of the nation in the free enjoyment of his life, his liberty, and his property, unleſs declared to be forfeited by the judgment of his peers or the law of the land.

The following is the celebrated chapter of Magna Charta, the foundation of the liberty of Engliſhmen: *Nullus liber homo capiatur, vel impriſonetur, aut diſſeiſiatur de libero tenemento ſuo, vel libertatibus, vel liberis conſuetudinibus ſuis; aut utlagetur, aut exulet, aut aliquo modo deſtruatur; nec ſuper eum ibimus, nec ſuper eum mittemus, niſi per legale judicium parium ſuorum, vel per legem terræ. Nulli vendemus, nulli negabimus aut differemus, rectum vel juſtitiam.* "No freeman ſhall be taken, or impriſoned, or diſſeized of his freehold, or liberties, or free cuſtoms; or outlawed, or baniſhed, or any ways deſtroyed; nor will we paſs upon him, or commit him to priſon, unleſs by the legal judgment of his peers, or the law of the land. We will ſell to no man, we will deny to no man, nor defer, right or juſtice."

However, by means of the ſtruggles in the reign of king John, the pope gained a greater aſcendant here than he ever had before enjoyed; which continued through the long reign of his ſon Henry III. in the beginning of whoſe time the old Saxon trial by ordeal was alſo totally aboliſhed. And we may by this time perceive, in Bracton's treatiſe, a ſtill farther improvement in the method and regularity of the common law, eſpecially in the point of pleadings. Nor muſt it be forgotten, that the firſt traces which remain, of the ſeparation of the greater barons from the leſs, in the conſtitution of parliament, are found in the Great Charter of king John, though omitted in that of Henry III. and that, towards the end of the latter of theſe reigns, we find the firſt record of any writ for ſummoning knights, citizens, and burgeſſes, to parliament. And here we conclude the ſecond period of our Engliſh legal hiſtory.

III. The third commences with the reign of Edward I. who hath juſtly been ſtyled our Engliſh Juſtinian. For in his time the law did receive ſo ſudden a perfection, that ſir Matthew Hale does not ſcruple to affirm, "that more was done in the firſt thirteen years of his reign to ſettle and eſtabliſh the diſtributive juſtice of the kingdom, than in all the ages ſince that time put together."

It would be endleſs to enumerate all the particulars of theſe regulations; but the principal may be reduced under the following general heads. 1. He eſtabliſhed, confirmed, and ſettled, the Great Charter and Charter of Foreſts. 2. He gave a mortal wound to the encroachments of the pope and his clergy, by limiting and eſtabliſhing the bounds of eccleſiaſtical juriſdiction; and by obliging the ordinary, to whom all the goods of inteſtates at that time belonged, to diſcharge the debts of the deceaſed. 3. He defined the limits of the ſeveral temporal courts of the higheſt juriſdiction, thoſe of the King's Bench, Common Pleas, and Exchequer; ſo as they might not interfere with each other's proper buſineſs; to do which they muſt now have recourſe to a fiction, very neceſſary and beneficial in the preſent enlarged ſtate of property. 4. He ſettled the boundaries of the inferior courts in counties, hundreds, and manors, confining them to cauſes of no great amount, according to their primitive inſtitutions; though of conſiderably greater than, by the alteration of the value of money, they are now permitted to determine. 5. He ſecured the property of the ſubject by aboliſhing all arbitrary taxes and talliages, levied without conſent of the national council. 6. He guarded the common juſtice of the kingdom from abuſes, by giving up the royal prerogative of ſending mandates to interfere in private cauſes. 7. He ſettled the form, ſolemnities, and effect, of fines levied in the court of Common Pleas; though the thing itſelf was of Saxon original. 8. He firſt eſtabliſhed a repoſitory for the public records of the kingdom, few of which are ancienter than the reign of his father; and thoſe were by him collected. 9. He improved upon the laws of king Alfred, by that great and orderly method of watch and ward, for preſerving the public peace and preventing robberies, eſtabliſhed by the ſtatute of Winchester.

Winchester. 10. He settled and reformed many abuses incident to tenures, and removed some restraints on the alienation of landed property, by the statute of *quia emptores*. 11. He instituted a speedier way for the recovery of debts, by granting execution, not only upon goods and chattels, but also upon lands, by writ of *elegit*; which was of signal benefit to a trading people; and, upon the same commercial ideas, he also allowed the charging of lands in a statute-merchant to pay debts contracted in trade, contrary to all feodal principles. 12. He effectually provided for the recovery of advowsons, as temporal rights, in which before the law was extremely deficient. 13. He also effectually closed the great gulph in which all the landed property of the kingdom was in danger of being swallowed, by his reiterated statutes of mortmain; most admirably adapted to meet the frauds that had been then devised, though afterwards contrived to be evaded by the invention of *uses*. 14. He established a new limitation of property, by the creation of estates tail; concerning the good policy of which, modern times have however entertained a very different opinion. 15. He reduced all Wales to the subjection, not only of the crown, but in great measure of the laws, of England, (which was thoroughly completed in the reign of Henry VIII.) and seems to have entertained a design of doing the like by Scotland, so as to have formed an entire and complete union of the island of Great Britain.

This catalogue might be continued much farther; but upon the whole, we may observe, that every scheme and model of the administration of common justice between party and party, was entirely settled by this king; and has continued nearly the same in all succeeding ages to this day; abating some few alterations, which the humour or necessity of subsequent times has occasioned. The forms of writs by which actions are commenced, were perfected in his reign, and established as models for posterity. The pleadings consequent upon the writs were then short, nervous, and perspicuous; not intricate, verbose, and formal. The legal treatises written in his time, as by Britton, Fleta, Hengham, and the rest, are for the most part law at this day, or at least were so till the alteration of tenures took place. And to conclude, it is from this period, from the exact observation of Magna Charta, rather than from its making or renewal in the days of his grandfather and father, that the liberty of Englishmen began again to rear its head; though the weight of the military tenures hung heavy upon it for many ages after.

A better proof of the excellence of his constitutions cannot be given than that from his time to that of Henry VIII. there happened very few, and those not very considerable, alterations in the legal *forms* of proceedings. As to matter of *substance*, the old Gothic powers of electing the principal subordinate magistrates, the sheriffs, and conservators of the peace, were taken from the people in the reigns of Edward II. and Edward III. and justices of the peace were established instead of the latter. In the reign also of Edward III. the parliament is supposed most probably to have assumed its present form, by a separation of the commons from the lords. The statute for defining and ascertaining treasons was one of the first productions of this new-modelled assembly; and the translation of the law-proceedings from French into Latin another. Much also was done, under the auspices of this magnanimous prince, for establishing our domestic manufactures; by prohibiting the exportation of English wool, and the importation or wear of foreign cloth or furs; and by encouraging clothworkers from other countries to settle here. Nor was the legislature inattentive to many other branches of commerce, or indeed to commerce in general; for, in particular, it enlarged the credit of the merchant by introducing the statute-staple, whereby he might the more readily pledge his lands for the security of his mercantile debts. And, as personal property now grew by the extension of trade to be much more considerable than formerly, care was taken, in case of intestacies,

to appoint administrators, particularly nominated by the law, to distribute that personal property among the creditors and kindred of the deceased, which before had been usually applied by the officers of the ordinary to uses then denominated pious. The statutes also of *præmunire*, for effectually depressing the civil power of the pope, were the work of this and the subsequent reign. And the establishment of a laborious parochial clergy, by the endowment of vicarages out of the overgrown possessions of the monasteries, added lustre to the close of the 14th century; though the seeds of the general reformation, which were thereby first sown in the kingdom, were almost overwhelmed by the spirit of persecution introduced into the laws of the land by the influence of the regular clergy.

From this time to that of Henry VII. the civil wars and disputed titles to the crown gave no leisure for farther juridical improvement. And yet it is to these very disputes that we owe the happy loss of all the dominions of the crown on the continent of France, which turned the minds of our subsequent princes entirely to domestic concerns. To these likewise we owe the method of barring entails by the fiction of common recoveries, invented originally by the clergy to evade the statutes of mortmain, but introduced under Edward IV. for the purpose of unfettering estates, and making them more liable to forfeiture; while on the other hand the owners endeavoured to protect them by the universal establishment of uses, another of the clerical inventions.

In the reign of king Henry VII. his ministers (not to say the king himself) were more industrious in hunting out prosecutions upon old and forgotten penal laws, in order to extort money from the subject, than in framing any new beneficial regulations. For the distinguishing character of this reign was that of amassing treasure in the king's coffers by every means that could be devised; and almost every alteration in the laws, however salutary or otherwise in their future consequences, had this and this only for their great and immediate object. To this end the court of star-chamber was new modelled, and armed with powers the most dangerous and unconstitutional over the persons and properties of the subject. Informations were allowed to be received in lieu of indictments at the assises and sessions of the peace, in order to multiply fines and pecuniary penalties. The statute of fines for the landed property was craftily and covertly contrived to facilitate the destruction of entails, and make the owners of real estates more capable of forfeiting as well as of aliening. The benefit of clergy, which so often intervened to stop attainders and save the inheritance, was now allowed only once to lay-offenders, who only could have inheritances to lose. A writ of *capias* was permitted in all actions on the case, and the defendant might in consequence be outlawed; because upon such outlawry his goods became the property of the crown. In short, there is hardly a statute in this reign, introductive of a new law, or modifying the old, but what either directly or obliquely tended to the emolument of the Exchequer.

IV. This brings us to the fourth period of our legal history, viz. the reformation of religion under Henry VIII. and his children, which opens an entirely new scene in ecclesiastical matters, the usurped power of the pope being now for ever routed and destroyed, all his connections with this island cut off, the crown restored to its supremacy over spiritual men and causes, and the patronage of bishoprics being once more indisputably vested in the king. And, had the spiritual courts been at this time reunited to the civil, we should have seen the old Saxon constitution with regard to ecclesiastical polity completely restored.

With regard also to our civil polity, the statute of wills, and the statute of uses, (both passed in the reign of this prince,) made a great alteration as to property; the former by allowing the devise of real estates by will, which before was in general forbidden; the latter by endeavouring

to deſtroy the intricate nicety of uſes, though the narrowneſs and pedantry of the courts of common law prevented this ſtatute from having its full beneficial effect. And thence the courts of equity aſſumed a juriſdiction, dictated by common juſtice and common ſenſe, which, however arbitrarily exerciſed, or productive of jealouſies in its infancy, has at length been matured into a moſt elegant ſyſtem of rational juriſprudence; the principles of which (notwithſtanding they may differ in forms) are now equally adopted by the courts of both law and equity. From the ſtatute of uſes, and another ſtatute of the ſame antiquity, (which protected eſtates for years from being deſtroyed by the reverſioner,) a remarkable alteration took place in the mode of conveyancing; the ancient aſſurance by feoffment and livery upon the land being now very ſeldom practiſed, ſince the more eaſy and more private invention of transferring property by ſecret conveyances to uſes, and long terms of years being now continually created in mortgages and family-ſettlements, which may be moulded to a thouſand uſeful purpoſes by the ingenuity of an able artiſt.

The farther attacks in this reign upon the immunity of eſtates tail, which reduced them little more than the conditional fees at the common law before the paſſing of the ſtatute *de donis*, the eſtabliſhment of recognizances in the nature of a ſtatute-ſtaple for facilitating the raiſing of money upon landed ſecurity, and the introduction of the bankrupt-laws, as well for the puniſhment of the fraudulent as the relief of the unfortunate trader; all theſe were capital alterations of our legal polity, and highly convenient to that character which the Engliſh began now to re-aſſume, of a great commercial people. The incorporation of Wales with England, and the more uniform adminiſtration of juſtice, by deſtroying ſome counties palatine, and abridging the unreaſonable privileges of ſuch as remained, added dignity and ſtrength to the monarchy; and, together with the numerous improvements before obſerved upon, and the redreſs of many grievances and oppreſſions which had been introduced by his father, will ever make the adminiſtration of Henry VIII. a very diſtinguiſhed era in the annals of juridical hiſtory.

It muſt, however, be remarked, that (particularly in his later years) the royal prerogative was then ſtrained to a very tyrannical and oppreſſive height; and, what was the worſt circumſtance, its encroachments were eſtabliſhed by law, under the ſanction of thoſe puſillanimous parliaments, one of which, to its eternal diſgrace, paſſed a ſtatute whereby it was enacted that the king's proclamations ſhould have the force of acts of parliament; and others concurred in the creation of that amazing heap of wild and new-fangled treaſons which were ſlightly touched upon in a former chapter. Happily for the nation, this arbitrary reign was ſucceeded by the minority of an amiable prince, during the ſhort ſunſhine of which great part of theſe extravagant laws were repealed. And, to do juſtice to the ſhorter reign of queen Mary, many ſalutary and popular laws, in civil matters, were made under her adminiſtration; perhaps the better to reconcile the people to the bloody meaſures which ſhe was induced to purſue for the re-eſtabliſhment of religious ſlavery, the well-concerted ſchemes for effecting which were (through the providence of God) defeated by the ſeaſonable acceſſion of queen Elizabeth.

The religious liberties of the nation being by that happy event eſtabliſhed (we truſt) on an eternal baſis, (though obliged in their infancy to be guarded againſt papiſts and other non-conformiſts by laws of too ſanguinary a nature,) the foreſt-laws having fallen into diſuſe, and the adminiſtration of civil rights in the courts of juſtice being carried on in a regular courſe, according to the wiſe inſtitutions of king Edward I. without any material innovations, all the principal grievances introduced by the Norman conqueſt ſeem to have been gradually ſhaken off, and our Saxon conſtitution reſtored, with conſiderable improvements, except only in the continuation of the military tenures, and a few other points, which ſtill armed the crown with a very oppreſſive and dangerous prerogative. It is alſo to be remarked, that the ſpirit of enriching the clergy, and endowing religious houſes, had through the former abuſe of it gone over to ſuch a contrary extreme, and the princes of the houſe of Tudor and their favourites had fallen with ſuch avidity upon the ſpoils of the church, that a decent and honourable maintenance was wanting to many of the biſhops and clergy. This produced the reſtraining ſtatutes, to prevent the alienations of lands and tithes belonging to the church and univerſities. The number of indigent perſons being alſo greatly increaſed by withdrawing the alms of the monaſteries, a plan was formed in the reign of queen Elizabeth; more humane and beneficial than even feeding and clothing millions, by affording them the means (with proper induſtry) to feed and to clothe themſelves. And, the farther any ſubſequent plans for maintaining the poor have departed from this inſtitution, the more impracticable, and even pernicious, their viſionary attempts have proved.

However, conſidering the reign of queen Elizabeth in a great and political view, we have no reaſon to regret many ſubſequent alterations in the Engliſh conſtitution: for, though in general ſhe was a wiſe and excellent princeſs, and loved her people; though in her time trade flouriſhed, riches increaſed, the laws were duly adminiſtered, the nation was reſpected abroad, and the people happy at home; yet the increaſe of the power of the ſtar-chamber, and the erection of the high-commiſſion court in matters eccleſiaſtical, were the work of her reign. She alſo kept her parliaments at a very awful diſtance; and in many particulars ſhe at times would carry the prerogative as high as her moſt arbitrary predeceſſors. It is true, ſhe very ſeldom exerted this prerogative ſo as to oppreſs individuals; but ſtill ſhe had it to exert; and therefore the felicity of her reign depended more on her want of opportunity and inclination, than want of power, to play the tyrant. This is a high encomium on her merit; but at the ſame time it is ſufficient to ſhow, that theſe were not thoſe golden days of genuine liberty that we formerly were taught to believe; for ſurely the true liberty of the ſubject conſiſts not ſo much in the gracious behaviour as in the limited power of the ſovereign.

The great revolutions that had happened in manners and in property had paved the way, by imperceptible yet ſure degrees, for as great a revolution in government; yet, while that revolution was effecting, the crown became more arbitrary than ever, by the progreſs of thoſe very means which afterwards reduced its power. It is obvious to every obſerver that, till the cloſe of the Lancaſtrian civil wars, the property and power of the nation were chiefly divided between the king, the nobility, and the clergy. The commons were generally in a ſtate of great ignorance; their perſonal wealth, before the extenſion of trade, was comparatively ſmall; and the nature of their landed property was ſuch as kept them in continual dependence upon their feudal lord, being uſually ſome powerful baron, ſome opulent abbey, or ſometimes the king himſelf. Though a notion of general liberty had ſtrongly pervaded and animated the whole conſtitution, yet the particular liberty, the natural equality, and perſonal independence, of individuals, were little regarded or thought of; nay even to aſſert them was treated as the height of ſedition and rebellion. Our anceſtors heard with deteſtation and horror thoſe ſentiments rudely deliVered, and puſhed to moſt abſurd extremes, by the violence of a Cade and a Tyler, which have ſince been applauded, with a zeal almoſt riſing to idolatry, when ſoftened and recommended by the eloquence, the moderation, and the arguments, of a Sidney, a Locke, and a Milton.

But, when learning, by the invention of printing, and the progreſs of religious reformation, began to be univerſally diſſeminated; when trade and navigation were ſud-

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denly carried to an amazing extent, by the uſe of the compaſs, and the conſequent diſcovery of the Indies; the minds of men thus enlightened by ſcience, and enlarged by obſervation and travel, began to entertain a more juſt opinion of the dignity and rights of mankind. An inundation of wealth flowed in upon the merchants and middling rank; while the two great eſtates of the kingdom, which formerly had balanced the prerogative, the nobility and clergy, were greatly impoveriſhed and weakened. The popiſh clergy, detected in their frauds and abuſes, expoſed to the reſentment of the populace, and ſtripped of their lands and revenues, ſtood trembling for their very exiſtence. The nobles, enervated by the refinements of luxury, (which knowledge, foreign travel, and the progreſs of the politer arts, are too apt to introduce with themſelves,) and fired with diſdain at being rivalled in magnificence by the opulent citizens, fell into enormous expenſes, to gratify which they were permitted, by the policy of the times, to diſſipate their overgrown eſtates, and alienate their ancient patrimonies. This gradually reduced their power and their influence within very moderate bounds, while the king, by the ſpoil of the monaſteries, and the great increaſe of the cuſtoms, grew rich, independent, and haughty; and the commons were not yet ſenſible of the ſtrength they had acquired, nor urged to examine its extent by new burthens or oppreſſive taxations, during the ſudden opulence of the exchequer. Intent upon acquiring new riches, and happy in being freed from the inſolence and tyranny of the orders more immediately above them, they never dreamed of oppoſing the prerogative to which they had been ſo little accuſtomed, much leſs of taking the lead in oppoſition, to which by their weight and their property they were now entitled. The latter years of Henry VIII. were therefore the times of the greateſt deſpotiſm that have been known in this iſland ſince the death of William the Norman; the prerogative, as it then ſtood by common law, (and much more when extended by act of parliament,) being too large to be endured in a land of liberty.

Queen Elizabeth, and the intermediate princes of the Tudor line, had almoſt the ſame legal powers, and ſometimes exerted them as roughly, as their father Henry VIII. But the critical ſituation of that princeſs with regard to her legitimacy, her religion, her enmity with Spain, and her jealouſy of the queen of Scots, occaſioned greater caution in her conduct. She, probably, or her able adviſers, had penetration enough to diſcern how the power of the kingdom had gradually ſhifted its channel, and wiſdom enough not to provoke the commons to diſcover and feel their ſtrength. She therefore drew a veil over the odious part of prerogative, which was never wantonly thrown aſide, but only to anſwer ſome important purpoſe; and, though the royal treaſury no longer overflowed with the wealth of the clergy, which had been all granted out, and had contributed to enrich the people, ſhe aſked for ſupplies with ſuch moderation, and managed them with ſo much economy, that the commons were happy in obliging her. Such, in ſhort, were her circumſtances, her neceſſities, her wiſdom, and her good diſpoſition, that never did a prince ſo long and ſo entirely, for the ſpace of half a century together, reign in the affections of the people.

On the acceſſion of king James I. no new degree of royal power was added to, or exerciſed by, him; but ſuch a ſceptre was too weighty to be wielded by ſuch a hand. The unreaſonable and imprudent exertion of what was then deemed to be prerogative, upon trivial and unworthy occaſions, and the claim of a more abſolute power inherent in the kingly office than had ever been carried into practice, ſoon awakened the ſleeping lion. The people heard with aſtoniſhment doctrines preached from the throne and the pulpit, ſubverſive of liberty and property, and all the natural rights of humanity. They examined into the divinity of this claim, and found it weakly and fallaciouſly ſupported; and common reaſon aſſured them, that, if it were of human origin, no conſtitution could eſtabliſh it without power of revocation, no precedent could ſanctify, no length of time could confirm, it. The leaders felt the pulſe of the nation, and found they had ability as well as inclination to reſiſt it: and accordingly reſiſted and oppoſed it, whenever the puſillanimous temper of the reigning monarch had courage to put it to the trial; and they gained ſome little victories in the caſes of concealments, monopolies, and the diſpenſing power. In the mean time, very little was done for the improvement of private juſtice, except the abolition of ſanctuaries, the extenſion of the bankrupt-laws, the limitation of ſuits and actions, and the regulating of informations upon penal ſtatutes. For I cannot claſs the laws againſt witchcraft and conjuration under the head of improvements; nor did the diſpute between lord Ellesmere and ſir Edward Coke, concerning the powers of the Court of Chancery, tend much to the advancement of juſtice.

Indeed when Charles I. ſucceeded to the crown of his father, and attempted to revive ſome enormities which had been dormant in the reign of king James, the loans and benevolences extorted from the ſubject, the arbitrary impriſonments for refuſal, the exertion of martial law in time of peace, and other domeſtic grievances, clouded the morning of that miſguided prince's reign; which, though the noon of it began a little to brighten, at laſt went down in blood, and left the whole kingdom in darkneſs. It muſt be acknowledged that, by the petition of right, enacted to aboliſh theſe encroachments, the Engliſh conſtitution received great alteration and improvement. But there ſtill remained the latent power of the foreſt-laws, which the crown moſt unſeaſonably revived. The legal juriſdiction of the ſtar-chamber and high commiſſion-courts was alſo extremely great; though their uſurped authority was ſtill greater. And, if we add to theſe the diſuſe of parliaments, the ill-timed zeal and deſpotic proceedings of the eccleſiaſtical governors in matters of mere indifference, together with the arbitrary levies of tonnage and poundage, ſhip-money, and other projects, we may ſee grounds moſt amply ſufficient for ſeeking redreſs in a legal conſtitutional way. This redreſs, when ſought, was alſo conſtitutionally given; for all theſe oppreſſions were actually aboliſhed by the king in parliament, before the rebellion broke out, by the ſeveral ſtatutes for triennial parliaments, for aboliſhing the ſtar-chamber and high-commiſſion courts, for aſcertaining the extent of foreſts and foreſt-laws, for renouncing ſhip-money and other exactions, and for giving up the prerogative of knighting the king's tenants *in capite*, in conſequence of their feodal tenures; though it muſt be acknowledged that theſe conceſſions were not made with ſo good a grace as to conciliate the confidence of the people. Unfortunately, either by his own miſmanagement, or by the arts of his enemies, the king had loſt the reputation of ſincerity; which is the greateſt unhappineſs that can befal a prince. Though he had formerly ſtrained his prerogative, not only beyond what the genius of the preſent times would bear, but alſo beyond the examples of former ages, he had now conſented to reduce it to a lower ebb than was conſiſtent with monarchical government. A conduct ſo oppoſite to his temper and principles, joined with ſome raſh actions and unguarded expreſſions, made the people ſuſpect that this condeſcenſion was merely temporary. Fluſhed therefore with the ſucceſs they had gained, fired with reſentment for paſt oppreſſions, and dreading the conſequences if the king ſhould regain his power, the popular leaders (who in all ages have called themſelves the people) began to grow inſolent and ungovernable; their inſolence ſoon rendered them deſperate; and deſpair at length forced them to join with a ſet of military hypocrites and enthuſiaſts, who overturned the church and monarchy, and proceeded with deliberate ſolemnity to the trial and murder of their ſovereign.

The crude and abortive ſchemes for amending the laws in the times of confuſion which followed, muſt be paſſed

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by; the moſt promiſing and ſenſible whereof (ſuch as the eſtabliſhment of new trials, the abolition of feodal tenures, the act of navigation, and ſome others,) were adopted in the

V. Fifth period, which is after the reſtoration of king Charles II. Immediately upon which, the principal remaining grievance, the doctrine and conſequences of military tenures, were taken away and aboliſhed, except in the inſtance of corruption of inheritable blood upon attainder of treaſon and felony. And though the monarch, in whoſe perſon the royal government was reſtored, and with it our ancient conſtitution, deſerves no commendation from poſterity, yet in his reign, (wicked, ſanguinary, and turbulent, as it was,) the concurrence of happy circumſtances was ſuch, that from thence we may date not only the re-eſtabliſhment of our church and monarchy, but alſo the complete reſtitution of Engliſh liberty, for the firſt time, ſince its total abolition at the conqueſt. For therein not only theſe ſlaviſh tenures, the badge of foreign dominion, with all their oppreſſive appendages, were removed from incumbering the eſtates of the ſubject; but alſo an additional ſecurity of his perſon from impriſonment was obtained, by that great bulwark of our conſtitution, the habeas corpus act. Theſe two ſtatutes, with regard to our property and perſons, form a ſecond Magna Charta, as beneficial and effectual as that of Running-Mead. That only pruned the luxuriances of the feodal ſyſtem; but the ſtatute of Charles II. extirpated all its ſlaveries; except perhaps in copyhold tenure; and there alſo they are now in great meaſure enervated by gradual cuſtom, and the interpoſition of our courts of juſtice. Magna Charta only, in general terms, declared, that no man ſhall be impriſoned contrary to law; the habeas corpus act points him out effectual means, as well to releaſe himſelf, though committed even by the king in council, as to puniſh all thoſe who ſhall thus unconſtitutionally miſuſe him.

To theſe may be added the abolition of the prerogatives of purveyance and pre-emption; the ſtatute for holding triennial parliaments; the teſt and corporation acts, which ſecure both our civil and religious liberties; the abolition of the writ *de hæretico comburendo*; the ſtatute of frauds and perjuries, a great and neceſſary ſecurity to private property; the ſtatute for diſtribution of inteſtates' eſtates, and that of amendments and jeofails, which cut off thoſe ſuperfluous niceties which ſo long had diſgraced our courts; together with many other wholeſome acts that were paſſed in this reign, for the benefit of navigation and the improvement of foreign commerce; and the whole, when we likewiſe conſider the freedom from taxes and armies which the ſubject then enjoyed, will be ſufficient to demonſtrate this truth, "that the conſtitution of England had arrived to its full vigour, and the true balance between liberty and prerogative was happily eſtabliſhed by law, in the reign of king Charles II." *Blackſt.* iv. 439. The point of time at which ſir William Blackſtone fixed this *theoretical* perfection of our public law, is the year 1679; after the habeas corpus act was paſſed, and that for licenſing the preſs had expired; though the years which immediately followed it were times of great *practical* oppreſſion.

It is far from our intention to palliate or defend many very iniquitous proceedings, contrary to all law, in that reign, through the artifice of wicked politicians, both in and out of employment. What ſeems inconteſtible is this, that by the law, as it then ſtood, (notwithſtanding ſome invidious, nay dangerous, branches of the prerogative have ſince been lopped off, and the reſt more clearly defined,) the people had as a large portion of real liberty as ſeems conſiſtent with a ſtate of ſociety; and ſufficient power reſiding in their own hands to aſſert and preſerve that liberty, if invaded by the royal prerogative. For which we need but appeal to the memorable cataſtrophe of the next reign. For, when king Charles's deluded brother attempted to enſlave the nation, he found it was beyond his power; the people both could, and did, reſiſt him; and, in conſequence of ſuch reſiſtance, obliged him to quit his enterpriſe and his throne together. Which introduces us to the laſt period of our legal hiſtory; viz.

VI. From the revolution in 1688 to the preſent time. In this period many laws have paſſed; as the bill of rights, the toleration act, the act of ſettlement with its conditions, the act for uniting England with Scotland, under the title of Great Britain, and recently Great Britain with Ireland, and ſome others; which have aſſerted our liberties in more clear and emphatical terms; have regulated the ſucceſſion of the crown by parliament, as the exigencies of religious and civil freedom required; have confirmed and exemplified the doctrine of reſiſtance, when the executive magiſtrate endeavours to ſubvert the conſtitution; have maintained the ſuperiority of the laws above the king, by pronouncing his diſpenſing power to be illegal; have indulged tender conſciences with every religious liberty conſiſtent with the ſafety of the ſtate; have excluded certain officers from the houſe of commons; have reſtrained the king's pardon from obſtructing parliamentary impeachments; have imparted to all the lords an equal right of trying their fellow peers; have regulated trials for high treaſon; have afforded our poſterity a hope that corruption of blood may one day be aboliſhed and forgotten; have (by the deſire of his preſent majeſty) ſet bounds to the civil liſt, and placed the adminiſtration of that revenue in hands that are accountable to parliament; and have (by the like deſire) made the judges completely independent of the king, his miniſters, and his ſucceſſors. Yet, though theſe proviſions have, in appearance and nominally, reduced the ſtrength of the executive power to a much lower ebb than in the preceding period; if on the other hand we throw into the oppoſite ſcale (what perhaps the reduction of the ancient prerogative may have rendered in ſome degree neceſſary) the vaſt acquiſition of force, ariſing from the riot-act, and the annual expedience of a ſtanding army; and the vaſt acquiſition of perſonal attachment, ariſing from the magnitude of the national debt, and the manner of levying thoſe yearly millions that are appropriated to pay the intereſt; we ſhall find that the crown has gradually and imperceptibly gained as much in influence as it has apparently loſt in prerogative. See the article KING, vol. xi. p. 736.

The chief alterations of moment (for the time would fail us to deſcend to *minutiæ*) in the adminiſtration of private juſtice during this period, are the ſolemn recognition of the law of nations with reſpect to the rights of ambaſſadors; the cutting off by the ſtatute, for the amendment of the law, a vaſt number of excreſcences, that in proceſs of time had ſprung out of the practical part of it; the protection of corporate rights by the improvements in writs of *mandamus*, and informations in nature of *quo warranto*; the regulations of trials by jury, and the admitting witneſſes for priſoners upon oath; the farther reſtraints upon alienation of lands in mortmain; the annihilation of the terrible judgment of *peine fort et dure*; the extenſion of the benefit of clergy, by aboliſhing the pedantic criterion of reading; the counterbalance to this mercy, by the vaſt increaſe of capital puniſhment; the new and effectual methods for the ſpeedy recovery of rents; the improvements which have been made in ejectments for the trying of titles; the introduction and eſtabliſhment of paper-credit by indorſements upon bills and notes, which have ſhown the legal poſſibility and convenience (which our anceſtors ſo long doubted) of aſſigning a choſe in action; the tranſlation of all legal proceedings into the Engliſh language; the erection of courts of conſcience for recovering ſmall debts, and (which is much the better plan) the reformation of county-courts; the great ſyſtem of marine juriſprudence, of which the foundations have been laid, by clearly developing the principles on which policies of inſurance are founded, and by happily applying thoſe prin-

ciples to particular caſes; and, laſtly, the liberality of ſentiment, which (though late) has now taken poſſeſſion of our courts of common law, and induced them to adopt (where facts can be clearly aſcertained) the ſame principles of redreſs as have prevailed in our courts of equity, from the time that lord Nottingham preſided there; and this, not only where ſpecially impowered by particular ſtatutes, (as in caſe of bonds, mortgages, and ſet-offs,) but by extending the remedial influence of the equitable writ of treſpaſs on the caſe, according to its primitive inſtitution by king Edward I. to almoſt every inſtance of injuſtice not remedied by any other proceſs. Theſe are all the material alterations that have happened with reſpect to private juſtice, in the courſe of the laſt and preſent centuries.

Thus, therefore, have we endeavoured to delineate ſome rude outlines of a plan for the hiſtory of our laws and liberties; from their firſt riſe, and gradual progreſs, among our Britiſh and Saxon anceſtors, till their total eclipſe at the Norman conqueſt; from which they have gradually emerged, and riſen to the perfection they now enjoy, at different periods of time. We have ſeen, that the maxims and rules of the law, which regard the rights of perſons, and the rights of things, the private injuries that may be offered to both, and the crimes which affect the public, have been and are every day improving, and are now fraught with the accumulated wiſdom of ages; that the forms of adminiſtering juſtice came to perfection under Edward I. and have not been much varied, nor always for the better, ſince; that our religious liberties were fully eſtabliſhed at the reformation; but that the recovery of our civil and political liberties was a work of longer time; they not being thoroughly and completely regained till after the reſtoration of king Charles II. nor fully and explicitly acknowledged and defined till the era of the revolution.

Of a conſtitution ſo wiſely contrived, ſo ſtrongly raiſed, and ſo highly finiſhed, it is hard to ſpeak with that praiſe which is juſtly and ſeverely its due; but it has defects, chiefly ariſing from the decays of time, or the rage of unſkilful improvements in later ages. The objects of all theſe laws, whether they reſpect the rights of perſons—the rights of things—private wrongs—or public wrongs—are ſet forth at length under their proper titles in the general alphabet. And, as Dr. Burn very juſtly obſerves, one reflection will naturally occur to every reader, in peruſing almoſt every one of the larger titles; and that is, concerning the poſſibility and expediency of reforming the ſtatute-law. The ſtatutes at large, from the very nature of the thing, have in proceſs of time become very cumberſome, and very intricate. They are not to be purchaſed but for a larger ſum of money, nor to be underſtood without a greater expenſe of time, than a wiſe man would often chooſe to employ in that way.

The courſe to be taken in that matter ſeems to be this: Firſt, actually to repeal all thoſe ſtatutes, and parts of ſtatutes, which are *virtually repealed* by ſubſequent contradictory ſtatutes. Secondly, to repeal all thoſe ſtatutes which are *obſolete*, and grown out of uſe, by the alteration of times and circumſtances. Thirdly, to repeal all thoſe ſtatutes, which, being neither contradicted by ſubſequent ſtatutes nor become obſolete, yet are rendered *uſeleſs* by ſubſequent ſtatutes enacting the ſame things over again, with alterations and amendments. Fourthly, to repeal or alter all thoſe ſtatutes which are *frivolous*, that is, which poſſibly cannot, or probably never will, be executed; ſuch as thoſe which appoint an offender to be whipped by the hands of the common hangman, where perhaps there is no ſuch officer; or which prohibit an offence under a ſmall penalty to be recovered in the courts at Weſtminſter, where the reward will not countervail the expenſe of recovering it. Fifthly, to omit all thoſe ſtatutes, which, although enacted to be public ſtatutes, yet are only of *private concern*; ſuch as thoſe for bridges in particular places, or paving the ſtreets in ſuch a market-town; and the like. Sixthly, as to the reſt, to lay all the ſtatutes, and clauſes of ſtatutes, together, which relate to the ſame ſubject; and out of the whole to compoſe one, two, or more, uniform and conſiſtent ſtatutes; and then to repeal all thoſe other, as workmen deſtroy the ſcaffolding when they have erected the building.

There appears but of one material objection againſt this method of proceeding; and that is, that, the law being now for the moſt part well ſettled upon the ſtatutes, notwithſtanding their acknowledged diſorder and confuſion, this would tend to unſettle all again, by breaking the connexion which there is between one ſtatute and another, and one part of a ſtatute and another, altering the words and phraſes, and after all, perhaps, not much mending the matter, ſince it is poſſible that the new ſtatutes may be as liable to objections as the former were. But this is an argument, not ſo much againſt the thing itſelf as againſt the manner in which it may be executed. As to breaking the connexion, it is certain that for the moſt part there is no connexion; and, where there is, that may eaſily be preſerved: and it ought to be laid down as an invariable rule, to retain as much as poſſible the identical words and ſentences of the former ſtatutes; only rejecting what is ſuperfluous, inſerting the clear law as it now ſtands, and putting the ſame into a form more regular, conciſe, and eaſy. And this ſeemeth no way impoſſible to be done, by any perſon of a tolerable underſtanding, endowed only with a clear head and much patience. *Burn's Juſtice*, vol. iv.

All our law-proceedings were formerly written, as indeed all public proceedings were, in Norman or law French; and even the arguments of the counſel and deciſions of the court were in the ſame barbarous dialect. An evident and ſhameful badge, it muſt be owned, of tyranny and foreign ſervitude; being introduced under the auſpices of William the Norman, and his ſons; whereby the obſervation of the Roman ſatiriſt was once more verified, that *Gallia cauſidicos docuit facunda Britannos*. This continued till the reign of Edward III. who, having employed his arms ſucceſsfully in ſubduing the crown of France, thought it unbeſeeming the dignity of the victors to uſe any longer the language of a vanquiſhed country. By a ſtatute, therefore, paſſed in the 36th year of his reign, it was enacted, that for the future "all pleas ſhould be pleaded, ſhown, defended, anſwered, debated, and judged, in the Engliſh tongue; but be entered and enrolled in Latin."

The Latin, which ſucceeded the French for the entry and enrolment of pleas, and which continued in uſe for four centuries, anſwers ſo nearly to the Engliſh, (often-times word for word,) that it is not at all ſurpriſing it ſhould generally be imagined to be totally fabricated at home, with little more art or trouble than by adding Roman terminations to Engliſh words: whereas in reality (as Blackſtone tells us) it is a very univerſal dialect, ſpread throughout all Europe at the irruption of the northern nations; and particularly accommodated and moulded to anſwer all the purpoſes of the lawyers with a peculiar exactneſs and preciſion. This technical Latin continued in uſe from its firſt introduction till the time of Oliver Cromwell; when, among many other innovations in the law, ſome for the better and ſome for the worſe, the language of our records was altered and turned into Engliſh. But, at the reſtoration of king Charles, this novelty was no longer countenanced; the practiſers finding it very difficult to expreſs themſelves ſo conciſely or ſignificantly in any other language but the Latin. And thus it continued till about the year 1730, when it was again thought proper that the proceedings at law ſhould be done into Engliſh, and it was accordingly ſo ordered by ſtat. 4 Geo. II. c. 26. But the tranſlation of technical phraſes, and the names of writs and other proceſs, were found to be ſo very ridiculous, (a writ of *niſi prius*, *quare impedit*, *fieri facias*, *habeas corpus*, and the reſt, not being capable of an Engliſh dreſs with any degree of ſerioufneſs,) that in two

years' time a new act was obliged to be made, 6 Geo. II. c. 14. which allows all technical words to continue in the uſual (Latin) language.

Of the Principality of Wales.

Wales had continued independent of England, unconquered and uncultivated, in the primitive paſtoral ſtate which Cæſar and Tacitus aſcribe to Britain in general, for many centuries; even from the time of the hoſtile invaſions of the Saxons, when the ancient and Chriſtian inhabitants of the iſland retired to thoſe natural intrenchments, for protection from their pagan viſitants. But, when theſe invaders themſelves were converted to Chriſtianity, and ſettled into regular and potent governments, this retreat of the ancient Britons grew every day narrower; they were over-run by little and little, gradually driven from one faſtneſs to another, and by repeated loſſes abridged of their wild independence. Very early in our hiſtory we find their princes doing homage to the crown of England; till at length, in the reign of Edward I. who may juſtly be ſtyled the conqueror of Wales, the line of their ancient princes was aboliſhed, and the king of England promiſed the people of that country, upon condition of their ſubmiſſion, to give them a prince who had been born among them, and who could ſpeak no other language. Upon their acquieſcence with this deceitful offer, he conferred the principality of Wales upon his *ſecond ſon* Edward, then an infant. Edward, by the death of his eldeſt brother Alfonſo, became heir to the crown; and, from that time, this honour has been appropriated to the eldeſt ſon or eldeſt daughter of the king of England. Yet the creation has not been confined to the *heir-apparent*; for both queen Mary and queen Elizabeth were created by their father Henry VIII. princeſſes of Wales, each of them at the time (the latter after the illegitimation of Mary) being *heir preſumptive* to the crown.

Edward II. was the firſt titular prince; the territory of Wales being then entirely re-annexed (by a kind of fœdal reſumption) to the dominion of the crown of England; or, as the ſtat. Walliæ expreſſes it, *Terra Walliæ cum incolis ſuis, prius regi jure feodali ſubjecta*, (of which homage was the ſign,) *jam in proprietatis dominium totaliter et cum integritate converſa eſt, et coronae regni Angliæ tanquam pars corporis ejuſdem annexa et unita*. By the ſame ſtatute alſo very material alterations were made in divers parts of their laws, ſo as to reduce them nearer to the Engliſh ſtandard, eſpecially in the forms of their judicial proceedings; but they ſtill retained very much of their original polity; particularly their rule of inheritance, viz. that their lands were divided equally among all the iſſue male, and did not deſcend to the eldeſt ſon alone. By other ſubſequent ſtatutes their provincial immunities were ſtill farther abridged; but the finiſhing ſtroke to their independence was given by the ſtat. 27 Hen. VIII. c. 26. which at the ſame time gave the utmoſt advancement to their civil proſperity, by admitting them to a thorough communication of laws with the ſubjects of England. Thus were this brave people gradually (as our Blackſtone expreſſes it) conquered into the enjoyment of true liberty; being inſenſibly put upon the ſame footing, and made fellow-citizens, with their conquerors. A generous method of triumph, which the republic of Rome practiſed with great ſucceſs; till ſhe reduced all Italy to her obedience, by admitting the vanquiſhed ſtates to partake of the Roman privileges.

It is enacted by this ſtatute, 27 Hen. VIII. 1. That the dominion of Wales ſhall be for ever united to the kingdom of England. 2. That all Welſhmen born ſhall have the ſame liberties as other the king's ſubjects. 3. That lands in Wales ſhall be inheritable according to the Engliſh tenures and rules of deſcent. 4. That the laws of England, and no other, ſhall be uſed in Wales; beſides many other regulations of the police of this principality. And the ſtat. 34 & 35 Hen. VIII. c. 26. confirms the ſame, adds farther regulations, divides it into twelve ſhires; and, in ſhort, reduces it into the ſame order in which it ſtands at this day; differing from the kingdom of England in only a few particulars, and thoſe too of the nature of privileges, (ſuch as having courts within itſelf, independent of the proceſs of Weſtminſter-hall,) and ſome other immaterial peculiarities, hardly more than are to be found in many counties of England itſelf. By this union of Wales with England, twenty-ſeven members were added to the Engliſh houſe of commons. No county or town in Wales ſends more than one member, except the county of Monmouth, which returns two.

IV. Of the LAW of SCOTLAND.

The kingdom of Scotland, notwithſtanding the union of the crowns on the acceſſion of their king James VI. to that of England, continued an entirely ſeparate and diſtinct kingdom for above a century more, though an union had been long projected; which was judged to be the more eaſy to be done, as both kingdoms were anciently under the ſame government, and ſtill retained a very great reſemblance, though far from an identity, in their laws. By an act of parliament 1 Jac. I. c. 1. it is declared, that theſe two mighty, famous, and ancient, kingdoms, were formerly one. And ſir Edward Coke obſerves how marvellous a conformity there was, not only in the religion and language of the two nations, but alſo in their ancient laws, the deſcent of the crown, their parliaments, their titles of nobility, their officers of ſtate and of juſtice, their writs, their cuſtoms, and even the language of their laws. Upon which account he ſuppoſes the common law of each to have been originally the ſame; eſpecially as their moſt ancient and authentic book, called *Regiam Majeſtatem*, and containing the rules of their ancient common law, is extremely ſimilar to that of Glanvil, which contains the principles of ours, as it ſtood in the reign of Henry II. And the diverſities ſubſiſting between the two laws at preſent may be well enough accounted for, from a diverſity of practice in two large and uncommunicating juriſdictions, and from the acts of two diſtinct and independent parliaments, which have in many points altered and abrogated the ancient common law of both kingdoms.

The laws in Scotland concerning the tenures of land, and of conſequence the conſtitution of parliaments and the royal prerogatives, were founded upon the ſame feudal principles as the laws reſpecting theſe ſubjects in England. It is ſaid, that the feudal polity was eſtabliſhed firſt in England; and was afterwards introduced into Scotland, in imitation of the Engliſh government. But it continued in its original form much longer in Scotland than it did in England; and the changes in the Scotch government, perhaps owing to the circumſtance that they are more recent, are far more diſtinctly marked and defined than they are in the hiſtory of the Engliſh conſtitution. And perhaps the progreſs of the Scotch parliaments affords a clearer elucidation of the obſcure and ambiguous points in the hiſtory of the repreſentation and conſtitution of our country, than any arguments or authorities that have yet been adduced. A particular diſcuſſion of this ſubject would far exceed the limits we have preſcribed to ourſelves, nor would it be very intereſting to the general reader: but for an account of the parliament of Scotland before the union, and of the laws relative to the election of the repreſentative peers and commoners of Scotland, we may refer to Mr. Wight's valuable Inquiry into the Riſe and Progreſs of Parliament, chiefly in Scotland. It is ſuppoſed, that we owe the lower houſe of parliament, in England, to the accidental circumſtance that the barons and the repreſentatives of the counties and boroughs had not a room large enough to contain them all; but, in Scotland, the three eſtates aſſembled always in one houſe, had one common preſident, and deliberated jointly upon all matters that came before them, whether of a judicial or of a legiſlative nature. *Wight*, 82. In England the lords ſpiritual were always ſtyled one of the three eſtates of the realm; but there is no authority that they ever voted in a body diſtinct from the lords temporal. In the Scotch parliament the three eſtates were, 1. The biſhops,

biſhops, abbots, and other prelates, who had a ſeat in parliament, as in England, on account of their benefices, or rather lands, which they held *in capite*, i. e. immediately of the crown. 2. The barons, and the commiſſioners of ſhires, who were the repreſentatives of the ſmaller barons, or the free tenants of the king. 3. The burgeſſes, or the repreſentatives of the royal boroughs. Craig aſſures us, *nihil ratum eſſe, nihil legis vim habere, niſi quod omnium trium ordinum conſenſu conjuncto conſtitutum eſt; ita tamen ut unius cujuſque ordinis per ſe major pars conſentiens pro toto ordine ſufficiat. Scio hodie controverti, an duo ordines diſſentiente tertio, quaſi major pars leges condere poſſint; cujus partem negantem boni omnes, et quicunque de hac re ſcripſerunt pertinaciſſimè tuentur, alioqui duo ordines in everſionem tertii poſſint conſentire.* De Feudis, lib. i. But ſome writers have ſince preſumed to controvert this doctrine. *Wight*, 83. It is ſtrange that a great fundamental point, which was likely to occur frequently, ſhould remain a ſubject of doubt and controverſy. But we ſhould now be inclined to think, that a majority of one of the eſtates could not have reſiſted a majority of each of the other two, as it cannot eaſily be ſuppoſed, that a majority of the ſpiritual lords would have conſented to thoſe ſtatutes, which, from the year 1587 to the year 1690, were enacted for their impoveriſhment, and finally for their annihilation. At the time of the union, the Scotch parliament conſiſted only of the other two eſtates. With regard to the laws concerning contracts and commerce, and perhaps alſo crimes, the law of Scotland is in a great degree conformable to the civil law; and this probably was owing to their frequent alliances and connections with France and the continent, where the civil law chiefly prevailed.

The Scotch acts of parliament were, by moſt ancient cuſtom, proclaimed in all the different ſhires, boroughs, and baron-courts, of the kingdom. But, after the ſtatutes came to be printed, that cuſtom was gradually neglected; and, at laſt, the publication at the market-croſs of Edinburgh was declared ſufficient; and they became obligatory forty days thereafter.

In the reigns of king James II. and king Charles II. commiſſioners were appointed to treat with commiſſioners of Scotland, concerning an union; but the bringing about this great work was reſerved for the reign of queen Anne. The ſtat. 1 Ann. c. 14. ordained articles to be ſettled by commiſſioners for the union of the two kingdoms, &c. and by ſtat. 5 Ann. c. 8, the union was effected. By this ſtatute, the twenty-five Articles of Union, agreed to by the parliaments of both nations, were ratified and confirmed; the purport of the moſt conſiderable being as follows:

1. That on the firſt of May, 1707, and for ever after, the kingdoms of England and Scotland ſhall be united into one kingdom, by the name of GREAT BRITAIN.

2. The ſucceſſion to the monarchy of Great Britain ſhall be the ſame as was before ſettled with regard to that of England.

3. The united kingdom ſhall be repreſented by one parliament.

4. There ſhall be a communication of all rights and privileges between the ſubjects of both kingdoms, except where it is otherwiſe agreed.

9. When England raiſes 2,000,000l. (accurately 1,997,763l. 8s. 4¼d.) by a land-tax, Scotland ſhall raiſe 48,000l.

16, 17. The ſtandards of the coin, of weights, and of meaſures, ſhall be reduced to thoſe of England throughout the united kingdoms.

18. The laws relating to trade, cuſtoms, and the exciſe, ſhall be the ſame in Scotland as in England. But all the other laws of Scotland ſhall remain in force; though alterable by the parliament of Great Britain. Yet with this caution, that laws relating to public policy are alterable at the diſcretion of the parliament: *laws relating to private right are not to be altered but for the evident utility of the people of Scotland.*

22. Sixteen peers are to be choſen to repreſent the peerage of Scotland in (each) parliament, and forty-five members to ſit in the houſe of commons.

23. The ſixteen peers of Scotland ſhall have all privileges of parliament: and all peers of Scotland ſhall be peers of Great Britain, and rank next after thoſe of the ſame degree at the time of the union, and ſhall have all privileges of peers, except ſitting in the houſe of lords, and voting on the trial of a peer.

It was formerly reſolved by the houſe of lords, that a peer of Scotland, claiming to ſit in the Britiſh houſe of peers by virtue of a patent paſſed under the great ſeal of Great Britain, had no right to vote in the election of the ſixteen Scotch peers; and that no patent of honour granted to any peer of Great Britain, who was a peer of Scotland at the time of the union, ſhould entitle him to ſit in parliament. But in 1782, on the claim of the duke of Hamilton to ſit as duke of Brandon, the queſtion being referred to the judges, they were unanimouſly of opinion, that the peers of Scotland were not diſabled from receiving, ſubſequently to the union, a patent of peerage of Great Britain, with all the privileges uſually incident thereto; and the houſe accordingly admitted the duke of Hamilton to ſit as duke of Brandon. It ſeems now to be ſettled, that a Scotch peer, made a peer of Great Britain, *has* a right to vote in the election of the ſixteen Scotch peers; and that, if any of the ſixteen Scotch peers are created peers of Great Britain, they thereby ceaſe to ſit as repreſentatives of the Scotch peerage; and new Scotch peers muſt be elected in their room. 1 *Comm.* 97. n. 7.

25. All laws and ſtatutes in either kingdom, ſo far as they are contrary to theſe articles, ſhall ceaſe and become void.

From the time of Edward IV. till the reign of Charles II. both incluſive, our kings uſed frequently to grant, by their charter only, a right to unrepreſented towns of ſending members to parliament. The laſt time this prerogative was exerciſed, was in the 29 Ch. II. who gave this privilege to Newark; and it is remarkable, that it was alſo the firſt time that the legality of this power was queſtioned in the houſe of commons, but it was then acknowledged by a majority of 125 to 73. *Comm. Jour.* 21 *March*, 1676–7. But, notwithſtanding it is a general rule in our law, that the king can never be deprived of his prerogatives, but by the clear and expreſs words of an act of parliament; yet it has been thought, from this laſt article in the act of union, that this prerogative of the crown is virtually abrogated, as the exerciſe of it would neceſſarily deſtroy the proportion of the repreſentatives for the two kingdoms. 1 *Doug. El. Caſes*, 70. *Preface to Glanv. Rep. and Simeon's Law of Elect.*

Theſe are the principal of the twenty-five articles of union, which are ratified and confirmed by ſtat. 5 Ann. c. 8. in which ſtatute there are alſo two acts of parliament recited; the one of *Scotland*, whereby the *church of Scotland*, and alſo the four univerſities of that kingdom, are eſtabliſhed for ever, and all ſucceeding ſovereigns are to take an oath inviolably to maintain the ſame; the other of *England*, 5 Ann. c. 6. whereby the *acts of uniformity* of 13 Eliz. and 13 Car. II. (except as the ſame had been altered by parliament at that time,) and all other acts then in force for the preſervation of the church of England, are declared perpetual; and it is ſtipulated, that every ſubſequent king and queen ſhall take an oath inviolably to maintain the ſame within England, Ireland, Wales, and the town of Berwick-upon-Tweed. And it is enacted, that theſe two acts "ſhall for ever be obſerved as fundamental and eſſential conditions of the union."

Upon theſe Articles and Act of Union, it is to be obſerved, 1. That the two kingdoms are now ſo inſeparably united, that nothing can ever diſunite them again; except the mutual conſent of both, or the ſucceſsful reſiſtance of either, upon apprehending an infringement of thoſe points which, when they were ſeparate and independent nations, it was mutually ſtipulated ſhould be

"fundamental

"fundamental and eſſential conditions of" the union. 2. That, whatever elſe may be deemed "fundamental and eſſential conditions," the preſervation of the two churches, of England and Scotland, in the ſame ſtate that they were in at the time of the union, and the maintenance of the acts of uniformity which eſtabliſh our common prayer, are expreſsly declared ſo to be. 3. That therefore any alteration in the conſtitution of either of thoſe churches, or in the liturgy of the church of England, (unleſs with the conſent of the reſpective churches, collectively or repreſentatively given,) would be an infringement of theſe "fundamental and eſſential conditions," and greatly endanger the union. 4. That the municipal laws of Scotland are ordained to be ſtill obſerved in that part of the iſland, unleſs altered by parliament; and, as the parliament has not yet thought proper, except in a few inſtances, to alter them, they ſtill (with regard to the particulars unaltered) continue in full force. Wherefore the municipal or common laws of England are, generally ſpeaking, of no force or validity in Scotland. 1 *Comm.* 97, 98, n.

Acts of parliament in general, paſſed ſince the union, extend to Scotland; but, where a ſtatute is not applicable to Scotland, and where Scotland is not intended to be included, the method is to declare by *proviſo* that it does not extend to Scotland. 3 *Burr.* 853. As to BERWICK, ſee vol. ii. p. 922, 3.

At the time of the union it was agreed, that the mode of the election of the peers and commons ſhould be ſettled by an act paſſed in the parliament of Scotland; which was afterwards recited, ratified, and made part of the act of union. As to the election of the ſixteen peers, ſee ſtat. 6 Ann. c. 23. With reſpect to the forty-five commoners, it was, by an act of the Scotch parliament, (and ſee ſtat. 6 Ann. c. 6,) enacted, that, of the forty-five, thirty ſhould be elected by the ſhires, and fifteen by the boroughs: that the city of Edinburgh ſhould elect one; and that the other royal boroughs ſhould be divided into fourteen diſtricts, and that each diſtrict ſhould return one; and it was alſo provided, that no perſon ſhould elect or be elected one of the forty-five, but who would have been capable of electing, or of being elected, a repreſentative of a ſhire or borough to the parliament of Scotland. The two ſtats. 9 Ann. c. 5, and 33 Geo. II. c. 20. requiring knights of ſhires and members for boroughs to have reſpectively 600l. and 300l. a-year, are expreſsly confined to England; but, a commiſſioner of a ſhire muſt be a freeholder; and it is a general rule, that none can be elected but thoſe who can elect. And it was formerly ſuppoſed, that it was neceſſary that every repreſentative of a borough ſhould be admitted a burgeſs of one of the boroughs which he repreſented, till the contrary was determined by a committee of the houſe of commons in the caſe of the borough of Wigtown; it ſtill holds generally true in ſhires in Scotland, that the qualifications of the electors and elected are the ſame; or that eligibility and a right to elect are convertible terms. 1 *Comm.* 97. n. 6. The election of members of parliament for Scotland is further regulated by Engliſh ſtatutes. The magiſtrates are required to ſummon the councils of boroughs; and an oath is to be taken by every freeholder and voter as to the eſtates to qualify them, that they are actually their own, and not fictitious: ſheriffs or ſtewards not to make any falſe return, &c. under the penalty of 500l. recoverable in a ſummary way; no judge of the court of ſeſſion, or baron of the exchequer, in Scotland, ſhall be elected a member of parliament. 7 *Geo.* II. *c.* 16. 16 *Geo.* II. *c.* 11. 14 *Geo.* III. *c.* 81.

Several acts of parliament have been paſſed, from time to time, for the internal regulation of various concerns of this part of the kingdom; the following acts are of public and general importance.

By ſtat. 6 Ann. c. 26, a court of exchequer is erected in Scotland, to be a court of record, revenue, and judicature, for ever; and barons of the ſaid court to be appointed, who ſhall be judges there.

An act for diſarming the highlands of Scotland; and requiring bail of perſons for their loyal and peaceable behaviour, &c. 1 *Geo.* I. 2. *c.* 54. Perſons ſummoned are to bring in and deliver up their arms, or, refuſing to do it, ſhall be taken as liſted ſoldiers to ſerve his majeſty beyond the ſeas; and, concealing their arms, are liable to penalties. The lords lieutenants, or juſtices of the peace, may appoint perſons to ſearch houſes for arms, &c. 11 *Geo.* I. *c.* 26.

By the ſtats. 19 Geo. II. c. 39. 20 Geo. II. c. 51. 21 Geo. II. c. 34. and 26 Geo. II. c. 29. proviſions are further made for diſarming the highlands, and reſtraining the uſe of the highland dreſs; and the maſters and teachers of private ſchools, chaplains, tutors, and governors of youth and children, are to take the oaths to his majeſty.

When any ordinary place is vacant in the court of ſeſſions in Scotland, the king may nominate a perſon, who is to be examined by the lords of the ſeſſion, and then admitted, &c. 10 *Geo.* I. c. 18.

By 20 Geo. II. c. 43, the heritable juriſdictions are taken away, and reſtored to the crown; more effectual proviſion is made for the adminiſtration of juſtice by the king's courts and judges there; and all perſons acting as procurators, writers, or agents, in the law, are to take the oaths. By 20 Geo. II. c. 50, the tenure of ward-holding is taken away, and converted into blanch and feu holding. The caſualties of ſingle and life-rent eſcheats, incurred by horning and denunciation for civil cauſes, are taken away. A ſummary proceſs is given to heirs and ſucceſſors againſt ſuperiors. The attendance of vaſſals at head-courts is diſcharged. Heirs and poſſeſſors of tailzied eſtates are empowered to ſell to the crown.

By 25 Geo. II. c. 20, certain doubts are obviated, that had ariſen with regard to the admiſſion of the vaſſals of the principality of Scotland, and payment of their rents and duties.

Peers of Scotland, and all officers, civil and military, &c. are to take the oath of abjuration, &c. A peer committing high treaſon or felony in Scotland may be tried by commiſſion under the great ſeal, conſtituting juſtices to inquire, &c. in Scotland; and the king may grant commiſſions of oyer and terminer in Scotland, to determine ſuch treaſon, &c. 6 *Ann.* c. 14. 7 *Ann.* c. 21.

Perſons having lands in Scotland, guilty of high treaſon by correſponding with, aſſiſting, or remitting money, &c. to, the pretender, on conviction, are to be liable to the pains of treaſon; and their vaſſals, continuing in dutiful allegiance, ſhall hold the ſaid lands of his majeſty in fee and heritage for ever, where the lands were ſo held of the crown by the offender: and tenants continuing peaceable, and occupying land, are to hold the ſame two years' rent-free. 1 *Geo.* I. 2. *c.* 20.

By ſtat. 19 Geo. II. c. 9, every juror for trial of high treaſon, or miſpriſion of treaſon, ſhall be poſſeſſed in his own or his wife's right of lands, &c. as proprietor or life-renter within the ſhire, &c. of the yearly value of 40s. ſterling at leaſt, or valued at 30s. ſterling per ann. in the tax-roll.

By 21 Geo. II. c. 19, offences of high treaſon, committed in the ſhire of Dumbarton, Stirling, Perth, Kincardine, Aberdeen, Inverneſs, Nairn, Cromartie, Argyl, Forfar, Bamf, Sutherland, Caithneſs, Elgine, and Roſs, or the ſhire or ſtewarty of Orkney, may be inquired of in any ſhire in Scotland, as ſhall be aſſigned by the king. Jurors may come out of adjoining counties. The practice of taking down evidence in writing, in crimes not affecting life or member, is abrogated.

By 22 Geo. II. c. 48, the court before whom any indictment for high treaſon, in Scotland, ſhall be found, may iſſue writs of capias, proclamation, and exigent, againſt the party, if not in cuſtody; whereon the defendant, not appearing, ſhall be deemed outlawed and attainted of high treaſon, or miſpriſion of high treaſon; perſons out of the kingdom, and returning within a year, may traverſe the indictment.

By 25 Geo. II. c. 41, forfeited eſtates in Scotland were

annexed to the crown inalienably, and ſatisfaction made to the lawful creditors thereupon; and the rents thereof applied for the better civilizing the highlands.

By 35 Geo. III. c. 123, and afterwards more effectually by 39 & 40 Geo. III. c. 46, regulations are made for the more eaſy and expeditious recovery of debts not exceeding 5l. ſterling, and determining of cauſes to that amount throughout Scotland, by the intervention of two juſtices of peace within their reſpective juriſdictions.

By 39 Geo. III. c. 49, the magiſtrates and judges in Scotland are empowered to extend the amount of bail to be given in criminal caſes to 1200l. ſterling for a nobleman; 600l. for a landed gentleman; 300l. for any other gentleman, burgeſs, or houſeholder; and 60l. for any inferior perſon. And on charges of ſedition any judge of the court of juſticiary, on application in the name of the king's advocate, may extend the bail beyond thoſe ſums.

By 39 & 40 Geo. III. c. 55, the ſalary of the judges was increaſed; and by 48 Geo. III. c. 145, his majeſty is empowered to grant annuities to the judges on their reſignation.

By 43 Geo. III. c. 80, and other acts, ſums have been granted out of the Britiſh exchequer, for the purpoſe of building and repairing bridges, and making and repairing roads, in the highlands. Public grants have alſo been made for the Caledonian and other canals. See alſo 46 Geo. III. c. 155, 6, applying produce of forfeited eſtates in making canals and harbours, and in other public purpoſes, ſuch as the fiſheries, lunatic aſylum, &c.

By 43 Geo. III. c. 54, proviſion is made for the better ſupport of parochial ſchool-maſters, and for better governing the pariſh-ſchools, in Scotland.

The chief of the tribunals now exiſting in Scotland for the adminiſtration of juſtice are, the Court of Seſſion and the Juſticiary Court.

The Court of Seſſion is the higheſt civil court in Scotland. It was firſt erected in the year 1425, and conſiſted of certain perſons named by the king out of the three eſtates of parliament. It was veſted with the juriſdiction formerly lodged in the council, and got the name of the *ſeſſion*, becauſe it was ordained to hold annually a certain number of ſeſſions at the places to be ſpecially appointed by the king. From the judgments of this court no appeal lay to the parliament. The judges ſerved by rotation, and were changed from time to time, after having ſat forty days. But they became ſo negligent in the adminiſtration of juſtice, that it was at laſt thought neceſſary to transfer the juriſdiction of this court to a council to be named by the king, called the *daily council*. The preſent model of the Court of Seſſion, or College of Juſtice, was formed in the reign of James V. anno 1537. The judges, who were veſted with an univerſal civil juriſdiction, conſiſted originally of ſeven church-men, ſeven laymen, and a preſident, whom it behoved to be a prelate; but ſpiritual judges were in 1584 partly, and in 1640 totally, prohibited. The judges of ſeſſion have been always received by warrants from the crown. Though judges may, in the general caſe, be named at the age of twenty-one years, the lords of ſeſſion muſt be at leaſt twenty-five. No perſon can be named lord of ſeſſion, who has not ſerved as an advocate or principal clerk of ſeſſion for five years, or as a writer to the ſignet for ten; and, in the caſe of a writer to the ſignet, he muſt undergo the ordinary trials upon the Roman law, and be found qualified two years before he can be named. Upon a vacancy in the bench, the king preſents the ſucceſſor by a letter addreſſed to the lords, wherein he requires them to try and admit the perſon preſented. The powers given to them to reject the preſentee upon trial are taken away, and a bare liberty to remonſtrate ſubſtituted in its place. Beſides the fifteen ordinary judges, the king was allowed to name three or four lords of his great council, who might ſit and vote with them. Theſe extraordinary lords were ſuppreſſed in the reign of George I.

This court formerly met upon the 12th day of June and roſe upon the 11th of Auguſt for the ſummer ſeſſion; but now, in conſequence of an act paſſed in the ſeſſion of parliament 1790, it meets on the 12th of May and riſes on the 11th of July for the ſummer ſeſſion; the winter ſeſſion ſtill remaining as formerly, viz. from the 12th of November to the 11th of March incluſive.

By ſtat. 48 Geo. III. c. 151, it was enacted, that the judges or lords of ſeſſion ſhall uſually ſit in two diviſions; the lord preſident of the whole court and ſeven of the ordinary lords forming the firſt diviſion; and the lord juſtice clerk and the ſix other ordinary lords making the ſecond diviſion; four judges in each diviſion to be a quorum; the judges in each diviſion to exerciſe the ſame powers as before. The judges of each diviſion may ſtate queſtions of law to the judges of the other. Regulations for tranſacting the buſineſs to be made by acts of ſederunt by the whole court of ſeſſion. Regulations are alſo introduced with reſpect to appeals to the houſe of lords. His majeſty is empowered to appoint a commiſſion to inquire into the forms of proceſs in the court of ſeſſion, and to report in what caſes trial by jury may be uſefully eſtabliſhed. The recent changes which have been made in the court of ſeſſion, by dividing it into two houſes, are well calculated to favour the diſpatch of buſineſs, and to prevent that notorious delay which had become the diſgrace of the Scottiſh court of judicature.

The Juſticiary Court, which is the criminal court of Scotland, conſiſts of five judges, who are likewiſe lords of ſeſſion; but with a preſident, ſtyled the lord juſtice clerk, as he is underſtood to repreſent the formerly great office of *juſticiar*, or juſtice-general, an office which ſtill continues, though it may be conſidered rather as a poſt of honour than profit. This is the ſupreme court in criminal cauſes, which are determined by the *majority* of a jury, and not by their *unanimity* as in England.

There is alſo a court of exchequer, conſiſting of a lord chief baron and four barons, who have the chief juriſdiction over the public revenue of Scotland; and a high court of admiralty, in which there is only one judge, who is the king's lieutenant and juſtice-general, on the high ſeas, and in all ports and harbours. From this court there is no appeal in maritime caſes.

Beſides the above national judges, there is, in every county a ſheriff, who acts as chief magiſtrate, and whoſe juriſdiction extends to ſome criminal caſes, and to all civil matters which are not by ſpecial law or cuſtom appropriated to other courts.

The *trial of crimes* in Scotland differs materially from the mode adopted in this country. The trial proceeds either on indictment, which is ſometimes uſed when the perſon to be tried is in priſon; or by criminal letters iſſuing from the ſignet of the juſticiary. In either caſe, the defender muſt be ſerved with a full copy of the indictment or letters, and with a liſt of the witneſſes to be brought againſt him, and of the perſons who are to paſs on the inqueſt; and fifteen days excluſive muſt intervene between his being ſo ſerved, and the day of his appearance. In England, a priſoner is entitled to this indulgence only in the caſe of high treaſon; and even there ſir Michael Foſter cenſures the meaſure, as productive of many bad conſequences. When the trial proceeds on criminal letters, the private proſecutor muſt give ſecurity, at raiſing the letters, that he will report them duly executed to the juſticiary, in terms of the ſtat. 1535, cap. 35. and the defender, who is called the *pannel*, after he has made his appearance in court, if he be not already in priſon, is, by the letters, required to give *caution*, (bail, or ſecurity,) within a certain number of days after his citation, for his appearance on the day fixed for his trial; and, if he give none within the days of the charge, he may be denounced *rebel*, by which a forfeiture of his moveables is incurred. That part of the indictment, or of the criminal letters, which contains the ground of the charge againſt the defender, and the nature or degree of the puniſhment that he ought to ſuffer, is called the *libel*: all libels muſt be

ſpecial, ſetting forth the particular facts inferring the guilt, and the particular place at which theſe facts were committed. The time of committing the offence may be libelled in more general terms, with an alternative as to the month or day of the month; but the defender will be allowed to prove that, on certain days of the time libelled, he was *alibi*; and on ſuch proof the libel cannot ſtrike againſt him as to theſe days. In this particular, the law of the two countries does not materially differ; for the authorities on this point are with us contradictory, ſome requiring the exact day to be ſpecified, and others declaring that the preciſe day is unneceſſary; for the priſoner, according to ſir Edward Coke, (2 Inſt. 318.) may be found guilty if the offence was committed on a day either prior or ſubſequent to that charged in the indictment. In the caſe of ſir Henry Vane, as reported by chief-juſtice Kelyng, the treaſon was laid in the indictment to be on the 30th of May, 11 Car. II. and the jury found him guilty of the treaſon laid in the indictment on the 30th of January, 1 Car. II. the day of the former king's execution. It was then reſolved by the court, that the day laid in the indictment was immaterial; and all ſir H. Vane's forfeitures relate to that time, to avoid all conveyances and ſettlements made by him.

The neceſſity of *ſpecial libels* prevailed formerly in Scotland, not only in the trials of principal criminals, but alſo of acceſſories; but, as it proved impracticable, in moſt caſes, to libel on the preciſe circumſtances of acceſſion that might appear in evidence, libels againſt acceſſories were declared ſufficient, if they mentioned in general that the perſons proſecuted were guilty *art and part*. The two things to be chiefly regarded in a criminal libel are, the relevancy of the facts, (i. e. their ſufficiency to infer the concluſion,) *and their truth*. The conſideration of the firſt belongs to the judges of the court; that of the other, to the jury, or aſſiſe. In trials before the juſticiary, after counſel had been heard on both ſides as to the relevancy, informations *hinc inde* were, by the ſtat. 1695, cap. 4. directed to be offered to the court; but, by virtue of the ſtat. 20 Geo. II. the judges, after the pleading, and minutes thereof made up by the clerk, may forthwith pronounce their interlocutor; reſerving power to themſelves, in caſes of difficulty, to direct informations either on the relevancy of the libel, the import of a ſpecial verdict, the degree of puniſhment, or on any other matter that may be alleged for the pannel, before judgment. In deciding on the relevancy of a libel, the court will alſo take into their conſideration whether the libel be drawn in a formal and logical way, as well as the queſtion of the ſufficiency of the facts to infer the concluſion. If the facts libelled be found irrelevant, the pannel is diſmiſſed from the bar; if relevant, the court remits him to the knowledge of an aſſiſe.

The word *aſſiſe* (from *aſſis*, ſettled or eſtabliſhed,) has different ſignifications: it is ſometimes taken for the ſittings of a court; ſometimes for its regulations or ordinances, eſpecially thoſe that fix the ſtandard of weights and meaſures; and it ſometimes ſignifies a jury, either becauſe juries conſiſted of a fixed and determinate number, or becauſe they continued ſitting till they pronounced their verdict. A jury conſiſts of *fifteen*, (not *twelve*, as with us) ſworn men *(juratores)* choſen by the court from a greater number, not exceeding forty-five, who have been ſummoned for that purpoſe by the ſheriff, and who have been given in a liſt to the defender when he was ſerved with a copy of his libel.

From this ſtatement, it will appear that our practice in England differs more in point of form than in ſubſtance from that uſed in Scotland; our demurrers to indictments before the trial, (which are incident to criminal as well as civil caſes, though now but ſeldom brought into practice,) and our motions in arreſt of judgment when the verdict has eſtabliſhed the fact, are ſimilar in principle and effect to the conſideration by the juſticiary of the relevancy of a libel.

The defender in a criminal trial may raiſe letters of exculpation for citing witneſſes in proof of his defences againſt the libel, or of his objections againſt any of the jury or witneſſes; and, as the right of the defender to prove his defences ought to be as ample and extenſive as that of the purſuer to prove his libel, letters of exculpation ought not to be refuſed on any relevant defence, though ſuch defence ſhould be inconſiſtent with the libel; otherwiſe, libels might be ſo laid as to deprive the defender of every article of exculpation. The defender has the ſame aid of the court, to compel the appearance of his witneſſes, as the proſecutor poſſeſſes; and he has the farther advantage, in every inſtance, of counſel to addreſs the jury, and to conduct his defence. From all theſe circumſtances, it is evident that the practice in Scotland is, in many particulars, more favourable to the intereſts of a priſoner than with us. No perſon could, in former times, by the law of Scotland, be convicted of the ſmalleſt offence, till he was found guilty by a jury of his countrymen; and this ſtill continues to be the practice in all proſecutions of a higher nature, whether before the ſupreme or inferior criminal courts; and no trial, even for the ſlighteſt tranſgreſſion, if purſued before the court of juſticiary, can be carried on without the intervention of a jury. In the trial of thoſe crimes to which the court of ſeſſion is competent, the fifteen judges are conſidered, as in civil caſes, in the character both of court and of jury. After all the witneſſes have been examined in court, the aſſiſers are ſhut up in a room by themſelves; where they muſt continue, excluded from all communication with others, till their verdict or judgment be ſubſcribed by the foreman (or chancellor) and clerk; and according to this verdict the court pronounces ſentence, either abſolving or condemning.

Though the proper buſineſs of a jury be to inquire into the truth of the facts found relevant by the court, for which reaſon they are ſometimes called the *inqueſt*; yet, in many caſes, they judge alſo in matters of law or relevancy. Thus, though an objection againſt a witneſs ſhould be repelled by the court, the aſſiſes are under no neceſſity of giving more credit to his teſtimony than they think juſt; and in all trials of art and part, where ſpecial facts are not libelled, the jury, if they return a general verdict, are indeed judges not only of the truth, but of the relevancy of the facts that are ſworn by the witneſſes. Thus alſo in an indictment for murder, where the court have previouſly determined the relevancy of the libel to infer the pains of death, the jury may deliver in a general verdict of not guilty, even though the facts be proved, if they are of opinion that thoſe facts amount to no higher an offence than that of manſlaughter; thus making themſelves not only judges of the truth of the facts, which is their peculiar province, but alſo judges of the ſufficiency of thoſe facts to infer the concluſions; or, in other words, judges of the *law* of the caſe. In England, the aſſiſtance of an act of parliament has been found neceſſary to give juries this power in the caſe of trials for libels. A general verdict is, as with us, that which finds in general terms that the pannel is guilty or not guilty, or that the libels or defences are proved or not proved; in a ſpecial verdict, the jury find certain facts proved, the import of which is to be afterwards conſidered by the court.

In Scotland, the power of proſecution is lodged with a public officer called the lord-advocate, but not ſo excluſively as to deprive the injured party of the right of proſecuting; a right which he often exerciſes with advantage to himſelf, as the puniſhment of the offender is not unfrequently a pecuniary compenſation to himſelf. In England, the king is the proſecutor; and the injury to the individual is quite overlooked in the conſideration of the greater injury ſuſtained by the public; and, if the puniſhment inflicted be in the nature of a fine, no part goes to the perſon injured, but the whole is reſerved for the crown.

To diſcourage groundleſs criminal trials, all proſecu-

tors, where the defender was abſolved, were condemned in coſts, as they ſhould be *modified* by the judge, which is ſimilar to our taxation of coſts; in addition, they were ſubjected to a ſmall fine, which was to be divided between the fiſk and the defender; and, where the king's advocate was the only purſuer, his informer was made liable to the payment thereof. This was the old practice, by virtue of ſome ancient ſtatutes; which ſufficiently warrant the preſent practice of condemning vexatious proſecutors in a pecuniary mulct, though far exceeding the ſtatutory ſum. Theſe particulars will remind our readers of the action for malicious proſecution with us, which is a more circuitous mode than that adopted in Scotland for redreſſing the injured party, and not equally effectual.

For ſome of the above information, we have been indebted to Erſkine's book on the Principles of the Law of Scotland. We ſhall next, from Hume's Commentaries on the Law of Scotland, proceed to point out ſome of the differences, and ſome of the coincidences, ſubſiſting in the criminal codes of the united kingdoms of England and Scotland: in the courſe of which inquiry it will appear, to adopt lord Kames's ſentiment on this ſubject, that "they have ſuch reſemblance as to bear a compariſon in almoſt every branch; and they ſo far differ as to illuſtrate each other by their oppoſition."

In the law of England, *theft* is only of things perſonal, and not of things real, or things which appertain to, or ſavour of, the realty. Under this rule, there is no theft, at common law, of nurſery-plants, nor of growing trees, nor of any of the growing fruits of the ground; nor of hedge-paling, nor of lead, iron, or other thing united to a houſe: as alſo the writings of any real eſtate are not ſubjects of this crime; neither are bonds, bills, or other choſes in action; though for this a different reaſon is given. But to all theſe (as we ſhould eſteem them) artificial diſtinctions, the practice in Scotland has ever been a ſtranger, and recogniſes the theft of every inanimate thing, which can be ſevered from that which, either naturally or by art, it is attached to, and be carried away. Thus, in the caſe of James Inglis, relevancy was found on the tearing of wool from ſheep, and carrying it away; and, long before this, ſentence of death had paſſed upon James Gray, convicted of pulling wool from nine ewes, and ſtealing an ewe, and carrying off the wool which he had pulled; 17th March 1581. Alſo, in the caſe of James Miln, accuſed of ſtealing ſhorn grain, ſhearing graſs, and carrying it away, and pulling up growing peaſe, and carrying them away, all of which were charged under the name of *theft* only, the trial proceeded on that footing as to the whole articles; and the man was tranſported. It ſeems even to be the more probable opinion, according to the analogy of what is ſettled, that the ſeparating and carrying away of part of the ſubſtance of the tenement itſelf ſhall be judged by the ſame rule. It is true, that injuries of this ſort are ordinarily done in that open manner, and are accompanied with thoſe circumſtances which bear evidence of a treſpaſs only or moleſtation; but it ſeems to be only there that the diſtinction lies; for, if one come in the night-time and work coal in his neighbour's pit, or ſtone in his quarry, or fuel in his moſs, and carry it away and hide it, this ſeems to be juſt ſuch an act as the cutting off the leaden ſpouts or tearing up iron ſpikes of his houſe, which is certainly theft.

With reſpect to writings, the law has been ſettled againſt the thief, by repeated judgments. As long ago as the 23d June, 1599, Grizel Matthew had ſentence of death, for ſtealing a coffer with writs and evidents. Alſo James and William Wood, and Alexander Dow, had ſentence of death, for breaking into the houſe of Bonnington, and ſtealing the whole writs and evidents of that eſtate, contained in a coffer, together with certain articles of furniture, and another coffer, alſo containing writs; as had Patrick Eviot, convicted of common theft, and of ſtealing a leather wallet, whereof the principal contents were certain title-deeds, which the owner was carrying to obtain a charter of confirmation. On the 6th of November, 1635, Michael Scot was ſent to an aſſiſe, on a charge of ſtealing certain bonds of borrowed money from the owner's cheſt; but he was acquitted. Relevancy was found to the ſame effect in the following caſes: Againſt Alexander Steel, for ſtealing three diſpoſitions and charters of the eſtates of Tawie; againſt James Graham, *alias* Gramoch Gregorick, for invading the duke of Montroſe's factor, when collecting rents at Chappell-aroch, and taking from him money or books, papers or accounts; and againſt John Johnſton for ſtealing a pocket-book, containing bank-notes, "with ſeveral other papers of leſs value." In this caſe an objection was ſtated to the charge, and was overruled. *Hume's Comm.*

It is to be obſerved that moſt of the offences ſpecified above, as not being felony by the *Engliſh law*, have been made felony by various ſtatutes; and it was only by the *common law* that a larceny was determined not to be committed in ſuch ſubjects. The puniſhment of this offence is with us preciſe, fixed, and aſcertained; in Scotland, it is diſcretionary in the judges, from the loweſt to the higheſt meaſure of puniſhment, and is governed by the circumſtances of each individual caſe; it muſt in courſe remain vague, uncertain, and differing according to the diſpoſitions and judgments of the perſons before whom the delinquency is tried. *Reſet of theft*, which is receiving and keeping ſtolen goods, knowing them to be ſuch, and with the intention of concealing them from the owner, is, according to the more received opinion, liable to arbitrary pains ſhort of death.

The crime of *arſon*, or wilful fire-raiſing, as it is more malignant in its nature and more pernicious in its conſequences than moſt other tranſgreſſions, has been viewed with the deepeſt indignation, and in moſt countries puniſhed with the greateſt ſeverity. In Scotland, this crime, by virtue of the old ſtatute 1528. cap. 8. was in certain caſes raiſed to the rank of treaſon. "The auld lawes (ſays that act) ſhall be keeped with this addition, that quha cummis and burnis folkes in their houſes, and all burninges of houſes and cornes, and wilful fire-raiſings, be treaſon, and crime of leſſe majeſtie." By the ſtat. 7 Anne, c. 21. this offence was lowered to the ordinary condition of a capital offence, and was ordered to be puniſhed as ſuch. The ſtat. 8 Hen. VI. cap. 6. made arſon, under ſome ſpecial circumſtances therein mentioned, amount to treaſon; but it was reduced to felony by the general acts of Edward VI. and queen Mary.

To the crime of *forgery* this peculiarity belongs, that it is as competent to the court of ſeſſion as to the court of juſticiary to try for this offence; and Mr. Hume mentions the following reaſons, which he calls *obvious*, for the practice: "The crime often comes to light in the courſe of proceſs depending in that court; whence ariſes a contingent juriſdiction over the offender, who is chaſtiſed ſummarily and without delay, in the very tribunal where he has tranſgreſſed, for his ſcandalous attempt to impoſe upon their wiſdom, and to pervert the court of juſtice. Another and an equally-ſubſtantial reaſon, lies in the very difficult and tedious nature, generally ſpeaking, of the proof of forgery, which is often impoſſible to be abſolved, as muſt be the caſe with every trial by aſſiſe and in the criminal court, in the courſe of a ſingle ſitting." We preſume, from this circumſtance, that the intervention of a jury is neceſſary in one court, and inadmiſſible in the other; which is a material objection to this concurrence of juriſdiction. We are aware that a perſon found guilty by the court of ſeſſion may by them be remitted to the court of juſticiary; in which caſe an indictment is there exhibited againſt him, and a jury is ſworn, before whom the decree of ſeſſion is produced inſtead of all other evidence of the crime in reſpect of which the jury find the pannel guilty; ſo that *that* decree, being pronounced by a competent court, is holden as full proof, or, in the ſtyle of the bar, as *probatio probata*. Can a jury thus reſtricted in its powers aſſiſt a priſoner, or be conſidered in any other light

light than that of a nullity? On him who commits this offence, ſo difficult to be prevented, ſo deſtructive to the intereſts of ſociety, the judges may inflict a capital puniſhment; they are not, however, conſtrained to do ſo, but poſſeſs a diſcretionary power, as in the caſe of theft, to accommodate the pain to the whole circumſtances of the offender and of the tranſgreſſion.

To the following law, created by the ſtatute 1661. cap. 20, we are acquainted with nothing in our law at all ſimilar. The act ordains "That whoſoever, ſon or daughter, above the age of ſixteen years, not being diſtracted, ſhall beat or curſe either father or mother, ſhall be put to death without mercy; and ſuch as are within the age of ſixteen years, and paſt the age of pupillarity, to be puniſhed at the arbitriment of the judge, according to their deſervings; that others may hear and fear, and not do the like." The object of this enactment was, as Mr. Hume obſerves, not only to guard the parent againſt the violence of perſons who have ſo many opportunities of indulging their hatred, if once, unhappily, they ſhall be poſſeſſed with it; but alſo, and perhaps chiefly, for the intereſts of morality and order which are ſo deeply wounded by the unnatural ſpectacle of the hand of the child lifted againſt the parent, or his tongue directing curſes againſt thoſe whom moſt he ought to cheriſh and revere. In ſome meaſure, we muſt conſider the crimes of inceſt, adultery, fornication, and blaſphemy, (being connected with the preſervation of religion and morality,) and their reſpective puniſhments, as allied to the laſt-mentioned tranſgreſſion. In all of theſe delinquencies the law of Scotland is much more ſevere than with us; inceſt is puniſhable with death; adultery and fornication are ſtill viewed in the light of crimes, and as ſuch are cogniſable and puniſhable in the temporal courts, though the ſeverity of that puniſhment is of late years much mitigated. Blaſphemy is in Scotland puniſhable capitally; in England, by fine and impriſonment, or other infamous corporal puniſhment. Of perjury and ſubornation of perjury the puniſhment is diſcretional in the judges, who have it in their power to ſentence capitally for the commiſſion of theſe crimes.

The following particulars are ſelected from the elaborate treatiſe on the Law of Scotland in the Encyclopædia Britannica.

Of Huſband and Wife.—As no perſon is preſumed capable of conſent within the years of pupillarity, which, by the Scots law, laſts till the age of fourteen in males, and twelve in females, marriage cannot be contracted by *pupils*; but, if the married pair ſhall cohabit after puberty, ſuch acquieſcence gives force to the marriage. Marriage is fully perfected by conſent; which, without conſummation, founds all the conjugal rights and duties. The conſent requiſite to marriage muſt be *de præſenti*. A promiſe of marriage *(ſtipulatio ſponſalitia)* may be reſiled from, as long as matters are entire; but, if any thing be done by one of the parties, whereby a prejudice ariſes from the non-performance, the party reſiling is liable in damages to the other.

It is not neceſſary that marriage ſhould be celebrated by a clergyman. The conſent of parties may be declared before any magiſtrate, or ſimply before witneſſes; and, though no formal conſent ſhould appear, marriage is preſumed from the cohabitation, or living together at bed and board, of a man and woman who are generally reputed huſband and wife. One's acknowledgment of his marriage to the midwife whom he called to his wife, and to the miniſter who baptized his child, was found ſufficient preſumptive evidence of marriage, without the aid either of cohabitation or of *habit* and *repute*. The father's conſent was, by the Roman law, eſſential to the marriage of children *in familia*; but, by our law, children may enter into marriage, without the knowledge, and even againſt the remonſtrances, of a father.

To prevent bigamy and inceſtuous marriages, the church has introduced proclamations of banns; which is the ceremony of publiſhing the names and deſignations of thoſe who intend to intermarry in the churches where the bride and bridegroom reſide, after the congregation is aſſembled for divine ſervice; that all perſons who know any objection to the marriage may offer it. When banns are publiſhed, as with us, the marriage is called *regular*; when otherwiſe, *clandeſtine*. But marriage is valid when entered into in either of theſe ways; only, when clandeſtine, there are certain penalties impoſed upon the parties, as well as the celebrator and witneſſes.

If the huſband ſhould either withdraw from his wife, or turn her out of doors; or if, continuing in family with her, he ſhould by ſevere treatment endanger her life; the commiſſaries will authorize a ſeparation *à menſa et thoro*, and give a ſeparate alimony to the wife, ſuitable to her huſband's eſtate, from the time of ſuch ſeparation until either a reconciliation or a ſentence of divorce.

A huſband who ſuſpects that his wife may hurt his fortune by high living, may uſe the remedy of *inhibition* againſt her; by which all perſons are interpelled from contracting with her, or giving her credit. Inhibition may paſs at the ſuit of the huſband againſt the wife, though he ſhould not offer to juſtify that meaſure by an actual proof of the extravagance or profuſion of her temper.

Marriage is diſſolved by death, either *within* year and day from its being contracted, or *after* year and day. If it is diſſolved within year and day, all rights granted in conſideration of the marriage (unleſs guarded againſt in the contract) become void, and things return to the ſame condition in which they ſtood before the marriage; with this reſtriction, that the huſband is conſidered as a *bona-fide* poſſeſſor, in relation to what he has conſumed, upon the faith of his right; but he is liable to repay the tocher, without any deduction, in conſideration of his family-expenſe during the marriage. If a living child be procreated of the marriage, the marriage has the ſame effect as if it had ſubſiſted beyond the year. A day is adjected to the year, *in majorem evidentiam*, that it may clearly appear that the year itſelf is elapſed; and therefore, the running of any part of the day, after the year, has the ſame effect as if the whole were elapſed.

Divorce is ſuch a ſeparation of married perſons, during their lives, as looſes them from the nuptial tie, and leaves them at freedom to intermarry with others. But neither adultery, nor wilful deſertion, are grounds which muſt neceſſarily diſſolve marriage; they are only handles, which the injured party may take hold of to be free. Cohabitation, therefore, by the injured party, after being in the knowledge of the acts of adultery, implies a paſſing from the injury; and no divorce can proceed which is carried on by colluſion betwixt the parties, left, contrary to the firſt inſtitution of marriage, they might diſengage themſelves by their own conſent; and though, after divorce, the guilty perſon, as well as the innocent, may contract ſecond marriages; yet, in the caſe of divorce upon adultery, marriage is by ſpecial ſtatute prohibited betwixt the two adulterers. A divorce obtained in Scotland does not qualify either party to contract a ſecond marriage in England.

Where either party has deſerted from the other for four years together, that other may ſue for *adherence*. If this has no effect, the church is to proceed, firſt by admonition, then by excommunication; all which previous ſteps are declared to be a ſufficient ground for purſuing a divorce. The commiſſaries pronounce ſentence in the adherence after one year's deſertion; but four years muſt intervene between the firſt deſertion and the decree of divorce.

Baſtards may be legitimated, 1. By the ſubſequent intermarriage of the mother of the child with the father; and this ſort of legitimation entitles the child to all the rights of lawful children. The ſubſequent marriage, which produces legitimation, is conſidered by the law to have been entered into when the child legitimated was begotten; and hence, if he be a male, he excludes, by his right

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of primogeniture, the ſons procreated after the marriage, from the ſucceſſion of the father's heritage, though ſuch ſons were lawful children from the birth. Hence, alſo, thoſe children only can be thus legitimated, who are begotten of a woman whom the father might at that period have lawfully married. 2. Baſtards are legitimated by letters of legitimation from the ſovereign. But letters of legitimation, let their clauſes be ever ſo ſtrong, cannot enable the baſtard to ſucceed to his natural father, to the excluſion of lawful heirs. A baſtard can have no legal heirs, except thoſe of his own body; ſince there is no ſucceſſion but by the father, and a baſtard has no certain father. The king therefore ſucceeds to him, failing his lawful iſſue, as laſt heir. Though the baſtard, as abſolute proprietor of his own eſtate, can diſpoſe of his heritage and of his moveables by any deed during his life; yet he is diſabled, *ex defectu natalium*, from bequeathing by teſtament, without letters of legitimation from the ſovereign. If the baſtard has lawful children, he may teſt without ſuch letters.

Minors may be relieved againſt all deeds granted in their minority, that are hurtful to them. Even where a minor, having guardians, executes a deed hurtful to himſelf with their conſent, he has not only action againſt them, but he has the benefit of reſtitution againſt the deed itſelf. The minor may raiſe and execute a ſummons for reducing the deed at any time before he be twenty-five years old. Theſe four years, between the age of twenty-one and twenty-five, called *quadriennium utile*, are indulged to the minor, that he may have a reaſonable time, from that period, when he is firſt preſumed to have the perfect uſe of his reaſon, to conſider with himſelf what deeds done in his minority have been truly prejudicial to him.

Of Maſter and Servant.—All ſervants now enjoy the ſame rights and privileges with other ſubjects, unleſs in ſo far as they are tied down by their engagements of ſervice. Servants are either neceſſary or voluntary. *Neceſſary* are thoſe whom the law obliges to work without wages, of whom immediately. *Voluntary* ſervants engage without compulſion, either for mere ſubſiſtence, or alſo for wages. Thoſe who earn their bread in this way, if they ſhould ſtand off from engaging, may be compelled to it by the juſtices of the peace, who have power to fix the rate of their wages.

Colliers, coal-bearers, ſalters, and other perſons neceſſary to colliers and ſalt-works, as they are particularly deſcribed by act 1661, were formerly tied down to perpetual ſervice at the works to which they had once entered. Upon a ſale of the works, the right of their ſervice was transferred to the new proprietor. All perſons were prohibited to receive them into their ſervice, without a teſtimonial from their laſt maſter; and, if they deſerted to another work, and were re-demanded within a year thereafter, he who had received them was obliged to return them within twenty-four hours, under a penalty. But, though the proprietor ſhould neglect to require the deſerter within a year, he did not by that ſhort preſcription, loſe his property in him. Colliers, &c. where the colliery to which they were reſtricted was either given up, or not ſufficient for their maintenance, might lawfully engage with others; but, if that work ſhould be again ſet going, the proprietor might reclaim them back to it. It was not till the 15 Geo. III. c. 28. that theſe reſtraints, theſe veſtiges of ſlavery in the law of Scotland, were abrogated; and, accordingly, after the 1ſt of July, 1775, all colliers, coal-bearers, and ſalters, are declared to be upon the ſame footing with other ſervants or labourers. The act ſubjected thoſe who were bound prior to the 1ſt of July, 1775, to a certain number of years' ſervice for their freedom, according to the age of the perſon.

The poor make the loweſt claſs or order of perſons. *Indigent children may be compelled to ſerve any of the king's ſubjects without wages till the age of thirty years.* Vagrants and ſturdy beggars may be alſo compelled to ſerve any manufacturer. And, becauſe few perſons were willing to receive them into their ſervice, public workhouſes are ordained to be built for ſetting them to work. The poor who cannot work, muſt be maintained by the pariſhes in which they were born; and, where the place of their nativity is not known, that burden falls upon the pariſhes where they have had their moſt common reſort for the three years immediately preceding their being apprehended, or their applying for the public charity. Where the contributions collected at the churches to which they belong are not ſufficient for their maintenance, they are to receive badges from the miniſter and kirk-ſeſſion, in virtue of which they may aſk alms at the dwelling-houſes of the inhabitants of the pariſh.

Of Debtor and Creditor.—After a debtor is impriſoned, *he is not to be indulged the benefit of the air, not even under a guard*; for creditors have an intereſt, that their debtor be kept under cloſe confinement, that, by the *ſqualor carceris*, they may be brought to pay their debt; and any magiſtrate or jailor, who ſhall ſuffer the priſoner to go abroad, without a proper atteſtation, upon oath, of the dangerous ſtate of his health, is liable for the debt. Magiſtrates are in like manner liable if they ſhall ſuffer a priſoner to eſcape through the inſufficiency of their priſon; but, if he ſhall eſcape under night, by the uſe of inſtruments, or by open force, or by any other accident which cannot be imputed to the magiſtrates or jailor, they are not chargeable with the debt; provided they ſhall have, immediately after his eſcape, made all poſſible ſearch for him. A caſe lately occurred where a meſſenger having apprehended a perſon for a debt, upon letters of caption, delivered him over to the provoſt of the burgh, and took a receipt for him. The provoſt allowed him to remain at the inn all night, and afterwards allowed him what is called *open gaol*, by which he had acceſs to the court-houſe, under the ſame roof with the priſon, where he tranſacted buſineſs. As the perſon at whoſe inſtance he was apprehended upon the caption, conſidered that the magiſtrates had not kept the debtor in priſon as commanded by the letters, he brought an action againſt them for the debt, *although the debtor had not ſo much as attempted to make his eſcape.* It was contended by the magiſtrates, that they were not liable, having only followed the uſual practice of the burgh; but the court of ſeſſion, conſidering the magiſtrates as principal keepers of the priſon, and as ſuch having no diſcretionary power, were of opinion, that the debtor had never been impriſoned in the eye of the law, and therefore found the magiſtrates liable; and their judgment was affirmed upon an appeal. Regularly, no priſoner for debt upon letters of caption, though he ſhould have made payment, could be releaſed without letters of ſuſpenſion, containing a charge to the jailor to ſet him at liberty; becauſe the creditor's diſcharge could not take off the penalty incurred by the debtor for contempt of the king's authority; but, to ſave unneceſſary expenſe to debtors in ſmall debts, jailors are empowered to let go priſoners where the debt does not exceed 200 merks Scots, upon production of a diſcharge in which the creditor conſents to his releaſe.

Inſolvent debtors may apply for a releaſe from priſon upon a *ceſſio bonorum*, i. e. upon their making over to the creditors all their eſtate, real and perſonal. This muſt be inſiſted for by way of action, to which all the creditors of the priſoner ought to be made parties. The priſoner muſt, in this action, exhibit a particular inventory of his eſtate, and make oath that he has no other eſtate than is therein contained, and that he has made no conveyance of any part of it, ſince his impriſonment, to the hurt of his creditors.

A caſe of importance was lately determined by the court of ſeſſion at Edinburgh, relative to the application of the principle of the *ceſſio bonorum*, between a man named Schiniman and his creditors. The queſtion was "Whether an individual, convicted of groſs and culpable extravagance, who for a number of years lived in a manner totally unſuitable to his manner in life, without the proſpect

ſpect of being able to diſcharge his debts, is entitled to the benefit of the *ceſſio?*" The creditors oppoſed it, becauſe a man who has, by a "vein of extravagance," without loſſes, been reduced to indigence, is not entitled to the benefit of it. The petitioner contended, that mere extravagance of living, with his family, in the degree alluded to, never had been in any inſtance conſidered as a bar to the *ceſſio*; and that, if he ſhould be refuſed that benefit, it would introduce a rule into the proceſs of *ceſſio*, different from what had been acted upon in all former practices of the court. The court (22d of June, 1811) "refuſed to the purſuer the benefit of the proceſs of *ceſſio bonorum in hoc ſtatu.*" The purſuer gave in a petition to the court againſt this judgment, and the court (16th of Nov. 1811) "adhered to their former judgment." Some of the judges expreſſed an opinion, that it appeared to be a new kind of morality to ſay, that a man is juſtifiable for running into every ſort of extravagance, provided he makes his wife and children ſharers in that extravagance. Neither is a fraudulent bankrupt allowed this privilege; nor a criminal who is liable in any indemnification to the party injured or his executors, though the crime itſelf ſhould be extinguiſhed by a pardon.

A diſpoſition granted on a *ceſſio bonorum* is merely in farther ſecurity to the creditors, not in ſatisfaction of the debts. If, therefore, the debtor ſhould acquire any eſtate after his releaſe, ſuch eſtate may be attached by his creditors, as if there had been no *ceſſio*, except in ſo far as is neceſſary for his ſubſiſtence. Debtors, who are ſet free on a *ceſſio bonorum*, are obliged to wear a habit proper to dyvours, or bankrupts. The lords are prohibited to diſpenſe with this mark of ignominy, unleſs, in the ſummons and proceſs of *ceſſio*, it be proved that the bankruptcy proceeds from misfortune. And bankrupts are condemned to ſubmit to the habit, even where no ſuſpicion of fraud lies againſt them, if they have been dealers in an illicit trade.

Deforcement is the oppoſition given, or reſiſtance made, to meſſengers or other officers, while they are employed in executing the law. It is puniſhable with the confiſcation of moveables, the one half to the king, and the other to the creditor at whoſe ſuit the *diligence* was uſed. Armed perſons, to the number of three or more, aſſiſting in the illegal running, landing, or exporting, of prohibited or uncuſtomed goods, or any who ſhall reſiſt, wound, or maim, any officer of the revenue, in the execution of his office, are puniſhable with death and the confiſcation of moveables.

Murder is the wilful taking away of a perſon's life, without a neceſſary cauſe. The Scots law makes no diſtinction betwixt premeditated and ſudden homicide; both are puniſhed capitally. The puniſhment of parricide, or of the murder of a parent, is not confined to the criminal himſelf: all his poſterity in the right line are declared incapable of inheriting; and the ſucceſſion devolves on the next collateral heir.

Duelling without licenſe from the king, is puniſhable by death; and whatever perſon, principal or ſecond, ſhall give a challenge to fight a duel, or ſhall accept a challenge, or otherwiſe engage therein, is puniſhed by baniſhment and eſcheat of moveables, though no actual fighting ſhould enſue.

Execution. Criminal judges muſt now ſuſpend for ſome time the execution of ſuch ſentences as affect life or limb, that ſo condemned criminals may have acceſs to apply to the king for mercy. No ſentence of any court of judicature ſouth of the river Forth, importing either death or demembration, can be executed in leſs than thirty days; and, if north of it, in leſs than forty days, after the date of the ſentence. But corporal puniſhments, leſs than death or diſmembering, e. g. whipping, pillory, &c. may be inflicted eight days after ſentence on this ſide the Forth, and twelve days after ſentence beyond it.

V. Of the LAW of IRELAND.

Ireland, until the late union, was a diſtinct kingdom; and, up to 22 & 23 Geo. III. a dependent ſubordinate kingdom under the crown of Great Britain.

Anciently it was only entitled the Dominion or Lordſhip of Ireland, (*ſtat. Hiberniæ*, 14 *Hen.* III.) and the king's ſtyle was no other than *dominus Hiberniæ*, lord of Ireland, till the title of king was conferred upon him and his ſucceſſors by a ſtatute paſſed in Ireland expreſsly for that purpoſe, and it was made treaſon for any inhabitant of Ireland to deny it. 33 *Hen.* VIII. c. 1. *Iriſh ſtat.*

The inhabitants of Ireland are, for the moſt part deſcended from the Engliſh, who planted it as a kind of colony, after the conqueſt of it by king Henry II. and the laws of England were then received and ſworn to by the Iriſh nation, aſſembled at the council of Liſmore. *Pryn. on* 4 *Inſt.* 249.

At the time of this conqueſt, the Iriſh were governed by what they called the *Brehon-law*, ſo ſtyled from the Iriſh name of the judges, who were denominated *brehons.* 4 *Inſt.* 358. But king John, in the twelfth year of his reign, went into Ireland, and carried over with him many able ſages of the law; and there, by his letters patent, in right of the dominion of conqueſt, is ſaid to have ordained and eſtabliſhed, that Ireland ſhould be governed by the laws of England; (*Vaugh.* 294. 2 *Pryn. Rec.* 85. 7 *Rep.* 23) which letters patent, ſir Edward Coke (1 *Inſt.* 141.) apprehends to have been there confirmed in parliament. But to this ordinance many of the Iriſh were averſe to conform, and ſtill ſtuck to their Brehon-law; ſo that both Henry III. and Edward I. were obliged to renew the injunction; and at length, in a parliament holden at Kilkenny, 40 Edw. III. under Lionel duke of Clarence, then lieutenant of Ireland, the Brehon-law was formally aboliſhed, it being unanimouſly declared to be "indeed no law, but a lewd cuſtom crept in of later times." And yet, even in the reign of queen Elizabeth, the wild natives ſtill kept and preſerved their Brehon law; which is deſcribed (*Edm. Spenſer*, p. 1513.) to have been "a rule of right unwritten, but delivered by tradition from one to another; in which oftentimes there appeared great ſhow of equity in determining the right between party and party, but in many things repugnant quite both to God's laws and man's." The latter part of this character is alone aſcribed to it, by the laws before-cited of Edward I. and his grandſon. See IRELAND, vol. xi. p. 298.

But, as Ireland was a diſtinct dominion, and had parliaments of its own, it is to be obſerved, that, though the immemorial cuſtoms or common law of England were made the rule of juſtice in Ireland alſo, yet no acts of the Engliſh parliament extended into that kingdom, unleſs it were ſpecially named, or included under general words, ſuch as, "within any of the king's dominions." And this is particularly expreſſed, and the reaſon given (in the year-books; 20 *Hen.* VI. *c.* 8. 2 *Ric.* III. *c.* 12.) "A tax granted by the parliament of England ſhall not bind thoſe of Ireland, becauſe they are not ſummoned to our parliament;" and again, "Ireland hath a parliament of its own, and maketh and altereth laws; and our ſtatutes do not bind them, becauſe they do not ſend knights to our parliament: but their perſons are the king's ſubjects, like as the inhabitants of Calais, Gaſcoigne, and Guienne, while they continued under the king's ſubjection." The general run of laws, enacted by the ſuperior ſtate, are ſuppoſed to be calculated for its own internal government, and do not extend to its diſtant dependent countries, which, bearing no part in the legiſlature, are not therefore in its ordinary and daily contemplation. But, when the ſovereign legiſlative power ſees it neceſſary to extend its care to any of its ſubordinate dominions, and mentions them expreſsly by name, or includes them under general words, there can be no doubt but then they are bound by its laws. *Year Book*, 1 *Hen.* VII. *c.* 3. 7 *Rep.* 22. Calvin's caſe.

The original method of paſſing ſtatutes in Ireland was nearly

nearly the ſame as in England, the chief governor holding parliaments at his pleaſure, which enacted ſuch laws as they thought proper. *Iriſh ſtat.* 11 *Eliz. ſt.* 3. *c.* 8. But, an ill uſe being made of this liberty, particularly by lord Gormanſtown, deputy-lieutenant in the reign of Edward IV. (*Iriſh ſtat.* 10 *Hen.* VII. *c.* 23.) a ſet of ſtatutes were there enacted in the 10 Hen. VII. ſir Edward Poynings being then lord deputy, whence they are called *Poynings' laws*; one of which (cap. 4. expounded by 3 and 4 Ph. & Mar. c. 4.) in order to reſtrain the power as well of the deputy as the Iriſh parliament, provided, 1. That, before any parliament be ſummoned or holden, the chief governor and council of Ireland ſhould certify to the king, under the great ſeal of Ireland, the conſiderations and cauſes thereof, and the articles of the acts propoſed to be paſſed therein. 2. That, after the king, in his council of England, ſhould have conſidered, approved, or altered, the ſaid acts, or any of them, and certified them back under the great ſeal of England, and ſhould have given licence to ſummon and hold a parliament, then the ſame ſhould be ſummoned and held; and therein the ſaid acts ſo certified, and no other, ſhould be propoſed, received, or rejected. 4 *Inſt.* 353. But, as this precluded any laws from being propoſed, but ſuch as were pre-conceived before the parliament was in being, which occaſioned many inconveniences, and made frequent diſſolutions neceſſary, it was provided, by the ſtatute of Philip and Mary, before-cited, that any new propoſitions might be certified to England in the uſual forms, even after the ſummons and during the ſeſſion of parliament. By this means, however, there was nothing left to the parliament in Ireland, but a bare negative, or power of rejecting, not of propoſing or altering, any law. But the uſage, till the independence of Ireland in 1782, 3, was, for bills to be framed in either houſe, under the denomination of "heads for a bill or bills;" and in that ſhape they were offered to the conſideration of the lord lieutenant and privy council; who, upon ſuch parliamentary intimation, or otherwiſe upon the application of private perſons, received and tranſmitted ſuch heads, or rejected them without any tranſmiſſion, to England.

But the Iriſh nation, being excluded from the benefit of the Engliſh ſtatutes, were deprived of many good and profitable laws, made for the improvement of the common law; and the meaſure of juſtice in both kingdoms becoming thence no longer uniform, it was therefore enacted, by another of Poynings' laws, cap. 22, that all acts of parliament, before made in England, ſhould be of force within the realm of Ireland. 4 *Inſt.* 351. But, by the ſame rule, that no laws made in England between king John's time and Poynings' law were then binding in Ireland, it followed that no acts of the Engliſh parliament made ſince the 10 Hen. VII. could bind the people of Ireland, unleſs ſpecially named, or included under general words. 12 *Rep.* 112.

But this ſtate of dependence being almoſt forgotten, and ready to be diſputed by the Iriſh nation, it became neceſſary to declare how that matter really ſtood; and therefore, by ſtat. 6 Geo. I. c. 5. it was declared "that the kingdom of Ireland ought to be ſubordinate to, and dependent upon, the imperial crown of Great Britain, as being inſeparably united thereto; and that the king's majeſty, with the conſent of the lords and commons of Great Britain in parliament, hath power to make laws to bind the people of Ireland."

The laws of Ireland thus communicated with thoſe of England; and it was by the ſame ſtatute expreſsly declared, "that the peers of Ireland have no juriſdiction to affirm or reverſe judgments or decrees whatſoever." So that, from that time up to 1782–3, the ultimate reſort from the courts of juſtice in Ireland was, as in Wales, to thoſe in England; a writ of error in nature of an appeal lying from the king's bench in Ireland to the king's bench in England, as the appeal from the chancery in Ireland lay immediately to the houſe of lords here.

But, this ſubjection of the people of Ireland having occaſioned much popular diſcontent in that country, the act 22 Geo. III. c. 53, repealed the ſtatute of Geo. I. However, as the ſtatute of Geo. I. was thought to be merely declaratory of the former law, the repeal of it could produce no farther operation than to render the law in ſome degree leſs clear than that ſtatute had made it. Therefore, to produce the intended effect, it required another ſtatute, the 23 Geo. III. c. 28, which expreſsly declared, "that, in all caſes whatever, the people of Ireland ſhould be bound only by laws enacted by his majeſty and the parliament of *that* kingdom; and that no appeal or writ of error from any court in Ireland ſhould for the future be brought into any of the courts in England."

Since theſe laſt acts, the great and important events of AN UNION between GREAT BRITAIN and IRELAND hath taken place.

The manner in which this happy conſolidation of the national rights and intereſts of both countries, was brought about, appear from the ſtat. 39 & 40 Geo. III. c. 77. which is in ſubſtance as follows:

In purſuance of his majeſty's moſt gracious recommendation to the two houſes of parliament in Great Britain and Ireland reſpectively, to conſider of ſuch meaſures as might beſt tend to ſtrengthen and conſolidate the connection between the two kingdoms, the two houſes of parliament in each country reſolved, that, in order to promote and ſecure the eſſential intereſts of Great Britain and Ireland, and to conſolidate the ſtrength, power, and reſources, of the Britiſh empire, it was adviſeable to concur in ſuch meaſures as ſhould beſt tend to unite the two kingdoms into one kingdom, on ſuch terms and conditions as ſhould be eſtabliſhed by the acts of the reſpective parliaments in the two countries. And, in furtherance of that reſolution, the two houſes of each parliament agreed upon *eight articles*, which, by an addreſs of the reſpective houſes of parliament, were laid before his majeſty for his conſideration; and, his majeſty having approved of the ſame, and having recommended it to his parliaments in Great Britain and Ireland to give full effect to them, they were ratified by an act of parliament of Great Britain on the 2d of July, 1800.

ART. 1. That the kingdoms of Great Britain and Ireland ſhall, on the firſt day of January, 1801, and for ever after, be united into one kingdom, by the name of The UNITED KINGDOM of GREAT BRITAIN and IRELAND; and that the royal ſtyle and titles of the imperial crown, and the enſigns, armorial flags, and banners, ſhall be ſuch as ſhould be appointed by his majeſty's royal proclamation.

2. That the ſucceſſion to the imperial crown ſhall continue ſettled in the ſame manner as the ſucceſſion to the crown of Great Britain and Ireland ſtood before limited.

3. That there ſhall be one parliament, ſtyled, The Parliament of the United Kingdom of Great Britain and Ireland.

4. That four lords ſpiritual of Ireland, *by rotation* of ſeſſions, viz. one of the four archbiſhops, and three of the eighteen biſhops, and twenty-three lords temporal elected *for life* by the peers of Ireland, ſhall ſit in the houſe of lords of the parliament of the united kingdom; and, in the houſe of commons, one hundred commoners; two for each of the thirty-two counties in Ireland; two for Dublin, two for Cork, one for Trinity-college, Dublin, and one for each of the thirty-one moſt conſiderable cities, towns, and boroughs; viz. Waterford, Limeric, Belfaſt, Drogheda, Carrickfergus, Newry, Kilkenny, Londonderry, Galway, Clonmel, Wexford, Youghal, Bandonbridge, Armagh, Dundalk, Kinſale, Liſburn, Sligo, Catherlough, Ennis, Dungarvon, Downpatrick, Coleraine, Mallow, Athlone, New Roſs, Tralee, Caſhel, Dungannon, Portarlington, and Enniſkillen. 40 *Geo.* III. *c.* 29.

That queſtions reſpecting the rotation or election of the ſpiritual or temporal peers ſhall be decided by the houſe

houſe of lords; and, in the caſe of an equality of votes in the election of a temporal peer, the clerk of the parliament ſhall determine the election by drawing one of the names from a glaſs.

That a peer of Ireland, not elected one of the twenty-eight, may ſit in the houſe of commons; but, whilſt he continues a member of the houſe of commons, he ſhall not be entitled to the privilege of peerage, nor capable of being elected one of the twenty-eight, nor of voting at ſuch election; and he ſhall be ſued and indicted for any offence as a commoner.

That, as often as three of the peerages of Ireland, exiſting at the time of the union, ſhall become extinct, the king may create one peer of Ireland: and, when the peers of Ireland are reduced to one hundred by extinction, or otherwiſe, excluſive of thoſe who ſhall hold any peerage of Great Britain ſubſiſting at the time of the union, or created of the united kingdom ſince the union, the king may then create one peer of Ireland for every peerage that becomes extinct, *or as often as any of them is created a peer of the united kingdom*; ſo that the king may always keep up the number of one hundred Iriſh peers, over and above thoſe who have an hereditary ſeat in the houſe of lords.

That queſtions reſpecting the election of the members of the houſe of commons returned for Ireland, ſhall be tried in the ſame manner as queſtions reſpecting the elections for places in Great Britain, ſubject to ſuch particular regulations as the parliament afterwards ſhall deem expedient.

That the qualifications by property of the repreſentatives in Ireland, ſhall be the ſame reſpectively as thoſe for counties, cities, and boroughs, in England, unleſs ſome other proviſion be afterwards made.

That all the lords of parliament on the part of Ireland, ſpiritual and temporal, ſitting in the houſe of lords, ſhall have the ſame rights and privileges reſpectively as the peers of Great Britain; and that all the lords ſpiritual and temporal of Ireland ſhall have rank and precedency next and immediately after all the perſons holding peerages of the like order and degree in Great Britain, ſubſiſting at the time of the union; and that all peerages hereafter created of Ireland, or of the united kingdom, of the ſame degree, ſhall have precedency according to the dates of their creations; and that all the peers of Ireland, except thoſe who are members of the houſe of commons, ſhall have all the privileges of peers as fully as the peers of Great Britain, the rights and privileges of ſitting in the houſe of lords and upon the trial of peers only excepted.

5. *That the churches of England and Ireland be united into one proteſtant epiſcopal church, to be called, The United Church of England and Ireland; that the doctrine and worſhip ſhall be the ſame; and that the continuance and preſervation of the united church, as the eſtabliſhed church of England and Ireland, ſhall be deemed an eſſential and fundamental part of the union*; and that, in like manner, the church of Scotland ſhall remain the ſame as is now eſtabliſhed by law, and by the acts of union of England and Scotland.

6. The ſubjects of Great Britain and Ireland ſhall be entitled to the ſame privileges with regard to trade and navigation, and alſo in reſpect of all treaties with foreign powers. That all prohibitions and bounties upon the importation of merchandiſe from one country to the other ſhall ceaſe. But that the importation of certain articles therein enumerated ſhall be ſubject to ſuch countervailing duties as are ſpecified in the act.

7. The ſinking funds, and the intereſt of the national debt, of each country, ſhall be defrayed by each ſeparately. And, for the ſpace of twenty years after the union, the contribution of Great Britain and Ireland towards the public expenditure in each year, ſhall be in the proportion of fifteen to two, ſubject to future regulations.

8. All the laws and courts of each kingdom ſhall remain the ſame as they are now eſtabliſhed, ſubject to ſuch alterations, by the united parliament, as circumſtances may require; but that all writs of error and appeals ſhall be decided by the houſe of lords of the united kingdom, except appeals from the court of admiralty in Ireland, which ſhall be decided by a court of delegates appointed by the court of chancery in Ireland.

By 44 Geo. III. c. 92, it is enacted, that, where perſons, againſt whom warrants have been iſſued by judges, &c. in Ireland for any crime or offence againſt the laws of Ireland, ſhall "eſcape, go into, reſide, or be," in England or Scotland; or where any perſons, againſt whom warrants have been iſſued in England or Scotland for any offence againſt the laws of England or Scotland reſpectively, ſhall eſcape, &c. into Ireland; any juſtice of peace of the county or place whither or where ſuch perſon ſhall eſcape, &c. ſhall indorſe the warrant, and the perſon charged may be apprehended in the place where ſuch warrant is ſo indorſed, and carried into England, Scotland, or Ireland, as the caſe may require, to be then proceeded againſt according to law. By 45 Geo. III. c. 92, if the offence is not bailable, the original warrant ſhall be ſo indorſed; but, if it is bailable, the party ſhall be bailed in the place where he is apprehended, by duplicate bonds, one to be tranſmitted to the proper officer of the place where the warrant was iſſued, and the other to the court of exchequer in the county where the party is bailed; and the penalty may be levied in the county where the bond is taken, on certificate of the breach thereof to the exchequer there. No warrant ſhall be indorſed, under theſe acts, unleſs iſſued, 1. upon an indictment or information found or filed in England or Ireland; or 2. criminal letters under ſignet of the court of juſticiary in Scotland; or 3. in reſpect of ſome capital crime or felony mentioned in the warrant. By the latter act, ſubpœnas in criminal proſecutions may be ſerved in England to compel appearance in Ireland, and ſo *vice verſâ*.

LAW, *adj.* Belonging to law, uſed in proceſſes at law.

LAW (John), a famous financial projector, was the ſon of a goldſmith in Edinburgh, in which city he was born about 1681. He was bred to no particular profeſſion; but, having a natural turn to calculation, he made himſelf a proficient in numbers, and in the ſpeculations depending upon them. Whilſt a very young man, he obtained the confidence of the king's miniſters for Scotland ſo far as to be employed to arrange the revenue-accounts, which were in great diſorder before the union of the two kingdoms. For the purpoſe of remedying the want of a circulating medium in that country, he propoſed the eſtabliſhment of a bank, which, according to this plan, might iſſue paper-money to the amount of the value of all the lands in the kingdom; an idea that ſeems to have been the baſis of all his after-projects; this, however, was too bold a ſcheme to be adopted. At the death of his father, in 1704, he ſucceeded to the ſmall eſtate of Lauriefton, near Edinburgh, of which his mother was heireſs. He then commenced fine gentleman, and ſupplied the deficiencies of his income by gaming. In conſequence of a duel, in which he killed his antagoniſt, he fled from his country, carrying with him, it is ſaid, another man's wife. He viſited Venice and Genoa, from both which cities he was baniſhed as a ſharper. He wandered through moſt of the towns of Italy, ſupporting himſelf chiefly by the ſucceſs of ſingular wagers, in which, by his ſkill in calculations, he always took care that the chances ſhould be in his favour. At Turin he propoſed his financial ſyſtem to the duke of Savoy, who had too much wiſdom and regard for his ſubjects to make trial of it. He had already made application to the miniſters of Louis XIV. who had rejected his ſchemes; but the regency of the duke of Orleans was more favourable to him. The fondneſs of that prince for ſplendid novelties, and the great embarraſſment of the public finances, cauſed his plauſible projects to be liſtened to. His firſt operation was the eſtabliſhment of a general bank, compoſed of 1200 ſhares of 3000 livres each. This was founded by royal authority in 1716; and, by the mode-

rate terms on which it tranſacted buſineſs, and the punctuality of its payments, its credit was ſo well eſtabliſhed, that its notes were preferred to ready money, and the ſhares ſoon bore a premium. This bank became the office for all the public receipts. There was annexed to it a Miſſiſſipi company, which had grants of land in Louiſiana, and was expected to realize an immenſe ſum by planting and commerce. To this were afterwards joined the trade of Senegal, the privilege of the old India company, and the farms of the revenue. In 1718 it was declared a royal bank; and, by a number of advantages arbitrarily conferred upon it, ſuch was the extent of its buſineſs and funds, that its ſhares roſe to twenty times their original value. All France was ſeized with the rage of gambling in its funds. Money and valuables of all kinds were brought to the market, and inveſted in bank paper; and happy were they who could ſtrip themſelves of every thing for a participation in this imaginary wealth. In 1720, Law, who had undergone the farce of converſion to the catholic religion, was made controller-general of the finances. Regarded as the Plutus of the kingdom, he ſaw at his levee dukes, peers, and marſhals of France; and titled ladies were proud to appear in the carriage of his wife, (or miſtreſs,) who was accuſtomed to ſay, that "there was not ſo tireſome an animal in the world as a ducheſs." It was not to be wondered at that his head ſhould turn with this elevation; but he had too much politeneſs to be inſolent, and rather indulged a ridiculous vanity: he required that his ſon ſhould be put on the liſt with the youths of quality who were to dance with the king in a ballet; and the regent thought fit to comply with his requeſt.

At length the baſeleſs fabric of this proſperity began to give way; the ſhares daily ſunk in value, and the ruin of the ſyſtem appeared inevitable. The parliament of Paris interfered, but was baniſhed by the regent. The credit of the projector, however, could not be ſupported. He was obliged to reſign his poſt, after holding it only five months; and, loaded with the public execration, retired firſt to an eſtate in the country, and then, for farther ſafety, quitted the kingdom. He carried with him but a ſmall reſidue of the vaſt fortune he once poſſeſſed, and lived afterwards in obſcurity. After viſiting England, Holland, Germany, and other countries, he finally ſettled at Venice, where he died in 1729, ſtill occupied with vaſt projects, and fully convinced of the ſolidity of his ſyſtem, the failure of which he attributed to the oppoſition it met with. The principles upon which Law's original ſcheme was founded, are explained by himſelf in A Diſcourſe concerning Money and Trade, which he publiſhed in Scotland, where (as we have ſeen) he firſt propoſed it. "The ſplendid but viſionary ideas which are ſet forth in that and ſome other works upon the ſame principles, (Dr. Adam Smith obſerves,) ſtill continue to make an impreſſion upon many people; and have perhaps in part contributed to that exceſs of banking which has of late been complained of, both in Scotland and in other places."

LAW (William), a learned and pious divine of the church of England, was born at King's Cliffe, Northamptonſhire, in 1696, and educated at Oxford, where he took his degrees. He entered into holy orders; but it does not appear that he ever had the cure of ſouls, owing probably to his adherence to nonjuring principles, which he maintained to the cloſe of his life. He was for ſome time a private tutor in a gentleman's family at Putney; after which he chiefly reſided in a very retired way at the houſe of Mrs. Heſter Gibbon, aunt of the celebrated hiſtorian, in Northamptonſhire, where he died in 1761. He was author of a great many theological publications, of which the moſt important is "The ſerious Call to a devout and holy Life, adapted to the State and Condition of all Orders of Chriſtians." His "Practical Treatiſe on Chriſtian Perfection" was likewiſe very much eſteemed. He entered the liſts againſt biſhop Hoadley; and was a zealous diſciple of the doctrines of Jacob Behmen, whoſe works he publiſhed.

LAW (Edmund), a learned and excellent Engliſh prelate, the ſon of a clergyman who held a ſmall chapel in the neighbourhood of Cartmel, in Lancaſhire, where he was born in the year 1703. He was educated in grammar-learning for ſome time at Cartmel-ſchool, and afterwards at the free grammar-ſchool at Kendal; whence he was ſent, well inſtructed in the claſſics, to St. John's college, Cambridge. He was admitted to the degree of B. A. in 1723; and ſoon afterwards was elected fellow of Chriſt's college. In 1727 he proceeded M. A. During his reſidence in this college, he became known to the public by a tranſlation of archbiſhop King's Eſſay upon the Origin of Evil, with copious notes, 8vo. in which many metaphyſical ſubjects, curious and intereſting in their own nature, are treated with great ingenuity, learning, and novelty. To this work was prefixed, under the name of "A preliminary Diſſertation," a very valuable piece, written by the Rev. Mr. Gay, of Sidney-college. In the controverſy which took place in conſequence of the appearance of Dr. Clarke's Demonſtration of the Being and Attributes of God, this tranſlation, and the notes, were not overlooked; and Mr. Law's Poſtſcript to the ſecond edition was a replication to A Second Defence of Dr. Clarke. Farther controverſy enſued; which produced, in 1734, or 1735, our author's very ingenious Enquiry into the Ideas of Space, Time, &c. 8vo. in which he combats the opinions of Dr. Clarke and his adherents on theſe ſubjects. This work is mentioned with great commendation by the celebrated Mirabeau in his Syſteme de la Nature.

In 1737 he was preſented by the univerſity to the living of Grayſtock, in the county of Cumberland, a rectory of about three hundred pounds a-year. In 1743 he was promoted, by Fleming biſhop of Carliſle, to the archdeaconry of that dioceſe; and in 1746, went from Grayſtock to reſide at Salkeld, a pleaſant village upon the banks of the river Eden, the rectory of which is annexed to the archdeaconry. During his reſidence at Salkeld, he publiſhed his Conſiderations on the Theory of Religion, 8vo. to which he ſubjoined, Reflections on the Life and Character of Chriſt; and an appendix, concerning the uſe of the words "ſoul and ſpirit" in holy ſcripture, and the ſtate of the dead as there deſcribed. The Reflections were publiſhed at Cambridge, in 1776, as a tract; accompanied with a ſummary and appendix on the Goſpel-morals, by Mr. Paley. In 1749, Mr. Law proceeded D. D. in his public exerciſe for which degree he defended the doctrine of what is uſually called, "the ſleep of the ſoul." In 1754, upon a vacancy taking place in the maſterſhip of Peter-houſe, in Cambridge, he was elected to fill that ſtation; when he reſigned his archdeaconry. About the year 1760, he was appointed head-librarian of the univerſity; a ſinecure place, with a ſalary of fifty pounds per ann. annexed to it; and in 1764, he was nominated caſuiſtical profeſſor. Two years before this, he had ſuſtained an irreparable loſs, by the death of his wife; a loſs rendered peculiarly afflicting by the ſituation of his family, which then conſiſted of eleven children, many of whom were very young. Some time afterwards, he received ſeveral ſmall preferments, which were rather honourable expreſſions of regard from his friends, than of much advantage to his fortune. In 1783, Dr. Cornwallis, then biſhop of Lichfield, who had been his pupil at Chriſt's college, appointed him archdeacon of Stafford, and gave him a prebend in the church of Lichfield; and in 1764, his old acquaintance Dr. Green, biſhop of Lincoln, preſented him to a ſtall in his cathedral; but in 1767, by the intervention of the duke of Newcaſtle, to whoſe intereſt, in the memorable conteſt for the high-ſtewardſhip of the univerſity, he had adhered in oppoſition to ſome temptations, he obtained a ſtall in the church of Durham. In the year 1769, on the recommendation of the duke of Grafton, who had a ſhort time before been elected

chancellor of the univerſity, the king nominated Dr. Law to the vacant ſee of Carliſle. This recommendation was made, not only without any ſolicitation on his part or that of his friends, but without his knowledge. With this biſhopric, he held the maſterſhip of Peter-houſe and the rectory of Grayſtock *in commendam*. In 1774, he publiſhed a valuable tract, entitled, "Conſiderations on the Propriety of requiring a Subſcription to Articles of Faith." This was anſwered by Dr. Randolph, of Oxford; in reply to whom, "A friend of religious liberty" publiſhed, in the ſame year, "A Defence of the Conſiderations;" a tract pretty confidently aſcribed to Dr. Paley. In or about the year 1777, he gave to the public a handſome edition, in four vols. 4to. of the works of Mr. Locke, with a life of the author, and a preface. Mr. Locke's writings and character he held in the higheſt eſteem, and ſeems to have drawn from them many of his own principles. It was obſerved, however, by ſome of his firm friends, that the department which he had undertaken in this edition had been too haſtily executed to anſwer their expectations. About the ſame time, he publiſhed new editions of his two principal works, with conſiderable additions, and ſome alterations. In particular, as he had by gradual progreſſion advanced into the Arian ſyſtem, in this edition he appears to have renounced the pre-exiſtent doctrine.

Dr. Law held the ſee of Carliſle almoſt nineteen years; during which time he only twice omitted ſpending the ſummer months at Roſe Caſtle, a ſeat belonging to his ſee; with which ſituation he was much pleaſed, not only on account of the natural beauty of the place, but becauſe it reſtored him to the country, in which he had ſpent the beſt part of his life. In the year 1787, he paid this viſit in a ſtate of great weakneſs and exhauſtion; and died at Roſe Caſtle about a month after his arrival there, on the 14th of Auguſt, and in the 84th year of his age.

The life of Dr. Law was a life of inceſſant reading and thought, almoſt entirely directed to metaphyſical and religious enquiries. The tenet by which his name and writings are particularly diſtinguiſhed, is, "that Jeſus, at his ſecond coming, will, by an act of his power, reſtore to life and conſciouſneſs the dead of the human ſpecies, who, by their own nature, and without his interpoſition, would remain in the ſtate of inſenſibility to which the death brought upon mankind by the ſin of Adam had reduced them." He interpreted literally that ſaying of St. Paul, 1 Cor. xv. 21. *As by man came death, by man came alſo the reſurrection of the dead.* Upon his own mind this opinion had no other effect, than that of increaſing his reverence for Chriſtianity, and for its divine founder. He retained it, as he did his other ſpeculative opinions, without laying, as many do, an extravagant ſtreſs upon their importance, and without pretending to more certainty than the ſubject allowed of. No man formed his own concluſions with more freedom, or treated thoſe of others with greater candour and equity. He never quarrelled with any perſon for differing from him, or conſidered that difference as a ſufficient reaſon for queſtioning any man's ſincerity, or judging meanly of his underſtanding. He was zealouſly attached to religious liberty, becauſe he thought that it leads to truth; yet from his heart he loved peace. But he did not perceive any repugnancy in theſe two things. He was a man of great ſoftneſs of manners, and of the mildeſt and moſt tranquil diſpoſition. His voice was never raiſed above its ordinary pitch. His countenance ſeemed never to have been ruffled; it preſerved the ſame kind and compoſed aſpect, truly indicating the calmneſs and benignity of his temper. He had an utter diſlike to large and mixed companies. Next to his books, his chief ſatisfaction was in the ſerious converſation of a literary companion, or in the company of a few friends. In this ſort of ſociety he would open his mind with great unreſervedneſs, and with a peculiar turn and ſprightlineſs of expreſſion. His perſon was low, but well-formed; his complexion fair and delicate. Except occaſional interruptions by the gout, he had for the greateſt part of his life enjoyed good health; and, when not confined by that diſtemper, was full of motion and activity. About nine years before his death, he was greatly enfeebled by an attack of the gout in his ſtomach; and in a ſhort time after that loſt the uſe of one of his legs. Notwithſtanding his fondneſs for exerciſe, he reſigned himſelf to this change, not only without complaint, but without any ſenſible diminution of his cheerfulneſs and good-humour. His fault was the general fault of retired and ſtudious characters, too great a degree of inaction and facility in his public ſtation. The modeſty, or rather baſhfulneſs, of his nature, together with an extreme unwillingneſs to give pain, rendered him ſometimes leſs firm and efficient in the adminiſtration of authority than was requiſite.

Beſides the articles already mentioned, biſhop Law publiſhed, 7. Some ſingle Sermons, preached on public occaſions. 8. The Nature and Neceſſity of catechiſing, with ſome Remarks thereon, 1746, 8vo. 9. A Defence of Mr. Locke's Opinion concerning perſonal Identity; in Anſwer to the firſt Part of a late Eſſay on that Subject, 1769, 8vo. afterwards inſerted at the end of the firſt volume of his edition of Mr. Locke's works. 10. Obſervations occaſioned by the Conteſt about literary Property, 1776, 8vo. *Gen. Biog.*

LAW'-DAY, *ſ.* A leet or ſheriff's tourn.—Keep leets and *law-days*, and in ſeſſions ſit. *Shakeſpeare's Othello.*

LAW'A, a town of the iſland of Borneo, ſituated on a river of the ſame name. Lat. 0. 40. N. lon. 110. 42. E.

LAW'A, a river of the iſland of Borneo, which runs into the ſea in lat. 0. 39. S. lon. 109. 30. E.

LAW'ENBURG. See LAUENBURG, p. 294, 5.

LAWEN'D, *ſ.* in the military language of the Ottoman empire, the appellation of cavalry, called alſo *delibaches*. Their arms are ſhort ſabres, piſtols, muſkets, and lances. They wear a kind of cap, which is a long cylinder of black felt, nine or ten inches high, and without any projecting rim. Their ſaddles are made in the Engliſh manner, of a ſingle ſkin ſtretched upon a wooden tree; in the reſt of their accoutrements and clothing, they reſemble the Mamalukes. Their ragged clothes, their ruſty arms, and their horſes of different ſizes, give them the appearance of banditti more than of ſoldiers; and, in reality, they have firſt diſtinguiſhed themſelves under the former character, nor have they much changed their habits by adopting their ſecond occupation; for, after exerciſing the trade of robbers, they ſeek employment, as well as an aſylum, in the ſervice of the pachas, and are ever ready to execute the orders of their maſter in the expeditions which he commands, and in the extortions which he directs. They follow him in war, perform the office of light troops, and fight without order and without diſcipline; they ſtop and bring back to battle the runaways; and frequently precipitate themſelves into the enemy's ranks, with a boldneſs which aſtoniſhes, and which ſometimes determines the victory in their favour. When a pacha is diſgraced, or when, from any motive, he diſmiſſes his delibaches, as they are without pay, and without reſources, they then commit the moſt terrible robberies; they ſpread themſelves over the fields, the villages, and even the towns; they rob indiſcriminately, lay all under contribution, and ſtop and plunder the caravans, till they are called into the ſervice of ſome other pacha, or till ſome impoſing force has put them to flight and diſperſed them.

LAW'ENSTEIN. See LAUENSTEIN, p. 295.

LAW'ER KIRK, a town of Scotland, in the county of Perth: fifteen miles ſouth-eaſt of George-town.

LAW'ERS, a river of Holland, which ſeparates Groningen from Weſt Frieſland, and runs into the ſea ten miles eaſt of Dockum.

LAWES (William), the eldeſt ſon of Thomas Lawes, a vicar-choral of the cathedral church of Saliſbury, and a native of that city, was placed early in life under Coperario, for his muſical education, at the expenſe of the earl of Hertford. His firſt preferment was in the choir of Chicheſter;

Chicheſter; but he was ſoon called to London, where, in 1602, he was ſworn a gentleman of the chapel royal; which place, however, he reſigned in 1611, and became one of the private or chamber muſicians to Charles, then prince, and afterwards king. Fuller ſays, "he was reſpected and beloved of all ſuch perſons as caſt any looks towards virtue and honour;" and he ſeems well entitled to this praiſe. He manifeſted his gratitude and loyalty to his royal maſter by taking up arms in his cauſe againſt the parliament. And though, to exempt him from danger, lord Gerard, the king's general, made him a commiſſary in the royal army, yet the activity of his ſpirit diſdaining this intended ſecurity, at the ſiege of Cheſter, 1645, he loſt his life by an accidental ſhot. The king is ſaid, by Fuller, to have been ſo affected at his loſs, that, though he was already in mourning for his kinſman lord Bernard Stuart, killed at the ſame ſiege, his majeſty put "on *particular* mourning for his dear ſervant William Lawes, whom he commonly called the father of muſic."

His chief compoſitions were fantaſias for viols, and ſongs and ſymphonies for maſques; though his brother Henry, in the preface to the Choice Pſalmes for three voices, which they publiſhed jointly, boaſts, that "he compoſed more than thirty ſeveral ſorts of muſic for voices and inſtruments, and that there was not any inſtrument in uſe in his time but he compoſed for it as aptly as if he had only ſtudied that." In Dr. Aldrich's Collection, Chriſtchurch, Oxon, there is a work of his called Mr. William Lawes's Great Conſort, "wherein are ſix ſetts of muſicke, ſix books." His Royal Conſort for two treble viols, two viol da gambas, and a thorough-baſe, which was always mentioned with reverence by his admirers in the 17th century, is now conſidered a moſt dry, aukward, and unmeaning, compoſition. It muſt, however, have been produced early in his life, as there are no bars, and the paſſages are chiefly ſuch as were uſed in queen Elizabeth's time. In the muſic-ſchool at Oxford are two large manuſcript volumes of his works in ſcore, for various inſtruments; one of which includes his original compoſitions for maſques, performed before the king, and at the inns of court. His anthem for four voices, in Dr. Boyce's ſecond volume, is the beſt compoſition that we have ſeen of this author. He muſt have been conſiderably older than his brother Henry, though they frequently compoſed in conjunction. We are, however, unable to clear up this point of primogeniture: Henry's name is placed firſt in the title to Choice Pſalmes, publiſhed in 1648, in the preface to which he ſays, "as to that, which is my part in this compoſition, it takes precedence of order only, not of worth." And yet he ſays of his own tunes juſt before, "they had their birth at the ſame time as his." His boaſted canons, publiſhed by his brother Henry at the end of their Pſalms, as proofs of his great abilities in harmony, when ſcored, appear ſo far from finiſhed compoſitions, that there is not one of them totally free from objections, or that bears the ſtamp of a great maſter.

LAWES (Henry), brother of the above, was likewiſe a diſciple of Coperario. By the cheque-book of the chapel royal, it appears that he was ſworn in piſteller in January 1625, and, in November following, a gentleman of the chapel royal: after this, he was appointed clerk of the cheque, and one of the public and private muſicians to Charles I. William and Henry Lawes were at this time in ſuch general favour, that, though the kingdom was divided into factions, and not only varied more in their principles, but diſputed them with more violence, than at any other period of our hiſtory, there was but one opinion concerning the abilities of theſe muſicians. The reputation of Henry was higher, and more firmly eſtabliſhed, than that of his brother but modern muſicians are unable to account for the great reputation which he acquired, and the numerous panegyrics beſtowed on him by the greateſt poets and muſicians of his time; for the praiſe of ſuch writers as Milton and Waller is durable fame. Tallis, Bird, or Gibbons, who were all infinitely ſuperior to Lawes, never had their abilities blazoned by contemporary poets or hiſtorians of eminence. Fenton, the editor of Waller's works, tells us, that "the beſt poets of his time were ambitious of having their verſes ſet to muſic by this admirable artiſt;" and, indeed, he not only ſet ſome of the works of almoſt every poet of eminence in Charles I.'s reign, but of young noblemen and gentlemen who ſeem only to have tried their ſtrength on the lyre for his uſe, and of whoſe talents for poetry no other evidence remains than what is to be found in Lawes's publications.

Waller has more than once beſtowed his fragrant incenſe on this muſician. Peek ſays, that "Milton wrote his Maſque at the requeſt of Lawes;" but whether Milton choſe Lawes, or Lawes Milton, for a colleague in Comus, it equally manifeſts the high rank in which he ſtood with the greateſt poets of his time. All the melodies of Henry Lawes remind us of recitative or pſalmody, and ſcarcely any thing like an air can be found in his whole book of Ayres. As to his knowledge and reſources in counterpoint, they were neither great nor profound. His works were chiefly publiſhed under the title of "Ayres and Dialogues," of which he printed three ſeveral books, the firſt in 1653, the ſecond in 1655, and the third in 1658. Beſides theſe, many of his ſongs and dialogues were publiſhed by Playford in collections, entitled "Select Muſical Ayres and Dialogues," by Dr. Wilſon, Dr. Charles Colman, Nicholas Laniere, and others. The tunes which he ſet to Sandys's excellent verſion of the pſalms, as well as thoſe to the Choice Pſalmes of the ſame paraphraſe, which were compoſed by Henry Lawes and his brother, in a kind of anthem or motet ſtyle, though uſhered into the world, in 1648, by ſuch innumerable panegyrics in rhyme, are ſo far from being ſuperior to the ſyllabic pſalmody of their predeceſſors who clothed Sternhold and Hopkins in narcotic ſtrains, that they ſeem to poſſeſs not only leſs pleaſing melody, but leſs learned harmony, than may be found in anterior publications of the ſame kind. And this ſeems to be the opinion of the public; as they were never adopted by any vociferous fraternity, or admitted into the pale of a ſingle country church, that we have been able to diſcover, ſince they were firſt printed. One of theſe, firſt publiſhed by Henry, to the ſeventy-ſecond pſalm, has, indeed, long had the honour of being jingled by the chimes of St. Lawrence Jewry, ſix times in the four-and-twenty hours, in a kind of *Laus perpetua*. During the civil war, Henry Lawes ſupported himſelf by teaching ladies to ſing; however, he retained his place in the chapel royal, and, at the reſtoration, compoſed the coronation-anthem. Yet he did not long ſurvive this event; for, in October 1662, he died, and was buried in Weſtminſter-abbey.

LAW'FUL, *adj.* Agreeable to law; conformable to law; allowed by law; legitimate; legal.—It is not *lawful* for thee to have her. *Matth.* xiv. 4.

LAW'FULLY, *adv.* Legally; agreeably to law.—I may be allowed to tell your lordſhip, the king of poets, what an extent of power you have, and how *lawfully* you may exerciſe it. *Dryden.*

This bond is forfeit;
And *lawfully* by this the Jew may claim
A pound of fleſh. *Shakeſpeare's Merch. of Venice.*

LAW'FULNESS, *ſ.* Legality; allowance of law.—It were an error to ſpeak further, till I may ſee ſome ſound foundation laid of the *lawfulneſs* of the action. *Bacon.*

LAW'GIVER, *ſ.* Legiſlator; one that makes laws.—A law may be very reaſonable in itſelf, although one does not know the reaſon of the *lawgivers*. *Swift.*

LAW'GIVING, *adj.* Legiſlative:

Lawgiving heroes, fam'd for taming brutes,
And raiſing cities with their charming lutes. *Waller.*

LAW'ING OF DOGS, *ſ.* Expeditation.—The court of regard, or ſurvey of dogs, is to be holden every third

year, for the *lawing* or expeditation of maſtiffs; which is done by cutting off the claws of the fore feet, to prevent them from running after deer. *Blackſtone.*

LAW'INGEN. See LAUINGEN, p. 297.

LA'WIS. See LUGANI.

LAW'LESS, *adj.* Unreſtrained by any law; not ſubject to law.—The neceſſity of war, which among human actions is the moſt *lawleſs*, hath ſome kind of affinity with the neceſſity of law. *Raleigh's Eſſays.*

The *lawleſs* tyrant, who denies
To know their God, or meſſage to regard,
Muſt be compell'd. *Milton.*

Contrary to law; illegal:

Take not the quarrel from his powerful arms:
He needs no indirect nor *lawleſs* courſe
To cut off thoſe that have offended him. *Shakeſpeare.*

LAWLESS COURT, a court held on King's Hill at Rochford in Eſſex, on Wedneſday morning next after Michaelmas-day yearly, at cock-crowing; at which court they whiſper, and have no candle, nor any pen and ink, but a coal; and he that owes ſuit or ſervice there, and appears not, forfeits double his rent. This court is mentioned by Camden, who ſays, that this ſervile attendance was impoſed on the tenants, for conſpiring at the like unſeaſonable time to raiſe a commotion. *Camd. Britan.* It belongs to the honour of Raleigh, and is called lawleſs, becauſe held at an unlawful hour; or *quia dicta ſine lege.* The title of it is in rhyme, and in the Court-rolls runs thus:

King's Hill in Rochford. } ff. *Curia de Domino Rege,*
Dicta ſine lege,
Tenta eſt ibidem
Per ejuſdem conſuetudinem,
Ante ortum ſolis
Luceat niſi polus,
Seneſcallus ſolus
Nil ſcribit niſi colis
Toties voluerit
Gallus ut cantaverit,
Per cujus ſoli ſonitus
Curia eſt ſummonitus:
Clamat clam pro rege
In curia ſine lege,
Et niſi cito venerint
Citius pœnituerint,
Et niſi clam accedant
Curia non attendat,
Qui venerit cum lumine erat in regimine
Et dum ſunt ſine lumine, capti ſunt in crimine,
Curia ſine cura.
Jurata de injuria.

Tenta ibidem die Mercurii (ante diem) proximi poſt feſtum Sancti Michaelis anno regni regis, &c.

LAW'LESS, *ſ.* Illegality; the ſtate of an out-law. *Scott.*

LAW'LESSLY, *adv.* In a manner contrary to law:

Fear not; he bears an honourable mind,
And will not uſe a woman *lawleſsly.* *Shakeſpeare.*

LAW'LESSNESS, *ſ.* Diſorder:

Gluttony, malice, pride, and covetiſe,
And *lawleſſneſs* reigning with riotiſe. *Spenſer.*

LAW'MAKER, *ſ.* Legiſlator; one who makes laws; a lawgiver.—Their judgment is, that the church of Chriſt ſhould admit no *lawmakers* but the evangeliſts. *Hooker.*

LAWN, *ſ.* [*land*, Dan. *lawn*, Welſh; *lande*, Fr.] Plain untilled ground covered with herbage.—His mountains were ſhaded with young trees, that gradually ſhot up into groves, woods, and foreſts, intermixed with walks, and *lawns*, and gardens. *Addiſon.*

Betwixt them *lawns*, or level downs, and flocks
Grazing the tender herb, were interpos'd. *Milton.*

[*Linon*, Fr.] Fine linen, remarkable for being uſed in the ſleeves of biſhops:

From high life high characters are drawn:
A ſaint in crape is twice a ſaint in *lawn.* *Pope.*

Should'ſt thou bleed,
To ſtop the wounds my fineſt *lawn* I'd tear,
Waſh them with tears and wipe them with my hair. *Prior.*

LAWN, *adj.* Made of fine linen; made of lawn.

LAWN'-ROBED, *adj.* Dreſſed in lawn:

What awe did the ſlow ſolemn knell inſpire;
The duties by the *lawn-rob'd* prelate pay'd,
And the laſt words, that duſt to duſt convey'd! *Tickell.*

LAWNY, *adj.* Conſiſting of lawn; reſembling a lawn.—Through foreſts, mountains, or the *lawny* grounds. *W. Browne.*

That from the ſun-redoubling valley lift,
Cool to the middle air, their *lawny* tops. *Thomſ. Summer.*

LAWOR'OW, a town of Auſtrian Poland, in Galicia: twenty-four miles weſt of Lemberg.

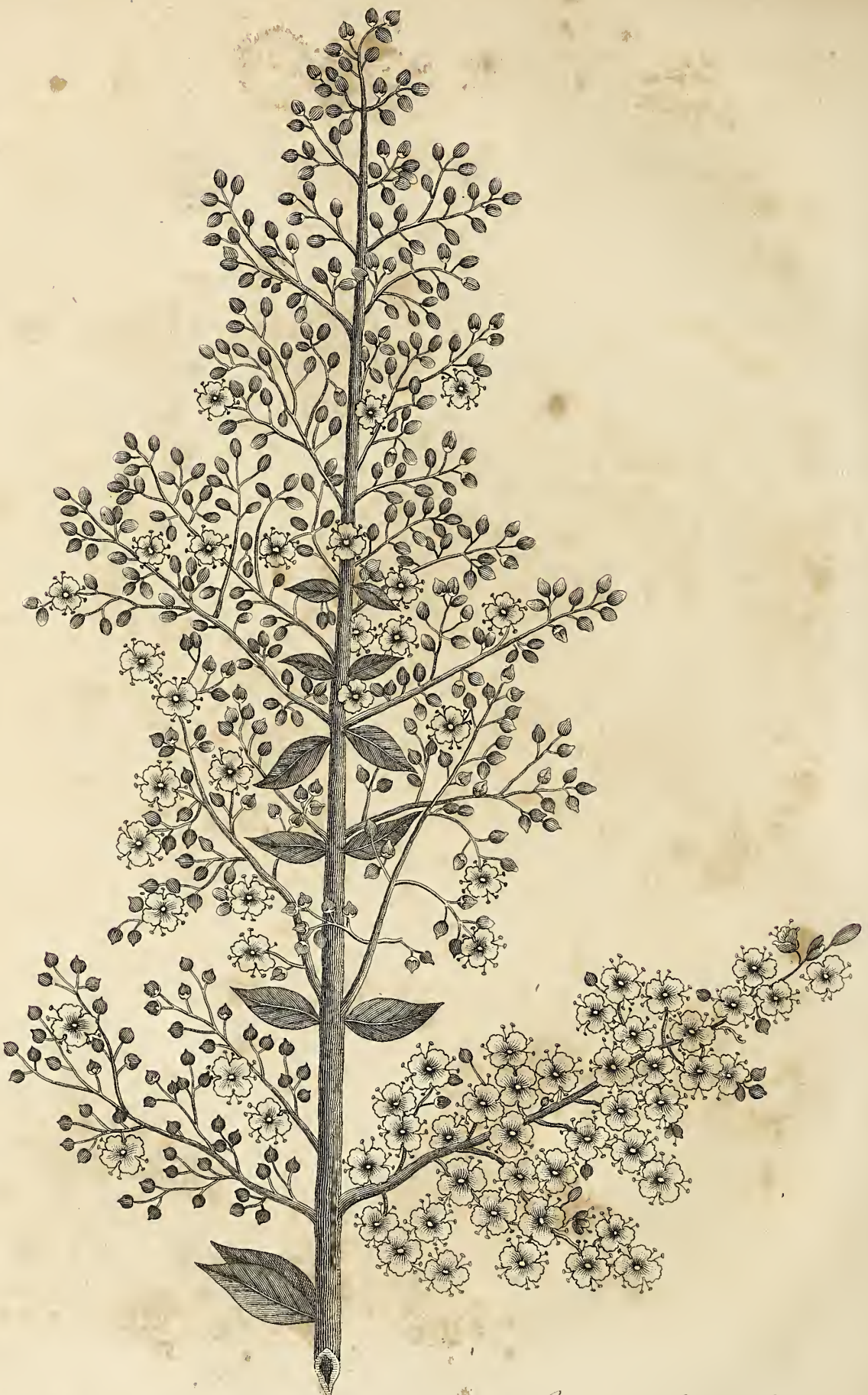
LAW'RENCE, in geography. See LAURENCE, p. 305.

LAW'RENCE (Peter Joſeph), an engineer, was born in Flanders in 1715. He diſtinguiſhed himſelf, when he was only eight years old, by a conſiderable turn for mechanics. Cardinal Polignac, being ſhown a machine that he had at that early age conſtructed, predicted that he would one day arrive at eminence in the ſcience of practical mathematics. Before he had attained to manhood, he had executed drains in different parts of Flanders and Hainault, which till that time had been deemed impracticable. He conſtructed many curious and very ingenious ſluices and locks for rivers and canals; and he invented machines that were found of great utility in fortification, and a carriage on which the coloſſal ſtatue of Lewis XV. was brought to Paris with great eaſe. He contrived engines, which at once cleared mines of their water, and, at the ſame time, raiſed the metallic ores. He formed a junction of the Scheldt and the Somme, which he effected by a ſubterraneous canal, three leagues in length, the level of which was forty-five feet above the ſource of the Scheldt, and fifteen feet below the bed of the Somme. The various mechanical inventions and undertakings of M. Lawrence have been celebrated in a poem by Delille, intitled, the Treaſury of Parnaſſus.

LAWSO'NIA, *ſ.* [from *Iſaac Lawſon*, M. D. author of a New Voyage to Carolina, Lond. 1709. 4to.] In botany, a genus of the claſs octandria, order monogynia, natural order of ſalicariæ, *Juſſ.* The generic characters are—Calyx; perianthium four-cleft, ſmall, permanent. Corolla: petals four, ovate-lanceolate, flat, ſpreading. Stamina: filaments eight, filiform, length of the corolla, in twin pairs between the petals; antheræ roundiſh. Piſtillum: germ roundiſh; ſtyle ſimple, length of the ſtamens, permanent; ſtigma headed. Pericarpium: capſule (or berry) globoſe with a point, four-celled. Seeds many, cornered, pointed.—*Eſſential Character.* Calyx: four-cleft; petals four; ſtamina in four pairs; capſule four-celled, many-ſeeded.

Species. 1. Lawſonia inermis, or ſmooth lawſonia: branches unarmed; leaves ſubſeſſile, ovate, ſharp at both ends. This riſes with a ſhrubby ſtalk eight or ten feet high. The branches come out by pairs oppoſite; they are ſlender, and covered with a whitiſh or yellow dark-grey bark. Leaves ſmall, oppoſite, oblong, ending in acute points, pale green. Flowers in looſe terminating bunches, grey. Petals ſmall, turning back at the top.

This is the *henna*, or *al-henna*, of the Scriptures, tranſlated *camphire* in Solomon's Song, i. 14. and in other places it is rendered *cypreſs* and *myrrh.* We ſhall therefore give a more particular deſcription of it. The henna is a tall ſhrub, endleſsly multiplied in Egypt. The leaves are of a lengthened oval form, oppoſed to each other, and of a faint-green colour; the flowers grow at the extremity



Smooth Lawsonia, the Henna, or Camphire, of Solomon's Song.

London, Published as the Act directs, Feb.ʳʸ 1.1813, by G. Jones.

tremity of the branches, in long and tufted bouquets; the ſmaller ramifications which ſupport them are red, and likewiſe oppoſite; from their arm-pit cavity ſprings a ſmall leaf, almoſt round, but terminating in a point; the corolla is formed of four petals curling up, and of a light yellow; between each petal are two white ſtamina with a yellow ſummit; there is only one white piſtil; the pedicle, reddiſh at its iſſuing from the bough, dies away in a faint green; the calyx is cut into four pieces, of a tender green up towards their extremity, which is reddiſh; the fruit, or berry, is a green capſule previous to its maturity; it aſſumes a red tint as it ripens, and becomes brown when it is dried. It is divided into four compartments, in which are encloſed the ſeeds, which are triangular, and brown. The bark of the ſtem and of the branches is of a deep grey and the wood has internally a light caſt of yellow. This ſhrub had at firſt been conſidered as a ſpecies of privet, Liguſtrum vulgare, Linn. to which it has, in truth, many relations; but differences in the parts of fructification determined botaniſts to make a diſtinct genus of it, to which Linnæus gave the name of Lawſonia, and which now contains four ſpecies. Its Arabic name is *hennè*, or *hanna*; and, with the article, *el-henne*, or *el-hanna*; in Turkey they call it *kanna* or *al-kanna*. Though figures of it had been publiſhed in ſeveral books on natural hiſtory, it had not been faithfully repreſented till the appearance of Sonnini's Travels in Egypt. This author informs us, that the *al-henna* is a plant moſt grateful to both the ſight and the ſmell. The dark-grey colour of its bark, the light-green of its foliage, the ſoftened mixture of white and yellow, with which the flowers, collected into long cluſters like the lilach, are coloured; the red tint of the ramifications which ſupport them; form a combination of the moſt agreeable effect. The henna grows in great quantities in the vicinity of Roſetta, and conſtitutes one of the principal ornaments of the beautiful gardens which ſurround that city. Its root, which penetrates to a great depth with the utmoſt eaſe, ſwells to a large ſize, in a ſoil, ſoft, rich, mixed with ſand, and ſuch as every huſbandman would wiſh to have to work upon; the ſhrub of courſe acquires a more vigorous growth there than any-where elſe; it is, at the ſame time, more extenſively multiplied: it grows, however, in all the other cultivated diſtricts of Egypt, and principally in the upper part. There is much reaſon to believe that the *henna* of Egypt is the *kupros* of the ancient Greeks. The deſcriptions which authors have given of it leave ſcarcely any doubt reſpecting the identity of theſe two plants. The name of *kupros* is no longer in uſe among the modern Greeks; they give to the *henna* the corrupted denomination of *kènè*, *kna*, &c. The ſeamen of Provence, whoſe veſſels are employed in the carriage of of the powder of henna, call it *quènè*.

It is not at all aſtoniſhing, that a flower ſo delicious ſhould have furniſhed to oriental poeſy agreeable alluſions and amorous compariſons. This may afford an anſwer to part of the forty-fifth queſtion of Michaelis; for the flowers of henna are diſpoſed in cluſters; and the women of Egypt, who love the ſmell of it, are fond of carrying it, in the ſpot where the text indicates, (Song i. 13.) in their boſoms. Relative to the farther uſes to which it is applied, Sonnini proceeds thus: "If large black eyes, which they are at pains to darken ſtill more, be eſſential to Egyptian female beauty, it likewiſe requires, as an acceſſory of firſt-rate importance, that the hands and nails ſhould be dyed yellow. This laſt faſhion is fully as general as the other; and not to conform to it would be reckoned indecent: the women could no more diſpenſe with this daubing than with their clothes. Of whatever condition, of whatever religion, they may be, all employ the ſame means to acquire this ſpecies of ornament, which the empire of faſhion alone could perpetuate; for it aſſuredly ſpoils fine hands much more than it decorates them. The animated whiteneſs of the palm of the hand, the tender roſe-colour of the nails, are effaced by a dingy layer of a reddiſh or orange-coloured drug. The ſole of the foot, the epidermis of which is not hardened by long and frequent walking, and which daily friction makes ſtill thinner, is likewiſe loaded with the ſame colour. It is with the greeniſh powder of the dried leaves of the henna, that the women procure for themſelves a decoration ſo whimſical. It is prepared chiefly in the Saïd, whence it is diſtributed over all the cities of Egypt. The markets are conſtantly ſupplied with it, as a commodity of habitual and indiſpenſable uſe. They dilute it in water, and rub the ſoft paſte it makes on the parts which they mean to colour: they are wrapped up in linen, and at the end of two or three hours the orange hue is ſtrongly impreſſed on them. Though the women waſh both hands and feet ſeveral times a-day, with lukewarm water and ſoap, this colour adheres for a long time, and it is ſufficient to renew the application about once a-fortnight; but that of the nails laſts much longer; nay, it is reckoned to be indelibly fixed. In Turkey, likewiſe, the women make uſe of henna, but apply it to the nails only, and leave to their hands and feet the colour of nature. It would appear, that the cuſtom of dying nails was known to the ancient Egyptians, for thoſe of mummies are, moſt commonly, of a reddiſh hue. (See Memoir on Embalmment, by M. de Caylus, in the Mem. of the Acad. of Inſcr. vol. xxiii. p. 133.) But the Egyptian ladies refine ſtill farther on the general practice; for they ſometimes paint their fingers ſpace by ſpace only; and, in order that the colour may not lay hold of the whole, they wrap them round with thread at the propoſed diſtances, before the application of the colour-giving paſte; ſo that, when the operation is finiſhed, they have the fingers marked circularly, from end to end, with ſmall orange-coloured belts. Others (and this practice is more common among certain Syrian dames) chooſe that their hands ſhould preſent the ſufficiently-diſagreeable mixture of black and white. The belts which the henna had firſt reddened become of a ſhining black by rubbing them with a compoſition of ſal-ammoniac, lime, and honey. You ſometimes meet with men likewiſe who apply tincture of henna to their beards, and anoint the head with it; they allege, that it ſtrengthens the organs, that it prevents the falling-off of the hair and beard, and baniſhes vermin." This ſhrub is repreſented on the annexed Plate, with the flowers of the natural ſize. *Sonnini's Travels in Egypt*, vol. i. p. 264 & ſeq.

2. Lawſonia achronychia, or long-petioled lawſonia: branches unarmed; leaves on long petioles, wedge-ſhaped. This differs from the preceding in having the leaves on long petioles, ſomewhat jointed at the inſertion; the calyx extremely ſmall; the petals not flat and ovate, but linear, and having bent claws. From this latter circumſtance Forſter gave it the name of *Acronychia*, from *ακρος*, *extremus*, and *ονυξ*, *unguis*. But it does not ſeem to have any character to diſtinguiſh it from Lawſonia. Native of New Caledonia; where it was found the 11th of September, 1744.

3. Lawſonia ſpinoſa, or prickly lawſonia: branches ſpiny. This riſes with a woody trunk eighteen feet high or more. The wood is hard and cloſe, covered with a light-grey bark. Branches alternate. Leaves oblong, oval. At the joints where the leaves are placed come out ſingle, ſtrong, ſharp thorns. Flowers in looſe bunches from the ſides of the branches, pale yellow, of a diſagreeable ſcent. Loureiro deſcribes it as only eight feet high, with few long ſpreading branches, having a few ſtraight ſpines terminating the ſhoots. Leaves broad-lanceolate, quite entire, ſeſſile, oppoſite, ſubtomentoſe, ſmall. Linnæus and Loureiro call the fruit a capſule; Gærtner names it a dry berry, globular flatted a little at top, crowned by the ſtyle, obſcurely four-grooved, ſomewhat coriaceous, honey or ochre coloured, four-celled; ſeeds in each cell five to nine, variouſly angular, ſharply pyramidal, ferruginous. Native of the Eaſt Indies. Mr. Miller, who cul-

tivated it in 1759, ſays that he received ſpecimens of it alſo from the Spaniſh Weſt Indies.

4. Lawſonia falcata, or falcated lawſonia: leaves ſickle-ſhaped, ſlightly crenate. This ſhrub is ſix feet high, and very much branched. Native of Cochin-china.

Propagation and Culture. Theſe plants are propagated by ſeeds, ſown on a hot-bed early in the ſpring, that the plants when they come up may have time to get ſtrength before winter. When fit to remove, plant each in a ſmall pot filled with light ſandy earth, and plunged into a hot-bed of tanners' bark, where they muſt be ſcreened from the ſun till they have taken new root. Then treat them as the coffee-tree, only giving them leſs water, eſpecially in winter. They are too tender to thrive in the open air; they muſt therefore conſtantly remain in the ſtove, having plenty of air in hot weather.

LAW'SUIT, *ſ.* A proceſs in law; a litigation.—The giving the prieſt a right to the tithe would produce *law-ſuits* and wrangles; his attendance on the courts of juſtice would leave his people without a ſpiritual guide. *Swift.*

LAW'YER, *ſ.* Profeſſor of law; advocate; pleader.—Is the law evil, becauſe ſome *lawyers* in their office ſwerve from it? *Whitgifte.*

The nymphs with ſcorn beheld their foes,
When the defendant's council roſe;
And, what no *lawyer* ever lack'd,
With impudence own'd all the fact. *Swift.*

An attorney.—The number of *lawyers* has much increaſed within the laſt three centuries; for an act of parliament, paſſed in the 33 Hen. VI. c. 7. ſtates, that not long before that time there had not been more than ſix or eight attorneys in Norfolk and Suffolk *quo tempore*, (it obſerves,) *magna tranquillitas regnabat*, but that the number had increaſed to twenty-four, to the great vexation and prejudice of theſe counties; it therefore enacts that for the future there ſhall only be ſix attorneys in Norfolk, ſix in Suffolk, and two in the city of Norwich. As it does not appear that this ſtatute was ever repealed, it might be curious to inquire how it was originally evaded. *Chriſtian's Blackſt.* iii. 25. n.

LAX, *adj.* [*laxus*, Lat.] Looſe; not confined.—Inhabit *lax*, ye pow'rs of heav'n! *Milton.*—Diſunited; not ſtrongly combined.—In mines, thoſe parts of the earth which abound with ſtrata of ſtone, ſuffer much more than thoſe which conſiſt of gravel, and the like *laxer* matter, which more eaſily give way. *Woodward.*—Vague; not rigidly exact.—Dialogues were only *lax* and moral diſcourſes. *Baker.*—Looſe in body, ſo as to go frequently to ſtool; *laxative* medicines are ſuch as promote that diſpoſition. Slack; not tenſe.—By a branch of the auditory nerve that goes between the ear and the palate, they can hear themſelves, though their outward ear be ſtopt by the *lax* membrane to all ſounds that come that way. *Holder's Elements of Speech.*

LAX, *ſ.* A looſeneſs; a diarrhœa.

LAX, a town of Swiſſerland, in the Valais: thirty-three miles eaſt of Sion.

LAX'A, a town of the iſland of Louis, ſituated on a bay on the eaſt coaſt: nine miles ſouth-ſouth-weſt of Stornaway.

LAX'A, a town of Peru, in the dioceſe of La Paz: twenty miles ſouth-weſt of La Paz.

LAX'AMENT, *ſ.* [from *lax.*] A relaxation, a refreſhment. *Scott.*

LAXAN'TIA, *ſ.* Looſening medicines; medicines producing a moderate diſcharge by ſtool.

LAX'ATED, *adj.* Looſened. *Scott.*

LAXA'TION, *ſ.* The act of looſening or ſlackening. The ſtate of being looſened or ſlackened.

LAX'ATIVE, *adj.* Having the power to eaſe coſtiveneſs.—Omitting honey, which is of a *laxative* power itſelf; the powder of loadſtones doth rather conſtipate and bind, than purge and looſen, the belly. *Brown.*

LAX'ATIVE, *ſ.* A medicine ſlightly purgative; a medicine that relaxes the bowels without ſtimulation;

Nought profits him to ſave abandon'd life,
Nor vomits upward aid, nor downward *laxative.* *Dryden.*

LAX'ATIVENESS, *ſ.* Power of eaſing coſtiveneſs.

LAX'EMBERG, a town of Auſtria: ſeven miles ſouth of Vienna.

LAX'EY, a village about the centre of the eaſt coaſt of the Iſle of Man, in the pariſh of Lonan. The bay affords a ſafe ſhelter from weſterly winds, in from ſeven to ten fathom water. The cape at the ſouthern extremity is called *Laxey Point.* Laxey is a place of little trade, being compoſed of not more than thirty cottages: it has only one ſhop, apparently very ill ſupplied, and two public houſes: for butcher's meat, and many other articles of convenience, the inhabitants ſend weekly to Douglas. The herring-fiſhery of this place is not very conſiderable; and the preſent ſcarcity of ſalmon is attributed to the water from the copper-mines. See ISLE *of* MAN, vol. xi. p. 415. The river's banks are high and ſteep; and in ſome places well planted with trees. A little way up the valley is a flax-ſpinning mill, upon a conſtruction ſimilar to that near Douglas. The water is kept up by an embankment of ſtone, over which ſalmon, in the ſpawning ſeaſon, were often ſeen to leap. Trout abound in Laxey river. The bridge is very narrow, and apparently ancient. Lonan, the pariſh-church, is a mile from the village. Its name is a corruption of Lonanus, the ſaint to whom it is dedicated, a ſon of Tigris, ſiſter to St. Patrick, and the firſt biſhop of Trim in Ireland. In the year 1786, two hundred and thirty-ſeven pieces of ſilver were found in this pariſh by a perſon digging; and ſeveral others had been previouſly diſcovered.

Nearly two miles on the Douglas ſide of Laxey, near the road, are about twelve ſtones placed in a form ſomewhat oval. Juſt beyond the oval, and at one end of it, facing the north-north-eaſt, are two ſtones ſix feet high, one of which is cloven from top to bottom; the other ſtones are from two to three feet high. The mount on which they all ſtand is three or four feet high; and in the centre of it is an excavation, ſeven feet long, three feet wide for about one-third of the length, and two feet for the remainder. The ſtones are of a hard clay-ſlate. The following traditionary ſtory is related of them: The proprietor of the land on which they reſt, being deſirous of removing them, took ſome labourers to effect his purpoſe. Being arrived at the ſtones, and looking back, he ſaw his houſe on fire, and conſequently returned in haſte. Having arrived at home, he found his houſe as it ſhould be, but ſaw the ſtones on fire. The man was too wiſe to diſregard ſo clear an omen; and the ſtones have ever ſince remained undiſturbed. The natives do not ſeem to form even a conjecture of their original uſe, nor ever to have heard of ſuch beings as Druids. Laxey is about eight miles and a half ſouth-eaſt of Ramſey, and ſix north of Douglas. *Woods's Iſle of Man.*

LAXIA'NA, a river of Spain, which runs into the Xalon about three miles above Anza in Arragon.

LAX'ITY, *ſ.* Not compreſſion; not cloſe coheſion.—The former cauſes could never beget whirlpools in a chaos of ſo great a *laxity* and thinneſs. *Bentley.*—Contrariety to rigorous preciſion; as, *laxity* of expreſſion.—Looſeneſs; not coſtiveneſs. If ſometimes it cauſe any *laxity*, it is in the ſame way with iron unprepared, which will diſturb ſome bodies, and work by purge and vomit. *Brown.*—Slackneſs; contrariety to tenſion.—*Laxity* of a fibre is that degree of coheſion in its part which a ſmall force can alter, ſo as to increaſe its length beyond what is natural. *Quincy.*—Openneſs; not cloſeneſs.—Hold a piece of paper cloſe by the flame of a candle, and by little and little remove it further off, and there is upon the paper ſome part of that which I ſee in the candle, and it grows ſtill leſs and leſs as I remove; ſo that, if I would truſt my ſenſe, I ſhould believe it as very a body upon the paper as in the candle, though infeebled by the *laxity* of the channel in which it flows. *Digby on Bodies.*

LAXMAN'NIA, *ſ.* [from *Ericus Laxmann*, a Swede, member

ber of the academy at Peterſburgh, and profeſſor there, who made many botanical diſcoveries in Siberia; and died in 1796.] In botany, a genus of the claſs hexandria, order monogynia, natural order aurantia, *Juſſ.* The generic characters are—Calyx: perianthium one-leafed, bell-ſhaped, compreſſed; four-toothed, rather acute; inferior, very ſmall. Corolla: petals four, linear, leathery; long, upright at the baſe, ſpreading, with inflected tip, a villoſe line on the upper part, two more approximated than the reſt. Stamina: filaments ſix, linear below; upright, awl-ſhaped at the tip, ſpreading; rather ſhorter than the corolla. Antheræ roundiſh, affixed to the back. Piſtillum: germ roundiſh, extremely villoſe; ſtyle ſhorter than the ſtamens, thick, cornered; ſtigma ſimple. Pericarpium: berry ſubgloboſe, tetragonal at the top, four-celled; the cells covered by a membrane. Seeds ſolitary, oblong, compreſſed.—*Eſſential Character.* Calyx: one-leafed, four-toothed, inferior. Corolla: four-petalled; berry four-celled; ſeeds ſolitary.

Species. 1. Laxmannia cuminoſma, or globoſe ankænda: fruit globoſe, ſlightly depreſſed; petals twice the length of the calyx. Native of Ceylon.

2. Laxmannia ankænda, or pointed ankænda: fruit ovate, pointed; petals many times longer than the calyx. A ſhrub about four feet high, with round ſmooth leafy branches. Leaves oppoſite, without ſtipules, ſtalked, four or five inches long, and nearly two in breadth, obovate, entire, veiny, ſmooth and ſhining, full of pellucid dots. Flowers greeniſh-white; berry ovate, pointed, dark-green, with an aromatic flavour of cumin. Native of Ceylon and Malabar. Mr. Dryander in the Linn. Tranſ. ii. 232, has well illuſtrated the ſynonymy of this plant, which Linnæus had confounded with the jambolana of Acoſta, a ſpecies of Calyptranthes. This miſtake is ſuppoſed to have ariſen from the tickets of *madan* and *ankænda* in Herman's Herbarium having been changed.

LAX'NESS, *ſ.* Laxity; not tenſion; not preciſion; not coſtiveneſs.—For the free paſſage of the ſound into the ear, it is requiſite that the tympanum be tenſe, and hard ſtretched; otherwiſe the *laxneſs* of that membrane will certainly dead and damp the ſound. *Holder.*

LAX'TON, a hamlet in Northamptonſhire, on the borders of the foreſt of Rockingham, where lands are held by the ſervice of hunting in all the king's foreſts and parks throughout Oxfordſhire, Bucks, Huntingdonſhire, and this county, to deſtroy all the vermin.

LAX'TON, or LEXIN'TON, a ſmall village in Nottinghamſhire, ſouth of Tuxford, near the Idle; it was made a barony by king John.

LAY, preterite of *lie.*—When Ahab had heard thoſe words, he faſted, and *lay* in ſackcloth. 1 *Kings* xxi. 27.

He rode to rouze the prey,
That ſhaded by the fern in harbour *lay*,
And thence diſlodg'd. *Dryden's Knight's Tale.*

To LAY, *v. a.* [lecgan, Sax. *leggen*, Dut.] To place; to put; to repoſite.—This word, being correlative to *lie*, involves commonly immobility or extenſion; a puniſhment laid, is a puniſhment that cannot be ſhaken off; in immobility is included weight. One houſe *laid* to another, implies extenſion. *Johnſon.*—He *laid* his robe from him. *Jonah.*—They have *laid* their ſwords under their head. *Ezekiel.*—Soft on the flow'ry herb I found me *laid*. *Milton.*—To place along.—Seek not to be judge, being not able to take away iniquity, leſt at any time thou fear the perſon of the mighty, and *lay* a ſtumbling-block in the way of thy uprightneſs. *Eccluſ.*—A ſtone was *laid* on the mouth of the den. *Daniel.*—To beat down corn or graſs.—Another ill accident is *laying* of corn with great rains in harveſt. *Bacon's Natural Hiſtory.*

Let no ſheep there play,
Nor friſking kids the flowery meadows *lay*. *May.*

To keep from riſing; to ſettle; to ſtill.—It was a ſandy ſoil, and the way had been full of duſt; but an hour or two before a refreſhing fragrant ſhower of rain had *laid* the duſt. *Ray.*

I'll uſe th' advantage of my power,
And *lay* the ſummer's duſt with ſhowers of blood. *Shakeſp.*

To fix deep; to diſpoſe regularly.—Either of theſe notions may be conceived from the following examples; but regularity ſeems rather implied; ſo we ſay, to *lay* bricks, to *lay* planks. *Johnſon.*—Schiſmaticks, outlaws, or criminal perſons, are not fit to *lay* the foundation of a new colony. *Bacon.*

I *lay* the deep foundation of a wall,
And Enos, nam'd from me, the city call. *Dryden.*

To put; to place.—They, who ſo ſtate a queſtion, do no more but ſeparate and diſentangle the parts of it, one from another, and *lay* them, when ſo diſentangled, in their due order. *Locke.*

We to thy name our annual rites will pay,
And on thy altars ſacrifices *lay*. *Pope's Statius.*

To bury; to inter.—David fell on ſleep, and was *laid* unto his fathers, and ſaw corruption. *Acts* xiii. 36.—To ſtation or place privily.—The wicked have *laid* a ſnare for me. *Pſalms.*—*Lay* not wait, O wicked man, againſt the dwelling of the righteous. *Prov.* xxiv. 15.—To ſpread on a ſurface.—The colouring upon thoſe maps ſhould be *laid* on ſo thin, as not to obſcure or conceal any part of the lines. *Watts.*—To paint; to enamel.—The pictures drawn in our minds are *laid* in fading colours; and, if not ſometimes refreſhed, vaniſh and diſappear. *Locke.*—To put into any ſtate of quiet.—They bragged, that they doubted not but to abuſe, and *lay* aſleep, the queen and council of England.—To calm; to ſtill; to quiet; to allay:

After a tempeſt, when the winds are *laid*,
The calm ſea wonders at the wrecks it made. *Waller.*

I fear'd I ſhould have found
A tempeſt in your ſoul, and came to *lay* it. *Denham.*

To prohibit a ſpirit to walk.—The huſband found no charm to *lay* the devil in a petticoat, but the rattling of a bladder with beans in it. *L'Eſtrange.*—To ſet on the table.—I *laid* meat unto them. *Hoſ.* xi. 4.—To propagate plants by fixing their twigs in the ground.—The chief time of *laying* gilliflowers is in July, when the flowers are gone. *Mortimer's Huſbandry.*—To wager; to ſtake:

But ſince you will be mad, and ſince you may
Suſpect my courage, if I ſhould not *lay*;
The pawn I proffer ſhall be full as good. *Dryden.*

To repoſite any thing.—The ſparrow hath found an houſe, and the ſwallow a neſt, for herſelf, where ſhe may *lay* her young. *Pſal.* lxxxiv. 3.—To exclude eggs.—A hen miſtakes a piece of chalk for an egg, and ſits upon it; ſhe is inſenſible of an increaſe or diminution in the number of thoſe ſhe *lays*. *Addiſon.*—To apply with violence; as, to *lay* blows.—*Lay* ſiege againſt it, and built a fort againſt it, and caſt a mount againſt it. *Ezek.* iv. 2.

Never more ſhall my torn mind be heal'd,
Nor taſte the gentle comforts of repoſe!
A dreadful band of gloomy cares ſurround me,
And *lay* ſtrong ſiege to my diſtracted ſoul. *Phillips.*

To apply nearly.—She *layeth* her hands to the ſpindle, and her hands hold the diſtaff. *Prov.* xxxi. 19.—It is better to go to the houſe of mourning than to go to the houſe of feaſting; for that is the end of all men, and the living will *lay* it to his heart. *Eccleſ.* vii. 2.—The peacock *laid* it extremely to heart, that, being Juno's darling bird, he had not the nightingale's voice. *L'Eſtrange.*—To add; to conjoin.—Wo unto them that *lay* field to field. *Iſa.* v. 8.—To put in a ſtate; implying ſomewhat of diſcloſure.—The wars have *laid* whole countries waſte. *Addiſon.*—To ſcheme; to contrive.—Homer is like his Jupiter, has his terrors,

terrors, ſhaking Olympus; Virgil, like the ſame power in his benevolence, counſelling with the gods, *laying* plans for empires. *Pope.*

Every breaſt ſhe did with ſpirit inflame,
Yet ſtill freſh projects *lay'd* the grey-ey'd dame. *Chapman.*

To charge as a payment.—A tax *laid* upon land ſeems hard to the land-holder, becauſe it is ſo much money going out of his pocket. *Locke.*—To impute; to charge.—There was eagerneſs on both ſides; but this is far from *laying* a plot upon Luther. *Atterbury.*

Let us be glad of this, and all our fears
Lay on his providence. *Paradiſe Regain'd.*

To impoſe, as evil or puniſhment.—The Lord ſhall *lay* the fear of you, and the dread of you, upon all the land. *Deut.* xi. 25.—Theſe words were not ſpoken to Adam; neither, indeed, was there any grant in them made to Adam; but a puniſhment *laid* upon Eve. *Locke.*

The wearieſt and moſt loathed life
That age, ach, penury, impriſonment,
Can *lay* on nature, is a paradiſe
To what we fear of death. *Shakeſpeare's Meaſ. for Meaſ.*

To enjoin as a duty, or a rule of action.—You ſee what obligation the profeſſion of Chriſtianity *lays* upon us to holineſs of life. *Tillotſon.*

Neglects the rules each verbal critic *lays*,
For not to know ſome trifles is a praiſe. *Pope.*

To exhibit; to offer.—It is not the manner of the Romans to deliver any man to die, before that he which is accuſed have the accuſers face to face, and have licence to anſwer for himſelf concerning the crime *laid* againſt him. *Acts* xxv. 16.—To throw by violence.—He bringeth down them that dwell on high; the lofty city he *layeth* it low, even to the ground. *Iſa.* xxvi. 5.

Brave Cæneus *laid* Ortygius on the plain;
The victor Cæneus was by Turnus ſlain. *Dryden.*

To place in compariſon.—*Lay* down by thoſe pleaſures the fearful and dangerous thunders and lightnings, and then there will be found no compariſon. *Raleigh.*

To LAY *apart.* To reject; to put away.—*Lay apart* all filthineſs. *James* i. 21.

To LAY *aſide.* To put away; not to retain.—Retention is the power to revive again in our minds thoſe ideas which, after imprinting, have diſappeared, or have been *laid aſide* out of ſight. *Locke.*

When by juſt vengeance guilty mortals periſh,
The gods behold their puniſhment with pleaſure,
And *lay* the uplifted thunder-bolt *aſide.* *Addiſon.*

To LAY *away.* To put from one; not to keep.—Queen Eſther *laid away* her glorious apparel, and put on the garments of anguiſh. *Eſther* xiv. 2.

To LAY *before.* To expoſe to view; to ſhow; to diſplay.—I cannot better ſatisfy your piety, than by *laying before* you a proſpect of your labours. *Wake.*

To LAY *by.* To reſerve for ſome future time.—Let every one *lay by* him in ſtore, as God hath proſpered him. 1 *Cor.* xvi. 2.—To put from one; to diſmiſs.—When their diſpleaſure is once declared, they ought not preſently to *lay by* the ſeverity of their brows, but reſtore their children to their former grace with ſome difficulty. *Locke.*

Darkneſs, which faireſt nymphs diſarms,
Defends us ill from Mira's charms;
Mira can *lay* her beauty *by*,
Take no advantage of the eye,
Quit all that Lely's art can take,
And yet a thouſand captives make. *Waller.*

To LAY *down.* To depoſite as a pledge, equivalent, or ſatisfaction.—I *lay down* my life for the ſheep. *John* x. 15.

For her, my lord,
I dare my life *lay down*, and will do't, ſir,
Pleaſe you t' accept it, that the queen is ſpotleſs
I' th' eyes of Heaven. *Shakeſpeare.*

To quit; to reſign.—The ſtory of the tragedy is purely fiction; for I take it up where the hiſtory has *laid* it *down.* *Dryden.*

Ambitious conquerors, in their mad career,
Check'd by thy voice, *lay down* the ſword and ſpear. *Blackm.*

To commit; to repoſe.—We *lay* us *down* to ſleep away our cares; night ſhuts up the ſenſes. *Glanville's Sceplis.*

Some god conduct me to the ſacred ſhades,
Or lift me high to Hæmus' hilly crown,
Or in the plains of Tempè *lay* me *down.* *Dryden.*

To advance as a propoſition.—Kircher *lays* it *down* as a certain principle, that there never was any people ſo rude, which did not acknowledge and worſhip one ſupreme Deity. *Stillingfleet.*—Plato *lays* it *down* as a principle, that whatever is permitted to befal a juſt man, whether poverty or ſickneſs, ſhall, either in life or death, conduce to his good. *Addiſon.*

To LAY *for.* To attempt by ambuſh, or inſidious practices.—He embarked, being hardly *laid for* at ſea by Cortugli, a famous pirate. *Knolles.*

To LAY *forth.* To diffuſe; to expatiate.—O bird! the delight of gods and of men! and ſo he *lays* himſelf *forth* upon the gracefulneſs of the raven. *L'Eſtrange.*—To place when dead in a decent poſture:

Embalm me,
Then *lay* me *forth*; although unqueen'd, yet like
A queen, and daughter to a king, inter me. *Shakeſpeare.*

To LAY *hold of*, or *on.* To ſeize; to catch.—Then ſhall his father and his mother *lay hold on* him, and bring him out. *Deut.* xxi. 19.—Favourable ſeaſons of aptitude and inclination, be heedfully *laid hold of. Locke.*

To LAY *in.* To ſtore; to treaſure.—Readers, who are in the flower of their youth, ſhould labour at thoſe accompliſhments which may ſet off their perſons when their bloom is gone, and to *lay in* timely proviſions for manhood and old age. *Addiſon's Guardian.*

An equal ſtock of wit and valour
He had *laid in*, by birth a taylor. *Hudibras.*

To LAY *on.* To apply with violence.—We make no excuſes for the obſtinate; blows are the proper remedies, but blows *laid on* in a way different from the ordinary. *Locke on Education.*

To LAY *open.* To ſhow; to expoſe.—A fool *layeth open* his folly. *Prov.* xiii. 16.

Teach me, dear creature, how to think and ſpeak:
Lay open to my earthy groſs conceit,
Smother'd in errors, feeble, ſhallow, weak,
The folded meaning of your word's deceit. *Shakeſpeare.*

To LAY *over.* To incruſt; to cover; to decorate ſuperficially.—Wo unto him that ſaith to the wood, awake; to the dumb ſtone, ariſe, it ſhall teach: behold, it is *laid over* with gold and ſilver, and there is no breath at all in the midſt of it. *Hab.* ii. 19.

To LAY *out.* To expend.—Tycho Brahe *laid out*, beſides his time and induſtry, much greater ſums of money on inſtruments than any man we ever heard of. *Boyle.*—If you can get a good tutor, you will never repent the charge; but will always have the ſatisfaction to think it the money, of all other, the beſt *laid out. Locke.*—Nature has *laid out* all her art in beautifying the face; ſhe has touched it with vermilion, planted in it a double row of ivory, and made it the ſeat of ſmiles and bluſhes. *Addiſon.*

My father never at a time like this
Would *lay out* his great ſoul in words, and waſte
Such precious moments. *Addiſon's Cato.*

To diſplay; to diſcover.—He was dangerous, and takes occaſion to *lay out* bigotry, and falſe confidence, in all its

colours. *Atterbury.*—To diſpoſe; to plan.—The garden is *laid out* into a grove for fruits, a vineyard, and an allotment for olives and herbs. *Notes on the Odyſſey.*—With the reciprocal pronoun, to exert; put forth.—No ſelfiſh man will be concerned to *lay out* himſelf for the good of his country. *Smalridge.*

To LAY *to.* To charge upon.—When we began, in courteous manner, to *lay* his unkindneſs *unto* him, he, ſeeing himſelf confronted by ſo many, like a reſolute orator, went not to denial, but to juſtify his cruel falſehood. *Sidney.*—To apply with vigour.—We ſhould now *lay to* our hands to root them up, and cannot tell for what. *Reaſons againſt the Covenant.*

Let children be hired to *lay to* their bones,
From fallow as needeth, to gather up ſtones. *Tuſſer.*

To haraſs; to attack.—The great maſter, having a careful eye over every part of the city, went himſelf unto the ſtation which was then hardly *laid to* by the Baſſa Muſtapha. *Knolles.*

Whilſt he this, and that, and each man's blow,
Doth eye, defend, and ſhift, being *laid to* ſore:
Backwards he bears. *Daniel's Civil War.*

To LAY *together.* To collect; to bring into one view.—Many different and oppoſite deductions muſt be examined, and *laid together*, before a man can come to make a right judgment of the point in queſtion. *Locke.*

To LAY *under.* To ſubject to:

A Roman ſoul is bent on higher views;
To civilize the rude unpoliſh'd world,
And *lay* it *under* the reſtraint of laws. *Addiſon.*

To LAY *up.* To confine to the bed or chamber.—In the Eaſt Indies, the general remedy of all ſubject to the gout, is rubbing with hands till the motion raiſe a violent heat about the joints; where it was chiefly uſed, no one was ever troubled much, or *laid up*, by that diſeaſe. *Temple.*—To ſtore; to treaſure; to repoſite for future uſe.—Thoſe things which at the firſt are obſcure and hard, when memory hath *laid* them *up* for a time, judgment afterwards growing explaineth them. *Hooker.*—This faculty of *laying up* and retaining ideas, ſeveral other animals have to a great degree, as well as man. *Locke.*

What right, what true, what fit, we juſtly call,
Let this be all my care; for this is all;
To *lay* this harveſt *up*, and hoard with haſte
What every day will want, and moſt the laſt. *Pope.*

To LAY, *v. n.* To bring eggs.—Hens will greedily eat the herb which will make them *lay* the better. *Mortimer's Huſbandry.*—To contrive; to form a ſcheme:

Which mov'd the king,
By all the apteſt means could be procur'd,
To *lay* to draw him in by any train. *Daniel's Civil War.*

To LAY *about.* To ſtrike on all ſides; to act with great diligence and vigour.—In the late ſucceſsful rebellion, how ſtudiouſly did they *lay about* them, to caſt a ſlur upon the king? *South.*

And *laid about* in fight more buſily,
Than th' Amazonian dame Penthefile. *Hudibras.*

To LAY *at.* To ſtrike; to endeavour to ſtrike.—The ſword of him that *layeth at* him cannot hold. *Job.*

Fiercely the good man did *at* him *lay*,
The blade oft groaned under the blow. *Spenſer.*

To LAY *in for.* To make overtures of oblique invitation.—I have *laid in for* theſe, by rebating the ſatire, where juſtice would allow it, from carrying too ſharp an edge. *Dryden.*

To LAY *on.* To ſtrike; to beat without intermiſſion:

Anſwer, or anſwer not, 'tis all the ſame,
He *lays* me *on*, and makes me bear the blame. *Dryden.*

To act with vehemence; uſed of expenſes.—My father has made her miſtreſs of the feaſt, and ſhe *lays* it *on*. *Shakeſp.*

To LAY *out.* To take meaſures.—I made ſtrict inquiry wherever I came, and *laid out* for intelligence of all places; where the intrails of the earth were *laid* open. *Woodward.*

To LAY *upon.* To importune; to requeſt with earneſtneſs and inceſſantly. *Obſolete.*—All the people *laid* ſo earneſtly *upon* him to take that war in hand, that they ſaid they would never bear arms more againſt the Turks, if he omitted that occaſion. *Knolles.*

LAY, *ſ.* [from the *verb.*] A row; a ſtratum; a layer; one rank in a ſeries, reckoned upwards.—A viol ſhould have a *lay* of wire-ſtrings below, as cloſe to the belly as the lute, and then the ſtrings of guts mounted upon a bridge as in ordinary viols, that the upper ſtrings ſtrucken might make the lower reſound. *Bacon.*—Upon this they lay a layer of ſtone, and upon that a *lay* of wood. *Mortimer's Huſbandry.*—A wager.—It is eſteemed an even *lay*, whether any man lives ten years longer; I ſuppoſe it is the ſame, that one of any ten might die within one year. *Graunt.*

LAY, *ſ.* [leȳ, leaȝ, Sax. *ley*, Scottiſh.] Graſſy ground; meadow; ground unplowed, and kept for cattle; more frequently, and more properly, written *lea.*—The plowing of *layes* is the firſt plowing up of graſs-ground for corn. *Mortimer's Huſbandry.*

A tuft of daiſies on a flow'ry *lay*
They ſaw. *Dryden's Flower and Leaf.*

LAY, *ſ.* [*lai*, Fr. It is ſaid originally to ſignify *ſorrow* or *complaint*, and then to have been transferred to poems written to expreſs ſorrow. It is derived by the French from *leſſus*, Latin, a funeral ſong; but it is found likewiſe in the Teutonic dialect; leȳ, leoð, Saxon; *leey*, Daniſh.] A ſong; a poem. It is ſcarcely uſed but in poetry:

He reach'd the nymph with his harmonious *lay*,
Whom all his charms could not incline to ſtay. *Waller.*

On Ceres let him call, and Ceres praiſe
With uncouth dances, and with country *lays*. *Dryden.*

Ev'n gods incline their raviſh'd ears,
And tune their own harmonious ſpheres
To his immortal *lays*. *Dennis.*

There were two ſorts of lays; the *great* and the *little*. The firſt was a poem conſiſting of twelve couplets of verſes, of different meaſures. The other was a poem conſiſting of ſixteen or twenty verſes, divided into four couplets. Theſe lays were the lyric poetry of the old French poets, who were imitated by ſome among the Engliſh. They were principally uſed on melancholy ſubjects, and are ſaid to have been formed on the model of the trochaic verſes of the Greek and Latin tragedies.

Father Morgues gives us an extraordinary inſtance of one of theſe ancient lays, in his Treatiſe of French Poetry:

Sur l'appuis du monde
Que faut il qu'on fonde
D'eſpoir?
Cette mer profonde,
En debris feconde
Fait voir
Calme au matin, l'onde
Et l'orage y gronde
Le ſoir.

"Lays were a kind of elegies," ſays M. l'Eveque de la Ravaliere, (Ancienté des Chanſons, tom. i. p. 225.) "filled with amorous complaints." However there are ſome lays which deſcribe moments of joy and pleaſure more than ſorrow or pain; and others upon ſacred ſubjects. Chaucer, who frequently uſes the word lay, confines it wholly to ſongs of complaint and ſorrow: Thus end I this complaining, or this *lay*.—In Spenſer's time, however, its acceptation was more general, and as frequently applied to ſongs of joy as ſorrow:

To the maiden's ſounding timbrels ſung
In well attuned notes, a joyous *lay*. *Fairy Queen.*

Shakeſpeare and Milton uſe it likewiſe indiſcriminately for every kind of ſong. *Lai* ſeems a word purely Francic and Saxon; it is neither to be found in the Armoric language, nor in the dialect of Provence. The French poeteſs Marie, who, in the time of St. Louis, about the middle of the thirteenth century, tranſlated ſeveral tales from the Armoric language of Bretagne, calls them *lais*; but the term is of much higher antiquity. After its adoption by the Engliſh poets, it ſoon became a generical term in poetry for every ſpecies of verſe, as ſong is now; but both theſe words ſtill retain their particular acceptation as well as generical; for by a ſong is underſtood a ſhort poem ſet to a tune, and this was the particular meaning of *lay*, in the laſt century, among our muſical writers.

LAY, *adj.* [*laicus*, Lat. from λαὸς, Gr.] Not clerical; regarding or belonging to the people as diſtinct from the clergy.—*Lay* perſons, married or unmarried, being doctors of the civil law, may be chancellors, officials, &c. *Ayliffe's Parergon.*

All this they had by law, and none repin'd;
The pref'rence was but due to Levi's kind;
But, when ſome *lay* preferment fell by chance,
The gourmands made it their inheritance. *Dryden.*

LAY BROTHERS, among the Romaniſts, thoſe pious but illiterate perſons, who devote themſelves at ſome convent to the ſervice of the religious. They wear a different habit from that of the religious; but never enter the choir, nor are preſent at the chapters; nor do they make any other vow except of conſtancy and obedience. In the nunneries there are alſo lay ſiſters.

LAY CORPORATIONS. See CORPORATION, vol. v.

LAY INVESTITURE OF BISHOPS. See INVESTITURE, vol. xi.

LAY FEE. See the article TENURE.

LAY, a town of France, in the department of the Rhône and Loire: eight miles ſouth-weſt of Roanne.

LAY, ALLAMPI, or ALAMPOU, a town of Africa, in the kingdom of Ningo, on the Gold Coaſt.

LAY-CHOU'I, a town of China, of the third rank, in Pe-tche-li: ten miles eaſt of Y.

LAY-DE', a town of Africa, in the country of the Foulis, on the Senegal: forty-five miles ſouth-eaſt of Goumel.

LAY-KAN', a ſmall iſland in the Eaſtern Indian Sea, near the ſouth-weſt coaſt of Celebes. Lat. 5. 32. S. lon. 119. 51. E.

LAY-MEBAM'BA, a town of Peru, in the juriſdiction of Chacapoyas.

LAY-MOU', a town on the ſouth coaſt of the iſland of Ceram.

LAYAU', a town of the iſland of St. Vincent, ſituated on the weſt-coaſt, in a bay at the mouth of a river, to both of which it gives name. Lat. 13. 8. N. lon. 61. 81. W.

LAYA'VEN POINT, a cape on the north coaſt of Mindanao.

LAY'BACH, a town and capital of Carniola, on a navigable river of the ſame name, which ſo divides it that one part of the town lies in Upper and the other in Lower Carniola. The citadel, which is ancient, has a church, and is inhabited by a conſtable, who has the title of burggrave, and twelve ſoldiers. Laybach is the ſee of a biſhop, erected in 1461, by the emperor Frederic IV. and the prelate was a prince of the empire. Beſides the cathedral, it contains ſeveral churches, and about 500 houſes: twenty-eight miles north-eaſt of Trieſte, and thirty-four weſt-ſouth-weſt of Cilley. Lat. 46. 12. N. lon. 14. 30. E.

LAY'BACH, or LAU'BACH, a river of Carniola, which riſes about a mile weſt of Ober Laubach, and runs into the Save three miles ſouth of Kreutberg.

LAY'BACH, or LAU'BACH, (Ober,) a town of Carniola: eleven miles ſouth-weſt of Laybach, and nine ſouth-eaſt of Hydria.

LAY'COCK, a village in Wiltſhire, containing about 1400 inhabitants. It has two fairs, July 7 and December 21; and formerly had a market. Here is ſaid to have been a caſtle in the time of the Britons; and a nunnery was built here in 1133, which is now the ſeat of the counteſs of Shrewſbury; and here is preſerved an original copy of Magna Charta. Roman coins have been often dug up near this place, in a field which has thence acquired the name of Silver-field. It is three miles from Corſham, and five from Chippenham.

LAY'COCK BA'Y, a bay on the north-eaſt coaſt of Barbadoes; one mile north-weſt of Cuckold's Point.

LAYE, *ſ.* [*ley*, old Fr.] Law:

A woman worthy of immortal praiſe,
Which for this realme found many goodley *layes*,
And wholeſome ſtatutes to her huſband brought. *Spenſer.*

LAYE, a river of France, which paſſes by Bethune, &c. and runs into the Lys ſix miles eaſt of St. Venant.

LAY'ER, *ſ.* [from *lay*.] A ſtratum, or row; a bed; one body ſpread over another.—A *layer* of rich mould beneath, and about this natural earth to nouriſh the fibres. *Evelyn.*—A ſprig of a plant.—Many trees may be propagated by *layers*. *Miller.*—A hen that lays eggs.—The oldeſt are always reckoned the beſt ſitters, and the youngeſt the beſt *layers*. *Mortimer.*

LAY'ING, *ſ.* The act of placing horizontally. The act of extruding eggs.

In gardening, it is the proceſs or operation of placing layers in the ſoil, for propagating trees, ſhrubs, and plants. It is effected by laying branches and young ſhoots of trees and plants in the earth, from two or three to five or ſix inches deep, leaving their tops out, that the part laid in the earth may emit roots, and become a plant. The layers, when well rooted, ſhould be ſeparated from the parent, and planted in the nurſery, or other proper place, to acquire due ſtrength and ſize, for the purpoſes for which they are deſigned. And they require different lengths of time for becoming rooted, from a few months to two or more years.

There are great numbers of ſhrubs and trees that are capable of being increaſed by layers; but the practice is more particularly applicable to the ſhrubby kind, as their branches grow near the ground, convenient for being laid down. It may, however, be practiſed with ſucceſs on fruit-trees and foreſt-trees, when their branches are ſituated low enough for being laid, though the varieties of many fruit-trees are better propagated by grafting and inoculation; as to which, ſee the article HORTICULTURE, vol. x. p. 399–402. The vine and fig, however, often admit of being increaſed by layers; and foreſt-trees, for the continuance of varieties; as the plants raiſed in this method continue exactly the ſame as the parent-plant from whence they were raiſed. This is a certain method to continue any approved variety, as well as to increaſe ſuch ſhrubs or trees as do not produce ſeeds here, and which cannot be eaſily obtained. It is likewiſe an expeditious and eaſy mode of propagation; as by it many new plants are often raiſed in a few months, which would take two or three years to bring them to the ſame ſize from ſeeds. In many ſorts it is ſo eaſy, that all the ſhoots of any branch ſituated near the ground, or convenient for laying down, may be made diſtinct plants.

It may be noticed that, for all ſorts of the tree or ſhrub kinds, it is generally performed on the young ſhoots of the preceding ſummer, which ſhould be laid down in ſpring or autumn; but ſometimes on ſhoots of the ſame year, in ſummer, eſpecially in the hard-wooded evergreen trees and ſhrubs, that do not ſtrike root readily in the older wood. Many ſorts of trees that have their wood of a looſe ſoft texture often grow pretty freely by layers of them, of two or ſeveral years growth. But in herbaceous plants capable of being propagated by layers, ſuch as carnations, pinks, double ſweet-williams, &c. the young

ſhoots of the ſame year, laid down in June and July, are commonly the moſt ſucceſsful. As to the ſeaſon for performing this ſort of work, in moſt ſorts of trees and ſhrubs, it is autumn and ſpring, though it may be performed at almoſt any time of the year.

The general method, of merely laying the branches or ſhoots in the earth, is ſufficient for a great number of trees and ſhrubs of the ſoft-wooded kinds; but, for ſuch as do not readily root by this ſimple method, recourſe muſt be had to ſome of the following contrivances. 1. Giving the ſhoot a gentle twiſt in the part deſigned to be laid in the ground, which greatly promotes and facilitates the emiſſion of fibres from the bruiſed part. 2. Slitting the ſhoot at a joint underneath, up the middle, half an inch to an inch or more long, according to the ſize and nature of the layer, forming a ſort of tongue nearly the ſame as directed for carnation layers; laying that part in the earth, and raiſing the top upright, or rather pointing inwards, ſo as to ſeparate the tongue of the ſlit from the other part, and keeping the ſlit open, as directed below. 3. Cutting the bark all round at a joint, taking out ſmall chips all the way below the cut, and laying that part in the earth, by which it readily emits roots. 4. Thruſting an awl through the ſhoot, at a joint, in ſeveral places, laying that part in the ground, by which it will emit fibres from the wounds more readily. Or, 5. Twiſting a piece of wire hard round the ſhoot at a joint, and pricking it with an awl on each ſide of the wire in ſeveral places, laying it in the earth, by which it breaks out into roots at the confined and wounded parts; often proving ſucceſsful in ſuch trees and ſhrubs as do not readily emit fibres by the other methods.

After laying in either of the above methods, there is no particular culture neceſſary, except, in the heat of ſummer, giving occaſional waterings to keep the earth moiſt about the layers, which will greatly forward them, and promote a good ſupply of roots againſt autumn, when thoſe that are properly rooted ſhould be taken off and tranſplanted.

LAY'MAN, *ſ.* One of the people, diſtinct from the clergy.—Where can be the grievance, that an eccleſiaſtical landlord ſhould expect a third part value for his lands, his title as ancient, and as legal, as that of a *layman*, who is ſeldom guilty of giving ſuch beneficial bargains. *Swift.*

Since a truſt muſt be, ſhe thought it beſt
To put it out of *laymen's* pow'r at leaſt,
And for their ſolemn vows prepar'd a prieſt. *Dryden.*

An image uſed by painters in contriving attitudes.—You are to have a *layman*, almoſt as big as the life, for every figure in particular, beſides the natural figure before you. *Dryden's Dufreſnoy.*

LAY'RAC, a town of France, in the department of the Lot and Garonne: four miles ſouth of Agen, and twelve weſt of Valence. Lat. 44. 8. N. lon. 0. 45. E.

LAY'SOIL, *ſ.* A layſtall.

LAYSSAC', a town of France, in the department of the Aveiron: twelve miles eaſt of Rodez.

LAY'STALL, *ſ.* A heap of dung:

Scarce could he footing find in that foul way,
For many corſes, like a great *layſtall*
Of murdered men, which therein ſtrewed lay. *Spenſer.*

LAY'STOFF, or LES'TOFF. See LOWESTOFFE.

LAY'STON, Hertfordſhire, a decayed market-town, near Buntingford, of which it is the mother-church, was erected by the Saxons; nothing remains now but the church. The manor was formerly called Coneybury. Market on Tueſday, and a fair at Bartholomew-tide for eight days. The river Rib riſes in the neighbourhood; and here is the preſent poſt-road from London to the north.

LAY'TONS, a town of Virginia: thirteen miles eaſt-ſouth-eaſt of Port Royal.

LAYTONSTO'NE, a village in Eſſex, (which with that of Low Layton forms but one pariſh,) on the ſkirts of Epping Foreſt, five miles and a quarter north-eaſt from London. Here are ſome fine ſeats; particularly the Foreſt Houſe, fronting the foreſt, the property of the late Samuel Boſanquet, eſq. the beautiful manſion of the late Thomas Oliver, eſq. and the Manor Houſe, once the ſeat of that great lawyer ſir John Strange, and now of Mr. Lane. Here was a Roman ſtation; ſeveral foundations, with Roman bricks and coins, having been found near the manor-houſe; and ſome urns, with ſome aſhes in them, have been dug up in the church-yard and other parts of the pariſh.

LA'ZA, a town of Spain, in Galicia: eighteen miles eaſt-ſouth-eaſt of Orenſe.

LAZANIL'LA, a town of the iſland of Cuba: forty miles eaſt-north-eaſt of Spiritu Santo.

LAZ'AR, *ſ.* [from *Lazarus* in the goſpel.] One deformed and nauſeous with filthy and peſtilential diſeaſes.—I am weary with drawing the deformities of life, and *lazars* of the people, where every figure of imperfection more reſembles me. *Dryden.*

Life he labours to refine
Daily, nor of his little flock denies
Fit alms to *lazars*, merciful and meek. *Philips.*

LAZ'AR-HOUSE, *ſ.* A houſe for the reception of the diſeaſed; an hoſpital:

A place
Before his eyes appear'd, ſad, noiſome, dark,
A *lazar-houſe* it ſeemed, where were laid
Numbers of all diſeas'd. *Milton.*

LAZ'AR-LIKE, *adj.* Leprous:

A moſt inſtant tetter bark'd about,
Moſt *lazar-like*, with vile and loathſome cruſt,
All my ſmooth body. *Shakeſpeare's Hamlet.*

LAZ'AR-WORT. See LASER-WORT, and LASERPITIUM, p. 255.

LAZA'RE BU'EY, a town of Spain, in New Caſtile: eight miles from Toledo.

LAZ'ARET, *ſ.* [French.] Lazaretto.—The ſame penalty alſo attends perſons eſcaping from the *lazarets*. *Blackſtone.*

LAZARET'TO, *ſ.* [Italian.] A public building, in manner of an hoſpital, for the reception of poor ſick. See LAZAR-HOUSE.

LAZARETTO, in ſome countries, is an edifice appointed for perſons coming from places ſuſpected of the plague, to perform quarantine. It is uſually a large building, at a diſtance from any city, whoſe apartments ſtand detached from each other, &c. where ſhips are unladen, and their crews laid up for forty days, more or leſs, according to the time and place of their departure.

We are indebted to Mr. Howard, the moſt diſtinguiſhed philanthropiſt who has appeared in this or any other country, and whoſe ſervices in the cauſe of humanity can never be forgotten, (ſee HOWARD, vol. x. p. 433.) for a particular account of all the principal lazarettos in Europe, with plans of the buildings, a detail of their chief regulations, and very important and uſeful hints for their improvement. With this view he determined, towards the end of the year 1785, notwithſtanding the expenſe and danger which he thus incurred, to viſit them in perſon. Accordingly, the firſt lazaretto which he inſpected was that at Marſeilles, which is ſituated on an elevated rock near the city, at the end of the bay, fronting the ſouth-weſt, and commanding the entrance of the harbour. This a ſpacious building, and its ſituation renders it very commodious for the great trade which the French carry on in the Levant. Within the lazaretto is the governor's houſe, a chapel, in which divine ſervice is regularly performed, and a tavern, from which perſons under quarantine may be ſupplied with neceſſaries. In order to prevent any communication that is not allowed

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by the regulations of the eſtabliſhment, there is a double wall round the lazaretto; and at the gate there is a bell for calling any perſon within this incloſure; and, by the number and other modifications of the ſtrokes, every individual knows when he is called. At Genoa, whither Mr. Howard next proceeded, the lazaretto is ſituated on the ſea-ſhore, near the city, detached from other buildings, and encompaſſed by a double wall. Another lazaretto, belonging to the Genoeſe, ſtands on a riſing ground at Varignano, near the gulf or noble port of Specia. At Leghorn there are three lazarettos; one of which is new, having been erected in the year 1778. The lazaretto at Naples is very ſmall; that at Meſſina lies on an iſland near the city. At Naples there are two kinds of quarantine performed; one by ſhips with clean bills of health, and the other by ſhips with foul bills. The firſt, called the *petty quarantine*, laſts eighteen days; and the ſhips which perform it lie at the entrance of the port near the health-office. The other, called the *great quarantine*, is performed at a lazaretto ſituated on a peninſula near the city. The health-office at Zante is in the city at the water-ſide. The old lazaretto is diſtant about half a mile from the city, and ſituated on a riſing ground near the ſea. There is another, called the new lazaretto, which is appropriated to a numerous body of peaſants, who paſs over to the Morea to work in harveſt-time; on their return, they perform here a ſeven days' quarantine; and other perſons perform fourteen days' quarantine in the old lazaretto. The lazaretto at Corfu is finely ſituated on a rock ſurrounded with water, about a league from the city. The lazaretto of the Caſtel-Nuovo, in Dalmatia, is on the ſhore, about two miles from the city; at the back of it there is a delightful hill, which belongs to a convent of friars. Perſons in quarantine, after a few days, are allowed to walk there, and divert themſelves with ſhooting, &c.

In order to obtain the moſt complete and ſatisfactory information by performing the ſtricteſt quarantine, our author determined to go to Smyrna, and there to take his paſſage to Venice in a ſhip with a foul bill. He was thus enabled to give a particular account of his reception and accommodation in the new lazaretto of this city, which is chiefly aſſigned to Turks and ſoldiers, and the crews of thoſe ſhips which have the plague on-board; and this he thought to be the more neceſſary, as the rules and tariffs of the other lazarettos in Europe have been evidently formed from thoſe eſtabliſhed at Venice. The city of Venice has two lazarettos, appropriated to the expurgation of merchandiſe ſuſceptible of infection, coming from ſuſpected parts, and for the accommodation of paſſengers in performing quarantine; as alſo for the reception of perſons and effects infected in the unhappy times of peſtilence. The old lazaretto is two miles, and the new about five miles, diſtant from the city, both on little iſlands, ſeparated from all communication, not only by broad canals ſurrounding them, but alſo by high walls; they are of large extent, being about four hundred geometrical paces in circumference. Of theſe Mr. Howard has given a particular deſcription, with an account of the regulations, and mode of government to which they are ſubject, and a plan of the old lazaretto. At Trieſte there are two lazarettos; one new, but both clean, and a contraſt to thoſe which our author had ſeen at Venice. Of the new one he has given a plan: it is ſurrounded at the diſtance of about twenty yards, by a double wall, within which are ſeparate burying places for Roman Catholics, Greeks, and Proteſtants. Mr. Howard cloſes his account of the principal lazarettos in Europe, with the outlines of a proper lazaretto, and an engraved ſketch of a plan for its conſtruction. He has alſo ſubjoined, in minute detail, various pertinent remarks reſpecting quarantines and lazarettos in general; together with obſervations on the importance of a lazaretto in England, in its connection with the advantages which our commerce might derive from it. Theſe details are publiſhed in his Account of the principal Lazarettos in Europe, &c. 1789, 4to.

LAZARETTO, a name given to an hoſpital-ſhip, which is for the reception of the ſick, or perſons ſuppoſed to be infectious. It is alſo the name of a place parted off at the fore-part of the lower deck in ſome merchant-ſhips, for the conveniency of laying up the proviſions, ſtores, &c. neceſſary for the voyage.

By 39 & 40 Geo. III. c. 80. § 23. it is enacted, that, if any ſound perſon ſhall enter any lazaret, he ſhall perform quarantine; and, if he ſhall return from thence (unleſs duly licenſed), or ſhall eſcape, or attempt to eſcape, he ſhall be guilty of felony without benefit of clergy. See QUARANTINE.

LAZARET'TO, a ſmall iſland in the Mediterranean, near the north coaſt of the iſland of Candy, formerly uſed by the Venetians for the purpoſe of a lazaretto, but now deſerted. It is not far from Canea.

LAZARET'TO VEC'CHIO, a ſmall iſland in the neighbourhood of Venice, formerly called St. Maria of Nazareth, from a church of the ſame name built by Auguſtine hermits in 1249. Since the year 1422, all ſhips coming from the Levant are to perform quarantine in this iſland, for which purpoſe it was in that year provided with the neceſſary inns, which were rebuilt and enlarged in 1565. Here all the ſhips and merchandiſe are cloſely inſpected, under the direction of a deputation of the ſenate.

LAZARE'VA, a town of Ruſſia, in the government of Irkutſk, on the Lena: thirty-two miles ſouth-weſt of Kirenſk.

LAZ'ARIM, a town of Portugal, in the province of Beira: ſix miles ſouth-eaſt of Lamego, and fifteen weſt-north-weſt of St. Joao da Peſquiera.

LAZ'ARITES, or FATHERS OF ST. LAZARUS, a name given to certain regular clerks of a congregation inſtituted in France, in the ſeventeenth century, by M. Vincent.

LAZ'ARUS, [i. e. *Eliazar*, ſignifying in Hebrew the help of the Lord.] Brother to Martha and Mary. He dwelt with his ſiſters at Bethany near Jeruſalem; and Jeſus Chriſt ſometimes lodged with him when he came to that city. While Jeſus was beyond Jordan with his apoſtles, Lazarus fell ſick; his ſiſters ſent information of this to our Saviour. Jeſus ſaid, *This ſickneſs is not unto death, but for the glory of God.* Two days afterwards, he ſaid to his diſciples, that Lazarus was aſleep, but that he would go and awake him; meaning that he was dead, and that he would reſtore him to life. Jeſus, on his arrival, found, that Lazarus had been already four days in the grave. Martha, when ſhe had intelligence that Jeſus was coming, went to meet him, and expoſtulated on his delay. Mary alſo came to meet Jeſus; who, ſeeing her weeping, was himſelf troubled, and wept alſo. When Jeſus was come to the grave, he ſaid, *Take away the ſtone*; and then, having returned thanks unto his Father for that he had always heard him, he cried with a loud voice *Lazarus, come forth!* Lazarus immediately appeared alive at the mouth of the grave in which he had been interred; and this miracle, which was wrought almoſt at the very gates of Jeruſalem, made a great noiſe; and the prieſts reſolved on the death of Jeſus. *John* xi.

Six days before his laſt paſſover, Jeſus came again to Bethany, and Lazarus was one of thoſe who reclined at table with him. The Jews, obſerving that the reſurrection of Lazarus had made a great impreſſion on the minds of the people, took a reſolution to procure the death of both. *John* xii. 10, 11. That part of their wicked deſign which related to our Saviour they executed; but ſcripture does not tell us what became of Lazarus. St. Epiphanius ſays, that there was a tradition of Lazarus being thirty years of age when Jeſus Chriſt raiſed him from the dead, and that he lived thirty years longer; ſo that he died, by this account, A. D. 63. The Greeks ſay, that he died at Citium, a town in Cyprus, where his ſepulchre was to be ſeen near the walls of the city; and that there were churches in the ſame iſland dedicated to him. The emperor Leo the Wiſe, having built a church in Conſtantinople in honour of St. Lazarus, about the year 890, ſent to Cyprus,

when

when his body was found near the town of Citium, in a marble tomb, the inſcription whereof imported, that this was Lazarus beloved by Jeſus Chriſt, and raiſed again by him. *Calmet.*

LAZ'ARUS (St.), the name of an eccleſiaſtical fraternity of knights. See the article KNIGHTHOOD, vol. xi. p. 796.

LAZ'ICA, in ancient geography, a country of Aſia, ſouth of the Phaſis, and north of Armenia. This country was inhabited by a tribe of people called *Lazi*, who have to this day preſerved their name, and are known among the Turks under the denomination of *Lazas*, and their country is called the Country of the Lazas, or the Province of Trebizond. In the time of Pliny, Arrian, and Ptolemy, the Lazi were a particular tribe on the northern ſkirts of Colchos. In the age of Juſtinian, they ſpread, or at leaſt reigned, over the whole country. At preſent they have migrated along the coaſt towards Trebizond, and compoſe a rude ſea-faring people, with a peculiar language.

LA'ZILY, *adv.* [from *lazy*.] Idly; ſluggiſhly; heavily. —Watch him at play, when following his own inclinations; and ſee whether he be ſtirring and active, or whether he *lazily* and liſtleſsly dreams away his time. *Locke.*

The eaſtern nations view the riſing fires,
Whilſt night ſhades us, and *lazily* retires. *Creech.*

LA'ZINESS, *ſ.* Idleneſs; ſluggiſhneſs; liſtleſſneſs; heavineſs in action; tardineſs.—That inſtance of fraud and *lazineſs*, the unjuſt ſteward, who pleaded that he could neither dig nor beg, would quickly have been brought both to dig and to beg too, rather than ſtarve. *South.*

LA'ZING, *adj.* Sluggiſh; idle.—The hands and the feet mutinied againſt the belly; they knew no reaſon, why the one ſhould be *lazing*, and pampering itſelf with the fruit of the other's labour. *L'Eſtrange.*

LAZI'SE, a town of Italy, in the Veroneſe, on the eaſt bank of Lake Garda, with a harbour, a cuſtom-houſe, and a caſtle: five miles weſt of Verona.

LA'ZIUS (Wolfgang), an induſtrious writer on hiſtory and antiquities, was born in 1514, at Vienna, where his father, Simon, practiſed as a phyſician. Wolfgang commenced a teacher in the belles-lettres, but was at length nominated to a profeſſorſhip of medicine in Vienna, which he occupied during nineteen years, till his death in 1565. He was an extremely ſtudious man, and left many proofs of his reſearches into Greek and Roman hiſtory, and into the antiquities of his own country. The emperor Ferdinand I. nominated him one of his counſellors, and conferred upon him the order of knighthood. His principal works are, 1. Commentariorum Rerum Græcarum, Lib. ii. folio, 1558. 2. Comment. Reipublicæ Romanæ in exteris provinciis, Lib. xii. folio, 1598. 3. De Gentium Migrationibus, folio, 1600. 4. Chorographia Pannoniæ. 5. Alvearium Antiquitatis. 6. In Genealogium Auſtriacum Comment. His letters were publiſhed collectively at Frankfort, in 2 vols. folio, 1698. *Thuani Hiſt.*

LAZ'ULI. See LAZULUS.

LAZ'ULUS, *ſ.* LAPIS LAZULI, or LAZULITE, in mineralogy, a genus of ſiliceous earth—Conſiſting of ſilex, with a leſs proportion of alumine and carbonat of lime, and a ſmall quantity of ſulphat of lime and oxyd of iron; opake, hardiſh, blue, denſe, without internal luſtre, breaking into indeterminate fragments, producing a white powder when pounded; neither loſing its colour nor effervescing from acids ſprinkled on it, melting eaſily in the fire into a frothy ſlag.

There is but one ſpecies, called Lazulus Orientalis, the lazulite of Haüy. It is found on the confines of Siberia, Tartary, and China, generally in ſolid maſſes, and uſually full of veins of quartz, limeſtone, and pyrites; colour ſky-blue, often with white or yellow ſpots or veins; if calcined, it effervesces a little with acids, and forms with them a gelatinous maſs; it retains its colour a long time in the fire, but at laſt becomes brown; when boiled in concentrated vitriolic acid, it diſſolves ſlowly, and loſes its colour. Specific gravity from 2·76 to 2·94; contains ſilex 46, alumine 14·5, carbonat of lime 28, ſulphat of lime 6·5, oxyd of iron 3, water 2.

It is the *pierre d'azur* of Brochant and other mineralogiſts, from its blue colour: but, according to Haüy, the Arabians call this mineral by the name of *azul*; and hence the term *lazuli*. The blue colour of lapis lazuli was formerly ſuppoſed by moſt mineralogiſts to be owing to the preſence of copper; of which however not the leaſt particle is contained, as appears by the foregoing analyſis. Wellerius thought that it was coloured by ſilver; but this is alſo a miſtake. Lapis lazuli frequently contains iron pyrites, diſſeminated through its ſubſtance in ſpecks and veins. It has not yet been found cryſtallized. In the maſs, this ſubſtance is uſed for ornamental purpoſes; when ſeparated from the matrix in the ſtate of powder, it is uſed as a pigment, and is called *ultramarine*: Baccius ſays it is probably ſo called becauſe it exceeds the colour of the ſea; but this etymology ſeems fanciful; perhaps it was ſo called in conſequence of its being imported into Europe from beyond ſea; for, according to Jameſon, it has not been met with in Europe except among the ruins of Rome. The colour is prepared by calcining the mineral, pounding and waſhing it; and collecting the ſediment. *Kidd's Mineralogy.*

Tavernier ſays that it is found near Thibet. According to Mr. Kirwan, it is found only on the confines of Siberia and Tartary, or China; and lately, as is reported, in America. It was called Cuprum lazuli by Linnæus; but is diſtinguiſhed from blue copper ore by retaining its colour in an ordinary heat. Gmelin calls it *Lazurus*, and places it among the Calcareous Earths; Dr. Turton has removed it.

The method of making the Venetian counterfeit lapis lazuli is this: Melt in a pot, in a glaſs-houſe furnace, equal quantities of the faireſt lattimo and the whiteſt cryſtalline glaſs; when this is in fuſion, mix into it, by ſmall parcels at a time, the blue ſmalt uſed by the painters; make frequent proofs of the colour; and, when it is right, let the whole ſtand twelve hours, and then work it. If the metal riſe in the pot, put in a piece of leaf-gold to keep it down. This makes a fine pale blue ſubſtance, repreſenting the plain blue parts of the natural lapis lazuli. A counterfeit lapis lazuli may be alſo made by fuſing ten pounds of either of the compoſitions for hard glaſs with an ounce and a half of zaffer, and half an ounce of magneſia, till a very deep tranſparent blue glaſs be produced. When the maſs is cold, powder it, and mix with it three quarters of a pound of calcined bones, horn, or ivory, by grinding them together; then fuſe this mixture with a moderate heat, till the ingredients are thoroughly incorporated, and form the melted maſs into cakes by pouring it on a clean bright plate of copper or iron. In order to give it veins of gold, mix gold powder with an equal weight of calcined borax, and temper them with oil of ſpike; let the cakes be painted with this mixture with freſh veins as are deſired, and then put into a furnace of a moderate heat. See Monthly Mag. for Dec. 1811.

LA'ZY, *adj.* [This word is derived by ſome perſons, with great probability, from *à l'aiſe*, Fr. at eaſe; it is however Teutonic; *lijſer* in Daniſh, and *loſigh* in Dutch, have the ſame meaning.] Idle; ſluggiſh; unwilling to work.—What amazing ſtupidity is it, for men to be negligent of ſalvation themſelves! to ſit down *lazy* and unactive. *Rogers.*

The *lazy* glutton ſafe at home will keep,
Indulge his ſloth, and batten with his ſleep. *Dryden.*

Slow; tedious.—The ordinary method for recruiting their armies, was now too dull and *lazy* an expedient to reſiſt this torrent. *Clarendon.*

LA'ZY-PACING, *adj.* Pacing ſlowly.—When he beſtrides the *lazy-pacing* clouds. *Shakeſpeare.*

LAZZARELLI (Gianfranceſco), an Italian comic poet, was a native of Gubbio. After ſuſtaining ſeveral offices

offices in the government of the ſtates of the church, he became, in 1661, auditor of prince Alexander Pico, duke of Mirandola. He was made provoſt of the church of that city in 1681, and died in 1694. He was one of the few poets who remained uninfected with the bad taſte of the poetry of that age, and imitated the more natural and eaſy ſtyle of the earlier writers. The work by which he is moſt known is entitled, *La Cicceide*, a very ſingular performance, the ſole object of which is to throw ridicule upon a perſon whom he calls Don Ciccio, and who was Buonventura Arrighini, formerly his colleague in the rota at Macerata. In a vaſt number of ſonnets and other pieces of verſe, he exhibits him in every poſſible light, ſatirical and ludicrous, from the cradle to the grave; and has purſued his deſign with a flow of verſification, an ingenuity of turn, and a copiouſneſs of fancy, which is truly ſurpriſing, and which ought to have been employed on a better ſubject. There is much indecency, and ſome profaneneſs, in this work, which cauſed it to be put in the prohibited liſt. In the ſecond edition ſome of the profaner ſonnets were omitted. *Bayle.*

LAZ'ZI, *ſ.* The Saxons divided the people of the land into three ranks; the firſt they called *Edilingi*, which were ſuch as are now nobility; the ſecond were termed *Frilingi*, from *friling*, ſignifying that he was born a freeman, or of parents not ſubject to any ſervitude, which are the preſent gentry; and the third and laſt were called *Lazzi*, as born to labour, and being of a more ſervile ſtate than our ſervants, becauſe they could not depart from their ſervice without the leave of the lord; but were fixed to the land where born, and in the nature of ſlaves; hence the word *lazzi*, or lazy, ſignifies thoſe of a ſervile condition. *Nithardus de Saxonibus*, lib. 24. It is remarkable that the lower claſs of people, at Naples, are called *Lazaroni*.

LEA, *ſ.* [leȝ, Sax. a fallow; leaȝ, Sax. a paſture.] Cultivated ground. *Obſolete.*—The lowing herds wind ſlowly o'er the *lea*. *Gray.*

Ceres, moſt bounteous lady, thy rich *leas*
Of wheat, rye, barley, fetches, oats, and peaſe. *Shakeſpeare.*

Her fallow *leas*
The darnel, hemlock, and rank fumitory,
Doth root upon. *Shakeſpeare.*

The ſurface of water:

As when two warlike brigantines at ſea,
With murd'rous weapons arm'd to cruell fight,
Doe meete together on the watry *lea*. *Spenſer.*

LEA, *ſ.* A quantity of yarn, ſo called; and at Kidderminſter it is to contain 200 threads on a reel four yards about. 22 & 23 *Car.* II. c. 8.

LEA, a river of England, which riſes out of Leagrave Marſh, near Luton, in the ſouth of Bedfordſhire, and, flowing obliquely to the eaſtern ſide of the county, waſhes the towns of Hertford and Ware, from the former of which it is navigable to the Thames. It collects in its courſe all the ſtreams of the northern and eaſtern parts of the county, divides part of it from Eſſex, and is the boundary between that county and Middleſex. From this river a ſhort canal has, within theſe few years, been cut to the Thames, near Limehouſe.

LEA, a village in Glouceſterſhire, two miles from Mitchel-Dean: the church is a chapel-of-eaſe to Linton in Herefordſhire.

LEA, a village in Lincolnſhire, two miles from Gainſborough.

LEACH, or LECH, a river of England, in the county of Glouceſter, which runs into the Thames near Leachlade.

LEACH-BRINE, *ſ.* A word uſed by the Engliſh ſalt-workers to expreſs the brine which runs out from the ſalt, when it ſtands in the baſket to drain, immediately after being taken out of the pan; and alſo the liquor left in the pan, when no more ſalt will ſhoot. This is alſo called the *mother-brine*, and *bittern*. In the German ſalt-works they throw this liquor away; but, in our brine-ſalt works in Cheſhire, they preſerve it, and add it to the next boiling; and, in the Newcaſtle and other ſea-water ſalt-works, they ſave it for the making the bitter purging ſalt called *Epſom-ſalt*.

LE'ACHLADE, or LECH'LADE, in Glouceſterſhire, a market-town, bounded by the lands of Fairford, which is four miles diſtant; Hatherope, ſix; Southrope, three; Little Farringdon, Berks, one; divided by the river Iſis from Eaton; Haſtings, Berks, near Helmſcott, Oxon, two; Buſcott, Berks, one; Ingleſham, Berks and Wilts, two; by the river Iſis, and by lands of Kelmsford, Glouceſterſhire, five miles. The church is a handſome ſtructure; the living, a vicarage endowed; Lawrence Bathurſt, eſq. in the year 1672, gave the great tithes to the vicarage for ever, which, with the houſe and premiſes, are worth upwards of three hundred pounds per annum, and have been let for four hundred. Leachlade is governed by a conſtable; is ſeventy-ſix miles from London; a poſt-town; and the turnpike-road from London to Glouceſter and Briſtol lies through it. Great quantities of cheeſe and other goods are brought to the wharfs here, and conveyed thence to London, &c. down the rivers Iſis and Thames, in barges of from thirty to ſeventy tons burthen.

A communication between the Severn and Thames by a canal was completed in 1783, which joins the river Iſis near this town, by which large quantities of coal are brought here, and the country for many miles round is ſupplied from hence with that neceſſary article, which, before the opening of the ſaid canal, was ſold at thirty-two ſhillings per ton home, but directly after ſold at the wharfs at twenty-four ſhillings per ton. Many veſſels ply (between this place and Brimſcomb-port) on the ſaid canal; and great quantities of corn are ſent thither for Briſtol, Stourport, Worceſter, &c. The communication between the Severn and Leachlade was completed in 1789.

Leachlade is ſix miles diſtance from Farringdon, Berks; ſix from Highworth, Wilts; thirteen from Cirenceſter, and twelve from Northleach, both in Glouceſterſhire; nine from Burford, and twelve from Witney, both in Oxfordſhire; all good market-towns. It is probable, that it was anciently a Roman town upon the Thames; for a very plain Roman road runs from hence to Cirenceſter. The river Lech, which riſes near North Lech in this county, diſcharges itſelf into the Thames a little below St. John's Bridge in this pariſh, and thereby gives name to the town. Friday is the market-day, but no great deal of buſineſs is done on it. Here is one good fair in the year, held on the 9th of September, for neat cattle, horſes, cheeſe, &c. &c. this fair was uſually kept in a meadow near St. John's Bridge; but, owing to a flood in the year 1774, it was then removed to the town of Leachlade, where it has been held ever ſince. In a meadow near St. John's Bridge there formerly ſtood a priory, dedicated to St. John the Baptiſt, the foundations of which have been often diſcovered by digging.

Three miles from Leachlade, and about a mile and a half from the village of Buſcott, is a noble manſion, called Buſcott Park, erected by Edward Loveden Loveden, eſq. member for Abingdon, Berks.

Between Leachlade and Cricklade is Kempsford. Here is a large handſome church: and to this place the Stroud canal is extended, which was opened on April 22, 1789, whereby a communication was formed between the Severn and Thames.

LE'ACOCK, a townſhip in Lancaſter-county, Pennſylvania, North America.

LEAD', *ſ.* [læd, Sax.] One of the metals, of which the chemical properties have been explained under the article CHEMISTRY, vol. iv. p. 295. and ſee farther the articles MINERALOGY and PLUMBUM.—*Lead* is very ductile, though leſs ſo than gold: it is very little ſubject to ruſt. The ſpecific gravity of *lead* is to that of water as 11·352 to 1000. *Lead*, when kept in fuſion over a common fire, throws up all other bodies, except gold, that are mixed, all others being lighter, except mercury, which will not bear

bear that degree of heat: it afterwards vitrifies with the baſer metals, and carries them off, in form of ſcoriæ, to the ſides of the veſſel. The weakeſt acids are the beſt ſolvents for *lead*: it diſſolves very readily in aqua fortis diluted with water, as alſo in vinegar. The ſmoke of *lead*-works is a prodigious annoyance, and ſubjects both the workmen, and the cattle that graze about them, to a mortal diſeaſe. *Hill.*—Of *lead*, ſome I can ſhow you ſo like ſteel, and ſo unlike common *lead* ore, that the workmen call it ſteel ore. *Boyle.*—*Lead* is employed for the refining of gold and ſilver by the cupel; hereof is made common ceruſs with vinegar; of ceruſs, red *lead*; of plumbum uſtum, the beſt yellow ocre; of *lead*, and half as much tin, ſolder for *lead*. *Grew.*

Thou art a ſoul in bliſs, but I am bound
Upon a wheel of fire; that mine own tears
Do ſcald like molten *lead*. *Shakeſpeare.*

[In the plural.] Flat roof to walk on, when houſes are covered with *lead*.—I would have the tower two ſtories, and goodly *leads* upon the top, raiſed with ſtatues interpoſed. *Bacon.*

Stalls, bulks, windows,
Are ſmother'd up, *leads* fill'd, and ridges hors'd
With variable complexions; all agreeing
In earneſtneſs to ſee him. *Shakeſpeare.*

Manufacture of LEAD. See PLUMBERY.

BLACK LEAD. See *Graphites* in the article MINERALOGY.

WHITE LEAD. See CHEMISTRY, vol. iv. p. 353.

To LEAD', *v. a.* To fit with lead in any manner.—He faſhioneth the clay with his arm, he applieth himſelf to *lead* it over; and he is diligent to make clean the furnace. *Ecclus*, xxxviii. 30.

To LE'AD, *v. a.* preter. I *led*; part. *led*: [læ̆ban, Sax. *leiden*, Dut.] To guide by the hand.—Doth not each on the ſabbath looſe his ox or his aſs from the ſtall, and *lead* him away to watering? *Luke* xiii. 15.—They thruſt him out of the city, and *led* him unto the brow of the hill. *Luke* iv. 29.—To conduct to any place.—Save to every man his wife and children, that they may *lead* them away and depart. 1 *Sam.* xxx. 22.—Then brought he me out of the way, and *led* me about the way without unto the outer gate. *Ezek.* xlvii. 2.—He maketh me to lie down in green paſtures; he *leadeth* me beſide the ſtill waters. *Pſal.* xxiii. 2.—To conduct as head or commander.—Chriſt took not upon him fleſh and blood, that he might conquer and rule nations, *lead* armies, or poſſeſs places. *South.*

He turns againſt the lion's armed jaws;
And, being no more in debt to years than thou,
Leads ancient lords and rev'rend biſhops on
To bloody battles. *Shakeſpeare's Henry* IV.

To introduce by going firſt.—Which may go out before them, and which may go in before them, and which may *lead* them out, and which may bring them in. *Numb.* xxvii. 17.

His guide, as faithful from that day,
As Heſperus that *leads* the ſun his way. *Fairfax.*

To guide; to ſhow the method of attaining.—Human teſtimony is not ſo proper to *lead* us into the knowledge of the eſſence of things, as to acquaint us with the exiſtence of things. *Watts.*—To draw; to entice; to allure.—Appoint him a meeting, give him a ſhew of comfort, and *lead* him on with a fine baited delay. *Shakeſpeare.*—To induce; to prevail on by pleaſing motives.—What I ſay will have little influence on thoſe whoſe ends *lead* them to wiſh the continuance of the war. *Swift.*

What I did, I did in honour,
Led by th' impartial conduct of my ſoul. *Shakeſpeare.*

To paſs; to ſpend in any certain manner.—Luther's life was *led* up to the doctrines he preached, and his death was the death of the righteous. *Francis Atterbury.*—Celibacy, as then practiſed in the church of Rome, was commonly forced, taken up under a bold vow, and *led* in all uncleanneſs. *Francis Atterbury.*

So ſhalt thou *lead*
Safeſt thy life, and beſt prepar'd endure
Thy mortal paſſage when it comes. *Milton.*

To LE'AD, *v. n.* To go firſt, and ſhow the way.—I will *lead* on ſoftly, according as the cattle that goeth before me, and the children, be able to endure. *Gen.* xxxiii.—To conduct as a commander.—Cyrus was beaten and ſlain under the *leading* of a woman, whoſe wit and conduct made a great figure. *Temple.*—To ſhow the way by going firſt:

The veſſels heavy-laden put to ſea
With proſp'rous gales, a woman *leads* the way. *Dryden.*

To exerciſe dominion:

For ſhepherds, ſaid he, there doen *lead*
As lords done otherwhere. *Spenſer's July.*

LE'AD, *ſ.* Guidance; firſt place: a low deſpicable word.—Yorkſhire takes the *lead* of the other counties. *Herring.*

LEAD HILLS, a village of Scotland, in the county of Lanerk, ſaid to be the moſt lofty habitable ſituation in Great Britain. Here reſide many hundreds of miners with their families. Theſe miners, though in a great meaſure excluded from ſociety by their ſituation, yet not only find means to procure a comfortable ſubſiſtence, but alſo pay more attention to the cultivation of the mind than many of their countrymen ſituated ſeemingly in more favourable circumſtances for the attainment of knowledge. As an evidence of this, they are very intelligent, and have provided a circulating library for the inſtruction and amuſement of the little community belonging to the village. Amid theſe mountains particles of gold have ſometimes been found waſhed down by the rains and ſtreams of water; but this deſert tract is chiefly valuable for producing the metal whoſe name it bears. "Nothing, ſays Mr. Pennant, can equal the gloomy appearance of the country round. Neither tree, nor ſhrub, nor verdure, nor picturesque rock, appear to amuſe the eye. The ſpectator muſt plunge into the bowels of theſe mountains for entertainment." The veins of lead lie moſtly north and ſouth; and their thickneſs varies from a few inches to twenty inches and two feet. At one place, the Suſannah-vein (the richeſt ever diſcovered at Lead hills) ſwelled out to the extraordinary thickneſs of fourteen feet. Some have been found filled with ore within two fathoms of the ſurface; others ſink to the depth of ninety fathoms. The earl of Hopetoun, the proprietor, has in his poſſeſſion a ſolid maſs of lead-ore from theſe mines weighing five tons. His lordſhip has alſo, it is ſaid, a piece of native gold that weighs two ounces, which was found here. The lead ſmelted at this place is all ſent to Leith, where it has the privilege of being exported free of duty. The ſcanty paſture afforded by this barren region feeds ſome ſheep and cattle; but thoſe in the neighbourhood of the mines ſometimes periſh by drinking of the water in which the lead-ore has been waſhed; for the lead-ore communicates a deleterious quality to the water, though that liquid acquires no hurtful taint from remaining in leaden pipes or ciſterns. Theſe mines have been wrought for two centuries. The village is fifteen miles ſouth of Lanerk.

LEAD-STEP BAY, a bay on the ſouth coaſt of Wales, in the county of Pembroke. Lat. 51. 37. N. lon. 4. 45. W.

LEAD'EN, a river of England, which runs into the Severn oppoſite Glouceſter.

LEAD'EN, *adj.* Made of lead.—A *leaden* bullet ſhot from one of theſe guns againſt a ſtone wall, the ſpace of twenty-four paces from it, will be beaten into a thin plate. *Wilkins.*

This tiger-footed rage, when it ſhall find
The harm of unſkann'd ſwiftneſs, will, too late,
Tye *leaden* pounds to 's heels. *Shakeſpeare.*

Heavy;

Heavy; unwilling; motionleſs:

If thou do'ſt find him tractable to us,
Encourage him, and tell him all our reaſons:
If he be *leaden*, icy, cold, unwilling,
Be thou ſo too. *Shakeſpeare's Richard* III.

Heavy; dull:

I'll ſtrive with troubled thoughts to take a nap;
Leſt *leaden* ſlumber poize me down to-morrow,
When I ſhould mount with wings of victory. *Shakeſpeare.*

LEAD'EN-STEP'PING, *adj.* Slowly moving:

Call on the lazy *leaden-ſtepping* hours,
Whoſe ſpeed is but the heavy plummet's pace. *Milton.*

LE'ADER, *ſ.* One that leads, or conducts. Captain; commander.—Thoſe eſcaped by flight, not without a ſharp jeſt againſt their *leaders*, affirming that, as they had followed them into the field, ſo it was good reaſon they ſhould follow them out. *Hayward.*

When our Lycians ſee
Our brave examples, they admiring ſay,
Behold our gallant *leaders*. *Denham.*

One who goes firſt.—Nay, keep your way, little gallant; you were wont to be a follower, now you are a *leader*. *Shakeſpeare.*—One at the head of any party or faction.—The underſtandings of a ſenate are enſlaved by three or four *leaders*, ſet to get or to keep employments. *Swift.*

LE'ADER WATER, a river of Scotland, which riſes in the north-weſt part of Berwickſhire, and runs into the Tweed three miles eaſt of Melroſs.

LE'ADING, *participal adj.* Principal; chief; capital.—In organized bodies, which are propagated by ſeed, the ſhape is the *leading* quality, and moſt characteriſtical part that determines the ſpecies. *Locke.*—Miſtakes ariſe from the influence of private perſons upon great numbers ſtyled *leading* men and parties. *Swift.*

LE'ADING-STRINGS, *ſ.* Strings by which children, when they learn to walk, are held from falling.—Was he ever able to walk without *leading-ſtrings*, or ſwim without bladders, without being diſcovered by his hobbling and his ſinking? *Swift.*

Sound may ſerve ſuch, ere they to ſenſe are grown,
Like *leading-ſtrings*, till they can walk alone. *Dryden.*

LE'ADLY (Jane), an Engliſh fanatic, who, towards the concluſion of the ſeventeenth century, ſeduced, by her viſions, predictions, and doctrines, a conſiderable number of diſciples, among whom there were ſome perſons of learning; and thus gave riſe to what was called the *Philadelphian Society*. This woman was of opinion that all diſſenſions among Chriſtians would ceaſe, and the kingdom of the Redeemer become, even here below, a glorious ſcene of charity, concord, and felicity, if thoſe who bear the name of Jeſus, without regarding the forms of doctrine or diſcipline that diſtinguiſh particular communions, would all join in committing their ſouls to the care of the *internal guide*, to be inſtructed, governed, and formed, by his divine impulſe and ſuggeſtions. Nay, ſhe went ſtill further, and declared, in the name of the Lord, that this deſirable event would happen; and that ſhe had a divine commiſſion to proclaim the approach of this glorious communion of ſaints, who were to be gathered together in one viſible univerſal church, or kingdom, before the diſſolution of this earthly globe. This prediction ſhe delivered with a peculiar degree of confidence, from a notion that her Philadelphian Society was the true kingdom of Chriſt, in which alone the divine ſpirit reſided and reigned. We ſhall not mention the other dreams of this enthuſiaſt, among which the famous doctrine of the final reſtoration of all intelligent beings to perfection and happineſs held an eminent place. Leadley was leſs fortunate than BOURIGNON, (ſee vol. iii. p. 317, 18.) that ſhe had not ſuch an eloquent and ingenious patron as Poiret to plead her cauſe, and to give an air of philoſophy to her wild reveries. For Pordage and Bromley, who were the chief of her aſſociates, had nothing to recommend them but their myſtic piety and contemplative turn of mind. Pordage, more eſpecially, was ſo far deſtitute of the powers of elocution and reaſoning, that he even ſurpaſſed Jacob Boehmen, whom he admired, in obſcurity and nonſenſe; and, inſtead of imparting inſtruction to his readers, did no more than excite in them a ſtupid kind of awe by a high-ſounding jingle of pompous words. The time of her death is not known. *Moſheim's Eccl. Hiſt.* vol. v.

LE'ADMAN, *ſ.* One who begins or leads a dance:

Such a light and mettled dance
Saw you never,
And by *leadmen* for the nonce,
That turn round like grindle-ſtones. *Ben Jonſon.*

LEAD'WORT, *ſ.* in botany. See PLUMBAGO.

LE'AF, *ſ. leaves*, plural; [leaf, Sax. *leaf*, Dut.] The green deciduous parts of plants and flowers.—For the uſe of leaves in vegetable phyſiology, and the various kinds of them, with figures, ſee the article BOTANY, vol. iii. p. 240–246. and Plate IV. V. VI. VII.—Thoſe things which are removed to a diſtant view, ought to make but one maſs; as the *leaves* on the trees, and the billows in the ſea. *Dryden.*

This is the ſtate of man; to-day he puts forth
The tender *leaves* of hopes, to-morrow bloſſoms. *Shakeſp.*

A part of a book, containing two pages:

Peruſe my *leaves* through ev'ry part,
And think thou ſeeſt my owner's heart
Scrawl'd o'er with trifles. *Swift.*

One ſide of a double door.—The two *leaves* of the one door were folding. 1 *Kings.*—Any thing foliated, or thinly beaten.—In horology, an appellation given to the teeth of pinions.

The art of raiſing trees from leaves has been long known; the firſt account of which was publiſhed by Agoſtino Mandirola, an Italian of the Franciſcan order, who aſſures us that he produced trees from the leaves of the cedar and lemon-tree. In the garden of baron Munchhauſen, a young tree was obtained from a leaf of the *limon à rivo*, which yielded fruit the ſecond year. It is more than probable that the multiplication of the *opuntia*, or Indian fig, firſt ſuggeſted the idea of ſuch experiments; for every joint of that plant when ſtuck into the earth, and properly nurtured, throws out roots, and grows.

One help for acquiring a knowledge of the anatomy of plants, is the art of reducing leaves to ſkeletons, which may be done by expoſing the leaves to decay for ſome time ſoaked in water, by which means the ſofter will be ſeparated from the internal harder parts. By carefully wiping, preſſing, and rinſing, them, the harder parts may be obtained from the reſt alone and entire. Some have been able to ſeparate the outer covering on both ſides from the woody net, and even to ſplit the latter into two. A naturaliſt in the year 1645 firſt conceived the idea of making *leaf-ſkeletons* by employing decompoſition for that purpoſe, aſſiſting it by ſeveral ingenious operations of art. When the method of producing theſe ſkeletons was publicly known, numberleſs preparations of them were every where attempted. So much did leaf-ſkeletons afterwards engage the attention of philoſophers, that one Seligmann wrote a treatiſe on the various methods of which may be employed in their preparation.

To LEAF, *v. n.* To bring leaves; to bear leaves.—Moſt trees fall off the leaves at autumn; and, if not kept back by cold, would *leaf* about the ſolſtice. *Brown.*

LEAF-GOLD, *ſ.* Gold beaten into exceedingly thin plates.—*Leaf-gold*, that flies in the air as light as down, is as truly gold as that in an ingot. *Digby.*

LEAF-SILVER, *ſ.* Silver beaten into leaves.—Eleven ounces two-pence ſterling ought to be of ſo pure ſilver as is called *leaf-ſilver*; and then the melter muſt add of other weight ſeventeen-pence halfpenny farthing. *Camden.*

LEAF-INSECT. See CIMEX paradoxus, vol. iv. p. 598.

LE'AFED, *adj.* Furniſhed with one leaf.

LE'AFLESS, *adj.* Naked of leaves.—Bare honeſty, without ſome other adornment, being looked on as a *leafleſs* tree, nobody will take himſelf to its ſhelter. *Government of the Tongue.*

Where doves in flocks the *leafleſs* trees o'erſhade,
And lonely woodcocks haunt the wat'ry glade. *Pope.*

LE'AFY, *adj.* Full of leaves:

Her *leafy* arms with ſuch extent were ſpread,
That hoſts of birds, that wing the liquid air,
Perch'd in the boughs. *Dryden's Flower and Leaf.*

LEA'GA, or BINEA'GA, a harbour on the ſouth-weſt coaſt of Sumatra. Here the chief mate of the Orange-Tree ſloop, captain Duggin, was ſtabbed by an Acheeneer. Four or five aſſaſſins intended to have murdered the captain, and ſeize the veſſel, but were overpowered; two were killed; the reſt jumped overboard and eſcaped. It is fourteen miles eaſt from the mouth of Sinkel River.

LEAGUE, *ſ.* [*lieue*, Fr. *leuca*, Lat. from *lech*, Welſh, a ſtone that was uſed to be erected at the end of every league. *Camden.*] A meaſure of length, containing three miles:

Ev'n Italy, though many a *league* remote,
In diſtant echoes anſwer'd. *Addiſon.*

A ſea-league is uſually reckoned 3000 geometrical paces, or three Engliſh miles; the large leagues of France are uſually 3000, and in ſome places 3500, paces; the mean or common league is 2500 paces, and the little league 2000. Chorier obſerves, that the ancient Gauliſh leagues were but 1500 paces; and the modern French league is 2500 toiſes, = 5328¾ Engliſh yards. The term *lieue*, or league, is applied in different parts of France to very different diſtances. The aſtronomical league of 25 to a degree meaſures 4865 Engliſh yards. The legal lieues, of two French miles, by which the highways were meaſured, contain each 4263 Engliſh yards. The marine league of 20 to a degree meaſures 6081 Engliſh yards. The Spaniſh leagues are larger than the French, 17 Spaniſh leagues making a degree, or 20 French leagues, or 69½ Engliſh ſtatute miles. The league of Spain is four ancient Roman miles, = 6441·392 yards. The large league of Spain is five ancient Roman miles, or 8051·74 Engliſh yards. On roads made ſince 1766, the diſtances are laid down at the rate of 8000 varas to the league; that is, 7416 Engliſh yards; ſo that five ſuch leagues = 21 Engliſh miles nearly. But the juridical league is 5000 varas, or 4635 Engliſh yards; ſo that eight of theſe are equal to 21 Engliſh miles. Marine leagues are reckoned at the rate of 20 to a degree; but in different parts of Spain, the leagues are very different. The leagues of Germany and Holland contain four geographical miles each. The German league, or that of Scandinavia, is 9662 Engliſh yards. The mile or league of Germany is 200 Rheniſh yards, or 8240 Engliſh. The Perſian leagues are nearly the ſame with the Spaniſh; that is, each is equivalent to four Italian miles; which come nearly to what Herodotus mentions of the paraſanga, an ancient meaſure among the Perſians, containing thirty ſtadia; eight of which, according to Strabo, make a mile. The Perſians mark their leagues by trees, as the ancient Romans did by ſtones, *lapides*; for which reaſon they are alſo called *agag*, a Turkiſh word ſignifying a tree. In Japan, the league conſiſts of 1800 fathoms. Theſe are all diſtinguiſhed by little hillocks, raiſed on purpoſe by the road-ſide.

LEAGUE, *ſ.* [*ligue*, Fr. *ligo*, Lat.] A confederacy; a combination either of intereſt or friendſhip.—It is a great error, and a narrowneſs of mind, to think, that nations have nothing to do one with another, except there be either an union in ſovereignty, or a conjunction in pacts or *leagues*: there are other bands of ſociety and implicit confederations. *Bacon's Holy War.*

You peers continue this united *league*:
I every day expect an embaſſage
From my Redeemer, to redeem me hence.
And now in peace my ſoul ſhall part to heav'n,
Since I have made my friends at peace on earth. *Shakeſp.*

The *league*, by way of eminence, denotes that famous one on foot in France, from the year 1576 to 1593. Its intent was to prevent the ſucceſſion of Henry IV. who was of the reformed religion, to the crown; and it ended with his abjuration of that faith. The *leaguers*, or confederates, were of three kinds. The *zealous leaguers* aimed at the utter deſtruction not only of the Huguenots, but alſo of the miniſtry. The *Spaniſh leaguers* had principally in view the tranferring the crown of France to the king of Spain, or the infanta his daughter. The *moderate leaguers* aimed only at the extirpation of Calviniſm, without any alteration of the government.

To LEAGUE, *v. n.* To unite; to confederate.—Where fraud and falſehood invade ſociety, the band preſently breaks, and men are put to a loſs where to *league* and to faſten their dependances. *South.*

LE'AGUE BREA'KER, *ſ.* One that breaks a league:

They took thee
As a *league-breaker*, and delivered bound
Into our hands. *Milton's Samſon Agoniſtes.*

LE'AGUED, *adj.* Confederated:

And now, thus *leagu'd* by an eternal bond,
What ſhall retard the Britons' bold deſigns? *Philips.*

LE'AGUER, *ſ.* [*beleggeren*, Dut.] One who enters into a league. A beſieging army.—We will bind and hoodwink him ſo, that he ſhall ſuppoſe no other but that he is carried into the *leaguer* of the adverſaries, when we bring him to our own tents. *Shakeſpeare.*

And haſting forward up the banks they paſs,
Till far behind the Chriſtian *leaguer* was. *Fairfax.*

LE'AGUING, *ſ.* The act of joining in a league.

LE'AH, [Heb. weary.] The wife of Jacob, and Laban's eldeſt daughter. Her father introduced her into Jacob's chamber, on the wedding-night, inſtead of Rachael, for whom he had ſerved ſeven years. When he complained of the cheat, Laban anſwered that the cuſtom of the country forbad to marry the younger daughters before the elder. *Gen.* xxix. 23, &c. See LABAN, p. 2, 3. Laban afterwards married Rachel; but the Lord, obſerving Jacob to have more inclination for Rachel than for Leah, made Leah the mother of ſix ſons and one daughter, viz. Reuben, Simeon, Levi, Judah, Iſſachar, Zebulun, and Dinah. We know not the year of Leah's death; but ſhe died in the land of Canaan, and was buried in the ſame cave with Sarah, Abraham, and Iſaac. *Gen.* xlix. 31.

LEAK, *ſ.* [*leck*, *leke*, Dut.] A breach or hole which lets in water.—There will be always evils, which no art of man can cure; breaches and *leaks* more than man's wit hath hands to ſtop. *Hooker.*—The water ruſhes in, as it doth uſually in the *leak* of a ſhip. *Wilkins.*

Whether ſhe ſprung a *leak* I cannot find,
Or whether ſhe was overſet with wind,
Or that ſome rock below her bottom rent;
But down at once with all her crew ſhe went. *Dryden.*

A ready way to find a leak in a ſhip, is to apply the narrow end of a ſpeaking-trumpet to the ear, and the other to the ſide of the ſhip where the leak is ſuppoſed to be; then the noiſe of the water iſſuing in at the leak will be heard diſtinctly, whereby it may be diſcovered. *Phil. Tranſ.* No. 201.

The manner of ſtopping a leak is, to put into it a plug wrapt in oakum, and well tarred, or in a tarpauling clout, which keeps the water out; or nailing a piece of ſheet-lead on the place. Seamen ſometimes ſtop a leak by thruſting a piece of ſalt beef into it. The ſea-water, ſays Mr. Boyle, being freſher than the brine imbibed by the

beef, penetrates into its body, and cauſes it to ſwell ſo as to bear ſtrongly againſt the edges of the broken plank, and thereby ſtops the influx of the water.

To LEAK, *v. n.* To let water in or out.—His feet ſhould be waſhed every day in cold water; and have his ſhoes ſo thin, that they might *leak*, and let in water. *Locke.*—To drop through a breach, or diſcontinuity.—The water, which will perhaps by degrees *leak* into ſeveral parts, may be emptied out again. *Wilkins.*

Golden ſtars hung o'er their heads,
And ſeem'd ſo crowded, that they burſt upon 'em,
And dart at once their baleful influence
In *leaking* fire. *Dryden and Lee.*

LE'AKAGE, *ſ.* The ſtate of a veſſel that leaks; that is, lets water, or other liquid, ooze in or out.

LEAKAGE alſo denotes an allowance of three barrels in thirty-ſix, of ſtrong beer, table-beer, and ale, and after that rate for any greater or leſs quantity, out of the exciſe, to the common brewer, in full compenſation for all waſte or other loſſes whatſoever. 43 *Geo.* III. *c.* 69.

LEAKE, *adj.* [hlece, Sax.] Leaky.—And fifty ſiſters water in *leake* veſſels draw. *Spenſer.*

Yet is the bottle *leake*, and bag ſo torn,
That all which I put in falls out anon. *Spenſer.*

LEAKE (Richard), was born at Harwich in the year 1629, and was bred to the ſea-ſervice. At the reſtoration he was made maſter-gunner of the Princeſs, a frigate of fifty guns; and in the firſt Dutch war diſtinguiſhed himſelf by his ſkill and bravery in two very extraordinary actions; in one againſt fifteen ſail of Dutch men-of-war; and another, in 1667, againſt two Daniſh ſhips in the Baltic, in which, the principal officers being killed, the command devolved on him, though only maſter-gunner. In 1669, he was promoted to be gunner of the Royal Prince, a firſt-rate man-of-war. In 1673, he was engaged, with his two ſons Henry and John, in the battle againſt Van Tromp, when the ſhip had all her maſts ſhot away, nearly four hundred men killed and diſabled, and moſt of her upper tier of guns diſmounted. As ſhe lay like a wreck, a Dutch man-of-war and two fire-ſhips came down upon her; and captain Rooke, afterwards ſir George, conceiving it impoſſible to defend her, deſired the men to ſave their lives, and ſtrike the colours. Mr. Leake, hearing this, ordered the lieutenant off the quarter-deck, and took the command, ſaying, "The Royal Prince ſhall never be given up to the enemy while I am alive to defend her." The undaunted ſpirit of the brave gunner inſpired the ſmall reſidue of the ſhip's company with reſolution; they returned to the fight; and, under the direction of this valiant gunner and his two ſons, ſunk both the fire-ſhips, and obliged the man-of-war to ſheer off; and, having thus ſaved the Royal Prince, he brought her into Chatham. Mr. Leake's joy in obtaining this victory was miſerably damped by the loſs of his eldeſt ſon Henry, who was killed by his ſide. Mr. Leake, in conſequence of his great merit, was made, in 1677, *maſter-gunner of England*, and ſtore-keeper of the ordnance at Woolwich. He invented, among other things, the cuſhee-piece; and contrived a new method of firing a mortar. He died in 1686. He had a ſurpriſing genius for all inventions relating to gunnery, and alſo in the compoſition of fire-works. He left a ſon,

LEAKE (John), who was but ſixteen years of age when he was engaged in the battle juſt referred to, and in which he took a conſpicuous part. He was ſhortly after made captain, and performed many prodigies of valour, and, among others, he executed a deſperate attempt of convoying ſome victuallers into Londonderry, which obliged the enemy to raiſe the ſiege; he was alſo at the battle of La Hogue. In 1702, being commodore of a ſquadron, he deſtroyed the French trade and ſettlements at Newfoundland, and reſtored the Engliſh to the poſſeſſion of the whole iſland. On his return he was made rear-admiral; and, in a ſhort time afterwards, he was created vice-admiral of the blue, and received the honour of knighthood. In 1705, he ſaved the important fortreſs of Gibraltar from the combined attacks of France and Spain, and was engaged in the reduction of Barcelona. In the courſe of the following year he relieved that ſame city, when it was reduced to the laſt extremity, and obliged king Philip to raiſe the ſiege. Soon after this he took the cities of Carthagena, Alicant, and Joyce, and concluded the exploits of the year with the reduction of the city and iſland of Majorca. On his return home, he was preſented by prince George of Denmark with a valuable diamond ring, worth 400l. and from the queen he received 1000l. as a reward of his important ſervices. On the death of admiral ſir Cloudeſley Shovel, in 1707, he was made admiral of the white, and commander-in-chief of her majeſty's fleet. In the following year he ſurpriſed a convoy of the enemies' corn, ſent it to Barcelona, and thus ſaved the city and confederate army from the danger of famine. He reduced the iſland of Sardinia to obedience to Charles king of Spain, and aſſiſted lord Stanhope in the conqueſt of Minorca. Returning home, he was appointed one of the council to the lord high-admiral, and in 1709 he was made rear-admiral of Great Britain. He was ſeveral times choſen member of parliament for Rocheſter; and in 1712 conducted the forces to take poſſeſſion of Dunkirk. On the acceſſion of George I. he was ſuperſeded, and allowed a penſion of 600l. upon which he lived in a private manner till his death, which happened at his houſe in Greenwich in 1720. He left no children, but was ſucceeded in his property by

LEAKE (Stephen Martin), who was ſon of captain Martin, the brother-in-law of admiral Leake. Inheriting the property of the admiral, he took his name in addition to that of his own. He went through the different ranks in the Herald's office, till he came to be Garter. He was the firſt perſon who wrote profeſſedly on Engliſh coins. He publiſhed a hiſtory of Britiſh coins, under the title of Nummi Britannici Hiſtoria: he wrote alſo the Life of Sir John Leake, of which only fifty copies were printed; and in 1766 he printed fifty copies of the Statutes of the Order of the Garter. He died in 1773.

LEAKE (John, M. D.), was born of Scottiſh parents in Cumberland, and received his education at the grammar-ſchool at Biſhop-Auckland. This being finiſhed, he ſet off for London, intending to engage in the military profeſſion; but, finding ſome promiſes, with which he had been flattered, were not likely ſoon to be realized, he turned his attention to medicine. After attending the hoſpitals, and being admitted a member of the corporation of ſurgeons, an opportunity preſented itſelf of improving himſelf in foreign ſchools; he embarked for Liſbon, and afterwards viſited Italy. On his return, he eſtabliſhed himſelf as a ſurgeon and accoucheur in the neighbourhood of Piccadilly; and about that time publiſhed a Diſſertation on the Properties and Efficacy of the Liſbon Diet-drink. Where he obtained his doctor's diploma is not known; but he became here long a licentiate of the College of Phyſicians, and removed to Craven-ſtreet, where he began to lecture, as well as continued to practiſe, in the obſtetric art. In 1765, he purchaſed a piece of ground on a building-leaſe, and afterwards publiſhed the plan for the inſtitution of the Weſtminſter Lying-in-Hoſpital; and, as ſoon as the building was raiſed, he voluntarily, and without any conſideration, aſſigned over to the governors all his rights on the premiſes, in favour of the hoſpital. He enjoyed a conſiderable ſhare of reputation and practice as an accoucheur, and as a lecturer; and was eſteemed a polite and accompliſhed man. He added nothing, however, in the way of improvement, to his profeſſion; and his writings are not characteriſed by any extraordinary acuteneſs, or depth of reſearch; but are plain, correct, and practical. He was attacked, in the ſummer of 1792, with a diſorder of the cheſt, with which he had been previouſly affected, and was found dead in his bed on the eighth of Auguſt of that year. He publiſhed,

liſhed, in 1773, a volume of Practical Obſervations on Child-bed Fever; and, in 1774, A Lecture introductory to the Theory and Practice of Midwifery, including the Hiſtory, Nature, and Tendency, of that Science, &c. This was afterwards conſiderably altered and enlarged, and publiſhed in two volumes, under the title of Medical Inſtructions towards the Prevention and Cure of various Diſeaſes incident to Women, &c. The work paſſed through ſeven or eight editions, and was tranſlated into the French and German languages. In the beginning of 1792, a ſhort time before his death, he publiſhed A practical Eſſay on the Diſeaſes of the Viſcera, particularly thoſe of the Stomach and Bowels. *Hutchinſon's Biog. Med.*

LE'AKING, *ſ.* The act of letting out contained water; the act of letting in water.

LE'AKY, *adj.* Battered or pierced, ſo as to let water in or out:

Thou art ſo *leaky*,
That we muſt leave thee to thy ſinking; for
Thy deareſt quit thee. *Shakeſpeare.*

If you have not enjoy'd what youth could give,
But life ſunk through you like a *leaky* ſieve,
Accuſe yourſelf you liv'd not while you might. *Dryden.*

Loquacious; not cloſe.—Women are ſo *leaky*, that I have hardly met with one that could not hold her breath longer than ſhe could keep a ſecret. *L'Eſtrange.*

LEAM, a mountain of Ireland, in the county of Galway, ſituated on the ſouth ſide of Lough Corib: ſixteen miles weſt-north-weſt of Galway.

LEAM, a river in Northamptonſhire, riſing from a ſpring at Helliden, called the Little-Down; haſtens by Cateſby and Staverton into Warwickſhire, where it gives name to the two Lemingtons, and then loſes both its water and name in the Ouſe.

LEAM (New), a river in Cambridgeſhire, runs north-eaſt from Peterborough, to Waterſey, between Whittleſey-Dike and Wiſbeach.

LEAM, *ſ.* with hunters, a leaſh. *Urry.*

LE'AM-CHOU'I-HO', a town of Chineſe Tartary: thirty-ſeven miles ſouth-weſt of Ning-yuen-tcheou.

LE'AM-KI'AN-SAM', a town of Chineſe Tartary: forty-two miles ſouth of Poro.

LE'AM-LE'AM, a town of China, of the third rank, in Pe-tche-li: fifteen miles ſouth-ſouth-weſt of Pekin.

LE'AM-YOM'-HO'TUN, a town of Corea: ſix hundred miles eaſt-north-eaſt of Pekin. Lat. 42. 20. N. lon. 128. 46. E.

LE'AM-YU'EN, a town of China, of the third rank, in Pe-tche-li: fifteen miles north of Chunte.

LE'AMER, *ſ.* [from *leam.*] A kind of hound. *Urry.*

LEAN, *adj.* [hlæne, Sax.] Not fat; meagre; wanting fleſh; bareboned.—*Lean* people often ſuffer for want of fat, as fat people may by obſtruction of the veſſels. *Arbuthnot.*

You tempt the fury of my three attendants,
Lean famine, quartering ſteel, and climbing fire. *Shakeſp.*

Not unctuous; thin; hungry.—There are two chief kinds of terreſtrial liquors, thoſe that are fat and light, and thoſe that are *lean* and more earthy, like common water. *Burnet.*—Low; poor; in oppoſition to *great* or *rich*:

That which combin'd us was moſt great, and let not
A *leaner* action rend us. *Shakeſpeare.*

Jejune; not comprehenſive; not embelliſhed; as, a *lean* diſſertation.

LEAN, *ſ.* That part of fleſh which conſiſts of the muſcle without the fat:

With razors keen we cut our paſſage clean
Through rills of fat, and deluges of *lean*. *Farquhar.*

To LEAN, *v. n.* preter. *leaned* or *leant*: [hlinan, Sax. *lenen*, Dut.] To incline againſt; to reſt againſt.—Security is expreſſed upon the medals of Gordianus, by a lady *leaning* againſt a pillar, a ſceptre in her hand, before an altar. *Peacham on Drawing.*—If God be angry, all our other dependencies will profit us nothing; every other ſupport will fail under us when we come to *lean* upon it, and deceive us in the day when we want it moſt. *Rogers.*

Mid the central depth of black'ning words,
High rais'd in ſolemn theatre around
Leans the huge elephant. *Thomſon.*

To propend; to tend towards.—They delight rather to *lean* to their old cuſtoms, though they be more unjuſt, and more inconvenient. *Spenſer.*—A deſire *leaning* to either ſide, biaſſes the judgment ſtrangely. *Watts.*—To be in a bending poſture.—She *leans* me out at her miſtreſs's chamber-window, bids me a thouſand times good night. *Shakeſpeare.*

Wearied with length of ways, and worn with toil,
She laid her down; and, *leaning* on her knees,
Invok'd the cauſe of all her miſeries. *Dryden.*

LE'AN-CHAN', a town of China, of the third rank, in Se-tchuen: thirty-two miles ſouth-ſouth-eaſt of Ta.

LE'AN-FACED, *adj.* Having a meagre face.

LE'AN-FLESHED, *adj.* Meagre in fleſh.

LE'AN-LOOKED, *adj.* Looking lean, having little appearance of fleſh. *Dryden.*

LEAN-TO', *ſ.* in architecture; a low ſhallow building joining to a higher.

LE'AN-WIT'TED, *adj.* Of ſhallow underſtanding.—And thou a lunatic *lean-witted* fool. *Shakeſp. Rich. II.*

LEAN'DER, a French capuchin-friar, was a native of Dijon, where he died in the year 1667. He was the author of various works, by which he acquired a high reputation in his day; and he is frequently quoted by Dupin. The principal of his productions ſtill held in eſteem are, 1. The Truths of the Goſpel, &c. 2 vols. folio, 1661 and 1692. 2. Commentaria in Epiſtolas Divi Pauli, 2 vols. folio, 1663. 3. Diſcurſus prædicabiles, 2 vols. folio, 1665. *Moreri.*

LEAN'DER, a youth of Abydos, famous for his amours with HERO, which ſee, vol. ix. p. 817.

LE'ANG-TANG', a town of China, of the third rank, in Chen-ſi: ſeventeen miles north-eaſt of Oei.

LE'ANING, *ſ.* The act of reclining.

LE'ANLY, *adv.* Meagrely; without plumpneſs.

LE'ANNESS, *ſ.* Extenuation of body; want of fleſh; meagreneſs.—The ſymptoms of too great fluidity are exceſs of univerſal ſecretions, as of perſpiration, ſweat, urine, liquid dejections, *leanneſs*, and weakneſs. *Arbuthnot.*

If thy *leanneſs* loves ſuch food,
There are thoſe, that, for thy ſake,
Do enough. *Ben Jonſon.*

Want of matter; thinneſs; poverty:

The poor king Reignier, whoſe large ſtyle
Agrees not with the *leanneſs* of his purſe. *Shakeſpeare.*

LEA'O, *ſ.* A mineral ſubſtance, approaching to the nature of the lapis lazuli, found in the Eaſt Indies, and of great uſe in the Chineſe porcelain-manufacture, being the fineſt blue they are poſſeſſed of. This ſtone is found in the ſtrata of pit-coal, or in thoſe of a yellowiſh or reddiſh earth in the neighbourhood of the veins of coal. When pieces of it are found on the ſurface of the ground, it is a ſure indication that more will be found on digging. It is generally met with in oblong pieces of the ſize of a finger, not round, but flat. Some of this is very fine, and ſome coarſe, and of a bad colour. The latter is very common, but the fine ſort is ſcarce, and greatly valued. It is not eaſy to diſtinguiſh them at ſight, but they are found by experiment, and the trying one piece is generally ſufficient for judging of the whole mine; for all that is found in the ſame place is uſually of the ſame ſort. Their manner of preparing it for uſe is this; They firſt waſh it very clean, to ſeparate it from the earth, or any other foulneſs it may have; they then lay it at the bottom of their baking-furnaces; and, when it has been thus calcined for three or four hours, it is taken out and powder-

ed very fine in large mortars of porcelain, with peſtles of ſtone faced with iron. When the powder is perfectly fine, they pour in ſome boiling water, and grind that with the reſt; and, when thoroughly incorporated, they add more, and finally pour it off, after ſome time ſettling. The remainder at the bottom of the mortar, which is the coarſer part, they grind again with more water, and ſo on, till they have made the whole fine, excepting a little dirt or grit. When this is done, all the liquors are mixed together, and well ſtirred. They are ſuffered to ſtand two or three minutes after this, and then poured off, with the powder remaining in them. This is ſuffered to ſubſide gradually, and is the fine blue they uſe in their beſt works, our common ſmalt ſerving for the blue of all the common low-priced China-ware.

It is plain that this ſtone is a ſort of lapis lazuli; and the ultramarine blue, uſed by our painters, is made in a manner not wholly unlike this. It is much to be wiſhed, that England were well ſearched for ſuch a ſtone as this leao, ſince our mines in Derbyſhire afford many blue ſubſtances which have not been ſufficiently conſidered; and, if it ſhould be found that either this or any other European nation produces it, it will be a fine diſcovery, as we ſhould not only have the means of giving a fine colour to our own manufactures of this kind, but we might trade with it in China to a vaſt advantage. If England does not poſſeſs it, it is very probable that Germany does, the mines there affording an almoſt inexhauſtible ſtore of coloured ſtones; and this being certainly no other than the ſtony matter of ſome cryſtalline nodule, accidentally tinged with ſome particles of copper. See LAZULUS.

LEA'O, a river of China, which runs into the ſea twelve miles weſt of Lai-tcheou.

LEA'O, or LE'HO, a river of Chineſe Tartary, formed by the union of ſeveral rivers, none of which bear this name till after it has paſſed the barrier between Leao-tong and Tartary. It runs into the gulf of Leao-tong, about twelve miles weſt of Yao-tcheou.

LEA'O-COU'-HO'TUN, a town of Corea, on the ſouth ſide of the Ya-lou river: 370 miles eaſt of Pekin. Lat. 40. 9. N. lon. 125. 4. E.

LEA'O-TONG, a province of Chineſe Tartary, now more uſually called CHEN-YANG, which ſee, vol. iv. p. 403.

LEA'O-TONG' (Gulf of), or YELLOW SEA, a large bay or gulf of the Chineſe Sea, between the peninſula of Corea and China; about 400 miles from north to ſouth, and from 100 to 250 from eaſt to weſt. Lat. 34. 45. to 41. E.

To LEAP, *v. n.* [hleapan, Sax. *loup*, Scot.] To jump; to move upward or progreſſively without change of the feet.—If I could win a lady at leap-frog, or by vaulting into my ſaddle with my armour on, I ſhould quickly *leap* into a wife. *Shakeſpeare's Henry* V.

Thrice from the ground ſhe *leap'd*, was ſeen to wield
Her brandiſh'd lance. *Dryden's Æneid.*

To ruſh with vehemence.—God changed the ſpirit of the king into mildneſs, who in a fear *leaped* from his throne, and took her in his arms, till ſhe came to herſelf again. *Eſther* xv. 8.

He ruin upon ruin heaps,
And on me, like a furious giant, *leaps*. *Sandys.*

To bound; to ſpring—Rejoice ye in that day, and *leap* for joy. *Luke* vi. 23.

I am warm'd, my heart
Leaps at the trumpet's voice, and burns for glory. *Addiſon.*

To fly; to ſtart.—Out of his mouth go burning lamps, and ſparks of fire *leap* out. *Job.* xli. 19.

He parted frowning from me, as if ruin
Leap'd from his eyes; ſo looks the chaſed lion
Upon the daring huntſman that has gall'd him;
Then makes him nothing. *Shakeſpeare Henry* VIII.

To LEAP, *v. a.* To paſs over, or into, by leaping.—Every man is not of a conſtitution to *leap* a gulf for the ſaving of his country. *L'Eſtrange.*

As one condemn'd to *leap* a precipice,
Who ſees before his eyes the depth below,
Stops ſhort. *Dryden's Spaniſh Friar.*

To compreſs, as beaſts:

Too ſoon they muſt not feel the ſting of love:
Let him not *leap* the cow. *Dryden's Georgics.*

LEAP, *ſ.* Bound; jump; act of leaping.—Space paſſed by leaping.—After they have carried their riders ſafe over all *leaps*, and through all dangers, what comes of them in the end but to be broken-winded? *L'Eſtrange.*—Sudden tranſition.—Wickedneſs comes on by degrees, as well as virtue; and ſudden *leaps* from one extreme to another are unnatural. *L'Eſtrange.*—An aſſault of an animal of prey. The cat made a *leap* at the mouſe. *L'Eſtrange.*—Embrace of animals:

How ſhe cheats her bellowing lover's eye;
The ruſhing *leap*, the doubtful progeny. *Dryden.*

Hazard, or effect of leaping:

Behold that dreadful downfal of a rock,
Where yon old fiſher views the waves from high!
'Tis the convenient *leap* I mean to try. *Dryden.*

A net, engine, or wheel, made of twigs, to catch fiſh in. 4 & 5 *Will. & Mary*, c. 23. In muſic, when there is an interval of a third, fourth, fifth, &c. between two notes. The leaps of a third major or minor, fourth, fifth, ſixth minor, and octave, either aſcending or deſcending, are performed by the voice without any great difficulty or effort; other leaps require more attention and pains to execute.

LE'AP-FROG, *ſ.* A play of children, in which they imitate the jump of frogs.—If I could win a lady at *leap-frog*, I ſhould quickly leap into a wife. *Shakeſpeare's Henry* V.

LE'AP-YEAR, *ſ.* See BISSEXTILE, vol. iii.—The reaſon of the name of *leap-year* is, that a day of the week is miſſed; as, if on one year the firſt of March be on Monday, it will on the next year be on Tueſday, but on *leap-year* it will *leap* to Wedneſday. The ſun conſiſteth of 365 days and almoſt ſix hours, wanting eleven minutes; which ſix hours omitted will, in proceſs of time, largely deprave the compute; and this is the occaſion of the biſſextile or *leap-year*. *Brown.*

LE'APER, *ſ.* One who leaps or jumps. In the French army there is at this time a ſingular kind of troops called *leapers*, who are trained to the greateſt agility and ſkill in corporeal movements. They accompany a correſponding number of cavalry into the field, whoſe horſes are accuſtomed to carry double, and not to ſtart when a man leaps up behind them. Their evolutions are made with wonderful rapidity; they gallop to the place at which they are required to act, and immediately the leapers jump down, form themſelves into a line behind the horſes, and become a ſeparate army. If this *en-croupe* infantry ſhould meet with a repulſe, they are taken off the field in the ſame way. *Worſley's Account of France.*

LE'APING, *ſ.* The act of jumping; the embrace of beaſts.

LE'AR, the name of a Britiſh king, ſaid in old chronicles to have ſucceeded his father Bladud about A. M. 3160. The ſtory of this king and his three daughters is well known, from Shakeſpeare's excellent tragedy founded on it.

LEAR'CHUS, a ſon of Athamas and Ino, cruſhed to death againſt a wall by his father, in a fit of madneſs. See ATHAMAS, vol. ii. p. 462.

LEARE, *ſ.* [læne, Sax. learning.] Skill:

From his mother's womb, which him did bear,
He was invulnerable made by magicke *leare*. *Spenſer.*

To LEARE, *v. a.* To learn.—On that ſame book his ſhame and loſs he *lear'd*. *Fairfax.*

I will

I will ſing what I did *leare*
Long ago in Janiveere. *W. Brown.*

To teach:

Becauſe I did thee *leare*
A lore repugnant to thy parents' faith. *Fairfax.*

LE'ARMOUTH, Northumberland, 328 miles from London, on the bank of the Tweed, in the barony of Wark. It was a handſome town, and once had a market; but is now reduced to a ſingle farm-houſe.

To LEARN, *v. a.* [leornian, Sax.] To gain the knowledge or ſkill of.—He, in a ſhorter time than was thought poſſible, *learned* both to ſpeak and write the Arabian tongue. *Knolles.*

Learn, wretches; *learn*, the motions of the mind,
And the great moral end of human-kind. *Dryden.*

To teach. It is obſervable, that in many of the European languages the ſame word ſignifies to learn and to teach; to gain or impart knowledge: but this ſenſe is now obſolete in Engliſh, and reckoned a vulgariſm.

A thouſand more miſchances than this one,
Have *learn'd* me how to brook this patiently. *Shakeſpeare.*

Haſt thou not *learn'd* me how
To make perfumes? *Shakeſpeare's Cymbeline.*

To LEARN, *v. n.* To take pattern; with of.—Take my yoke upon you, and *learn of* me; for I am meek and lowly. *Matth.* xi. 29.

LEAR'NED, *adj.* Verſed in ſcience and literature.—The beſt account is given of them by their own authors: but I truſt more to the table of the *learned* biſhop of Bath. *Arbuthnot on Coins.*—Skilled; ſkilful; knowing: with *in*:

Though train'd in arms, and *learn'd in* martial arts,
Thou chuſeſt, not to conquer men, but hearts. *Glanville.*

Skilled in ſcholaſtic, as diſtinct from other, knowledge.—Till a man can judge whether they be truths or no, his underſtanding is but little improved; and thus men of much reading are greatly *learned*, but may be little knowing. *Locke.*

LEAR'NEDISH, *adj.* As if learned:

And ſeem more *learnediſh* than thoſe,
That at a greater charge compoſe. *Butler's Remains.*

LEAR'NEDLY, *adv.* With knowledge; with ſkill.—The apoſtle ſeemed in his eyes but *learnedly* mad. *Hooker.*

He ſpoke, and *learnedly*, for life; but all
Was either pitied in him, or forgotten. *Shakeſpeare.*

LEAR'NER, *ſ.* One who is yet in his rudiments; one who is acquiring ſome new art or knowledge.—The late *learners* cannot ſo well take the ply, except it be in ſome minds that have not ſuffered themſelves to fix. *Bacon.*

LEAR'NING, *ſ.* Literature; ſkill in languages or ſciences; generally ſcholaſtic knowledge.—*Learning* hath its infancy, when it is almoſt childiſh; then its youth, when luxuriant and juvenile; then its ſtrength of years, when ſolid; and, laſtly, its old age, when dry and exhauſt. *Bacon.*

To tongue or pudding thou haſt no pretence:
Learning thy talent is, but mine is ſenſe. *Prior.*

Skill in any thing, good or bad.—An art of contradiction by way of ſcorn, a *learning* wherewith we were long ſithence forwarned, that the miſerable times whereunto we are fallen ſhould abound. *Hooker.*

LE'ASBURG, a town of America, being the capital of Caſwell county, in North Carolina; containing a court-houſe, gaol, and a few houſes.

LEASE, *ſ.* [*laiſſer*, Fr. *Spelman.*] A contract by which, in conſideration of ſome payment, a temporary poſſeſſion is granted of houſes or lands.—I have heard a man talk with contempt of biſhops' *leaſes*, as on a worſe foot than the reſt of his eſtate. *Swift.*

Lords of the world have but for life their *leaſe*;
And that too, if the leſſor pleaſe, muſt ceaſe. *Denham.*

Any tenure:

Thou, to give the world increaſe,
Short'ned haſt thy own life's *leaſe*. *Milton.*

A *leaſe* is properly a conveyance of any lands or tenements, uſually in conſideration of rent, or other annual recompence, made for life, for years, or at will; but always for a leſs time than the leſſor hath in the premiſes; for, if it be for the whole intereſt, it is more properly an *aſſignment* than a leaſe. He that letteth is called the *leſſor*, and he to whom the lands, &c. are let, is called the *leſſee*.

A leaſe for years is thus defined: A contract between leſſor and leſſee for the poſſeſſion and profit of lands, &c. on the one ſide, and a recompence for rent or other income on the other. *Bac. Abr.* title *Leaſes*. This word is alſo ſometimes, though improperly, applied to the eſtate, *i. e.* the title, time, or intereſt, the leſſee hath in the thing demiſed; and then it is rather referred to the thing taken or had, and the intereſt of the taker therein; but it is more accurately applied rather to the manner or means of attaining or coming to the thing letten.

The uſual words of operation in a leaſe are, "Demiſe, grant, and to farm let." *Farm*, or *feorme*, is an old Saxon word ſignifying proviſions. And it came to be uſed inſtead of *rent*, or *render*, becauſe anciently the greater part of rents were reſerved in proviſions; in corn, in poultry, and the like; till the uſe of money became more frequent; ſo that a farmer, *firmarius*, was one who held his lands upon payment of a rent, or *feorme*; though at preſent, by a gradual departure from the original ſenſe, the word *farm* is brought to ſignify the very eſtate or lands ſo held upon farm or rent. By this conveyance, an eſtate for life, for years, or at will, may be created either in corporeal or incorporeal hereditaments; though livery of ſeiſin is indeed incident and neceſſary to one ſpecies of leaſes, viz. leaſes for life of corporeal hereditaments, but to no other.

A leaſe may be made either in writing or by word of mouth; but moſt frequently by writing, called a *leaſe by indenture*; when by word of mouth, without any writing, it is called a *leaſe-parol*. *Sheph. Touchſt. c.* 14. But, by the ſtatute of frauds, leaſes of lands muſt be in writing, and ſigned by the parties themſelves, or their agents duly authorized, otherwiſe they will operate only as leaſes at will; *except* leaſes not exceeding three years. 29 *Car.* II. *c.* 14.

A parol agreement to leaſe lands for four years creates only a tenancy at will. 4 *Term Rep.* 680. But ſee 8 *Term Rep.* 3, that a leaſe by parol enures as a tenancy from year to year; the meaning of the ſtatute of frauds being that ſuch an agreement ſhould not operate *as a term*.

A leaſe may be made by all the ways above mentioned, either for life, for years, or at will. *For life*; as for life of the leſſee, or another, or both. *For years*, i. e. for a certain number of years, as 10, 100, 1000, or 10,000 years, months, weeks, or days, as the leſſor and leſſee do agree. And then the eſtate is properly called *a term for years*; for the word *term* doth not only ſignify the limits and limitation of time, but alſo the eſtate and intereſt that doth paſs for that time. Leaſes for years do ſome of them commence *in præſenti*, and ſome *in futuro* at a day to come; and the leaſe that is to begin *in futuro* is called an *intereſſe termini*, or future intereſt. *At will*; i. e. when a leaſe is made of land to be held at the will and pleaſure of the leſſor and leſſee together; and ſuch a leaſe may be made by word of mouth, as well as the former. *Sheph. Touchſt. c.* 14.

If the leaſe be but for half a year, or a quarter, or any leſs time, this leſſee is reſpected as a tenant for years, and is ſtyled ſo in ſome legal proceedings; a year being the ſhorteſt term which the law in this caſe takes notice of. *Lit.* § 58.

Theſe eſtates for years were originally granted to mere farmers or huſbandmen, who every year rendered ſome equivalent in money, proviſions, or other rent, to the leſſors or landlords; but, in order to encourage them to manure and cultivate the ground, they had a permanent in-

tereſt granted them, not determinable at the will of the lord; and yet they were rather conſidered as the bailiffs or ſervants of the lord, who were to receive and account for the profits at a ſettled price, than as having any property of their own; and, therefore, they were not allowed to have a freehold eſtate; but their intereſt (ſuch as it was) veſted after their deaths in their executors. The leſſee's eſtate might alſo, by the ancient law, be at any time defeated by a common recovery ſuffered by the tenant of the freehold, which annihilated all leaſes for years then ſubſiſting: unleſs afterwards renewed by the recoverer, whoſe title was ſuppoſed ſuperior to his by whom thoſe leaſes were granted. *Co. Lit.* 46.

While eſtates for years were thus precarious, it is no wonder that they were uſually very ſhort, like the modern leaſes upon rack-rent; and indeed, we are told, that by the ancient law no leaſes for more than forty years were allowable; but leaſes for long terms, for three hundred or one thouſand years, were certainly in uſe in the time of Edward III. and probably of Edward I. But when, by the ſtat. 21 Hen. VIII. c. 5, the *termor* (that is, he who is entitled to the term of years) was protected againſt fictitious recoveries, and his intereſt rendered ſecure and permanent, long terms began to be more frequent than before; and were afterwards extenſively introduced; continuing ſubject however to the ſame rules of ſucceſſion, and with the ſame inferiority to freeholds, as when they were little better than tenancies at the will of the landlord. 2 *Comm.* c. 9.

The law reckons an eſtate for years inferior in intereſt, as compared to an eſtate for life, or an inheritance; an eſtate for life, even if it be *pur auter vie*, is a freehold; but an eſtate for a thouſand years is only a chattel, and reckoned part of the perſonal eſtate. *Co. Lit.* 45. Hence it follows, that a leaſe for years may be made to commence *in futuro*, though a leaſe for life cannot. For no eſtate of freehold can commence *in futuro*, becauſe it cannot be created at common-law without livery of ſeiſin, or corporal poſſeſſion of the land; and corporal poſſeſſion cannot be given of an eſtate now, which is not to commence now, but hereafter. 5 *Rep.* 94. And, becauſe no livery of ſeiſin is neceſſary to a leaſe for years, ſuch leſſee is not ſaid to be *ſeiſed*, or to have true legal ſeiſin of the lands. Nor indeed does the bare leaſe veſt any eſtate in the leſſee; but only gives him a right of entry on the tenement, which right is called, as has been already remarked, *his intereſt in the term*; but, when he has actually ſo entered, and thereby accepted the grant, the eſtate is then and not before veſted in him, and he is *poſſeſſed*, not properly of the land, but of the term of years; the poſſeſſion or ſeiſin of the land remaining ſtill in him who hath the freehold. *Co. Lit.* 46. Thus the word *term* does not merely ſignify the time ſpecified in the leaſe, but the eſtate alſo and intereſt that paſſes by that leaſe; and therefore the *term* may expire during the continuance of the *time*, as by ſurrender, forfeiture, and the like. *Co. Lit.* 45.

To the making of a good leaſe ſeveral things neceſſarily concur. There muſt be a leſſor not reſtrained from making a leaſe; a leſſee not diſabled to receive; a thing demiſed which is demiſable, and a ſufficient deſcription of the thing demiſed, &c. If it be for years, it muſt have a certain commencement and determination; it is to have all the uſual ceremonies, as ſealing, delivery, &c. and there muſt be an acceptance of the thing demiſed. *Lit.* § 56. 1 *Inſt.* 46. *Plowd.* 273, 523. Whether any rent be reſerved upon a leaſe for life, years, or at will, or not, is not material, except only in the caſes of leaſes made by tenant in tail, huſband and wife, and eccleſiaſtical perſons under ſtat. 32 Hen. VIII. c. 28.

A paper containing words of preſent contract, with an agreement that the leſſee ſhould take poſſeſſion immediately, and that a leaſe ſhould be executed in future, operates only as an *agreement for a leaſe*, and not as a leaſe itſelf. 1 *Term. Rep.* 735. An inſtrument on an agreement-ſtamp, reciting that A, in caſe he ſhould be entitled to certain copyhold premiſes on the death of B. would immediately demiſe the ſame to C. declaring that he did thereby agree to demiſe and let the ſame, with a ſubſequent covenant to procure a licence to let, from the lord, operates as an agreement for a leaſe, and not as an abſolute demiſe. 2 *Term. Rep.* 739. Words in an agreement that A ſhall hold and enjoy, &c. if not accompanied with reſtraining words, operate as words of preſent demiſe; otherwiſe, if they be followed by others, which ſhow that the parties intended that there ſhould be a leaſe in future. The whole muſt depend on the intention of the parties. 5 *Term Rep.* 163. Theſe words in an inſtrument, "Be it remembered, that I. B. hath let, and by theſe preſents doth demiſe, &c." are held to operate as a preſent demiſe, although the inſtrument contained a further covenant for a future leaſe.

By various acts of parliament, and alſo by private ſettlements, a power is granted of making leaſes *in poſſeſſion*, but not in reverſion, for a certain time; the object being that the eſtate may not be incumbered, by the act of the party, beyond a ſpecific time. Yet perſons who had this limited power of making in poſſeſſion only, frequently demiſed premiſes to hold *from the day of the date*; and the courts in ſeveral inſtances determined, that the words "from the day of the date" excluded the day of making the deed; and that in conſequence theſe were leaſes in reverſion, and void; but, this queſtion having been brought again before the court of K. B. it was determined, that the words "from the day" might either be incluſive or excluſive; and therefore that they ought to be conſtrued ſo as to effectuate theſe important deeds, and not to deſtroy them. *Cowp.* 714.

Of all kinds of powers the moſt frequent is that to make leaſes. In the making ſuch leaſes, all the requiſites particularly ſpecified in the power muſt be ſtrictly obſerved; and ſuch leaſes muſt contain all ſuch beneficial clauſes and reſervations as ought to be, for the benefit of the remainder-man; the principle being, that the eſtate muſt come to him in as beneficial a manner as the ancient owners held it. See POWER. If a man hath power to leaſe for ten years, and he leaſeth for *twenty*, the leaſe ſhall be good in equity for ten years.

If a leſſee for a term of twenty years *accepts* of a leaſe of the ſame land for ten years, by the leſſee's *acceptance* of the new leaſe, the term of twenty years is determined in law. 2 *Roll. Abr.* 469.

Caſe.—Leaſe for years to R. B. rendering rent; the next year a leaſe was made of the ſame lands to lady P. for ninety-nine years; the next year the ſame lands were demiſed to the ſaid R. B. for forty-one years, who accepted the leaſe, but that did not extinguiſh his firſt leaſe; becauſe the leſſor by making the intermediate leaſe to lady P. had only a reverſion, and could not afterwards give any intereſt to R. B. But, if it had not been for this intermediate leaſe, then the acceptance of the ſecond leaſe for forty-one years had been a ſurrender of the firſt. *Hutt.* 104.

If a man hath a leaſe for years, which is good in law, and afterwards accepts a new leaſe of the ſame lands, which is void in law, this is no ſurrender in law of the good leaſe. *Hutt.* 105. *Baker v. Willoughby. Mills v. Whitewood.*

A man, in conſideration of a marriage to be had with M. R. made an eſtate to her for life of certain lands in full ſatisfaction of her dower; afterwards they married, and the huſband died, and the widow brought a writ of dower againſt the heir, who pleaded in bar the acceptance of the eſtate for life; adjudged no good plea; for ſuch acceptance did not bar her of her dower at the common-law, becauſe ſhe had no title of dower when the acceptance was made; and beſides no collateral acceptance can bar any right of inheritance or freehold. Sec 4 *Rep.* 1. *Vernon's caſe.* See alſo the article DOWER, vol. vi.

A man made a leaſe of a manor for thirty years, excepting the wood, &c. and afterwards made a leaſe of the woods

woods to the ſame leſſee for ſixty years, and a third leaſe to him of the manor for thirty years, without any exception. Reſolved, that by the acceptance of this future leaſe, the leaſe for ſixty years was ſurrendered; becauſe by ſuch acceptance the leſſee had affirmed that the leſſor had authority to make a new leaſe. 5 *Rep.* 11. *Ives's caſe.*

In a ſpecial verdict in treſpaſs, the caſe was, a leaſe was made to huſband and wife for their lives, and afterwards they accepted a new leaſe for themſelves and their ſon: *habendum* to all three of them, *a die datûs indenturæ*, for the term of their lives, with a letter of attorney to make livery. Adjudged, that the acceptance of a ſecond leaſe, to commence *a die datûs*, was a ſurrender of the firſt, and this by the expreſs agreement in writing of the leſſees themſelves; for otherwiſe the leſſor had no power to make a new leaſe. *Moor* 636.

By ſtat. 29 Geo. II. c. 31, *infants, lunatics, and femes covert*, may apply to the courts of chancery or exchequer, or to the courts of equity of the counties palatine of Cheſter, Lancaſter, and Durham, or to the courts of great ſeſſion of Wales, by petition or motion in a ſummary way; and, by the order of thoſe courts reſpectively, ſuch perſons may, by deed only, without levying a fine, ſurrender leaſes for lives or years, and take new leaſes for lives or years, of the premiſes compriſed therein.

Leſſees are bound to repair their tenements, except it be mentioned in the leaſe to the contrary. Though a leſſee for years is not obliged to repair the houſe let to him, which is burnt by accident, if there be not a ſpecial covenant in the leaſe, that he ſhall leave the houſe in good repair at the end of the term; yet, if the houſe be burnt by negligence, the leſſee ſhall repair it, although there be no ſuch covenant. A leſſee at will is not bound to ſuſtain or repair, as tenant for years is. If the houſe of ſuch a tenant is burnt down by negligence, action lies not againſt the tenant; but action lies for voluntary waſte, in pulling down houſes, or cutting woods, &c. 5 *Rep.* 13. A leſſee who covenants to pay rent and to repair, with an exception of caſualties by fire, is liable upon the covenant for rent, though the premiſes are burnt down, and not rebuilt by the leſſor after notice; but the tenant will be relieved in equity, when the landlord recovers the value againſt the inſurer.

A leſſee muſt not, when near the end of his term, injure the land by improper tillage for his own immediate benefit, ſo as to leave the land in a reduced ſtate. Caſe: W. Childe, eſq. of Kinlet, in Shropſhire, plaintiff; and John Aſprey, farmer, of the ſame place, defendant. The iſſue was, whether a tenant, under a leaſe for twenty-one years, could, towards the concluſion of it, ſow a much greater quantity of wheat and other grain than cuſtomary, although there was no ſpecial clauſe in the leaſe to reſtrict him from doing ſo; or whether a general covenant, "to uſe manure, and employ the farm in a good huſband-like manner, and not impoveriſh and make barren the ſame," did not ſufficiently reſtrain the tenant from an exceſs of tillage. The facts, on the part of the plaintiff, having been ſubſtantiated by the evidence of land-ſurveyors and farmers of the firſt abilities and character, and not controverted by the witneſſes on the other ſide, the judge (Le Blanc) ſummed up the evidence, and clearly eſtabliſhed the law; and a ſpecial jury gave a verdict for the plaintiff, with 300l. damages, excluſive of 75l. for dilapidations on the farm-houſe, and other buildings, with coſts.

A proviſo in a leaſe for twenty-one years, that the landlord ſhall re-enter, on the tenant's committing any act of bankruptcy whereon a commiſſion ſhall iſſue, is good. 2 *Term Rep.* 133. The bankruptcy of the leſſee is no bar to an action of covenant (made before his bankruptcy) brought againſt him for rent due after the bankruptcy. 4 *Term Rep.* 94. Though a bankrupt cannot give a lien on any particular goods, yet he may take a demiſe, and agree that the rent ſhall be payable on a particular day; *e. g.* he may agree to pay half a year's rent in advance; where, by the cuſtom of the country, half a year's rent becomes due on the day on which a tenant enters. And in this caſe the law gives the landlord a power of diſtraining on that day. 2 *Term. Rep.* 600. See RENT, DISTRESS, &c.

If a leaſe contain a covenant that the leſſee, his executors, &c. ſhall not *ſet, let*, or *aſſign-over*, the whole or part of the premiſes without leave in writing, on pain of forfeiting the leaſe; the adminiſtratrix of the leſſee cannot *under-let* without incurring a forfeiture, though for leſs time than the whole term; a parol licence to let part of the premiſes does not diſcharge the leſſee from the reſtriction of ſuch a proviſo. 2 *Term Rep.* 425. But a warrant of attorney to confeſs judgment, on which a leaſe is taken in execution, and ſold, is no forfeiture of the leaſe under a covenant not to *let, ſet, aſſign*, &c. yet, where a tenant gave ſuch warrant of attorney to a creditor, for the expreſs purpoſe of enabling the creditor to take the leaſe in execution, this was held a fraud on the covenant, and the landlord recovered the premiſes in ejectment. 6 *Term. Rep.* 57, 300.

A landlord cannot maintain an action of covenant for rent againſt an under-tenant who holds for a term leſs than the time granted in the original leaſe. But, if the whole of a term is made over by the leſſee, although in the deed he reſerves the rent, and a power of entry for non-payment to himſelf, and not to the original leſſor; and although he introduce new covenants; the perſon to whom it is made over may ſue the original leſſor or his aſſignee of the reverſion, or be ſued by them as aſſignee of the term, on the reſpective covenants in the original leaſe. *Dougl.* 187.

Perſons for whoſe lives eſtates are held by leaſe, &c. remaining beyond ſea, or being abſent, ſeven years, if no proof be made of their being alive, ſhall be accounted dead. 19 *Car.* II. c. 6. See LIFE-ESTATE, and OCCUPANCY.

With regard to the profits of lands ſowed by tenant for years, there is this difference between him and tenant for life: that where the term of tenant for years depends upon a certainty, as if he holds from Midſummer for ten years, and in the laſt year he ſows a crop of corn, and it is not ripe and cut before Midſummer, the end of his term, the landlord ſhall have it; for the tenant knew the expiration of his term, and therefore it was his own folly to ſow what he could never reap the profits of. *Litt.* § 68. But where the leaſe for years depends upon an uncertainty, as, upon the death of the leſſor, being himſelf only tenant for life, or being a huſband ſeized in right of his wife; or if the term of years be determinable upon a life or lives; in all theſe caſes, an eſtate for years not being certainly to expire at a time foreknown, but merely by the act of God, the tenant, or his executors, ſhall have the profits in the ſame manner that a tenant for life or his executors ſhall be entitled thereto. *Co. Litt.* 56. Not ſo if it determine by act of the party himſelf; as if tenant for years does any thing that amounts to forfeiture; in which caſe the emblements ſhall go to the leſſor, and not to the leſſee, who hath determined his eſtate by his own default. *Co. Litt.* 55. 2 *Comm.* 144.

Where the term of a leaſe is to end on a preciſe day, there is no occaſion for a notice to quit; unleſs the parties come to a freſh agreement. In the caſe of a tenancy from year to year, there muſt be *half a year's* notice to quit ending at the expiration of the year. *Six calendar months'* notice is not ſufficient. And there is no diſtinction between houſes and lands as to the time of giving notice to quit. 1 *Term. Rep.* 54. 159. 162, 3.

The *enabling ſtatute*, 32 Hen. VIII. c. 28, empowers three manner of perſons to make leaſes, to endure for three lives, or one-and-twenty years, which could not do ſo before. As firſt, tenant in tail may by ſuch leaſes bind his iſſue in tail, but not thoſe in remainder or reverſion. Secondly, a huſband ſeiſed in right of his wife, in fee-ſimple or fee-tail, provided the wife joins in ſuch leaſe, may bind her and her heirs thereby. Laſtly, all perſons ſeiſed of an eſtate

eſtate in fee-ſimple in right of their churches, which extends not to parſons and vicars, may (without the concurrence of any other perſon) bind their ſucceſſors. But then many requiſites muſt be obſerved, which the ſtatute ſpecifies; otherwiſe ſuch leaſes are not binding. *Co. Litt.* 44. 1ſt, The leaſe muſt be by indenture, and not by deed-poll or parol. 2d, It muſt begin from the making, or day of the making, and not at any greater diſtance of time. 3d, If there be any old leaſe in being, it muſt be firſt abſolutely ſurrendered, or be within a year of expiring. 4th, It muſt be either for twenty-one years, *or* three lives; and not for both. 5th, It muſt not exceed the term of three lives, or twenty-one years, but may be for a ſhorter time. 6th, Under this ſtat. 32 Hen. VIII. it muſt have been of corporeal hereditaments, and not of ſuch things as lie merely in grants; for no rent can be reſerved thereout by the common law, as the leſſor cannot reſort to them to diſtrain. But now, by the ſtat. 5 Geo. III. c. 17, a leaſe of tithes or other incorporeal hereditaments alone may be granted by any biſhop, or any ſuch eccleſiaſtical or eleemoſynary corporation, and the ſucceſſor ſhall be entitled to recover the rent by an action of debt; which (in caſe of a freehold leaſe) he could not have brought at the common law. 7th, It muſt be of lands and tenements moſt commonly letten for twenty years paſt; ſo that, if they had been let for above half the time, (or eleven years out of the twenty,) either for life, for years, at will, or by copy of court-roll, it is ſufficient. 8th, The moſt uſual and cuſtomary *feorme*, or rent, for twenty years paſt, muſt be reſerved yearly on ſuch leaſe. 9th, Such leaſe muſt not be made without impeachment of waſte. Theſe are the guards impoſed by the ſtatute (which was avowedly made for the ſecurity of farmers, and the conſequent improvement of tillage) to prevent unreaſonable abuſes (in prejudice of the iſſue, the wife, or the ſucceſſor) of the reaſonable indulgence here given.

The *diſabling* or *reſtraining ſtatute*, 1 Eliz. c. 19, (made entirely for the benefit of the ſucceſſor,) enacts, that all grants by archbiſhops and biſhops, (which include even thoſe confirmed by the dean and chapter, the which, however long and unreaſonable, were good at common law,) other than for the term of twenty-one years, or three lives, from the making, or without reſerving the uſual rent, ſhall be void. Concurrent leaſes, if confirmed by the dean and chapter, are held to be within the exception of this ſtatute, and therefore valid; provided they do not exceed, together with the leaſe in being, the term permitted by the act. *Co. Litt.* 45. But, by a ſaving expreſsly made, this ſtatute of 1 Eliz. did not extend to grants made by any biſhop to the crown; by which means queen Elizabeth procured many fair poſſeſſions to be made over to her by the prelates, either for her own uſe, or with intent to be granted out again to her favourites, whom ſhe thus gratified without any expenſe to herſelf. To prevent which for the future, the ſtat. 1 Jac. c. 3, extends the prohibitions to grants and leaſes made to the king, as well as to any of his ſubjects. 11 *Rep.* 71.

The ſtatute 13 Eliz. c. 10, explained and enforced by 14 Eliz. cc. 11, 14; 18 Eliz. c. 11; and 43 Eliz. c. 29; extend the reſtrictions laid by the 1 Eliz. c. 19, on biſhops, to certain other inferior corporations, both ſole and aggregate. The reſult of all theſe ſtatutes is, that all colleges, cathedrals, and other eccleſiaſtical or eleemoſynary corporations, and all parſons and vicars, are reſtrained from making any leaſes of their lands, unleſs under the following regulations: 1. They muſt not exceed twenty-one years, or three lives, from the making. 2. The accuſtomed rent, or more, muſt be yearly reſerved thereon. 3. Houſes in corporations or market-towns may be let for forty years, provided they be not the manſion-houſes of the leſſors, nor have above ten acres of ground belonging to them; and provided the leſſee be bound to keep them in repair; and they may alſo be aliened in fee-ſimple for lands of equal value in recompence. 4. Where there is an old leaſe in being, no concurrent leaſe ſhall be made, unleſs where the old one will expire within three year 5. No leaſe, by the equity of the ſtatute, ſhall be made without impeachment of waſte. *Co. Litt.* 45. 6. All bonds and covenants tending to fruſtrate the proviſions of the ſtats. 13 & 18 Eliz. ſhall be void.

Concerning theſe reſtrictive ſtatutes, two general obſervations are to be made. Firſt, That they do not, by any conſtruction, enable any perſons to make ſuch leaſes as they were by common-law diſabled to make: therefore a parſon or vicar, though he is reſtrained from making longer leaſes than for twenty-one years or three lives, even *with* the conſent of the patron and ordinary, yet is not enabled to make any leaſe at all, ſo as to bind his ſucceſſor, *without* obtaining ſuch conſent. *Co. Lit.* 44. Secondly, That, though leaſes contrary to theſe ſtatutes are declared void, yet they are good againſt the leſſor, during his life, if he be a ſole corporation; and are alſo good againſt an aggregate corporation, ſo long as the head of it lives, who is preſumed to be the moſt concerned in intereſt. For the ſtatute was intended for the benefit of the ſucceſſor only; and no man ſhall make an advantage of his own wrong. *Co. Lit.* 45. 2 *Comm. c.* 20.

Where a new thing is demiſed with lands accuſtomably let, though there be great increaſe of rent, the leaſe is void; but more rent than the accuſtomed rent may be reſerved. 5 *Rep.* 5. 6 *Rep.* 37. The leaſes according to the ſtatute 32 Hen. VIII. bind the iſſue in tail, but not thoſe in reverſion or remainder; for, if tenant in tail makes a leaſe warranted by the ſtatute, and dies without iſſue, the leaſe as to him in reverſion or remainder is void; though, by a common recovery, leaſes may be made to bind him in remainder, &c. *Wood's Inſt.* 267.

The ſtat. 18 Eliz. c. 6, directs that one-third of the old rent on all college-leaſes then paid ſhould for the future be reſerved in wheat or malt, reſerving a quarter of wheat for each 6s. 8d. or a quarter of malt for every 5s. or that the leſſees ſhould pay for the ſame according to the price that wheat and malt ſhould be ſold for, in the market next adjoining to the reſpective colleges, on the market-day before the rent becomes due.

The leaſes of beneficed clergymen are farther reſtrained in caſe of their non-reſidence, by ſtats. 13 Eliz. c. 20. 14 Eliz. c. 11. 18 Eliz. c. 11. 43 Eliz. c. 9. which direct, that, if any beneficed clergyman be abſent from his cure above fourſcore days in any one year, he ſhall not only forfeit one year's profit of his benefice, to be diſtributed among the poor of the pariſh, but that all leaſes made by him of the profits of ſuch benefice, and all covenants and agreements of a like nature, ſhall ceaſe and be void; except in the caſe of licenſed pluraliſts, who are allowed to demiſe the living on which they are non-reſident to their curates only, provided ſuch curates do not abſent themſelves above forty days in any one year.

LEASES OF THE KING. Leaſes made by the king, of part of the duchy of Cornwall, are to be for three lives, or thirty-one years, and not be made diſpuniſhable of waſte, whereon the ancient rent is to be reſerved; and eſtates in reverſion, with thoſe in poſſeſſion, are not to exceed three lives, &c. 13 *Car.* II. *c.* 4.

All leaſes and grants made by letters patent, or indentures under the great ſeal of England, or ſeal of the court of Exchequer, or by copy of court-roll, according to the cuſtom of the manors of the duchy of Cornwall, not exceeding one, two, or three lives, or ſome term determinable thereon, &c. are confirmed; and covenants, conditions, &c. in leaſes for lives or years, ſhall be good in law, as if the king were ſeiſed in fee-ſimple. 1 *Jac.* II *c.* 9. 5 *& 6 W. & M. c.* 18. 12 *Ann. c.* 22. Leaſes from the crown of lands in England and Wales, and under the ſeals of the duchy of Lancaſter, &c. for one, two, or three, lives, or terms not exceeding fifty years, are allowed time for inrolment, &c. by ſtat. 10 Ann. c. 18. Leaſes made by the prince of Wales of lands, &c. in the duchy of Cornwall, for three lives, or thirty-one years, on which is reſerved the moſt uſual rent paid for the greateſt part

of

of twenty years before, ſhall be good againſt the king, the prince, and their heirs, &c. and the conditions of ſuch leaſes be as effectual as if the prince had been ſeiſed of an abſolute eſtate in fee-ſimple in the lands. 10 *Geo.* II. *c.* 29.

LEASE AND RELEASE, a conveyance of the fee-ſimple, right, or intereſt, in lands or tenements, under the ſtatute of uſes, 27 Hen. VIII. c. 10. giving firſt the poſſeſſion, and afterwards the intereſt, in the eſtate conveyed. The deed of feoffment was the uſual conveyance at common-law; but, ſince the ſtatute of uſes, the conveyance by leaſe and releaſe has taken place of it, and is become a very common aſſurance to paſs lands and tenements; for it amounts to a feoffment, the uſe drawing after it the poſſeſſion without actual entry, &c. and ſupplying the place of livery and ſeiſin required in that deed. In the making it, a leaſe or bargain and ſale for a year, or ſuch-like term, is firſt prepared and executed; "to the intent," as is expreſſed in the deed, "that by virtue thereof the leſſee may be in actual poſſeſſion of the land intended to be conveyed by the releaſe; and thereby, and by force of the ſtatute 27 Hen. VIII. c. 10, for transferring of uſes into poſſeſſion, be enabled to take and accept a grant of the reverſion and inheritance of the ſaid lands, &c. to the uſe of himſelf and his heirs for ever." Upon which the releaſe is accordingly made, reciting the leaſe, and declaring the uſes; and in theſe caſes a pepper-corn rent in the leaſe for a year is a ſufficient reſervation to raiſe an uſe, to make the leſſee capable of a releaſe.

Blackſtone ſays, this ſpecies of conveyance was firſt invented by ſerjeant Moore, ſoon after the ſtatute of uſes. It is thus contrived: A leaſe, or rather bargain and ſale upon ſome pecuniary conſideration, for one year, is made by the tenant of the freehold, to the leſſee or bargainee. Now this, without any enrolment, makes the bargainor ſtand ſeiſed to the uſe of the bargaineee, and veſts in the bargainee the *uſe* of the term for a year; and then the ſtatute immediately annexes the *poſſeſſion*. He therefore, being thus in poſſeſſion, is capable of receiving a releaſe of the freehold and reverſion, which muſt be made to a tenant in poſſeſſion; and accordingly the next day a releaſe is granted to him. This is held to ſupply the place of livery of ſeiſin; and thus a conveyance by leaſe and releaſe is ſaid to amount to a feoffment. *Co. Lit.* 270. *Cro. Jac.* 604.

The form of this conveyance is originally derived to us from the common-law; and it is neceſſary to diſtinguiſh in what reſpect it operates as a common-law conveyance, and in what manner it operates under the ſtatute of *uſes*. At the common-law, where the uſual mode of conveyance was by feoffment with livery of ſeiſin, if there was a tenant in poſſeſſion, ſo that livery could not be made, the reverſion was granted, and the tenant attorned to the reverſioner. As by this mode the reverſion or remainder of an eſtate might be conveyed without livery, when it depended on an eſtate previouſly exiſting, it was natural to proceed one ſtep further, and to create a particular eſtate for the expreſs and ſole purpoſe of conveying the reverſion; and then, by a ſurrender or releaſe, either of the particular eſtate to the reverſioner, or of the reverſion to the particular tenant, the whole fee veſted in the ſurrenderee, or releaſee. It was afterwards obſerved, that there was no neceſſity to grant the reverſion to a ſtranger; and that, if a particular eſtate was made to the perſon to whom it was propoſed to convey the fee, the reverſion might be immediately releaſed to him, which releaſe, operating by way of enlargement, would give the releaſee (or releſſee as he is ſometimes termed) a fee. In all theſe caſes the particular eſtate was only an eſtate for years; for at the common-law the ceremony of livery of ſeiſin is as neceſſary to create even an eſtate of freehold, as it is to create an eſtate of inheritance. Still an actual entry would be neceſſary on the part of the particular tenant; for, without actual poſſeſſion, the leſſee is not capable of a releaſe, operating by way of enlargement. But this neceſſity of entry for the purpoſe of obtaining the poſſeſſion, was ſuperſeded or made unneceſſary by the ſtatute of uſes above alluded to; for by that ſtatute the poſſeſſion was immediately transferred to the *ceſtui que uſe*; ſo that a bargainee under that ſtatute is as much in poſſeſſion, and as capable of a releaſe, before or without entry, as a leſſee is at the common-law after entry. All, therefore, that remained to be done, to avoid on the one hand the neceſſity of livery or ſeiſin from the grantor, and to avoid on the other the neceſſity of an actual entry on the part of the grantee, was, that the particular eſtate (which, for the reaſons above-mentioned, ſhould be an eſtate for years) ſhould be ſo framed as to be a bargain and ſale within the ſtatute. Originally it was made in ſuch a manner as to be both a leaſe at the common-law, and a bargain and ſale under the ſtatute; but as it is held, that, where conveyances may operate both by the common-law and ſtatute, they ſhall be conſidered to operate by the common-law, unleſs the intention of the parties appears to the contrary, it became the practice to inſert, among the operative words, the words *bargain and ſell*; (in fact, it is more accurate to inſert no other operative words;) and to expreſs that the bargain and ſale, or leaſe, is made to the intent and purpoſe that thereby, and by the ſtatute for transferring uſes into poſſeſſion, the leſſee may be capable of a releaſe. The bargain and ſale therefore, or leaſe for a year, as it is generally called, operates, and the bargainee is in the poſſeſſion, by the ſtatute. The releaſe operates by enlarging the eſtate or poſſeſſion of the bargainee to a fee. This is at the common-law; but, if the uſe be declared to the releaſee in fee-ſimple, it continues an eſtate at the common-law; but, if the uſe is declared to a third perſon, the ſtatute again intervenes, and annexes or transfers the poſſeſſion of the releaſee to the uſe of the perſon to whom the uſe is declared. It has been ſaid, that the poſſeſſion of the bargainee under the leaſe is not ſo properly merged in, as enlarged by, the releaſe; but at all events it does not, after the releaſe, exiſt diſtinct from the eſtate paſſed by the releaſe. 1 *Inſt.* 271. *b.*

As the operation of a leaſe and releaſe depends upon the leaſe, or bargain and ſale; if the grantor is a *body corporate*, the leaſe will not operate under the ſtatute of uſes; for a body corporate cannot be ſeiſed to an uſe; and therefore the leaſe of poſſeſſion, conſidered as a bargain and ſale under the ſtatute, is void; and the releaſe then muſt be of no effect for want of a previous *poſſeſſion* in the releaſee. In caſes of this nature, therefore, it is proper to make the conveyance by feoffment, or by a leaſe and releaſe with an *actual entry* by the leſſee previous to the releaſe; after which the releaſe will paſs the reverſion. It may alſo be obſerved, that in *exchanges*, if one of the parties die before the exchange is executed by entry, the exchange is void. But, if the exchange be made by leaſe and releaſe, this inconvenience is prevented, as the ſtatute executes the poſſeſſion without entry; and all incidents annexed to an exchange at common-law will be preſerved. 1 *Inſt.* 271. *b. in n.*

A leaſe and releaſe make but one conveyance, being in the nature of one deed. 1 *Mod.* 252. For further information as to the principles in which this form of conveyance originates, and under which it operates, ſee CONVEYANCE, DEED, FEOFFMENT, RELEASE, USES, &c.

To LEASE, *v. a.* To let by leaſe.—Where the vicar *leaſes* his glebe, the tenant muſt pay the great tithes to the rector or impropriator, and the ſmall tithes to the vicar. *Ayliffe.*

To LEASE, pronounced *leeze*, *v. n.* [*leſen*, Dut.] To glean; to gather what the harveſt-men leave:

She in harveſt us'd to *leaſe*;
But, harveſt done, to chare-work did aſpire:
Meat, drink, and two-pence, was her daily hire. *Dryden.*

LE'ASER, *ſ.* Gleaner; gatherer after the reaper.—

There was no office which a man from England might not have; and I looked upon all who were born here as only in the condition of *leasers* and gleaners. *Swift.*

LE'ASEY POINT, a cape on the weſt coaſt of the county of Lancaſter, in the Iriſh Sea, north of the iſland of Walney.

LEASH, *ſ.* [*leſſe*, Fr. *letſe*, Dut. *laccio*, Ital.] A leather thong, by which a falconer holds his hawk, or a courſer leads his greyhound. *Hanmer.*

Holding Corioli in the name of Rome,
Ev'n like a fawning greyhound in the *leaſh*,
To let him ſlip at will. *Shakeſpeare.*

A band wherewith to tie any thing in general.—The raviſhed foul, being ſhown ſuch game, would break thoſe *leaſhes* that tie her to the body. *Boyle.*—A tierce; three.—I am ſworn brother to a *leaſh* of drawers, and can call them all by their Chriſtian names. *Shakeſpeare.*

Some thought, when he did gabble,
Th' ad heard three labourers of Babel,
Or Cerberus himſelf pronounce
A *leaſh* of languages at once. *Hudibras.*

To LEASH, *v. a.* To bind; to hold in a ſtring:

Then ſhould the warlike Harry, like himſelf,
Aſſume the port of Mars; and, at his heels,
Leaſht in like hounds, ſhould famine, ſword, and fire,
Crouch for employment. *Shakeſpeare's Henry* V.

LE'ASHING, *ſ.* The act of binding, the act of tying together with a leaſh; that with which any thing is leaſhed.

LE'ASING, *ſ.* [leaſe, Sax.] Lies; falſehood.—O ye ſons of men, how long will ye have ſuch pleaſure in vanity, and ſeek after *leaſing? Pſalm* iv. 2.

He amongſt ladies would their fortunes read
Out of their hands, and merry *leaſings* tell. *Hubbard's Tale.*

[*Leſen*, Dut.] The act of gleaning in a field.

LE'ASING, *ſ.* [from *leaſe*.] The act of letting out on leaſe.

LE'ASOWES, the name of a villa near Hales Owen in Shropſhire, formerly the ſeat of Shenſtone the poet, and at that time famous for natural and artificial beauties. It is now in ruins. Thoſe who wiſh to know what it was once are referred to the Britiſh Directory, vol. ii. p 243.

LEAST, *adj.* the ſuperlative of *little*: [læſt, Sax. This word *Wallis* would perſuade us to write *leſt*, that it may be analogous to *leſs*; but ſurely the profit is not worth the change.] Little beyond others; ſmalleſt.—I am not worthy of the *leaſt* of all the mercies ſhowed to thy ſervant. *Gen.* xxxii. 10.—A man can no more have a poſitive idea of the greateſt than he has of the *leaſt* ſpace. *Locke.*

LEAST, *adv.* In the loweſt degree; in a degree below others; leſs than any other way.—No man more truly knows to place a right value on your friendſhip, than he who *leaſt* deſerves it on all other accounts than his due ſenſe of it. *Pope.*

Ev'n that avert; I chuſe it not;
But taſte it as the *leaſt* unhappy lot. *Dryden.*

At LEAST, or LEASTWISE. To ſay no more; not to demand or affirm more than is barely ſufficient; at the loweſt degree.—A fiend may deceive a creature of more excellency than himſelf, *at leaſt* by the tacit permiſſion of the omniſcient Being. *Dryden.*—Every effect doth after a ſort contain, *at leaſtwiſe* reſemble, the cauſe from which it proceedeth. *Hooker.*

He who tempts, though in vain, *at leaſt* aſperſes
The tempted with diſhonour. *Milton.*

It has a ſenſe implying doubt: to ſay no more; to ſay the leaſt; not to ſay all that might be ſaid.—Let uſeful obſervations be *at leaſt* ſome part of the ſubject of your converſation. *Watts.*

Whether ſuch virtue ſpent now fail'd
New angels to create, if they *at leaſt*
Are his created. *Milton.*

LEAST, *ſ.* A minuteſt particle:

And thence we that a *leaſt* may well conclude
Which utmoſt is, too little to be view'd. *Creech.*

It is uſed with a plural:

They all affirm, that nature never reſts
In breaking bodies, and admits no *leaſts*. *Creech.*

LE'ASY, *adj.* [This word ſeems formed from the ſame root with *loiſir*, Fr. or *looſe*.] Flimſy; of weak texture. *Not in uſe.*—He never leaveth, while the ſenſe itſelf be left looſe and *leaſy*. *Aſcham's Schoolmaſter.*

LEATH'ER, *ſ.* [leðer, Sax. *leaâr*, Erſe.] Dreſſed hides of animals.—He was a hairy man, and girt with a girdle of *leather* about his loins. 2 *Kings* i. 8.

And, if two boots keep out the weather,
What need you have two hides of *leather?* *Prior.*

Skin; ironically:

Returning ſound in limb and wind,
Except ſome *leather* loſt behind. *Swift.*

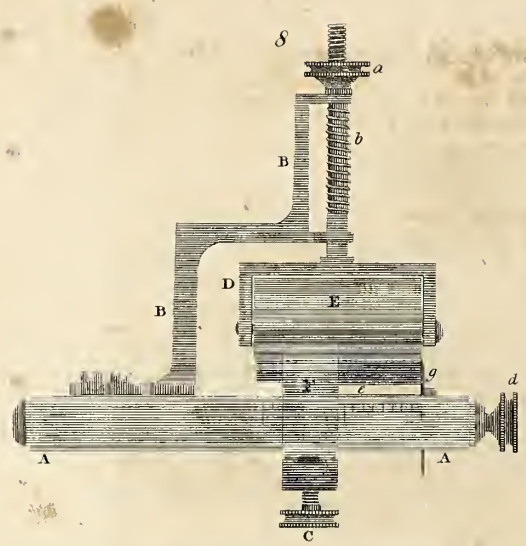
It is often uſed in compoſition for *leathern*, the *adj.*

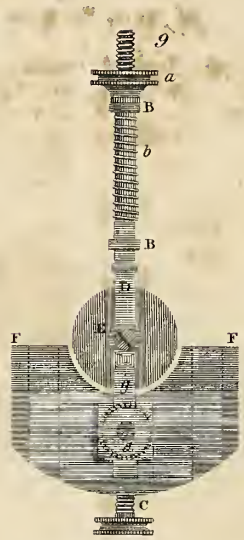
The ſhepherd's homely curds,
His cold thin drink out of his *leather* bottle;
Is far beyond a prince's delicacies. *Shakeſpeare.*

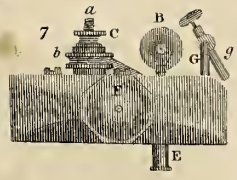
The three principal aſſortments of leather, as noticed in the ſtat. 9 Anne, c. 11. § 3. are tanned, dreſſed in oil, and tawed. By *tanned* hides or ſkins, are meant ſuch as are tanned in wooze, made of the bark of trees, or ſhumach; by hides and ſkins *dreſſed in oil*, are meant ſuch as are made into leather in oil, or with any materials, of which the chief ingredient ſhall be oil; and by *tawed* hides or ſkins, are meant ſuch as are dreſſed or made into leather in alum and ſalt, or meal, or other ingredients properly uſed by tawers of whit-leather. See the articles TANNING, TAWING, and CURRIER.

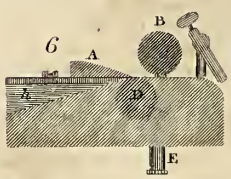
Cuttings of leather and whit-leather may be converted to various uſes. Mr. Samuel Hooper, of St. Giles's, London, bookſeller, took out a patent (Jan. 1790) for manufacturing ſuch refuſe cuttings into a leather for covering coaches &c. and for making boxes of various kinds, and other articles; mouldings, and other ornaments, for rooms; and for binding of books; and alſo for making paper of various ſorts. The proceſs is as follows: Put into an engine, according to its ſize, one hundred-weight or more of ſuch cuttings, ſhavings, or parings, of leather; waſh them with water till clean from dirt, and then work with a proper quantity of water in the engine, till it is reduced to a fine pulp. This pulp muſt be put into a cheſt or tub, and worked on braſs or iron wire mounds, and made to any degree of thickneſs the different articles of the manufacture require. The pulp being ready to work, it muſt be put into the moulds, and then, with a hand-ſcrew preſs ſuſpended in a frame over a table, preſſed ſufficiently to ſeparate the water from the pulp, in order to deliver it free from the mould; which done, lay each piece, as it is made, between a kind of blanketing, or felting. This being done, put it in an upright ſtrong preſs, and preſs it with ſuch force as to leave it as free from water as poſſible; when preſſed as dry as you can, take it immediately out, and ſpread it flat on the ground, or on ſtages made fit for the purpoſe. As ſoon as it is dry, it muſt be again put into the preſs, and preſſed with great force, to give it a ſmooth and even ſurface; and, ſhould the ſecond preſſing not be ſufficient to give it that even face neceſſary, then put each piece between metal plates and re-preſs it, or run it through iron or braſs rollers, which finiſhes the operation. The proceſs for manufacturing the cuttings, ſhavings, or parings, of leather, for binding books, is the ſame, in every reſpect, as above deſcribed for making the covering for the fronts, backs, ſides, and tops, of coaches, chariots, poſt-chaiſes, ſedan-chairs, and trunks, leaving out the ſize. The proceſs for manufacturing the ſame cuttings, &c. for making band,

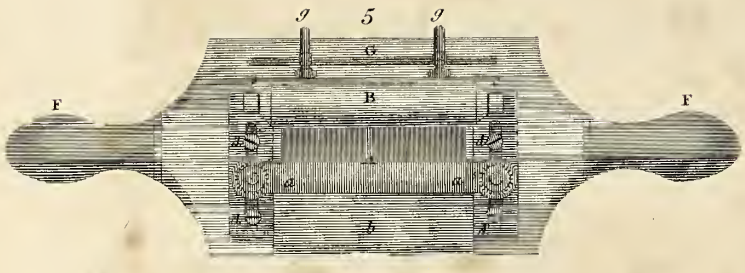
hat,

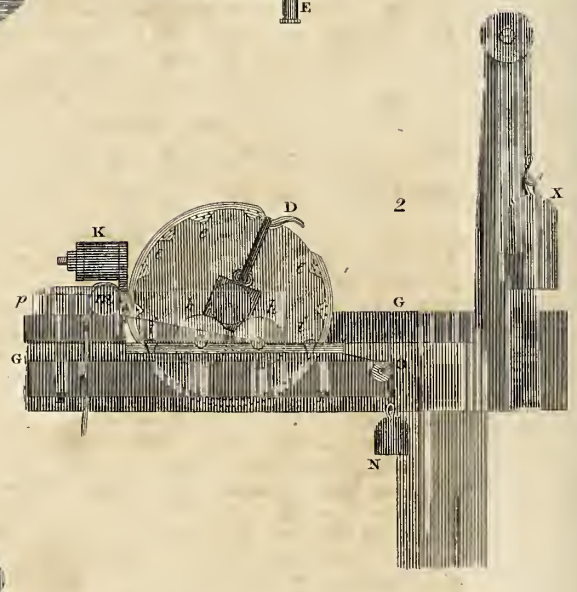


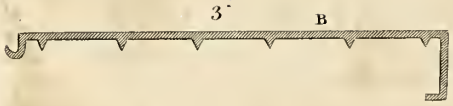


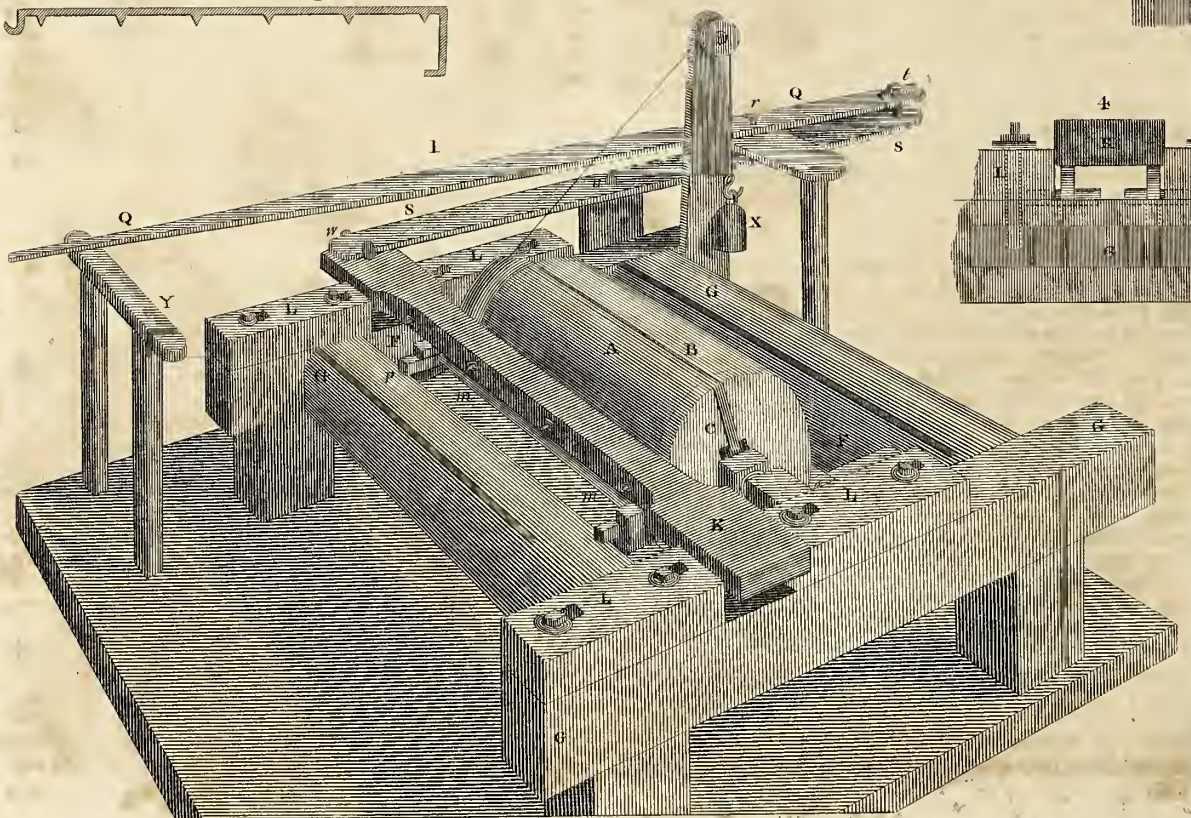


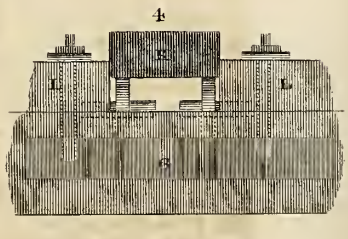












J. Pass sc.

Fig. 1–4. Stott's Machine for Splitting Sheep-skins.
5–9. Aubrey's Instruments for cutting Straps.

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hat, and other, boxes, waiters and tea-trays, ink-ſtands and ink-pots, ſnuff and tobacco boxes, and other things, ſuch as mouldings, cornices, cielings, and other ornaments for rooms, is the ſame as above deſcribed for making the covering for coaches, and for binding of books, except that, when the leather-cuttings are reduced to a pulp, as before deſcribed, the water muſt be drained from them, and then mix with the pulp a ſtrong ſize; this will form a kind of paſte, or ſoft dough, which, from its ſoftneſs and yielding quality, may be moulded into any form. The proceſs for manufacturing the leather-cuttings, &c. for making brown paper, is to put to them a fourth part or more of junk, or hemp, with a little fine clay, which will give it ſmoothneſs and ſtrength; theſe materials are to be put together into the engine, and beat till reduced to a proper pulp. The mode of working is the ſame as commonly practiſed for making brown paper. The proceſs for manufacturing the cuttings into whited-brown paper, is the ſame as that for making the brown paper, except that, inſtead of junk, or hemp, the ſame quantity of the courſeſt rags muſt be ſubſtituted, leaving out the clay. The proceſs for manufacturing paper for drawing, and printing of copper-plates, is to add to the cuttings, ſhavings, and parings, of common leather, including whit-leather, three-fourths or more of fine rags. Theſe muſt be put into the engine, and beat to a fine pulp; and, to make it ſufficiently tough and firm, uſe ſuch quantity of ſize as is neceſſary for that purpoſe; the ſize may be mixed with the pulp in the engine, or after the paper is made, in the uſual way. The method of making it is the ſame as commonly practiſed for making paper.

A patent has alſo been obtained (1800) for converting old ſkins of parchment or vellum into leather. Take the ſkins, and waſh them well and often in water for twenty-four hours; then remove them for the ſame time into a bath compoſed of a pound and a half of white vitriol, a pound of cream of tartar, and an ounce of ſal ammoniac, diſſolved in twenty gallons of water. Next add to the liquor ten pounds of vitriolic acid, one pound of nitric acid, and one pint of ſpirit of ſalt, which makes an acid bath, in which the ſkins are to be ſteeped for a ſhort time. This will get off the lime that had been before employed for the parchment. The ſkins are then to be waſhed to rinſe out all the acid, and the water wrung out as completely as poſſible, without tearing the ſkin. It is then to be immerſed and well ſoaked in a tanning liquor, compoſed of twenty pounds of oak-bark, ſeven-pounds of ſhumach, five of elm-bark, three of ſaſſafras, and the ſame quantity of lignum-vitæ ſhavings, mixed with twenty gallons of water, and previouſly warmed for twelve hours, and cooled down to a new-milk warmth before immerſion of the ſkins. Theſe are then to be tanned in the common way with oak-bark, or oak and ſhumach, waſhed and dried. To make the leather water-proof, it muſt be firſt ſoaked for five or ſix days in linſeed or nut oil; and, after this has been wrung out, the ſkin is to be repeatedly ſmeared with a compoſition, made by melting together ſeven pounds of nut or linſeed oil, with one pound of each of the following ingredients; namely, red led, litharge, ſugar of lead, white vitriol, bees'-wax, roſin, and pitch. The object in the above proceſs is, firſt to reduce the ſkin to its original ſtate, by ſoftening its texture, diſſolving out the lime, &c. next to give it a body by means of a ſtrong tanning; and laſtly, to make it water-proof, by means of various ingredients that reſiſt moiſture.

We know not whether the method of converting cuttings and ſhavings into leather again, detailed in the preceding page, be much in uſe; but we cannot refrain from noticing a very ingenious invention, (which obtained a premium of twenty guineas from the Society of Arts in May 1806,) for *ſplitting ſheep-ſkins*, by Mr. Benjamin Stott, of Bermondſey. His letter to the committee of the Society is in the following words: "Gentlemen, I have invented an engine for the purpoſe of ſplitting ſheep-ſkins, that is, of making two good ſkins out of one. The former and common mode of dreſſing ſkins is to ſhave one ſide off, reſerving the ſhavings for glue-pieces; whereas by my method theſe ſhavings are all taken off in one piece, forming a good ſkin of leather; and thus, independently of the advantage ariſing to the proprietor, an additional revenue will be cauſed to the nation, in proportion to the increaſe of leather made." The annexed engraving repreſents the machine. Fig. 1. A, the barrel of caſt iron, (having wooden ends,) round which barrel the ſkin is wrapped, and kept cloſe by means of pins run through the edges into the wood, as at *e e*, fig. 2. B, fig. 1, an iron running in a groove along the barrel, catching in a hole at C, and faſtened down at the other end by a hook fixed in the end of the barrel, the bar having points in it, (as ſhown at B, fig. 3.) under which the edges of the ſkin are faſtened, as ſeen at D, fig. 2. F F, fig. 1 and 2, bars fixed acroſs each end of the ſtrong wooden frame G G G G, over which the barrel is ſupported on friction-rollers, as at *h h*, fig. 2, which run on a ſlip of braſs, moveable under the ſcrews *i i*, to adjuſt the barrel to the knife. K K, fig. 1 and 2, a ſtrong bar of caſt iron, to which the knife is ſcrewed, moving lengthwiſe on friction-rollers between the pieces of wood L L L L, on the frame G, as at K, fig. 4. The pieces of wood L L L L are each moveable under two ſcrews, by which they are adjuſted to ſteady the motion of the knife-bar. *m m*, fig. 1 and 2, is a roller at the back of the knife, to which it is kept cloſe by a weight N, at each end, acting over pulleys, as at O, fig. 2, ſuſpended from the ſlider *p*, between which the roller is placed. By drawing the ſpare ſkin over this roller, as it is cut off, it keeps both ſides of the ſkin equally up to the knife, and makes it cut more uniform. Q Q, fig. 1, is a lever acting on a pin *r*, and moving another lever S S, by means of a pin and a notch *t*, which acts on another pin at *u*; and, by means of the two pins at *w*, it moves the knife lengthwiſe to and fro; as faſt as the ſkin is cut, the barrel is drawn round by the weight X. Y is a guide to the lever, from which end it is worked.

The lateſt improvement that we are acquainted with in leather-cutting is from the ingenuity of Mr. Aubrey, of Fort Place, Bermondſey, who has invented two inſtruments for equaliſing the width and thickneſs of leather ſtraps, which will be found of the greateſt utility to ſaddlers, harneſs and collar-makers, leather-cutters, &c. Having communicated his diſcovery to the Society of Arts, and produced ſeveral certificates of its utilty, he received from the ſociety, in May 1810, a reward of thirty guineas.

Figs. 5, 6, and 7, are a plan, ſection, and end-view, of the inſtrument *for cutting leather ſtraps to an equal thickneſs*. A is the knife, fixed to the frame by two ſcrews *a a*, which paſs through holes in the end of the knife, and have two nuts upon each of them, between which is faſtened the knife, and by means of theſe the knife can be raiſed or lowered, and fixed at any point, by ſcrewing the nuts towards each other; *b*, fig. 7, is the lower, and *c* the upper, one, which faſtens the knife upon the other; the ſcrews *a a* are faſtened to the frame by two plates and four ſcrews at *d d d d*, which fit into oblong holes in the plates, and can be looſened to put the knife nearer to or further from a roller B, between which, and another roller D, fig. 6, (concealed in the wooden frame,) the leather-ſtrap paſſes; the bearing *e e* for the pivots of the upper roller are ſcrews, and received into tubes E, E, figs. 5, 6, and 7, which are alſo ſcrewed internally, ſo that, by turning theſe tubes round, the roller is brought nearer to or further from the roller D, to ſuit ſtraps of different thickneſſes; the tubes are alſo drawn down by helical ſprings, (concealed in the wood,) which keep the upper roller down with a moderate preſſure, but at the ſame time allow it to riſe up if a thick part of the ſtrap comes under it. F F are two handles fixed to the mahogany block, which is the frame for the whole. G is a rod or wire bent at right-angles at each end, and driven into the block.

block with two ſliding pieces *gg* upon it, which can be fixed at any diſtance from each other by ſcrews; theſe are ſet to the width of the ſtrap, to keep it parallel in paſſing through the rollers B and D; it enters in between them, paſſing under the knife A, and over the inclined part *h*, fig. 6. the end which is juſt through is faſtened to the work-bench, and the workman takes the machine by its handles FF, and draws it back from the bench; this pulls the ſtrap through between the rollers, and the knife removes all the leather which projects above its edge, leaving the ſtrap of a perfectly-equal thickneſs throughout; this thickneſs is, as above mentioned, regulated by the diſtance; the knife-edge is placed above the roller D: in cutting the ſtrap, the ſmootheſt ſide is placed downwards upon the lower roller.

Figs. 8 and 9 are elevations of the other machine, *for cutting the ſtrap to an equal width* throughout. AA is a braſs bar made hollow, for lightneſs; BB an iron frame ſcrewed to it, and ſupporting a frame D, containing a roller E. The frame D ſlides up and down in the frame B by a ſcrew and nut *a*; but it has a conſtant tendency towards the bar A by means of a ſpring *b*, which ſurrounds the ſcrew, and counteracts the preſſure of the nut *a*. F is a piece of the braſs ſliding upon the bar A, and can be fixed at any part of it by the ſcrew C; it has a ſemicircular gap cut in it to admit the roller E, as ſhown in fig. 9. *g* is a ſmall and thin ſharp-edged knife, put through the end of the bar A, and held in its place by a ſcrew *d*; this knife is placed exactly at the end of the roller, as ſeen in fig. 8. The ſtrap to be cut is paſſed through the opening *e*, fig. 8. and the roller ſuffered to deſcend by its nut *a* until the ſpring preſſes the roller down upon the ſtrap with ſufficient force to keep it ſteady; the piece F is fixed along the bar, at the ſame diſtance from the knife as the ſtrap is intended to be wide; and this is ſhown by the diviſions on the bar, the ſtrap being then drawn through under the roller, the knife cuts away all parts which are beyond its edge, and reduces the ſtrap to the proper breadth.

Dying of Leather. *Blue* is given by ſteeping the ſubject a day in urine and indigo, then boiling it with alum: or it may be given by tempering the indigo with red wine, and waſhing the ſkins therewith. *Red* is given by waſhing the ſkins, and laying them two hours in galls, then wringing them out, dipping them in a liquor made with liguſtrum, alum, and verdigris, in water; and, laſtly, in a dye made of Braſil-wood boiled with ley. *Purple* is given by wetting the ſkins with a ſolution of roche-alum in warm water; and, when dry again, rubbing them with the hand with a decoction of logwood in colder. *Green* is given by ſmearing the ſkin with ſap-green and alum-water boiled. *Dark green* is alſo given with ſteel-filings and ſal ammoniac ſteeped in urine till ſoft, then ſmeared over the ſkin; which is to be dried in the ſhade. *Sky-colour* is given with indigo ſteeped in boiling water, and the next morning warmed and ſmeared over the ſkin. *Yellow*, by ſmearing the ſkin over with aloes and linſeed-oil diſſolved and ſtrained; or by infuſing it in weld. *Orange-colour* is given by ſmearing with ſuſtic-berries boiled in alum-water; or, for a deep orange, with turmeric.

The following are the proceſſes for dying leather red and yellow as practiſed in Turkey, with directions for preparing and tanning the ſkins; as communicated by Mr. Philippo, a native of Armenia, who received from the Society for the Encouragement of Arts, &c. one hundred pounds, and the gold medal, as a reward for diſcovering this ſecret.

Firſt Preparation of the Skins, both for Red and Yellow Leather, by dreſſing them in Lime. Let the ſkins, dried with the hair on, be firſt laid to ſoak in clean water for three days; let them then be broken over the fleſh-ſide, put into freſh water for two days longer, and afterwards hung up to drain half an hour. Let them now be broken on the fleſh-ſide, limed in cold lime on the ſame ſide, and doubled together with the grain-ſide outward. In this ſtate they muſt be hung up within doors over a frame for five or ſix days, till the hair be looſe; which muſt then be taken off, and the ſkins returned into the lime-pit for about three weeks. Take them out, and let them be well worked, fleſh and grain, every ſixth or ſeventh day during that time; after which, let them be waſhed ten times in clear water, changing the water at each waſhing. They are next to be prepared in drench, as below mentioned.

Second Preparation of the Skins, for both the Red and Yellow Dyes, by drenching. After ſqueezing the water out of the ſkins, put them into a mixture of bran and water, warm as new milk, in the following proportions; viz. about three pounds of bran for five ſkins, and water ſufficient to make the mixture moderately fluid, which will be about a gallon to each pound of bran. In this drench let the ſkins lie three days; at the end of which time they muſt be well worked, and afterwards returned into the drench two days longer. They muſt then be taken out, and rubbed between the hands; the water ſqueezed from them, and the bran ſcraped off clear from both ſides of the ſkins. After this they muſt be again waſhed ten times in clear water, and the water ſqueezed out of them.

Thus far the preparatory proceſs of all the ſkins, whether intended to be dyed red or yellow, is the ſame; but afterwards thoſe which are to be dyed red muſt be treated as follows.

Preparation in Honey and Bran, of Skins that are to be dyed Red. Mix one pound of honey with three pints of luke-warm water, and ſtir them together till the honey is diſſolved. Then add two double handfuls of bran; and, taking four ſkins, (for which the above quantity of the mixture will be ſufficient,) work them well in it one after another. Afterwards fold up each ſkin ſeparately into a round form, with the fleſh-ſide inwards; and lay them in an earthen pan, or other proper veſſel; if in the ſummer, by the ſide of each other; but, in the winter, on the top of each other. Place the veſſel in a ſloping poſition, ſo that ſuch part of the fluid as may ſpontaneouſly drain from the ſkins may paſs from them. An acid fermentation will then riſe in the liquor, and the ſkins will ſwell conſiderably. In this ſtate they muſt continue for ſeven or eight days; but the moiſture that drains from them muſt be poured off once or twice a-day, as occaſion may require.

Let them be taken out of the mixture on the eighth or ninth day, and well rubbed with dry common ſea ſalt, in the proportion of about half a pound to each ſkin; the ſalt muſt be well rubbed and worked with them. This will make them contract again, and part with a further conſiderable quantity of moiſture, which muſt be ſqueezed out by drawing each ſkin ſeparately through the hands. They muſt next be ſcraped clean on both ſides from the bran, ſuperfluous ſalt, and moiſture, that may adhere to them; after which, dry ſalt muſt be ſtrewed over the grain-ſide, and well rubbed in with the hand. They are then to be doubled with the fleſh-ſide outwards, lengthwiſe from neck to tail, and a little more dry ſalt muſt be thinly ſtrewed over the fleſh-ſide, and rubbed in; for the two laſt operations, about a pound and a half of ſalt will be ſufficient for each ſkin. They muſt then be put, thus folded on each other, between two clean boards, placed ſloping, breadthwiſe; and a heavy weight laid on the upper board, in order gradually to preſs out what moiſture they will thus part with. In this ſtate of preſſure they muſt be continued two days or longer, till it is convenient to dye them, for which they will then be duly prepared.

Preparation of the Red Dye, in a proper proportion for four Skins. Put eight gallons of water into a copper, with ſeven ounces of *ſhenan* tied up in a linen bag. [Shenan is a drug much uſed by dyers in the eaſt; and may eaſily be procured at any of the ports of Syria and Africa, in the Levant. It is the eaſtern jointed-kali, called by botaniſts Salicornia; and grows in great plenty in thoſe and other parts of the eaſt. There is a ſpecies of the Salicornia on our

our coaſt, which, from its great affinity with the ſhenan, might be preſumed to have the ſame qualities.] Light a fire under a copper; and, when the water has boiled about a quarter of an hour, take out the bag of ſhenan, and pour into the boiling fluid, or lixivium, two drams of alum, two drams of pomegranate-bark, three quarters of an ounce of turmeric, three ounces of cochineal, and two ounces of loaf-ſugar. Let the whole mixture boil about ſix minutes; then cover the fire, and take out a quart of liquor, putting it into a flat earthen pan; and, when it is as cold as new milk, take one ſkin, folded lengthwiſe, the grain-ſide outwards, and dip it in the liquor, rubbing it gently with the hands. Then, taking out the ſkin, hang it up to drain, and throw away the ſuperfluous dye. Proceed in the ſame manner with the remaining three ſkins; repeating the operation of each ſkin ſeparately eight times, ſqueezing the ſkins by drawing them through the hands before each freſh dipping. Lay them now on one ſide of a large pan, ſet ſloping, to drain off as much of the moiſture as will run from them without preſſure, for about two hours, or till they are cold; then tan them in the following manner:

Powder four ounces of the beſt white galls in a marble mortar, ſifting it through a fine ſieve. Mix the powder with about three quarts of water, and work the ſkins well in this mixture for half an hour or more, folding up the ſkins four-fold. Let them lie in this tan for twenty-four hours; when they muſt be worked again as before; then taken out, ſcraped clean on both ſides from the firſt galls, and put into a like quantity of freſh galls and water. In this freſh mixture they muſt be again well worked for three quarters of an hour; then folded up as before, and left in the freſh tan for three days. On the fourth day they muſt be taken out, waſhed clean from the galls in ſeven or eight freſh quantities of water, and then hung up to dry. When the ſkins have been treated as above, and are very near dry, they ſhould be ſcraped with the proper inſtrument or ſcraper on the fleſh-ſide, to reduce them to a proper degree of thickneſs. They are then to be laid on a ſmooth board, and glazed by rubbing them with a ſmooth glaſs. After which they muſt be oiled, by rubbing them with olive-oil, by means of a linen rag, in the proportion of one ounce and a half of oil for four ſkins; they are then to be grained on a graining-board, lengthwiſe, breadthwiſe, and cornerwiſe, or from corner to corner.

Preparations with Galls, for the Skins to be dyed Yellow. After the four ſkins are taken out of the drench of bran, and clean-waſhed as before directed in the ſecond article, they muſt be very well worked, half an hour or more, in a mixture of a pound and a half of the beſt white galls, finely powdered, with two quarts of clean water. The ſkins are then to be ſeparately doubled lengthwiſe, rolled up with the fleſh-ſide outwards, laid in the mixture, and cloſely preſſed down on each other, in which ſtate they muſt continue two whole days. On the third day let them be again worked in the tan; and afterwards ſcraped clean from the galls, with an ivory or braſs inſtrument, (for no iron muſt touch them.) They muſt then be put into a freſh tan, made of two pounds of galls finely powdered, with about three quarts of water, and well worked therein fifteen times. After this they muſt be doubled, rolled up as before, and laid in the ſecond tan for three days. On the third day a quarter of a pound of white ſea-ſalt muſt be worked into each ſkin; and the ſkins doubled up as before, and returned into the tan till the day following, when they are to be taken out, and well waſhed ſix times in cold water, and four times in water luke-warm. The water muſt be then well ſqueezed out, by laying the ſkins under preſſure, for about half an hour, between two boards, with a weight of about two or three hundred pounds laid upon the uppermoſt board, when they will be ready for the dye.

Preparation of the Yellow Dye, in the proper proportion for four Skins. Mix ſix ounces of *caſſiari gehira*, or the berries of the eaſtern rhamnus, with the ſame quantity of alum; and pound them fine in a marble or braſs mortar, with a braſs peſtle. Then, dividing the materials, thus powdered, into three equal parts of four ounces each, put one of thoſe three parts into about a pint and a half of water, in a china or earthen veſſel, and ſtir the mixture together. Let the fluid ſtand to cool, till it will not ſcald the hand. Then, ſpreading one of the ſkins flat on a table, in a warm room, with the grain-ſide uppermoſt, pour a fourth part of the tinging liquor, prepared as above directed, over the upper or grain ſide, ſpreading it equally over the ſkin with the hand, and rubbing it well in. Afterwards do the like with the other three ſkins, for which the mixture firſt made will be ſufficient. This operation muſt be repeated twice more on each ſkin ſeparately, with the remaining eight ounces of the powder of the berries and alum, with the above-mentioned due proportions of hot water, put to them as before directed.

The ſkins, when dyed, are to be hung up on a wooden frame, without being folded, with the grain-ſide outwards, about three quarters of an hour, to drain; when they muſt be carried to a river or ſtream of running water, and well waſhed therein ſix times or more. After this they muſt be put under preſſure for about an hour, till the water be well ſqueezed out; afterwards the ſkins muſt be hung up to dry in a warm room. This being done, the ſkins are to be dreſſed and grained as before directed for thoſe dyed red; except the oiling, which muſt be omitted.

Method of Dying Leather of a Saxon Green, from the Journal de Phyſique, vol. xvi. The ſkins, after being prepared in the uſual way to receive the dye, are dipped and ſoaked ſeveral times in a ſtrong decoction of the wood of the barberry, (Berberis vulg. *Linn.*) By this means they acquire a deep and permanent yellow; they are then dried, and afterwards dipped in a bath of Saxon blue till they become of the deſired tint of green. The bath of Saxon blue is nothing more than a dilute ſolution of ſulphat of indigo, prepared by digeſting indigo in ſtrong vitriolic acid, aſſiſted by a gentle heat till it is diſſolved; in this ſtate the liquor is black; but, by largely diluting it with water, it becomes of a beautiful blue, called the Saxon blue. The tint of this is far more vivid than can be produced in the common indigo-vat; but it has the diſadvantage, when uſed by itſelf, of being much leſs permanent.

The moſt approved compoſition for keeping leather *black* and gloſſy has been given under the word BLACKING, vol. iii. p. 78. We ſhall here add a receipt to clean the tops of boots: One quart of milk; two ounces of oil of vitriol; one ounce of gum tragacanth; one table-ſpoonful of lavender-drops; and two table-ſpoonfuls of ſpirit of wine. Firſt mix the lavender-drops with the ſpirit of wine. Diſſolve the gum in boiling water; then mix them with the milk cold; and put in the oil of vitriol laſt. Strain the whole through a ſieve.

Stat. 27 Hen. VIII. c. 14, directs packers to the appointment of leather intended to be tranſported; but the 18 Eliz. c. 9, prohibits the ſhipping of leather, on penalty of forfeiture, &c. By ſtat. 20 Car. II. c. 5, tranſportation of leather was allowed to Scotland, Ireland, or any foreign country, paying a cuſtom or duty; which ſtatute was continued by divers ſubſequent acts. No perſon ſhall ingroſs leather to ſell again, under the penalty of forfeiture; none but tanners are to buy any rough hides of leather, or calves'-ſkins in the hair, on pain of forfeiture; and no perſon ſhall foreſtall hides, under the penalty of 6s. 8d. a hide. Leather not ſufficiently tanned is to be forfeited. In London, the lord-mayor and aldermen are to appoint and ſwear *ſearchers* of leather, out of the company of ſhoemakers, &c. and alſo *triers* of ſufficient leather; and the ſame is to be done by mayors, &c. in other towns and corporations; and ſearchers allowing inſufficient leather, incur a forfeiture of 40s.

Hides of leather are adjudged the ware and manufacture of the currier, and ſubject to ſearch, &c. All per-

ſons dealing in leather may buy tanned leather ſearched in open market; and any perſon may buy or ſell leather hides or ſkins by weight. 1 *W. & M.* c. 83. Duties of exciſe are granted on leather, and entries to be made of tan-yards; and tanners and leather-dreſſers uſing any private tan-yards, or concealing ſkins, are liable to penalties. 9 *Ann.* c. 11. 5 *Geo.* I. c. 2. 9 *Geo.* I. c. 27. Artificers may freely buy their leather, and cut it and ſell it in ſmall pieces. 12 *Geo.* II. c. 25. Penalty on curriers neglecting to curry leather. *Ibid.* By ſtats. 39 & 40 Geo. III. c. 66. 41 Geo. III. c. 53. regulations are made to prevent the ſpoiling of hides and leather, by the flaying animals injudiciouſly; and inſpectors appointed to inſure the execution of the law. See the local act, 48 Geo. III. c. 71, for London and its environs. The ſtat. 12 Geo. III. c. 50. as amended by 44 Geo. III. c. 85. for encouraging the manufacture of leather, by lowering the duty on the importation of oak-bark when the price ſhall exceed a certain rate, is made perpetual by 52 Geo. III. c. 18; March 20, 1812. But, in July 1812, an additional exciſe of 1½d. per pound was laid upon leather. The dealers in leather are at this time (Feb. 1813) endeavouring to get this act repealed; they urge that "it is aſcertained that the amount of the double tax in the home-diſtrict, which includes London, Southwark, and all within the bills of mortality, was in the firſt quarter greatly deficient; and that the ſecond quarter, ending the 22d of December, 1812, is ſtill more ſo; for, inſtead of being twice the amount of the old duty, as expected, it does not amount to one quarter of that ſum above the old tax, for the correſponding months in the laſt year; it being, from the diminiſhed ſtate of the trade in the laſt quarter, only 4812l. 19s. 7d. more than the old duty. The committee therefore believe, that, when the extra prices government have already paid for leather goods is known, and how greatly the leather trade in every part of the kingdom has ſuffered from the inability of the tanners to purchaſe raw hides, and to afford their leather at the preſent prices, and from their ſtocks being in conſequence conſiderably diminiſhed ſince the additional tax took place, the impolicy of continuing this tax will be moſt apparent."

The value of the leather manufacture was ſome years ago ſtated at 10,500,000l. and, from the ſtate of the trade of late, and the high price of ſkins of moſt kinds, it cannot be ſuppoſed leſs than that ſum at preſent. Deducting 954,545l. for the profits of the capital employed, and 3,500,000l. for the coſt of the raw article, there remains 6,045,455l. for the wages of perſons employed in this trade, which, at 100l. per annum for each perſon, makes the number employed 60,454.

LEATH'ER-COAT, *ſ.* An apple with a tough rind. —There is a diſh of *leather-coats* for you. *Shakeſpeare.*

LEATH'ER-DRESSER, *ſ.* He who dreſſes leather; he who manufactures hides for uſe.—He removed to Cumæ; and by the way was entertained at the houſe of one Tychius, a *leather-dreſſer*. *Pope.*

LEATH'ER-EATER. See DERMESTES.

LEATH'ER-JACKET, *ſ.* A fiſh of the Pacific Ocean. —Some beautifully-ſpotted ſoles, *leather-jackets*, &c. *Cook and King's Voyage.*

LEATH'ER-MOUTHED, *adj.* By a *leather-mouthed* fiſh, I mean ſuch as have their teeth in their throat; as, the chub or cheven. *Walton's Angler.*

LEATH'ER-SELLER, *ſ.* He who deals in leather.

LEATH'ER-WOOD, *ſ.* in botany. See DIRCE, vol. v. p. 855.

LEATH'ERHEAD, Surrey, is nineteen miles from London, on the road from London to Brighthelmſtone, Guildford, &c. In a field north of the village is a fair, held on the 10th of October annually, which is pretty large for horſes, pigs, toys, &c. This place had formerly a market. Here is a bridge over the river Mole, which, having ſunk into the earth near Mickleham, at the foot of Box Hill, riſes again near this place, which is pleaſantly ſituated on a riſing bank by the ſide of the river, and has a fine dry champaign country almoſt all round it. Its bridge is built with bricks, conſiſting of fourteen arches, and received great additions and repairs in the year 1783. The church is built in the form of a croſs, conſiſting a chancel, ſix aiſles, veſtry-room, and ſix bells; it was granted to the priory of Ledys, in Kent, by Robert Crevecœur, anno 1119, and confirmed by Edward III. At the monaſtic diſſolution it was beſtowed on the dean and chapter of the cathedral church of Rocheſter, by Henry VIII. in 1542; it is dedicated to St. Mary and St. Nicholas. The vicarage is in the gift of the church of Rocheſter, who are alſo impropriators; they allow to the vicar forty pounds per annum out of the parſonage.

One mile north-weſt from Leatherhead is Randal-houſe, the ſeat of ſir John Coghill, bart. ſituated on the eaſt banks of the river Mole, with a pleaſant lawn to the ſouth-eaſt, bounded on the weſt by the river, which much adds to its beauty and the many agreeable objects that preſent themſelves to the view.

Between the church and the road is a large old houſe (almoſt concealed from ſight by a high wall) called Churchhouſe, in the occupation of Joſeph Price, eſq. On the ſouth are large gardens, from whence is a moſt delightful proſpect.

A gradual deſcent continues one furlong on the right over the river Mole, where is the ſeat of Henry Boulton, eſq. a moſt elegant villa, in a charming ſituation, having the command of the Brighthelmſtone road, with a view of the river Mole, which runs through the lawn and forms beautiful caſcades, with a commanding proſpect of Leatherhead church and village. On the ſouth ſide it has the moſt pleaſing views of the fields leading to Norbury Park, Fetcham Windmill, and Fetcham Downs. About a mile further is Gibbins Grove, a beautiful houſe and gardens, the ſeat of Richard Boulton, eſq. which is ſituated on a pleaſing eminence, and commands a picturesque view of Norbury Park. Near this is Thorncroft, the ſeat of Henry Boulton, eſq. lord of the manor. At Fetcham, mentioned before, is a ſeat of Mrs. Hankey, on which no coſt has been ſpared.

Box-hill, between Leatherhead and Dorking, received its name from the box-trees planted on the ſouth ſide of it, by the earl of Arundel, in the reign of Charles I. but the north part is covered with yews. Although theſe trees were merely planted for ornament, they were lately ſold for 15,000l. Theſe groves are interſperſed with a number of little green ſpots and agreeable walks. From the higheſt part of this hill, in a clear day, is a proſpect over part of Kent and Surrey, and the whole of Suſſex, quite to the South Downs, near the ſea, at the diſtance of thirty-ſix miles. The weſt and north views overlook a large part of Surrey and Middleſex; and advancing to the place called the Quarry, upon the ridge of the hill that runs toward Mickleham, the ſublime and beautiful unite together in forming a delightful ſcene; we look down, from a vaſt and almoſt perpendicular height, upon a well-cultivated vale, laid out in beautiful incloſures, and ſee the river Mole winding cloſe to the bottom of the mountain, as if it were directly under our feet, though it is at a great diſtance. In this charming valley are Burford Lodge, built by Mr. Eckerſall, but now the property of George Barclay, eſq. and the cottage called the Grove, belonging to John Louis Goldſmid, eſq. Indeed the ſpot altogether is charming from the wildneſs and variety of its ſcenery. An eccentric man, an officer in the marines, a few years ago, requeſted to be buried on the ſummit of this hill in an *erect poſture*; and at his deceaſe this ſingular requeſt was complied with, his coffin having been immured in a perpendicular poſition. Perhaps he took the idea from Leithhill tower, which covers the remains of Mr. Hull. At the foot of this beautiful hill is Burford-bridge, where a moſt commodious and romantic little inn, the Fox and Hounds, affords every comfort the rational traveller can wiſh for. Here the gallant Nelſon, in company with ſir William and lady Hamilton, enjoyed ſeveral days of calm

retirement, a ſhort time before he quitted England, to take the command of that glorious expedition which raiſed him to immortality.

Mickleham is a village at the foot of Box-hill, between Leatherhead and Darking; and, adjoining the downs, is Juniper-hill, a handſome houſe, with curious plantations.

Norbury Park, in the pariſh of Mickleham, is the ſeat of William Lock, eſq. This eſtate was many years poſſeſſed by the ancient family of Stydolfe, a name conſiderable in this and the adjoining counties ever ſince the conqueſt. In an old regiſter, from 1549 to 1680, is a curious licence granted in 1632 by Moſes Wall, parſon of Mickleham, upon the certificate of Lawrence Wright, M. D. to the worſhipful lady Francis Stydolfe, to eat fleſh during lent, and on all fiſh-days, on account of her ill health, ſhe paying all dues for this indulgence. The next year the whole family were taken ill, and had the ſame licence on the ſame conditions. This ancient family declining in a female, the Tryons came into poſſeſſion; from them it paſſed to Mr. Chapman, of whom the proprietor purchaſed the eſtate, with all its manorial appendages. The old manſion-houſe ſtood on the lower ſide of the park, near the road; but, being decayed and ruinous, Mr. Lock pulled down the greateſt part of it, reſerving the north end for his farms, and erected, upon a well-choſen eminence on the oppoſite ſide of the park, one of the moſt elegant and beautiful ſeats in the county. From the church-yard, the riſing ſlopes of Norbury Park, beautifully variegated with ſtately trees, appear to the greateſt advantage; the park itſelf is extenſive and well diverſified; it is aſſerted that, when ſir Richard Stydolfe was owner, it was famed for containing 40,000 walnut-trees.

The extent and richneſs of proſpect from the houſe fill the beholder with admiration. To the north a large expanſe of country diſplays a varied and magnificent ſcene. The ſouth preſents a picture equally ſtriking; elegant villas and plantations on each ſide; Deepden, late the duke of Norfolk's, but now belonging to lady Burrell, majeſtically cloſing the view. The hanging hills, adorned with ſtately beech on the right, contraſt with the fine downs covered with evergreens, and the chalky crags of Box-hill, on the left. Beneath is a fertile vale, through which the river Mole ſilently purſues its courſe, and then ſinks imperceptibly from the ſight. The banks of Arno cannot excel the ſcene. Mr. Lock's ſaloon unites this grand amphitheatre of nature with the moſt excellent production of the late Barrett's inimitable pencil; an attempt unprecedented. The magnificent ſcenery with which he has embelliſhed the walls, being artfully managed to appear as a continuation of the view, introducing in the weſtern compartment an aſſemblage of the lakes and mountains in Cumberland and Weſtmoreland, blended together, forms a landſcape expreſſive of the moſt majeſtic idea of rural grandeur. The rude crags and diſtant ſummit of Skiddaw are contraſted with the placid meer below, which ſeems genially heated by the warm rays of a ſummer's ſetting ſun, rendered more brilliant by the tints of a retiring ſtorm, ſhadowing the mountain's ſide. The ſecond compartment preſents a nearer view of immenſe rocks in the dreary complexion of thoſe ſtupendous deſerts; the ſun here ſcarcely affords a ray to cheer the gloomy ſcene. The fire-place forms the third; here the chimney-glaſs is ſo let into the wall, that, were it not for the real appearance of the hearth, imagination would ſuggeſt the entrance of an elegant arbour. In the fourth compartment the ſcene is continued, but with the placid effect of evening ſerenity; here the ſhepherd tells his amorous tale to the attentive fair. The figures are happily introduced. This ſcene opens to an organ, with a figure of St. Cecilia, by Cipriani, who painted the landſcape figures—as did Gilpin the cattle. The ocean, bounded on one hand by hills and rocks, with a variety of characteriſtic accompaniments, complete the fifth ſcene. The ceiling repreſents a correſpondent ſky, ſeen through a circular treillage, by Paſtorini; the carpet reſembles a mown lawn. The whole is admirably connected with a view from the windows, and adapted to convey a claſſical idea of a perfect landſcape. The water to ſupply the houſe is raiſed by an engine, from a depth of 361 feet.

Bookham, or Great Bookham, is a village near Leatherhead. Here are the fine ſeats of viſcount Downe and — Laurel, eſq. The church of this village was built by John de Rumerwick, abbot of Chertſey, in 1340. At Poleſden, in the pariſh of Great Bookham, is the noble ſeat of the late ſir William Geary, bart. but now of Richard Brinſley Sheridan, eſq. ſituated on an eminence, commanding a beautiful proſpect. Behind the houſe are the fineſt beech-woods imaginable.

Effingham, three miles north-eaſt from Leatherhead, was once, according to tradition, a populous place, in which were ſixteen churches. There are certainly proofs of its having been much larger than it is at preſent; for wells and cavities like cellars have been frequently found in the fields and woods here; and in the church are ſeveral old ſtalls and monuments. Here is the late ſeat of general Delancey, which he built himſelf, ſurrounded by his own eſtate, where the beauties of nature and art are moſt happily combined. This beautiful place has been recently given up by the general to commiſſioners, for the purpoſe of liquidating a debt due to government.

Between Leatherhead and Guildford are Eaſt and Weſt Horſley: they are about a mile aſunder.

LEATH'ERN, *adj.* Made of leather:

The wretched animal heav'd forth ſuch groans,
That their diſcharge did ſtretch his *leathern* coat
Almoſt to burſting. *Shakeſpeare's As you like it.*

In ſilken or in *leathern* purſe retain
A ſplendid ſhilling. *Philips.*

LEATH'ERY, *adj.* Reſembling leather.—Wormius calls this cruſt a *leathery* ſkin. *Grew.*

LEATHES WATER, a lake in Cumberland, between Ambleſide and Keſwick; called alſo Wythburn, or Thirlmere-water. It begins at the foot of Helvellyn, and ſkirts its baſe for the ſpace of four miles, increaſed by a variety of paſtoral torrents, that pour their ſilver ſtreams down the mountains' ſides, and then join the lake. The range of mountains on the right are tremendouſly great. Helvellyn and Cachidecam are the chief; and, according to the Wythburn ſhepherds, much higher than Skiddaw. It is however certain, that theſe mountains retain ſnow many weeks after Skiddaw; but that may be owing to the ſteepneſs of Skiddaw's northern ſide, and ſhivery ſurface, that attracts more forcibly the ſolar rays than the verdant front of Helvellyn, and ſo ſooner loſes its winter covering. A thouſand huge rocks hang on Helvellyn's brow, which have been once in motion, and are ſeemingly prepared to ſtart anew. Many have already reached the lake, and are at reſt. The road ſweeps through them along the naked margin of the lake. The oppoſite ſhore is beautified with a variety of crown-topped rocks, ſome rent, ſome wooded, others not, riſing immediately from, or hanging towards, the water; and all ſet off with a background of verdant mountains, riſing in the nobleſt paſtoral ſtyle. Its ſingular beauty is its being almoſt interſected in the middle by two peninſulas, that are joined by a bridge, in a taſte ſuitable to the genius of the place, which ſerves for an eaſy communication among the ſhepherds that dwell on the oppoſite banks. At the ſixth mile-poſt, from the top of an eminence, on the left, there is a good general view of the lake and vale; but the moſt pictureſque point is from an eminence behind Dalehead-houſe. This end is beautifully decorated with two ſmall iſlands, dreſſed with wood, and charmingly placed. The lake terminates ſweetly with a pyramidal rock, wooded to the top; and oppoſite to it, a ſilver-grey rock, hanging over its baſe towards the lake, has a fine effect. The road after this leads through the narrow green vale of Legberthwate, divided into ſmall incloſures, peopled with a few cots, and nobly terminated

by

by the romantic caſtle-like rock of St. John. Below this, the vale contracts into a deep craggy dell, through which Leathes-water rolls, till it joins the Greeta at Newbridge, under the foot of Threlkeld-fell, a gloomy mountain of dark dun rocks, that ſhuts up the view of the ſweet ſpreading vale of St. John. *Guide to the Lakes.*

LE'ATON, a village near Wolverhampton in Staffordſhire; in a field belonging to which a quantity of lead-ore is produced, in a yellowiſh ſtone, mixed with cauk and ſpar.

LEAU, a town of France, in the department of the Dyle, and chief place of a canton, in the diſtrict of Louvain. The place contains 715, and the canton 6264, inhabitants, on a territory of 97½ kiliometres, in 13 communes.

LEAVE, *ſ.* [lɛ̣ꝛe, Sax. from lyꝑan, to grant.—Grant of liberty; permiſſion; allowance.—I muſt have *leave* to be grateful to any who ſerves me, let him be never ſo obnoxious to any party; nor did the tory party put me to the hardſhip of aſking this *leave.* *Pope.*

Offended that we fought without his *leave*,
He takes this time his ſecret hate to ſhew. *Dryden.*

Farewel; adieu; permiſſion to depart.—Take *leave* and part, for you muſt part forthwith. *Shakeſpeare.*—There is further compliment of *leave*-taking between France and him. *Shakeſpeare's King Lear.*

Here my father comes;
A double bleſſing is a double grace;
Occaſion ſmiles upon a ſecond *leave.* *Shakeſpeare.*

To LEAVE, *v. a.* pret. *I left*; *I have left.*—To quit; to forſake.—A man ſhall *leave* his father and his mother, and cleave to his wife. *Gen.* ii. 24.

If they love lees, and *leave* the luſty wine,
Envy them not their palates with the ſwine. *Ben Jonſon.*

To deſert; to abandon.—He that is of an unthankful mind, will *leave* him in danger that delivered him. *Ecclus.* xxix. 17.—To depart from, without action: as, I *left* things as I found them.—When they were departed from him, they *left* him in great diſeaſes. 2 *Chron.* xxiv. 25.—To have remaining at death.—There be of them that have *left* a name behind them. *Ecclus.* xliv. 8.—Not to deprive of.—They ſtill have *left* me the providence of God, and all the promiſes of the goſpel, and my charity to them too. *Taylor.*—To ſuffer to remain.—Theſe things muſt be *left* uncertain to farther diſcoveries in future ages. *Abbot.*—Not to carry away.—Vaſtius gave ſtrict commandment, that they ſhould *leave* behind them unneceſſary baggage. *Knolles.*—To reject; not to chooſe:

In all the common incidents of life,
I am ſuperior; I can take or *leave.* *Steele.*

To fix as a token or remembrance.—This I *leave* with my reader, an occaſion for him to conſider how much he may be beholden to experience. *Locke.*—To bequeath; to give as inheritance:

That peace thou *leav'ſt* to thy imperial line,
That peace, O happy ſhade! be ever thine. *Dryden.*

To give up; to reſign.—If a wiſe man were *left* to himſelf, and his own choice, to wiſh the greateſt good to himſelf he could deviſe; the ſum of all his wiſhes would be this, That there were juſt ſuch a being as God is. *Tillotſon.*—To permit without interpoſition.—Whether Eſau were a vaſſal, I *leave* the reader to judge. *Locke.*—To ceaſe to do; to deſiſt from.—Let us return, leſt my father *leave* caring for the aſſes, and take thought for us. 1 *Sam.* ix. 5.

To LEAVE *off.* To deſiſt from; to forbear.—If, upon any occaſion, you bid him *leave off* the doing of any thing, you muſt be ſure to carry the point. *Locke.*—To forſake.—He began to *leave off* ſome of his old acquaintance, his roaring and bullying about the ſtreets: he put on a ſerious air. *Arbuthnot.*

To LEAVE *out.* To omit; to neglect.—What is ſet down by order and diviſion doth demonſtrate, that nothing is *left out* or omitted. *Bacon.*

Let all thy dues be done, and none *left out*,
Ere the nice morn on Indian ſteep
From her cabin'd loop-hole peep. *Milton.*

To LEAVE, *v. n.* To ceaſe; to deſiſt.—He began at the eldeſt, and *left* at the youngeſt. *Geneſis.*

And, ſince this buſineſs ſo far fair is done,
Let us not *leave* till all our own be won. *Shakeſpeare.*

To LEAVE *off.* To deſiſt.—Grittus, hoping that they in the caſtle would not hold out, *left off* to batter or undermine it, wherewith he perceived he little prevailed. *Knolles.*

But, when you find that vigorous heat abate,
Leave off, and for another ſummons wait. *Roſcommon.*

To ſtop:

Wrongs do not *leave off* there where they begin,
But ſtill beget new miſchiefs in their courſe. *Daniel.*

To LEAVE, *v. a.* [from *levy*; of *lever*, Fr.] To levy; to raiſe: a corrupt word, made probably for a rhyme:

An army ſtrong ſhe *leav'd*,
To war on thoſe which him had of his realm bereav'd.
Spenſer's Fairy Queen.

LE'AVED, *adj.* [from *leaves*, of *leaf.*] Furniſhed with foliage. Made with leaves or folds.—I will looſe the loins of kings, to open before him the two-*leaved* gates. *Iſa.* xlv. 1.

LEAV'EN, *ſ.* [*levain*, Fr. *levare*, Lat.] Ferment mixed with any body to make it light; particularly uſed of ſour dough mixed in a maſs of bread.—All fermented meats and drinks are eaſieſt digeſted; and thoſe unfermented, by barm or *leaven*, are hardly digeſted. *Floyer.*—Any mixture which makes a general change in the maſs; it generally means ſomething that depraves or corrupts that with which it is mixed.—Many of their propoſitions ſavour very ſtrongly of the old *leaven* of innovations. *King Charles.*

Leaven was ſtrictly forbidden by the law of Moſes during the ſeven days of the paſſover; and the Jews, in obedience to this law, very carefully purified their houſes from all leaven as ſoon as the vigil of the feaſt began. Nothing of honey or leaven was to have place in any thing preſented to the Lord, upon his altar, during this ſolemnity. If, during the feaſt, the leaſt particle of leaven was found in their houſes, they imagined the whole was polluted, for *a little leaven leaveneth the whole lump.* 1 Cor. v. 6. And even at this day, as we are informed, the Jews are equally ſtrict. Before the paſſover commences, they ſearch all the corners of their houſes, with moſt ſcrupulous exactneſs, for all bread or paſte, &c. that might have been leavened. Having thus well cleanſed their houſes, they whiten or paint the rooms, and provide themſelves with kitchen and table utenſils all new, or with others to be uſed only on that day. If they are of metal, they have them poliſhed, and put into the fire to cleanſe all impurity which they may have contracted by touching any thing leavened. All this is done on the 13th of the month Niſan, on the eve of the paſſover, which begins on the 15th or rather on the 14th in the evening; the Hebrews reckoning their days from evening to evening. *Leo of Modena's Ceremonies of the Jews*, Part iii. cap. 3.

To LEAV'EN, *v. n.* To ferment by ſomething mixed.—Breads we have of ſeveral grains, with divers kinds of *leavenings* and ſeaſonings; ſo that ſome do extremely move appetites. *Bacon.*—To taint; to imbue:

That cruel ſomething unpoſſeſs'd
Corrodes and *leavens* all the reſt. *Prior.*

LEAV'ENING, *ſ.* The act of fermenting by leaven, the ſtate of being fermented with leaven; a fermentation, a taint.

LE'AVER, *ſ.* [from *leave.*] One who deſerts or forſakes:

Let

Let the world rank me in regiſter
A maſter-*leaver*, and a fugitive. *Shakeſpeare.*

LEAVES, *ſ.* The plural of *leaf*.—Parts fit for the nouriſhment of man in plants are, ſeeds, roots, and fruits; for *leaves* they give no nouriſhment at all. *Bacon's Nat. Hiſt.*

LE'AVING, *ſ.* The act of forſaking, giving up, ſuffering to remain, bequeathing, breaking off, deſiſting.

LE'AVINGS, *ſ.* [from *leave*.] Remnant; relics; offal; refuſe; it has no ſingular:

My father has this morning call'd together,
To this poor hall, his little Roman ſenate,
The *leavings* of Pharſalia. *Addiſon's Cato.*

LE'AVY, *adj.* [from *leaf*.] Full of leaves; covered with leaves; *leafy* is more uſed:

Strephon, with *leavy* twigs of laurel-tree,
A garland made on temples for to wear,
For he then choſen was the dignity
Of village-lord that Whitſontide to bear. *Sidney.*

LE'BA, a town of Pomerania: ſixteen miles north of Lauenburg.

LE'BACH, a town of France, in the department of the Sarre, and chief place of a canton, in the diſtrict of Sarrebruck. The place contains 506, and the canton 8392, inhabitants, in 66 communes.

LEBÆ'A, a town of Macedonia, anciently the capital of this kingdom, the preciſe ſituation of which cannot be aſcertained.

LEBADE'A, now *Livadias*, a town of Bœotia, near mount Helicon. It received this name from the mother of Aſpledon, and became famous for the oracle and cave of Trophonius. No moles could live there, according to Pliny.

LE'BAN, a village of Syria, in the pachalic of Damaſcus: near it is a khan for the reception of travellers; ſuppoſed to be the ancient Lebna, mentioned in ſcripture: twelve miles ſouth of Naplouſe.

LE'BAN, *ſ.* A milk-diet peculiar to the Arabs and Turks. See YAOURT.

LEBA'NA, [Hebrew.] A man's name.

LEB'ANON, the ſcripture appellation for LIBANUS, which ſee.

LEB'ANON, a town of Pennſylvania: twenty-two miles weſt of Reading.

LEB'ANON (New), a village in Canaan, New York, pleaſantly ſituated, partly on the declivity of a hill, and partly in a vale; and containing medicinal ſprings next in celebrity to thoſe of Ball-town, Saratoga.

LEBA'OTH, [Hebrew.] The name of a city.

LEB'BECK, *ſ.* in botany. See MIMOSA.

LEB'BEUS, [Heb. a man of courage.] See JUDE, vol. xi. p. 479. Lebbeus, or Jude, was a married man, and had children; for Hegeſippus, as Euſebius relates, (Hiſt. Eccl. lib. iii. cap. 20.) ſpeaks of two martyrs, his grandſons. The Muſcovites believe that they received the faith from Lebbeus. *Calmet.*

LE'BE, a town of Germany, in the lordſhip of Lauenburg, on a lake near the Baltic: fifteen miles north-weſt of Lauenburg. Lat. 54. 40. N. lon. 17. 29. E.

LEBECK'IA, *ſ.* in botany, a genus of the claſs diadelphia, order decandria. Generic eſſential characters—Calyx five-parted, with acute diviſions and rounded cavities: legume cylindrical, many-ſeeded.

Species. 1. Lebeckia contaminata: leaves ſimple, linear-filiform, glabrous: flowers umbelled. 2. Lebeckia ſepiaria: leaves ſimple, filiform, glabrous; flowers racemed. 3. Lebeckia pungens: leaves ſimple, obovate; branches and branchlets ſpineſcent, downy; flowers ſolitary. 4. Lebeckia armata: leaves ternate; branches ſpineſcent, round, cinereous; flowers racemed. 5. Lebeckia denſa: leaves ternate, villous; leaflets convolute, oblong; flowers racemed, remote. 6. Lebeckia humilis: leaves ternate, villous; leaflets linear-oblong; flowers racemed, reflected; branches incurved. 7. Lebeckia ſericea: leaves ternate, ſilky; leaflets linear; flowers racemed. 8. Lebeckia cytiſoides: leaves ternate, villous; raceme long, terminal. They are all natives of the Cape of Good Hope.

LEB'EDA, an ancient ſeaport town of Africa, in the kingdom of Tripoli, with a pretty good harbour, and an old caſtle, ſeated on the Mediterranean ſea, in lat. 32. 10. N. lon. 14. 50. E.

LEBEDIAU', a town of Ruſſia, in the government of Tambov: one hundred miles weſt-north-weſt of Tambov. Lat. 53. 28. N. lon. 38. 50. E.

LEB'EDIN, a town of Ruſſia, in the government of Charkov: ſixty miles north-weſt of Charkov.

LEB'EDUS, or LEB'EDOS, a town of Ionia, at the north of Colophon, where feſtivals were yearly obſerved in honour of Bacchus, and where Trophonius had a cave and a temple. Lyſimachus deſtroyed it, and carried part of the inhabitants to Epheſus. It had been founded by an Athenian colony, under one of the ſons of Codrus.

LE'BEN, or LEB'ENA, in ancient geography, one of the port-towns of the Gortynians, on the ſouth-eaſt ſide of Crete; famous for a temple of Æſculapius, in imitation of that of Cyrenaica.

LEBENTHOR', a town of the duchy of Stiria: five miles north-north-eaſt of Fridaw.

LE'BER, a river of France, which runs into the Ill a little below Schlettſtat, in the department of the Lower Rhine.

LEBIAL'NA, an iſland of Ruſſia, in the Caſpian Sea. Lat. 45. 55. N. lon. 53. 30. E.

LEBIA'R, a foreſt of Africa, in the country of Zenhaga, in which gum is collected in large quantities: one hundred miles eaſt-north-eaſt of Portendic.

LEBIA'ZIA, a fortreſs of Ruſſia, in the government of Caucaſus: ſixteen miles north-weſt of Aſtrachan.

LEBIA'ZIA, a fort of Ruſſia, in the government of Tobolſk: 188 miles ſouth-ſouth-eaſt of Tobolſk. Lat. 55. 20. N. lon. 71. 14. E.

LEB'IDA, or LEB'DA, a ſeaport town of Africa, in the country of Tripoli, on the coaſt of the Mediterranean: thirty miles weſt of Meſurata, and thirty eaſt-ſouth-eaſt of Tripoli. Lat. 32. 40. N. lon. 13. 56. E.

LEBIE'DA, a town of Lithuania, in the palatinate of Wilna: ten miles ſouth of Lida.

LEBIED'ZIOW, a town of Lithuania, in the palatinate of Wilna: fifty-ſix miles eaſt-ſouth-eaſt of Wilna.

LEBIN'THOS, or LEBYN'THOS, in ancient geography, an iſland in the Ægean ſea, near Patmos.

LEBLAN'C (Marcel), born at Dijon in 1653, entered into the order of Jeſuits, and was one of the fourteen mathematicians whom Louis XIV. ſent to the king of Siam, the ſuppoſed convert to Chriſtianity, in 1687. Leblanc took up his abode with the talapoins or prieſts of the country, in order to learn the language; but, the revolution taking place which deprived that king of his crown, and put an end to the hopes of the miſſionaries, he was ſent back to France to carry the intelligence. He had the misfortune of being taken priſoner by the Dutch near the Cape of Good Hope, and ſent into confinement at Middleburg in Zealand. He obtained his liberty in 1690, and returned to Dijon in the capacity of mathematical profeſſor in the Jeſuits' college. In 1691 he joined a new miſſion for China, and embarked at Liſbon. During the voyage, he received a blow on the head in a ſtorm, which put an end to his life, at Mozambique, in 1693. Father Leblanc had begun at Dijon to draw up memoirs concerning the miſſions into the eaſt, which he left imperfect. He is known by a "Hiſtory of the Revolution of the Kingdom of Siam, in 1688, and of the preſent State of the Indies," printed at Lyons, in 2 vols. 12mo. 1692, in French, which gives a faithful and exact narrative of that event, and contains various remarks uſeful to navigators. *Moreri.*

LEB'NA, a ſtrong city of Paleſtine, in the tribe of Judah, ſituated on a narrow neck of land, which ran north-

wards between the tribes of Dan and Benjamin. Joſhua took it and gave it to the Levites of this tribe, and it became a city of refuge. This had been an encampment of the Iſraelites in the Deſert.

LEB'NEK, a town of Tranſylvania: fifteen miles ſouth-eaſt of Scheſburg.

LE'BO, a river of Chili, which runs into the Pacific Ocean in lat. 37. 30. S.

LEB'RADE, a town of the duchy of Holſtein: ſix miles ſouth-weſt of Lutkenborg.

LEBRIL'LA, a town of Spain, in the province of Murcia: eleven miles ſouth-weſt of Murcia.

LEBRIX'A, or LEBRI'JA, a town of Spain, in the province of Seville, ſituated formerly on a branch of the Guadalquivir, which being now choaked up, the town is ſix miles from the river. It has a caſtle, which marks ſome appearance of antiquity to the place; and within the caſtle is a convent, which was viſited by our countryman Mr. Jacob in the year 1810. In the environs are produced olives, from which is obtained ſome of the beſt oil in Spain: twenty miles ſouth of Seville.

LEBRUT'Z, a river of Saxony, which runs into the Elbe two miles weſt of Schandau.

LEB'SKOI, a town of Ruſſia, in the government of Archangel, near the union of the rivers Mezen and Pezna: 168 miles eaſt of Archangel.

LE'BUS, a town of the Middle Mark of Brandenburg, ſeated on the Oder, being 1200 paces in length, taken in a direct line, though formerly much larger; and containing about 14,000 inhabitants, with three churches. This town has been frequently ſacked. It lies low, among hills, ſo that it cannot be ſeen at one view, and therefore makes but a mean appearance. It was originally ſubject to Poland, but afterwards devolved on Boleſlaw duke of Sileſia, who, in 1250, bequeathed both the town and its lordſhip to the margraves Otho and John, of Brandenburg. In 1354, the elector Louis the Roman left the caſtle and city of Lebus to the biſhopric, to which it afterwards gave title. The biſhop's caſtle here was deſtroyed by a fire in 1631. The biſhopric of Lebus was founded in the year 965 in Red Ruſſia, by the Poliſh prince Mieziſlaw, but the particular place of its ſee is not known. That prince's ſucceſſor, Boleſlaw, ſettled and improved this biſhopric, which at firſt, however, bore not the name of Lebus. About the year 1300, it was called the biſhopric of Goritz; but at length the biſhopric of Lebus, on occaſion of that city's being added to its territories; which name it likewiſe retained after the building of the cathedral at Furſtenwalde. Lebus was always municipal; inſomuch that, on the biſhop's being regiſtered in the matricula in 1521, not only the elector of Brandenburg, but likewiſe the biſhop himſelf, remonſtrated againſt it. On the deceaſe of biſhop John VIII. in 1555, the management of the dioceſe was committed to the care of the margrave Joachin Frederic of Brandenburg who, on his acceſſion to the electoral dignity in 1598, ſecularized the biſhopric, and at the ſame time ſuppreſſed the chapter. It is five miles north of Frankfort on the Oder, and ſeven ſouth-ſouth-weſt of Cuſtrin. Lat. 52. 26. N. lon. 14. 44. E.

LE'CA, a town of the iſland of Samos: two miles ſouth of Carlovaſſi.

LECANOM'ANCY, *ſ.* [from the Greek λεκανη, a baſon, and μαντεια, magic.] Divination by means of water in a baſon; the ſame with HYDROMANCY.

LECASEL'LO, a town of the Ligurian Republic: twenty miles north-eaſt of Genoa.

LEC'CE, a city of Naples, in the province of Otranto, the ſee of a biſhop, ſuffragan of Otranto. The wool produced in the environs of this place was formerly much celebrated; the country yields abundance of almonds and olives. It contains, beſides the cathedral, three pariſh-churches and ſeveral convents. It is the reſidence of the governor, and is ſometimes called the capital of Otranto; and by ſome the province is called *Lecce*, inſtead of Otranto. The number of inhabitants is eſtimated at 18,000. It is twenty miles north-weſt of Otranto, and 192 eaſt of Naples. Lat. 40. 40. N. lon. 18. 8. E.

LEC'CI, a town of the iſland of Corſica: five miles north of Porto Vecchio.

LEC'CO, a town of Italy, and capital of the department of the Montagna, on the lake Como, which gives name to a branch of the lake called the Lake of Lecco: fourteen miles eaſt-north-eaſt of Como. Lat. 45. 5. N. lon. 9. 23. E.

LECE'TA, a town of Spain, in Navarre: ſeventeen miles north-north-weſt of Pamplona.

LECH, *ſ.* A term uſed by miners to expreſs the gold ore which has been powdered and waſhed, and afterwards run with the aſſiſtance of lime-ſtone. The lech is afterwards burnt in a fire of charcoal, in order to render it fit for the ſeparation of the metal, by means of lead, which abſorbing and ſcorifying the extraneous matter, renders the gold pure.

LECH, a river which riſes in the Tyroleſe, paſſes by Fueſſen, Landſburg, Augſburg, &c. and runs into the Danube five miles below Donawert.

LECH. See LEACH, p. 410.

To LECH, *v. a.* [*lecher*, Fr.] To lick over. *Hanmer.*

Haſt thou yet *leched* the Athenian's eyes
With the love-juice? *Shakeſpeare.*

LECHÆ'UM, now *Pelago*, a port of Corinth, in the bay of Corinth.

LE'CHAH, [Hebrew.] A man's name.

LECH'AMPTON, a village in Glouceſterſhire, three miles ſouth from Cheltenham, and eight eaſt from Glouceſter. About half this pariſh lies in dairy-farms in the vale of Glouceſter; the other part ſtretches eaſtward over a ſtupendous ridge of hills, where there is a fine proſpect over the vale and the river Severn, above and below the city of Glouceſter.

LECHE, a river of France, which runs into the Meuſe near Dinant.

LECHE'A, *ſ.* [ſo named by Linnæus, at the ſuggeſtion of Kalm, in honour of profeſſor *John Leche*, of Abo in Finland, member of the Stockholm Academy, ſeveral of whoſe memoirs, relating to zoology, botany, and rural economy, are found in the Tranſactions of that learned body. He has alſo left us three diſſertations, publiſhed under his preſidency: 1. Primitiæ Floræ Scanicæ, 1744. 2. Novæ Inſectorum ſpecies, written by his pupil Uddman, a piece highly valued for its merit and rarity. 3. De Commoratione hybernali et peregrinationibus Hirundinum. He died in 1764, aged 60.] In botany, a genus of the claſs triandria, order trigynia, natural order of caryophyllei. The generic characters are—Calyx: perianthium three-leaved; leaflets ovate, concave, extremely ſpreading, permanent. Corolla: petals three, linear, narrower than the calyx, but almoſt longer, concave. Stamina: filaments three, (ſometimes four or five,) capillary, longer than the corolla, incumbent on the piſtil, equal; antheræ roundiſh. Piſtillum: germ ovate; ſtyle none; ſtigmas three, feathery, divaricated. Pericarpium: capſule ovate, three-ſided, three-celled, (one-celled, *Gærtner*,) three-valved; and alſo with three internal valves converging towards the exterior ones, conſtituting partitions. Seeds: ſolitary, ovate, cornered inwards.—*Eſſential Character.* Calyx three-leaved; petals three, linear; capſules three-celled, three-valved, with as many internal ones; ſeeds ſolitary.

Species. 1. Lechea minor, or ſmaller lechea: leaves linear-lanceolate; flowers panicled. Root fibrous, perennial; putting up ſeveral upright ſimple ſtems, panicled at top, and round. Leaves ſcattered, upright, quite entire, ſharp; above ſmooth and ſhining, beneath ſomewhat pubeſcent, with a reflex margin, on very ſhort petioles. Flowers numerous, on terminating peduncled racemes. Seeds three, oblong, acuminate at both ends, three-ſided, convex on one ſide, angular on the other, obſcurely dotted, brown. It is conſtantly one-celled, and has no inner valves. The embryo is not circular, as in moſt of its

congeners, but almoſt ſtraight. Native of North America, in Virginia and Canada.

2. Lechea major, or great lechea: leaves ovate-lanceolate; flowers lateral, wandering. Stems purpliſh, round, with ſimple alternate remote branches. Leaves alternate, rugged above, tomentoſe beneath, with a reflex margin. Flowers two, three, or four, from the uppermoſt ſhoots. Clayton aſſigns four ſtamens to the flower, the two upper ones approximating. Native of North America, in Virginia and Canada. The plant deſcribed by Linnæus for Lechea major is ſuppoſed to be Ciſtus Canadenſis; but the plant intended by Kalm for Lechea major is very different, as may be ſeen by comparing the ſpecimens in the Bankſian Herbarium.

3. Lechea racemuloſa, or many-cluſtered lechea: hairs cloſe-preſſed; leaves linear-lanceolate, acute, hairy beneath; flowers in numerous ſlender cluſters; calyx hairy. Gathered by Clayton at Point Comfort, in Virginia.

4. Lechea thymifolia, or thyme-leaved lechea: hairs cloſe-preſſed; leaves lanceolate. Stem panicled; cluſters leafy; bracteas linear, much longer than the flowers. Gathered by Clayton in Virginia; by Michaux in dry expoſed ſituations in North and South Carolina. Stem a foot high, round, reddiſh, rough with cloſe-preſſed hairs; leaves oppoſite or ſcattered, various in ſize.

5. Lechea tenuifolia, or ſlender-leaved lechea: ſtems buſhy, decumbent, aſcending, with ſpreading branches. Found on ſandy hills near the Santee river, flowering in April and May. Michaux deſcribes it as of humble and buſhy growth, with capſules rather larger, in proportion to the plant, than is uſual in this genus.

6. Lechea verticillata, or whorled lechea: leaves elliptical, ſerrated; flowers whorled. Sent by Dr. Rottler from Madras.

7. Lechea Chinenſis, or Chineſe lechea: leaves ovate-lanceolate; ſpathes three-flowered, terminating. Stem annual, manifold, creeping, ſhort. Leaves marked with lines, ſmooth, with ſheathing petioles. Flowers from a large blunt ſpathe; petals blue, with claws. This plant ſeems at firſt ſight to be related to Commelina and Tradeſcantia; but it has not either villoſe filaments like the latter, or cruciate nectaries like the former. Native of China, near Canton.

LECH'EMY, or LAKSHMI, [from the Sanſkrit *lakſh*, light, ſplendour.] The Venus and Ceres of the Hindoos, and the conſort of Viſhnu. See the article HINDOOSTAN, vol. x. p. 116. She is repreſented by the poets and painters as of perfect beauty. Hindoo females are commonly named after her; and there are few in the long catalogue of their deities whoſe various names and functions are ſo frequently alluded to in converſation and writing, either on theogony, mythology, poetry, or philoſophy. Her terreſtrial manifeſtations have been frequent, and her origin various. As Rhemba, the ſea-born goddeſs, ſhe aroſe one of the fourteen gems from the ocean when churned by the good and evil beings for the *amrita*, or beverage of immortality. She then aſſumes the character of Venus Marina, or Aphrodites of the Greeks; who, as Heſiod and Homer ſing, aroſe from the ſea, aſcended to Olympus, and captivated all the gods. The operation of churning the ocean is noticed under KURMAVATARA; and the production of Rhemba, Sri, or Lechemy, is thus deſcribed in the 36th ſection of the firſt book of the Ramayana: "The gods, the aſuras, and the gandharvas, again agitating the ſea, after a long time appeared the great goddeſs, inhabiting the lotus; clothed with ſuperlative beauty, in the firſt bloom of youth, covered with ornaments, and bearing every auſpicious ſign; adorned with a crown, with bracelets on her arms, her jetty locks flowing in ringlets, and her body, which reſembled burning gold, adorned with ornaments of pearl. Thus was produced the goddeſs Padma, or Sri, adored by the whole univerſe, Padma by name. She took up her abode in the boſom of Padmanabha, even of Heri," that is, of Viſhnu, of whom theſe are names. Sri, as this deity is frequently called, diſtinguiſhes her more particularly as the goddeſs of fortune, the word meaning *proſperity*; but it is not given excluſively to Lechemy. Others of her names are derived from the lotus, which is the emblem of female beauty, and eſpecially applicable to this goddeſs.

In images and pictures of her, which are very common in India, Lechemy is generally repreſented as a mere woman; ſometimes, however, four-armed; often holding a *kamal*, or lotus, in an eaſy and elegant attitude; and always very handſome. With her lord Viſhnu ſhe is frequently ſeen on the ſerpent Seſha; he repoſing, ſhe in reſpectful attendance, while a lotus ſpringing from Viſhnu's navel to the ſurface of the ſea (for this ſcene is ſubaqueous) bears, in its expanded calyx, Brahma, the creator of the world, about to perform the work of renovation. Sometimes ſhe is ſeated with her lord on Garuda, or Superna, cleaving the air, of which Viſhnu is a perſonification. In Viſhnu's moſt ſplended avatara, or incarnation of Kriſhna, ſhe became manifeſted as Rukmeni, or Radha, the moſt adored of the amorous deities, and mother of Kama, the god of love; here again correſponding with our popular Venus, the mother of Cupid.

Lechemy alſo preſides over marriages, and is conſidered, indeed, among certain ſects of Hindoos, as the general ſource of all happineſs. She is found, by mythologiſts, to have characteriſtic attributes and powers ſimilar to the Ceres of the Greeks, (Sri is, in one caſe, Sris, correſponding here, likewiſe, in name,) and the Iſis of the Egyptians. On theſe, and other points connected with the ſubject of this article, ſee ſir William Jones, and Mr. Colebroke, Aſiat. Reſ. vol. i. iii. and vii. Many plates of her in her various forms, and puranic legends and anecdotes, are likewiſe given in *Moor's Hindoo Pantheon*.

LECHENAUL'TIA, *ſ.* [named by Mr. R. Brown, in compliment to his friend *Lechenault*, an eminent French botaniſt and traveller, who has undertaken to illuſtrate the plants of the weſtern coaſt of New Holland more eſpecially, as well as thoſe of Java and Timor.] In botany, a genus of the claſs pentandria, order monogynia, natural order of campanaceæ, *Linn.* (campanulaceæ, *Juſſ.* goodenoviæ, *Brown.*) Generic eſſential characters—Calyx ſuperior; tube of the corolla ſlit longitudinally on one ſide; antheræ cohering; pollen of compound grains; ſtigma obſolete, in the bottom of a two-lipped cover; capſule priſmatic, of two cells, and four oppoſite valves with central partitions; ſeeds cubical or cylindrical, ſhelly. *Brown's Prodr. Nov. Holl.* 581.

Species. I. Small ſhrubs with heath-like leaves. Flowers axillary or terminal; capſule valvular; ſeeds cubical. 1. Lechenaultia formoſa: flowers axillary, ſolitary, drooping, without bracteas; corolla ſmooth, two-lipped. Gathered by Mr. Brown on the ſouth coaſt of New Holland. 2. Lechenaultia tubiflora: flowers nearly terminal, ſolitary, ſlightly ſtalked; corolla tubular, curved, with a cloſed limb; leaves awl-ſhaped, with a ſmall pellucid point. 3. Lechenaultia expanſa: corymbs axillary, of few flowers. Stalks with a pair of bracteas each; corolla with one lip, in fringed ſegments. Natives of the ſame country.

II. Herbaceous. Flower oppoſite to a leaf; capſule opening only when far advanced, its valves cohering by a narrow neck; ſeeds cylindrical. 4. Lechenaultia filiformis: leaves alternate, thread-ſhaped, ſomewhat compreſſed. Gathered by Mr. Brown in the tropical part of New Holland.

LECH'ER, LEACHER, or LETCHER, *ſ.* [derived by Skinner from *luxure*, old French; *luxuria* is uſed in the middle ages in the ſame ſenſe.] A whore-maſter.—I will now take the *lecher*; he's at my houſe; he cannot 'ſcape me. *Shakeſpeare.*

You, like a *letcher*, out of whoriſh loins
Are pleas'd to breed out your inheritors. *Shakeſpeare.*

The *lecher* ſoons transforms his miſtreſs; now
In Iö's place appears a lovely cow. *Dryden.*

To LECH'ER, *v. n.* To whore.—Die for adultery? No.

The

The wren goes to't, and the ſmall gilded fly does *lecher* in my ſight. *Shakeſpeare.*

LECHERA'INE, a town of France, in the department of Mont Blanc: ten miles north-north-eaſt of Chambery.

LECH'EROUS, *adj.* Lewd; luſtful.—The ſapphire ſhould grow foul, and loſe its beauty, when worn by one that is *lecherous*; the emerald ſhould fly to pieces, if it touch the ſkin of any unchaſte perſon. *Derham.*

LECH'EROUSLY, *adv.* Lewdly; luſtfully.

LECH'EROUSNESS, *ſ.* Lewdneſs.

LECH'ERWITE, LAIRWITE, or LEGERWITE, *ſ.* [from the Saxon, leȝan, to lie with, and pite, a penalty.] A fine for adultery or fornication, anciently paid to the lords of certain manors. 4 *Inſt.* 206.

LECH'ERY, *ſ.* Lewdneſs; luſt.—The reſt welter with as little ſhame in open *lechery* as ſwine do in the common mire. *Aſcham.*

Againſt ſuch lewdſters, and their *lechery*,
Thoſe that betray them do no treachery. *Shakeſpeare.*

LE'CHES, a town of France, in the department of the Dordogne: three miles ſouth of Mucidan.

LECHIQUELE'E, a rock or ſmall iſland, near the ſouth coaſt of the iſland of Jerſey: four miles ſouth-eaſt of St. Helier.

LECH'LADE. See LEACHLADE, p. 410.

LECH'ENICH. See LEGHENIGH.

LECHO'NES, a cluſter of ſmall iſlands in the Atlantic, near the weſt coaſt of Portugal: three miles north from the mouth of the Duero. Lat. 41. 43. N. lon. 8. 25. E.

LECH'S-GEMUND, a town of Bavaria, in the principality of Neuburg, near the Danube: ſix miles eaſt-north-eaſt of Donawert.

LECH'WAR, a town of Hindooſtan, in Bahar: thirty-two miles ſouth-eaſt of Bahar.

LECK, a town of Denmark, in the duchy of Sleſwick: fourteen miles north of Bredſtede.

LECK, a river of Holland, or rather a branch of the Rhine which takes that name at Wyck-te-Duerſtede, in Utrecht, paſſes by Culemburg, Viana, Schonhoven, &c. and loſes itſelf in the Merwe at Krimpe.

LECK'NESS, a town of Norway: twenty two miles weſt of Chriſtianſand.

LECLER'C (Gabriel), phyſician in ordinary to Louis XIV. author of the following eſteemed medical works; 1. L'Ecole du Chirurgien; 12mo. 1684. 2. La Chirurgie complette, 1694. This has been many times reprinted, and is an excellent manual of the art; it contains, in the opinion of Boerhaave and Haller, the completeſt and moſt correct anatomy of the bones that had at that time been publiſhed. 3. Appareil commode de jeunes Chirurgiens; Paris, 1700, avec fig. 12mo. 4. Catalogue des Drogues, 1701, 12mo. 5. La Medicine aiſée, contenant pluſieurs Remedes faciles et experimentés pour toutes Sortes de Maladies, 2 vols. 12mo. This has alſo been ſeveral times reprinted.

LECLER'K (Daniel), a celebrated phyſician, and learned writer on the hiſtory and practice of medicine, was born at Geneva, Feb. 4, 1652. He was the ſon of Stephen Leclerk, profeſſor in the Greek language, and from him received the rudiments of his knowledge, as well as his taſte for reſearch into antiquity, by which he became in time ſo famous. Having completed his ſchool-education, he went in ſucceſſion to Montpellier, Paris, and Valence, where he took his degree of doctor in medicine in 1672. He now returned to Geneva, and ſoon found himſelf in conſiderable practice, which he attended to with zeal, until the year 1704, when, being appointed one of the members of the council of ſtate, he entirely renounced practice, that he might have leiſure to fill the honourable poſt to which he had been raiſed, and to correct and complete the various works in which he had been engaged, and which had given him a diſtinguiſhed rank among the principal literary characters of his age. He died June 8, 1728, leaving two ſons; James, who had been educated to medicine; and James-Theodore, who was miniſter of the goſpel, and profeſſor of the oriental languages. He had publiſhed, in conjunction with James Mangets, Bibliotheca Anatomica, 2 vols. folio, in 1685; but the work for which he is principally celebrated, is his "Hiſtoire de la Medecine, ou l'on voit l'Origine et le Progres de cette art de Siecle en Siecle;" a work of immenſe erudition, in which are depicted the opinions, or theories of medicine, which have prevailed from the earlieſt period to the time of Galen. The firſt part, which brought the hiſtory of medicine only to the time of Hippocrates, was publiſhed in 8vo. 1696. Finding this approved, he produced the work completed in 4to. in 1702. This was reprinted in 1723; and again, with additions, and much improved, in 1729. Freind wrote a continuation of the hiſtory, and in ſo excellent a manner, as to leave little reaſon to regret that it had not been finiſhed by the original author. Leclerk alſo wrote "Hiſtoria naturalis et medica latorum Lumbricorum intra Hominem et Animalia naſcentium;" Genevæ, 1715, 4to. which contains all that is known on the ſubject of thoſe pernicious reptiles. A little before he died, he tranſlated, Senebier ſays, the firſt Satyr of Perſius, into the French language; but this has not been printed. *Haller Bib. Med. Senebier Hiſt. Lit. de Geneve.*

L'ECLU'SE (Fort de), or FORT DE LA CLUSE, a ſmall town of France, in the department of the Ain, twelve miles weſt of Geneva, on the river Rhône, or rather, near the place where the Rhône, loſing itſelf among rocks, diſappears, as it were, under ground, and re-appears at no great diſtance.

L'ECLU'SE. See ECLUSE, vol. vi.

LECOQ' (Anthony), a Pariſian phyſician, who graduated in the faculty of that city, and practiſed there with great reputation until his death, which took place on the 28th of March, 1550. He was elected dean of his faculty in 1538; and in the following year was called, in conſultation with Fernel, to viſit the French king, Francis I. who had contracted the venereal diſeaſe. He ſhowed his knowledge of the nature of the diſeaſe, by inſiſting, in oppoſition to Fernel, that mercurial frictions were neceſſary; but his mode of propoſing it evinced that he was a novice in the manners of a court. He obſerved to Fernel, ſpeaking of the king, "C'eſt un vilain qui a gagné la vérole; *frottetur* comme un autre, et comme le dernier de ſon royaume, puiſque il s'eſt gaté de la même manière." This was reported to the king, who laughed, and was pleaſed with his frankneſs. Lecoq left two works: 1. De Ligno ſancto non permiſcendo in imperitos fucatoſque medicos; Paris, 1548. 2. Conſilia de Arthritide; Frankfort, 1540. The latter comprehended alſo ſome other treatiſes on the gout, eſpecially thoſe of Sylvius and Fernel; in conjunction with whom, Lecoq had been conſulted on the ſubject by Louis of Flanders, and by Eleonora queen of France. *Eloy. Dict. Hiſt.*

LEC'TERN, *ſ.* An old word for the reading-deſk in a church. *Phillips.*

LEC'TI, *ſ.* [Latin.] Beds or couches, which were of two kinds amongſt the Romans, as being deſtined to two different uſes; to lie upon at entertainments, and to repoſe upon for nightly reſt. The firſt were called *lecti triclinares*, the other *lecti cubicularii*. See BEDS, vol. ii. p. 844.

LEC'TICA, *ſ.* [Lat. from *lectus*, a bed.] A litter, or vehicle in which the Romans were carried. Lectica was alſo the name of the funeral bed or bier for carrying out the dead. See LITTER.

LECTICA'RIUS, *ſ.* Among the Romans, ſervants who carried the LECTICA. Alſo an officer in the Greek church, whoſe buſineſs it was to bear off the bodies of thoſe who died, and to bury them. Theſe were otherwiſe denominated *decani* and *copiatæ*.

LEC'TION, *ſ.* [*lectio*, Lat.] A reading; a variety in copies.—Every critic has his own hypotheſis; if the common text be not favourable to his opinion, a various *lection* ſhall be made authentic. *Watts.*

LEC'TIONARY,

LEC'TIONARY, *ſ.* [from *lection.*] The ſervice-book in the Romiſh church. *Scott.*

LECTISTER'NIUM, *ſ.* [Lat. from *lectus*, a bed, and *ſternere*, to ſpread, or prepare.] A ſolemn ceremony obſerved by the Romans in times of public danger, wherein an entertainment was prepared with great magnificence, and ſerved up in the temples. The gods were invited to partake of the good cheer, and their ſtatues placed upon couches round the table, in the ſame manner as men uſed to ſit at meat. The firſt lectiſternium held at Rome was in honour of Apollo, Latona, Diana, Hercules, Mercury, and Neptune, to put a ſtop to a contagious diſtemper which raged amongſt the cattle, in the year of Rome 354. At theſe feaſts the Epulones preſided, and the ſacred banquet was called *epulum.* Something like the lectiſternium was occaſionally obſerved amongſt the Greeks, according to Caſaubon.

The ſame word is ſometimes uſed by the moderns to denote the apparatus uſed for a bed-ridden patient.

LEC'TIUS (James), a learned and patriotic citizen of Geneva, was born at that city in 1560. After a preliminary education at home, he ſtudied law under Cujas, and, through the influence of Beza, obtained a chair in that faculty at Geneva in 1583. In the following year he was made counſellor of ſtate; and the zeal and intelligence which he diſplayed in the public ſervice cauſed him four times to be appointed to the ſyndicate, or firſt office in the government, and to be employed in ſome important negotiations. He was ſent, in 1589, to queen Elizabeth, in order to obtain ſome pecuniary aid for the republic, exhauſted by war; and, although that frugal princeſs would contribute nothing from her own purſe, ſhe permitted a collection to be made throughout the kingdom, under the direction of the archbiſhop of Canterbury. Lectius went upon a ſimilar miſſion to Holland, and obtained a ſum from the prince of Orange and the ſtates-general, upon the liberal condition that the academy of Geneva ſhould be re-eſtabliſhed, the profeſſors of which had been diſmiſſed. Lectius himſelf, from his love to letters, ſupported this meaſure; and among his orations is one with the title *De Studiis liberalibus publica ob mala non deſerendis.* He was employed to maintain the rights of the republic with his pen, againſt the duke of Savoy; and, when that prince had diſhonoured himſelf by the infamous attempt of the *eſcalade*, in 1602, Lectius repreſented the action in ſuch colours to the Swiſs cantons, as to obtain the deſired ſuccours. He afterwards defended the proteſtant religion againſt the attacks of the preſident Favre, in an excellent controverſial work. In the midſt of theſe occupations he found time for various publications in juriſprudence and in polite literature. He died in 1611, regarded by his countrymen as the model of an excellent magiſtrate and citizen. The legal writings of Lectius are contained in the collection entitled, Theſaurus Juris Romani, continens rariora meliorum Interpretum Opuſcula; Lugd. Bat. 5 vols. folio, 1725. His other publications, all in Latin, conſiſt chiefly of poems, orations, pieces of biography, &c. *Sennebier, Hiſt. Lit. de Geneve.*

LECTOU'RE, a town of France, and principal place of a diſtrict, in the department of the Gers, ſituated on a mountain, acceſſible only on one ſide, near the Gers. It is defended by art as well as nature. Before the revolution, it was the ſeat of a governor and ſee of a biſhop. The number of inhabitants is about 4000. It is ſixteen miles ſouth of Agen, and ſixteen north of Auch. Lat. 43. 56. N. lon. 0. 42. E.

LEC'TUAL, *adj.* [from the Lat. *lectus*, a bed.] Confined in a bed, proper to be confined in bed. *Not uſed.*

LEC'TUM, a promontory, now *Cape Baba*, ſeparating Troas from Æolia.

LEC'TURE, *ſ.* [*lecture*, Fr.] A diſcourſe pronounced upon any ſubject.—Mark him, while Dametas reads his ruſtic *lecture* unto him, how to feed his beaſts before noon, and where to ſhade them in the extreme heat. *Sidney.*

When in muſic we have ſpent an hour,
Your *lecture* ſhall have leiſure for as much. *Shakeſpeare.*

The act or practice of reading; peruſal.—In the *lecture* of holy ſcripture, their apprehenſions are commonly confined unto the literal ſenſe of the text. *Brown.*—A magiſterial reprimand; a pedantic diſcourſe.—Numidia will be bleſt by Cato's *lectures. Addiſon.*

To LEC'TURE, *v. a.* To inſtruct formally. To inſtruct inſolently and dogmatically.

To LEC'TURE, *v. n.* To read in public; to inſtruct an audience by a formal explanation or diſcourſe: as, Wallis *lectured* on geometry.

LEC'TURER, *ſ.* An inſtructor; a teacher by way of lecture. A preacher in a church hired by the pariſh to aſſiſt the rector or vicar.—If any miniſter refuſed to admit into his church a *lecturer* recommended by them, and there was not one orthodox or learned man recommended, he was preſently required to attend upon the committee. *Clarendon.*—Theſe lecturers are choſen by the veſtry, or chief inhabitants of the pariſh, and are uſually the Sunday-afternoon preachers; the law requires that they ſhould have the conſent of thoſe by whom they are employed, and likewiſe the approbation and admiſſion of the ordinary; and they are, at the time of their admiſſion, to ſubſcribe to the thirty-nine articles of religion, &c. required by the 13 and 14 Car. II. c. 4. If lecturers preach in the week-days, they muſt read the common-prayer for the day when they firſt preach, and declare their aſſent to that book; they are likewiſe to do the ſame the firſt lecture-day in every month, ſo long as they continue lecturers, or they ſhall be diſabled to preach till they conform to the ſame; and, if they preach before ſuch conformity, they may be committed to priſon for three months, by warrant of two juſtices of peace, granted on the certificate of the ordinary.

Univerſity ſermons or lectures are excepted out of the act concerning lecturers. There are lectures founded by the donations of pious perſons, the lecturers whereof are appointed by the founders, without any interpoſition or conſent of rectors of churches, &c. though with the leave and approbation of the biſhop. But ſuch are not entitled to the pulpit without the conſent of the rector, or vicar, in whom the freehold of the church is.

There are lecturers of divinity, law, phyſic, &c. in the univerſities of Oxford and Cambridge; and in London we have lecturers upon almoſt every art and ſcience, as anatomy, phyſiology, ſurgery, chemiſtry, muſic, the belles lettres, &c. &c.

LEC'TURESHIP, *ſ.* The office of a lecturer.—He got a *lecture/hip* in town of ſixty pounds a-year, where he preached conſtantly in perſon. *Swift.*

LEC'TURING, *ſ.* The act of reading lectures; of reprimanding.

LECTUR'NIUM, *ſ.* in old records; a reading deſk.

LECY'THIS, *ſ.* [from ληκυθος, Gr. a pot; the fruit reſembling a pot with its lid, or a cup and cover.] In botany, a genus of the claſs polyandria, order monogynia, natural order of myrti, *Juſſ.* The generic characters are —Calyx: perianthium ſix-leaved; leaflets roundiſh, concave, permanent. Corolla: petals ſix, oblong, obtuſe; flat, very large; of which the two upper ones are very ſpreading. Nectary petal-form, one-leafed; tongue-ſhaped; flat at the baſe, perforated for the germ, marginated; a ſtrap bent upwards from the lower ſide of the flower; linear, outwardly convex, thick at the tip, ovate, together with the ſtamens covering the organs. Stamina: filaments extremely plentiful, inſerted on every ſide into the interior diſk of the baſe of the nectary, very ſhort, thicker above; antheræ oblong, ſmall. Piſtillum: germ depreſſed; acuminated, girt with the receptacle of the flower; ſtyle very ſhort; ſtigma rather obtuſe, conic. Pericarpium: roundiſh at the baſe, woody, girt above by the rudiments of the calyx, truncated, ſubquadrilocular, circumciſed, with orbiculated operculum. Seeds ſeveral, gloſſy,

gloſſy, with rough margin.—*Eſſential Character.* Calyx ſix-leaved; corolla ſix-petalled; nectary ligulate, ſtaminiferous; pericarpium circumciſed, many-ſeeded.

Theſe are trees or ſhrubs, with alternate leaves; flowers in terminating ſpikes, and from the axils of the ſhoots; in the ſpikes alternate, on pedicels that have a ſingle bracte at the baſe, and frequently two ſcales under the calyx. It is peculiar to this genus to have a pitcher-ſhaped body in the centre of the flower, which Linnæus calls the *nectarium*, inſerted into the calyx below the petals, perforated in the middle for the paſſage of the ſtyle, ſhaped like a petal, coriaceous, entire at the edge, not ſtaminiferous on the edge as in Pirigara (Guſtavia) and Butonica, but covered on the inſide with numerous ſubſeſſile ſtamens, and produced on the ſide into a membranaceous bilamellated ſtrap. Calyx ſix-lobed at top, equal, the lobes deciduous. Petals ſix, inſerted into the calyx under the diviſions, and faſtened to the nectary, coriaceous and concave. Germ half inferior, ending in a conical ſtyle, and a blunt ſtigma. Capſule woody, four-celled, but ſometimes varying in the number of cells from two to ſix; differing in form, ſize, and denſity; the veſtiges of the calyx remain on it about half-way down; at the top it is cut round, and furniſhed with a lid, which is produced or continued down into a central angular receptacle, and faſtened to the partitions of the capſule. Seeds in each cell ſolitary or few, inſerted into the receptacle, angular, covered by a membranaceous aril.

Species. 1. Lecythis grandiflora, or large-flowered lecythis: leaves ovate, peduncles of the flowers thick. This tree grows to the height of thirty feet. Leaves ſtrong, thick, waved, ſeven inches long, and three inches wide, ending in a little point; midrib prominent the whole length underneath. Flowers at the end of the ſhoots from the axils of the leaves, and alſo from the branches and ſhoots themſelves; the pedicel enlarges as it approaches the calyx, which is of a reddiſh colour on the inſide, corolla roſe-coloured; two petals longer and wider, and four ſmaller; capſule ſhaped like an urn, hard, woody, thick, about ſeven inches in height, four inches or more in diameter, and the opening of the cover two inches and a half, rounded next the peduncle, convex at top, and ending in a point; the remains of the calyx form a woody border, and above that is a collar near an inch high, which in the flower was covered by the claws of the petals; the periphery of the opening, which is cloſed by a lid or cover that deſcends the whole height of the collar, and often to the very bottom, is convex in its outer face, but the inner is produced into a long, woody, conical body, having ſeveral ſides, to which are attached large oblong kernels, of an irregular ſhape, enveloped in a membrane, and very good to eat. Native of the foreſts of Guiana; flowering in January, and fruiting in April. Called by the Caribbs *canari makaque*, by the French *marmite de ſinge*, the ape's porridge-pot.

2. Lecythis amara, or bitter lecythis: leaves ovate-lanceolate, acuminate; fruit ſmall, with a bitter kernel. This is alſo a very lofty tree. Flowers ſmall, yellow, with two or three ſcales on the peduncle. Capſule the ſize of an egg, thin, hard and woody, in the form of a little oval pot; the cover is divided at bottom into four parts, to each of which an oblong, angular, bitter kernel is attached: this is eaten by monkeys. The Creoles call it *petite marmite de ſinge*.

3. Lecythis parviflora, or ſmall-flowered lecythis: leaves ovate-lanceolate, acuminate; fruit ſmall, two-celled; lid, with the appendix, woody; produced inwards. This is not a very high tree; the boughs and twigs bend towards the ground; leaves ſhorter than thoſe of the preceding; flowers much ſmaller, of a golden yellow colour, and ſmelling very ſweet. The kernels, being bitter, are eaten only by monkeys. Native of Guiana, on the banks of rivers.

4. Lecythis Jacapucaya, or tall lecythis: leaves lanceolate-oblong, acuminate; fruit, large, with an eatable kernel. This is a very lofty tree, the trunk attaining ſixty feet in height and more, and being two feet and upwards in diameter; the wood is white, except towards the middle, where it is red; the boughs extend every way at top, and the ſhoots are loaded with leaves ten inches long, two inches and a half wide, entire about the edge, ſmooth, ſtrong, pale green, on a ſhort petiole, which is convex underneath, and channelled above. The kernels are eaten; they are ſweet, delicate, and preferable to almonds: they are ſold in London under the name of Braſil nuts. Birds and monkeys feed much on them. In Braſil they extract an oil from the kernels, which is much eſteemed. The Indians uſe the bark for making cordage, and as oakum for ſtopping the ſeams of boats. The wood, being hard and durable, is excellent for mill-work. The capſules are made into drinking-cups, boxes, toys, &c. Piſo relates, that a ſingle tree will yield fruit ſufficient to feed a moderate army. Native of America, Braſil, and Guiana. Introduced into the Iſle of France before 1761, by M. d'Eſtaing.

5. Lecythis idatimon, or red-flowered lecythis: leaves ovate-lanceolate, acuminate; fruit, ſmall, four-celled. This reſembles the preceding ſpecies in its leaves, and riſes to the ſame height. Native of the foreſts of Guiana, and called *idatimon* by the Caribbs.

6. Lecythis minor, or ſmall lecythis: leaves lanceolate-oblong; petioled. This is an elegant, branching, upright, tree, ſixty feet high. Leaves acuminate, ſerrate, ſmooth, ſubdiſtich, half a foot in length. Flowers large; the corolla and nectary white, the ſtamens and corpuſcles of the nectary yellow. Fruit very hard, brown, two inches in diameter: the cover falls off when the fruit is ripe; the dried pulp and ſeeds follow; but the pot or body of the capſule hangs on frequently two years in an inverted ſtate; the ſeparation of the cells is commonly incomplete; and in each there are two or three ſeeds, and ſometimes only one; in all about eight. Monkeys are fond of theſe. Jacquin relates, that, having eaten a whole nut, he was ſeized with a nauſea in half an hour after, accompanied with a giddineſs of the head. The flowers are infeſted with a ſort of black waſp, which attacks thoſe who gather them. Native of woods about Carthagena in New Spain, flowering in June and July. The fruits are ripe in December. Jacquin is of opinion that his L. minor is very different from the Lecythis of Loefling, and probably alſo from the Jacapucaya of Marcgraaf. Aublet ſuppoſes L. minor of Jacquin and L. ollaria of Linnæus to be the ſame ſpecies, and diſtinct from Jacapucaya of Marcgraaf.

LECY'THUS, in ancient geography, a town of Eubæa.

LECZEN'GA, a river of Africa, which runs into the Mozambique gulf in lat. 17. 20. S.

LECZ'NA, a town of Poland, in the palatinate of Chelm: twenty-four miles north-weſt of Chelm.

LED, part. pret. of *lead.*—The leaders of this people cauſe them to err, and they that are *led* of them are deſtroyed. *Iſa.* ix. 16.—As in vegetables and animals, ſo in moſt other bodies, not propagated by ſeed, it is the colour we moſt fix on, and are moſt *led* by. *Locke.*

LED'-HORSE, *ſ.* A ſumpter horſe.

LE'DA, in fabulous hiſtory, a daughter of king Theſpios and Eurythemis, who married Tyndarus king of Sparta. She was ſeen bathing in the river Eurotas by Jupiter, when ſhe was ſome few days advanced in her pregnancy; and the god, ſtruck with her beauty, reſolved to deceive her. He perſuaded Venus to change herſelf into an eagle, while he aſſumed the form of a ſwan; and, after this metamorphoſis, Jupiter, as if fearful of the tyrannical cruelty of the bird of prey, fled through the air into the arms of Leda, who willingly ſheltered the trembling ſwan from the aſſaults of his ſuperior enemy. The careſſes with which the naked Leda received the ſwan, enabled Jupiter to avail himſelf of his ſituation; and, nine months after this adventure, the wife of Tyndarus brought forth two eggs, of one of which ſprang Pollux and Helena, and of the other Caſtor and Clytemneſtra. The

two former were deemed the offspring of Jupiter, and the others claimed Tyndarus for their father. Some mythologiſts attribute this amour to Nemeſis, and not to Leda; and they further mention, that Leda was entruſted with the education of the children which ſprang from the eggs brought forth by Nemeſis. See HELENA. To reconcile this diverſity of opinions, others maintain that Leda received the name of Nemeſis after death. Homer and Heſiod make no mention of the metamorphoſis of Jupiter into a ſwan, whence ſome have imagined that the fable was unknown to theſe two ancient poets, and probably invented ſince their age.

LE'DA NE'GUS, a town of Abyſſinia, in the province of Gojam: 120 miles ſouth-ſouth-weſt of Gondar.

LE'DAH, a town of Hindooſtan, in the circar of Gangpour: twenty miles ſouth of Gangpour.

LEDAT', a town of France, in the department of the Lot and Garonne: three miles north-north-weſt of Villeneuve d'Agen, and ſix ſouth-weſt of Monſtanquin.

LED'BURY, an ancient borough and market-town in the county of Hereford, ſituated on a declivity within a ſmall valley, formed by the Dog-hill and other eminences, about one mile weſt from the river Leddon, from which it derives part of its name. The town conſiſts chiefly of two ſtreets, croſſing each other at right angles; the principal ſtreet runs north and ſouth, and has a middle row near the old market-houſe. This building is elevated on ſtrong oak pillars, and compoſed of timber and lath plaſtered and white-waſhed; the beams being coloured black: this mode of building is prevalent in the more ancient parts of the town; and many of the houſes have projecting ſtories. The modern houſes are of red brick, and of a reſpectable appearance. The pavement, even in the high ſtreet, is very bad, and full of inequalities; the ſmall ſtones that form it being preſſed into the ſtiff clay, which is the general ſoil of the county. Biſhop Bohun procured the charter of a market from king Stephen, to be held on Saturdays; but, this having fallen into diſuſe, queen Elizabeth granted a new charter for a Tueſday-market, and two annual fairs; the tolls ariſing from which were to be given to the poor. The borough had once the privilege of ſending two members to parliament, but ſurrendered the right, on the plea of inability to ſupport them. The church, which is a large edifice, of Saxon origin, conſiſts of a nave, ſide-aiſles, and chancel; a chapel called St. Catharine's, and a detached tower, terminated by a finely-proportioned ſpire, about ſixty feet high. Biſhop Foliot founded an hoſpital in this town in the year 1232 for the maintenance of poor men and widows: it was re-founded and farther endowed by queen Elizabeth. The hoſpital is a very ancient timber and plaſter building. Here are alſo a free-ſchool, a charity-ſchool, and ſeveral alms-houſes. The clothing-trade was, at one period, very flouriſhing in this town; but the principal buſineſs now carried on is the manufacture of ropes, lines, and ſacks. The cider-trade, however, is very conſiderable; great quantities being made in the vicinity. The biſhops of Hereford formerly had a palace here. Ledbury is 16 miles north-weſt of Glouceſter, and 123 weſt of London. Lat. 52. 6. N. lon. 2. 20. W.

On the Dog-hill, to the north of Ledbury, is Hope End, the ſeat of ſir Harry Vane Tempeſt, bart. About two miles ſouth of the town is the Vineyard-camp; the works of which have been almoſt defaced by the plough, and the area is cultivated.

Not far from Ledbury, is Colwal; near which, upon a waſte, as a countryman was digging a ditch about his cottage, he found a crown or coronet of gold, with gems ſet deep in it. It was of a ſize large enough to be drawn over the arm with the ſleeve; the ſtones of it were ſold to a jeweller for 1500l. *Britiſh Directory*.

LED'DEN, *ſ.* [from leden, Sax. the Latin language.] Language.—Her *ledden* was like human language true. *Fairfax.*

Thereto he was expert in prophecies
And could the *ledden* of the gods unfold. *Spenſer.*

True meaning:

And thoſe that do to Cynthia expound
The *ledden* of ſtrange languages in charge. *Spenſer.*

LED'DER, a river of North Wales, which runs into the Conway twelve miles ſouth of Aberconway.

LED'ENITZ, a town of Bohemia, in the circle of Bechin: ſeven miles ſouth-ſouth-eaſt of Budweiſs.

LE'DER, a lake of the county of Tyrol: eighteen miles weſt of Trent, and four weſt of Riva.

LE'DERHOFE, a town of Saxony, in the circle of Neuſtadt: ſix miles weſt of Weyda.

LEDES'MA, a town of Spain, in the province of Leon, on the river Tormes, defended by nature and art. Near it is a warm medicinal bath. It is eighteen miles weſt of Salamanca.

LEDET'SCH, a town of Bohemia, in the circle of Czaſlau: thirteen miles ſouth of Czaſlau, and forty-two ſouth-eaſt of Prague. Lat. 49. 40. N. lon. 15. 15. E.

LEDET'Z, a town of Bohemia, in the circle of Boleſlaw: ſeven miles ſouth-eaſt of Jung Buntzel.

LEDGE, *ſ.* [*leggen*, Dut. to lie.] A row; layer; ſtratum.—The loweſt *ledge* or row ſhould be merely of ſtone, cloſely laid, without mortar: a general caution for all parts in building contiguous to board. *Wotton's Architecture.*—A ridge riſing above the reſt, or projecting beyond the reſt.—The four parallel ſticks, riſing above five inches higher than the handkerchief, ſerved as *ledges* on each ſide. *Gulliver.*—Any prominence, or riſing part:

Beneath a *ledge* of rocks his fleet he hides,
The bending brow above a ſafe retreat provides. *Dryden.*

LED'GER. See LEGER.

LEDIANA'IA, a bay or gulf of the Frozen Sea, on the north coaſt of Nova Zembla. Lat. 76. 40. N. lon. 59. 14. E.

LEDIANO'I, a cape on the north coaſt of Nova Zembla. Lat. 78. N. lon. 73. 24. E.

LEDIGNAN', a town of France, in the department of the Gard: fifteen miles north-weſt of Niſmes.

LE'DON, *ſ.* in botany. See CISTUS, vol. iv.

LEDONG', a town on the eaſt coaſt of the iſland of Borneo. Lat. 4. 33. N. lon. 116. 42. E.

LEDO'REN, a ſmall iſland on the weſt ſide of the gulf of Bothnia. Lat. 63. 12. N. lon. 20. 56. E.

LEDOY'RA, a town of Spain, in Galicia: eleven miles north-eaſt of Santiago.

LEDRAN'. See DRAN, vol. vi. p. 65.

LED'SHAM, a village near Pontefract in Yorkſhire; here is an hoſpital for ten aged people, who have each two rooms and a garden, and 10l. a-year in money. Ledſham-hall is the manor-houſe, which belongs to Peregrine Wentworth, eſq.

LE'DUM, [*à lædendo odore*, from its diſagreeable injurious ſcent. *Linn.*] In botany, a genus of the claſs decandria, order monogynia, natural order of bicornes, (rhododendra, *Juſſ.*) The generic characters are—Calyx: perianthium one-leafed, very ſmall, five-toothed. Corolla: one-petalled, flat, five-parted; diviſions ovate, concave, rounded. Stamina: filaments ten, filiform, ſpreading, length of the corolla: antheræ oblong. Piſtillum: germ roundiſh; ſtyle filiform, length of the ſtamens; ſtigma obtuſe. Pericarpium: capſule roundiſh, five-celled, gaping five ways at the baſe. Seeds numerous, oblong, narrow, ſharp on each ſide, extremely ſlender.—*Eſſential Character.* Calyx: five-cleft; corolla flat, five-parted; capſule five-celled, gaping at the baſe.

Species. 1. Ledum paluſtre, marſh ledum, or marſh ciſtus: leaves linear, rolled back at the edge, tomentoſe underneath. Root branched, running widely and deeply into the ground. Stems ſhrubby, ſlender, three or four feet.

feet long, dividing into ſimple branches, and covered with a brown bark, which is tomentoſe or villoſe whilſt they are young, but afterwards becomes ſmooth. Leaves linear-lanceolate, duſky green above, and ſmooth, underneath covered with a brown pile, quite entire, reſembling thoſe of roſemary, but wider, petioled, perennial. Flowers on peduncles an inch or more in length, nodding before and after flowering, whitiſh, in axillary bundles or corymbs. Capſule ſmall, obovate, terminated by a long permanent ſtyle; valves coriaceous; partitions membranaceous, ſpringing from the edges of the valves, doubled, opening at the inner angle by a longitudinal chink. Receptacles five, filiform, curved a little, ſpringing from the upper part of the axis of the fruit, and hanging down freely in the cavity of the cells. Seeds extremely numerous and ſmall, irregularly ſhaped like ſaw-duſt, pointed at each end, of a browniſh ſtraw-colour. Native of the North of Europe.

β. L. decumbens, the creeping or dwarf ledum of Hudſon's Bay. It flowers here in April and May. Introduced in 1762 by Mr. John Buſh. Miller ſeems to confound it with Andromeda polyfolia.

2. Ledum latifolium, broad-leaved ledum, or Labrador tea: leaves oblong, rolled back at the edge, tomentoſe underneath; flowers ſubpentandrous. This ſhrub grows three or four feet in height, with a trunk as thick as a man's finger; branches the firſt year woolly and whitiſh, the ſecond tomentoſe and ruſt-coloured, afterwards ſmooth and brown. Leaves ſcattered alternately, on ſhort petioles, quite entire, perennial, blunt, an inch or an inch and a half in length; when young, pale green, hairy above and woolly white beneath; when older, ſmooth, dark green, and ſometimes ruſt-coloured beneath. Flowers like thoſe of the preceding, except in having only five ſtamens. In moſt of them, indeed, one fifth part is wanting in all the parts. Native of Greenland, Hudſon's Bay, Labrador, Newfoundland, and Nova Scotia. It flowers here in April and May; and was introduced in 1763 by Mr. Bennet. Bees are very fond of the flowers of theſe plants. Quadrupeds do not browze on them, and they are reputed in ſome degree poiſonous; they are, however, put into beer, in order to inebriate; and the ſmoke of them deſtroys bugs and other inſects. The Ruſſians are ſaid to uſe them in tanning leather. A decoction is given in the itch, &c.

3. Ledum buxifolium, or box-leaved ledum: leaves ovate-oblong, flat, ſmooth. This is a ſmall ſhrub, ſcarcely a foot in height; ſtem upright, roundiſh, rugged with ſcars, aſh-coloured; branches at ſtated intervals, in a ſort of whorl, leafy or ſcarred, each ſubdivided and upright. Leaves like thoſe of box, ſcattered, frequent on ſhort petioles, blunt, two or three lines in length, ſomewhat wrinkled above, ſmooth beneath, dotted, ſhining, on both ſides, the edges rolled back. Native of New Jerſey and Carolina in North America; introduced in 1736 by Peter Collinſon; flowers in April and May.

Propagation and Culture. Theſe ſhrubs, growing on moſſes or bogs, where the roots ſpread freely, cannot be preſerved in gardens, at leaſt ſo as to thrive, but in a proper ſoil and a ſhady ſituation. The plants muſt be procured from the places of their growth, and taken up with good roots; they muſt be planted in a border of bog earth, and frequently watered. See CISTUS, KALMIA, and RHODODENDRON.

LE'DUS, now LEZ, a river of Gaul, near the modern Montpelier.

LED'WELL, a village near Deddington in Oxfordſhire, noted for a fine ſand uſed in making glaſs.

LED'WICH, a river of England, which runs into the Temd five miles ſouth-eaſt of Ludlow in Shropſhire.

LED'YARD, a native of America, who ſeems from his youth to have indulged an invincible deſire of acquainting himſelf with the unknown or imperfectly-diſcovered regions of the globe. His hiſtory is ſo extraordinary, that a detail of ſome of its leading particulars cannot be unamuſing to our readers. Having lived for ſeveral years with the Indians of America, he had ſtudied their manners, and had practiſed in their ſchool the means of obtaining the protection, and of recommending himſelf to the favour, of ſavages. In the humble ſituation of a corporal of marines, to which he ſubmitted rather than relinquiſh his purſuit, he had made with captain Cook the voyage of the world; and, feeling on his return an anxious deſire of penetrating from the north-weſtern coaſt of America, which Cook had partly explored, to the eaſtern coaſt, with which he himſelf was perfectly familiar, he determined to traverſe the vaſt continent from the Pacific to the Atlantic Ocean. His firſt plan for the purpoſe was that of embarking in a veſſel, which was then preparing to ſail, on a voyage of commercial adventure, to Nootka Sound, on the weſtern coaſt of America; and with this view he expended in ſea-ſtores the greateſt part of the money with which he had been ſupplied by the liberality of ſir Joſeph Banks, who has eminently diſtinguiſhed himſelf for the promotion of every kind of uſeful ſcience. But this ſcheme was fruſtrated by the rapacity of a cuſtom houſe officer; and therefore Mr. Ledyard determined to travel over land to Kamtſchatka, whence the paſſage is extremely ſhort to the oppoſite coaſt of America. Accordingly, with no more than ten guineas, which was all that he had left, he croſſed the Britiſh channel to Oſtend, towards the cloſe of the year 1786, and, by the way of Denmark and the Sound, proceeded to the capital of Sweden. As it was winter, he attempted to traverſe the gulf of Bothnia on the ice, in order to reach Kamtſchatka by the ſhorteſt courſe; but, finding, when he came to the middle of the ſea, that the water was not frozen, he returned to Stockholm, and, taking his courſe northward, walked to the arctic circle, and, paſſing round the head of the gulf, deſcended on its eaſtern ſide to Peterſburg, where he arrived in the beginning of March, 1787. Here he was noticed as a perſon of an extraordinary character; and, though he had neither ſtockings nor ſhoes, nor means to provide himſelf with any, he received and accepted an invitation to dine with the Portugueſe ambaſſador. From him he obtained twenty guineas for a bill, which he took the liberty, without being previouſly authorized, to draw on ſir Joſeph Banks, concluding, from his well-known diſpoſition, that he would not be unwilling to pay it. By the intereſt of the ambaſſador, he obtained permiſſion to accompany a detachment of ſtores, which the empreſs had ordered to be ſent to Yakutz, for the uſe of Mr. Billings, an Engliſhman, at that time in her ſervice. Thus accommodated, he left Peterſburg on the 21ſt of May, and, travelling eaſtward through Siberia, reached Irkutſk in Auguſt; and thence he proceeded to Yakutz, where he was kindly received by Mr. Billings, whom he recollected on-board captain Cook's ſhip, in the ſituation of the aſtronomer's ſervant, but who was now entruſted by the empreſs in accompliſhing her ſchemes of diſcovery. He returned to Irkutſk, where he ſpent part of the winter; and in the ſpring proceeded to Oczakow, on the coaſt of the Kamtſchatkan Sea, intending, in the ſpring, to have paſſed over to that peninſula, and to have embarked on the eaſtern ſide in one of the Ruſſian veſſels that trade to the weſtern ſhores of America; but, finding that the navigation was completely obſtructed, he returned to Yakutz, in order to wait for the termination of the winter. But, whilſt he was amuſing himſelf with theſe proſpects, an expreſs arrived, in January 1788, from the empreſs, and he was ſeized, for reaſons that have not been explained, by two Ruſſian ſoldiers, who conveyed him in a ſledge through the deſerts of Northern Tartary to Moſcow, without his clothes, money, and papers. From Moſcow he was removed to the city of Moialoff, in White Ruſſia, and from thence to the town of Tolochin, on the frontiers of the Poliſh dominions. As his conductors parted with him, they informed him, that, if he returned to Ruſſia, he would be hanged; but that, if he choſe to go back to England, they wiſhed him a pleaſant journey.

journey. Diſtreſſed by poverty, covered with rags, infeſted with the uſual accompaniments of ſuch clothing, haraſſed with continual hardſhips, exhauſted by diſeaſe, without friends, without credit, unknown, and reduced to the moſt wretched ſtate, he found his way to Konigſberg. In this hour of deep diſtreſs, he reſolved once more to have recourſe to his former benefactor, and fortunately found a perſon who was willing to take his draft for five guineas on the preſident of the Royal Society. With this aſſiſtance he arrived in England, and immediately waited on ſir Joſeph Banks. Sir Joſeph, knowing his diſpoſition, and conceiving, as we may well imagine, that he would be gratified by the information, told him, that he could recommend him, as he believed, to an adventure almoſt as perilous as that from which he had juſt returned; and then communicated to him the wiſhes of the Aſſociation for diſcovering the Inland Countries of Africa. Mr. Ledyard replied, that he had always determined to traverſe the continent of Africa, as ſoon as he had explored the interior of North America; and, with a letter of introduction from ſir Joſeph Banks, he waited on Henry Beaufoy, eſq. an active member of the fore-mentioned aſſociation. Mr. Beaufoy ſpread before him a map of Africa, and, tracing a line from Cairo to Sennar, and thence weſtward in the latitude and ſuppoſed direction of the Niger, informed him that this was the route by which he was anxious that Africa might, if poſſible, be explored. Mr. Ledyard expreſſed great pleaſure in the hope of being employed in this adventure. Being aſked when he would ſet out? "To-morrow morning" was his anſwer. The committee of the ſociety aſſigned to him, at his own deſire, as an enterpriſe of obvious peril and of difficult ſucceſs, the taſk of traverſing from eaſt to weſt, in the latitude attributed to the Niger, the wideſt part of the continent of Africa. On the 30th of June, 1788, Mr. Ledyard left London; and, after a journey of thirty-ſix days, ſeven of which were conſumed at Paris, and two at Marſeilles, he arrived at the city of Alexandria. On the 14th of Auguſt, at midnight, he left Alexandria, and, ſailing up the Nile, arrived at Cairo on the 19th. From Cairo he communicated to the committee of the ſociety all the information which he was able to collect during his ſtay there; and they were thus ſufficiently apprized of the ardent ſpirit of inquiry, the unwearied attention, the perſevering reſearch, and the laborious, indefatigable, anxious, zeal, with which he purſued the object of his miſſion. The next diſpatch which they were led to expect, was to be dated at Sennar; the terms of his paſſage had been ſettled, and the day of his departure was appointed. The committee, however, after having expected with impatience the deſcription of his journey, received with great concern and grievous diſappointment, by letters from Egypt, the melancholy tidings of his death. By a bilious complaint, occaſioned probably by vexatious delay at Cairo, and by too free an uſe of the acid of vitriol and tartar emetic, the termination of his life was haſtened. He was decently interred in the neighbourhood of ſuch of the Engliſh as had ended their days in the capital of Egypt.

Mr. Ledyard, as to his perſon, ſcarcely exceeded the middle ſize; but he manifeſted very remarkable activity and ſtrength; and, as to his manners, though they were unpoliſhed, they were neither uncivil nor unpleaſing. "Little attentive to difference of rank," ſays his biographer, "he ſeemed to conſider all men as his equals, and as ſuch he reſpected them. His genius, though uncultivated and irregular, was original and comprehenſive. Ardent in his wiſhes, yet calm in his deliberations; daring in his purpoſes, but guarded in his meaſures; impatient of controul, yet capable of ſtrong endurance; adventurous beyond the conception of ordinary men, yet wary and conſiderate, and attentive to all precautions; he appeared to be formed by nature for achievements of hardihood and peril. They who compare the extent of his pilgrimage through the vaſt regions of Tartary with the ſcantineſs of his funds, will naturally aſk, by what means he obtained a ſubſiſtence on the road? All that I have ever learned from him on the ſubject was, that his ſufferings were exceſſive, and that more than once he owed his life to the compaſſionate temper of the women. This remark is ſtrongly confirmed by the following extract from his account of his Siberian tour: "I have always remarked, that women, in all countries, are civil, obliging, tender, and humane; that they are ever inclined to be gay and cheerful, timorous and modeſt; and they do not heſitate, like men, to perform a generous action. Not haughty, not arrogant, not ſupercilious; they are full of courteſy, and fond of ſociety; more liable, in general, to err than man; but in general, alſo, more virtuous, and performing more good actions than he. To a woman, whether civilized or ſavage, I never addreſſed myſelf in the language of decency and friendſhip, without receiving a decent and friendly anſwer. With man it has often been otherwiſe. In wandering over the *barren* plains of *inhoſpitable Denmark*, through *honeſt Sweden* and *frozen Lapland*, *rude* and *churliſh Finland*, *unprincipled Ruſſia*, and the *wide-ſpread regions* of the *wandering Tartar*, if hungry, dry, cold, wet, or ſick, the women have ever been friendly to me, and uniformly ſo; and, to add to this virtue (ſo worthy the appellation of benevolence), theſe actions have been performed in ſo free and ſo kind a manner, that, if I was dry, I drank the ſweeteſt draught; and if hungry, I ate the coarſe morſel with a double reliſh." Similar to this was the experience of Mr. Park. Nevertheleſs, though Mr. Ledyard found frequent relief and aſſiſtance from female attention and kindneſs, he ſeems on many occaſions to have endured the utmoſt preſſure of diſtreſs. "I am accuſtomed," ſaid he, in his laſt converſation with the writer to whom we are indebted for this account of him, "to hardſhips. I have known both hunger and nakedneſs to the utmoſt extremity of human ſuffering. I have known what it is to have food given me as charity to a madman; and I have at times been obliged to ſhelter myſelf under the miſeries of that character to avoid a heavier calamity. My diſtreſſes have been greater than I ever owned, or ever *will* own, to any man. Such evils are terrible to bear; but they never yet had power to turn me from my purpoſe. If I live, I will faithfully perform, in its utmoſt extent, my engagement to the ſociety; and, if I periſh in the attempt, my *honour* will ſtill be ſafe; for death cancels all bonds." *Proceedings of the Aſſociation for promoting the Diſcovery of the Interior Parts of Africa*; Lond. 1790.

LEE, *ſ.* [*lie*, Fr.] Dregs; ſediment; refuſe: commonly *lees*:

My cloaths, my ſex, exchang'd for thee,
I'll mingle with the people's wretched *lee*. *Prior.*

[Sea-term; ſuppoſed by *Skinner* from *l'eau*, Fr.] It is generally that ſide which is oppoſite to the wind, as the *lee*-ſhore is that the wind blows on. To be under the *lee* of the ſhore, is to be cloſe under the weather-ſhore. A *leeward* ſhip is one that is not faſt by a wind, to make her way ſo good as ſhe might. To lay a ſhip by the *lee*, is to bring her ſo that all her ſails may lie againſt the maſts and ſhrowds flat, and the wind to come right on her broadſide, ſo that ſhe will make little or no way.—The Hollanders were before Dunkirk with the wind at north-weſt, making a *lee*-ſhore in all weathers. *Raleigh.*

Him, haply ſlumb'ring on the Norway foam,
The pilot of ſome ſmall night-founder'd ſkiff,
Deeming ſome iſland, oft, as ſeamen tell,
With fixed anchor in his ſcaly rind,
Moors by his ſide under the *lee*, while night
Inveſts the ſea. *Milton.*

LEE, a rural village in Kent, ſix miles ſouth from London, on the ſouth ſide of Blackheath, and on the road to Maidſtone. It contains Lee Place, the handſome ſeat of the late lady Dacre, but now of Trevor Roper, eſq. Here is likewiſe

likewiſe the ancient family-ſeat of Charles Boone, eſq. occupied by Benjamin Harriſon, eſq. On the ſummit of the hill, next the heath, ſtands the ancient church of Lee, in a ſituation particularly rural and pictureſque. In the church are two fine monuments; the one of the Boone and the other of the Fludyer family. The great aſtronomer royal, Dr. Edmund Halley, is interred here, under a plain tomb, with a Latin inſcription, which is printed with his life. Here alſo lies buried, with a ſmall head-ſtone, Parſons, of comic memory.

In this church-yard alſo ſtands the monument of Charles Roper, baron Dacre; erected by his widow, lady Dacre, who is lately dead, and lies buried with him. Of the very ſingular and pious attachment of this lady, the following ſketch is given by Mr. Pratt, in his Gleanings. "In Lee church-yard is depoſited the remains of the right hon. Charles baron Dacre, who is preſerved to the memory by more powerful ties upon it, than his wealth, titles, or the common tradition of his having been born one day, and having died on another. Suffer me to lead you, with conſecrating ſteps, to what better ſeparated him from the ſurrounding and oblivious map of mortality. You will, I truſt, one day read the whole of the inſcription graven on his tomb: meanwhile I ſhall offer you a partial extract. 'His afflicted widow, as a teſtimony of their diſtinguiſhed and unclouded union for near twenty years, their unexampled happineſs, and of the unbounded confidence in which they lived, and as a ſincere token of her real gratitude for his uniform endearing affection and particular generoſity, her deep-felt ſorrow, and tendereſt remembrance, has erected this unadorned monument, and herſelf inſcribed thoſe well-known truths to his beloved memory; accounting them moſt conſonant to the purity of his life, his mild diſpoſition, his amiable temper, and genuine character.' This conjugal tribute proceeds in the ſame ſtrain, and cloſes with the mourner's aſſurance, that ſhe ſubmits with pious faith to the will of her God, and truſts in the ſame interceſſion to his mercy, with brighteſt hopes of laſting re-union in eternal bliſs. In this ſpirit of attachment ſhe has acted ever ſince the era of her loſs to the preſent hour, and will probably continue ſo to deport herſelf to the lateſt of her life; at leaſt while the power is given her to walk, or to be conveyed to the ſacred ſpot where ſhe has enſhrined her heart. Lady Dacre has been in the practice of viſiting the grave of her huſband ever ſince the time of his burial; in truth almoſt daily, as ſhe chiefly reſides at her villa in this pariſh. The precincts of the tomb are kept ſacred from every profanity, both of ill accident or malicious deſign; indeed, from the elements and winds of heaven, which ſhe will not ſuffer to viſit too roughly. While I was making theſe reflections with my pencil, I obſerved the lady who had called them forth coming towards the church-yard with haſty and anxious ſteps; which, on perceiving I was ſeated on the ſtyle, ſhe directed to a ſmaller gate, and found it locked, and ſeemed much diſappointed. Unwilling to interrupt her pious purpoſe, I quitted the ſtyle, when, bending in acknowledgment, ſhe paſſed into the church-yard, but was again diverted from her purpoſe. A party of people (it being Sunday) were haſtening to the tomb to read the inſcription; the throng increaſing by the entrance of ſome additional company, her ladyſhip went back into the road, where ſhe remained, walking backward and forward in view of the church-yard, till the intruders had left it; when, returning to the ſpot from whence ſhe had been ſo long witheld, ſhe redoubled her attention; and I ſaw her, while I ſtood aloof, (myſelf unſeen,) kneel in reverence at the foot of the grave. After remaining ſome time (I preſume in prayer), ſhe went back to her villa, where, in his lifetime, ſhe had ſo long been bleſſed with the ſociety of him whoſe loſs ſhe now bewails. Hallowed be that tender and generous fortitude, and ſacred be the pious griefs, that are ſuperior to and reſiſt ſuch contemptible dominion over all the ribald jeſts and inſults, that a reverence for natural impreſſion induces! The care of this tomb was undertaken by the valet of the deceaſed, upon principles of unbought attachment to his noble maſter, under the ſanction of his lady; who had the heartfelt ſatisfaction to perceive her wiſhes (that the ſacred ſtructure ſhould be kept unſullied) accompliſhed by this faithful domeſtic; who has continued uniformly attentive, defying all ſeaſons and circumſtances; and, even when the whole village appeared to be loſt in ſnow, his care was never allowed to feel more weight than muſt inevitably collect in the few hours that ſuſpended his viſit." In one of this lady's pious viſits, a depraved villain robbed her of her gold watch and purſe. Since the death of lady Dacre, the tomb is no longer diſtinguiſhed for that neatneſs in which it was formerly kept.

LEE, a river of Ireland, which paſſes by Cork, and empties itſelf into Cork Harbour.

LEE, a river of Ireland, which riſes about ſix miles eaſt from Tralee, in the county of Kerry, and runs into Tralee Bay.

LEE, a river of England, which runs into the Wever two miles north of Nantwich in Cheſhire.

LEE (Nathaniel), a dramatic poet, was the ſon of a clergyman, and was educated at Weſtminſter-ſchool under Dr. Buſby. He was admitted a ſcholar of Trinity-college, Cambridge, in 1668; but quitted the univerſity without a fellowſhip, and attempted to puſh his fortune at court, with what expectation, or in what capacity, we are not told. Failing in this project, he eſſayed his powers in writing for the ſtage; and in 1675 produced his tragedy of Nero. From this time to 1681 he gave the town a new tragedy yearly, all which appear to have had temporary ſucceſs. He alſo made a trial of his abilities as an actor, encouraged by the applauſe he received from the players when reading his pieces at rehearſals for their inſtruction. But, though he read with extraordinary pathos, he ſoon found himſelf deficient in other qualifications for the ſtage, and gave up the attempt. The warmth of his feelings, probably joined to irregularity of living, occaſioned an unhappy derangement of mind, which proceeded to ſuch a length, that it was neceſſary to confine him in Bedlam. After an abode in that receptacle of miſery for four years, he was diſcharged in 1688, and was able to write two more tragedies. His circumſtances were, however, very low; and his chief ſupport was a weekly penſion of ten ſhillings from the theatre royal. His laſt play was the Maſſacre of Paris, in 1690; a ſubject of horror dangerous to an unſettled brain. Not long after its appearance he died, as it is ſaid, in a drunken ſtreet-frolic by night, and was buried by the pariſh of St. Clement Danes.

Lee is reckoned by Addiſon (Spectator, N° 39) to have equalled any of his contemporaries in a natural genius for tragedy, but to have been hurried away by the impetuoſity of his ideas into the turgid and bombaſtic, burying his thoughts in ſuch a cloud of words, that it is difficult to diſcern their beauty. His mind was probably never free from a degree of diſorder, and was incapable of the exerciſe of cool judgment. He certainly poſſeſſed a vein of high poetry, and could give a powerful expreſſion to paſſion, though always upon the verge of rant. He was accounted to excel in repreſenting the paſſion of love, which he ſometimes touched with exquiſite tenderneſs, as well as force. His Theodoſius, or the Force of Love, was long a favourite on this account; that, and his Rival Queens, are the only pieces out of eleven which he compoſed, that keep a place on the ſtage. He likewiſe wrote two in conjunction with Dryden; Oedipus, and The Duke of Guiſe. *Biog. Britan.*

LEE-CHEE, *ſ.* in botany. See SAPINDUS.

LEE's CREEK, a river of Virginia, which runs into the Ohio in lat. 38. 57. N. lon. 81. 55. W.

LEE's CREEK, a river of Kentucky, which runs into the Ohio in lat. 38. 36. N. lon. 88. 56. W.

LEE's MARK, rocks in the Spaniſh Main, near the Moſquito Shore. Lat. 14. 10. N. lon. 82. 10. W.

LEE-

LEE-LAR'CHE, or LEE-LATCH, *ſ.* The tendency of a ſhip to leeward.

LEE-PENNY, or LEE-STONE, *ſ.* A curious piece of antiquity belonging to the family of Lee in Scotland, and of which the following account has been given in the Gentleman's Magazine for December 1787.

It is a ſtone of a dark red colour and triangular ſhape, and its ſize about half an inch each ſide. It is ſet in a piece of ſilver coin, which, though much defaced, by ſome letters ſtill remaining is ſuppoſed to be a ſhilling of Edward I. the croſs being very plain, as it is on his ſhillings. It has been, by tradition, in the Lee-family ſince the year 1320; that is, a little after the death of king Robert Bruce, who, having ordered his heart to be carried to the Holy Land, there to be buried, one of the noble family of Douglas was ſent with it, and it is ſaid got the crowned heart in his arms from that circumſtance; but the perſon who carried the heart was Simon Locard, of Lee, who juſt about this time borrowed a large ſum of money from ſir William de Lendſay, prior of Air, for which he granted a bond of annuity of ten pounds of ſilver, during the life of the ſaid ſir William de Lendſay, out of his lands of Lee and Cartland. The original bond, dated 1323, and witneſſed by the principal nobility of the country, is ſtill remaining among the family-papers.

As this was a great ſum in thoſe days, it is thought it was borrowed for that expedition; and, from his being the perſon who carried the royal heart, he changed his name from Locard to *Lockheart*, as it is ſometimes ſpelled, or Lockhart, and got a heart within a lock for part of his arms, with the motto *Corda ſerrata pando*. This Simon Lockhart having taken priſoner a Saracen prince or chief, his wife came to ranſom him; and, on counting out the money or jewels, this ſtone fell out of her purſe, which ſhe haſtily ſnatched up; which Simon Lockhart obſerving, inſiſted to have it, elſe he would not give up his priſoner. Upon this the lady gave it him, and told him its many virtues, viz. that it cured all diſeaſes in cattle, and the bite of a mad dog both in man and beaſt. It is uſed by dipping the ſtone in water, which is given to the diſeaſed cattle to drink; and the perſon who has been bit, and the wound or part infected, is waſhed with the water. There are no words uſed in the dipping of the ſtone, nor any money taken by the ſervants, without incurring the owner's diſpleaſure. Many are the cures ſaid to be performed by it; and people come from all parts of Scotland, and even as far up in England as Yorkſhire, to get the water in which the ſtone is dipped, to give their cattle, when ill of the murrain eſpecially, and black-leg. A great many years ago, a complaint was made to the eccleſiaſtical courts againſt the laird of Lee, then ſir James Lockhart, for uſing witchcraft. It is ſaid, when the plague was laſt at Newcaſtle, the inhabitants ſent for the Lee-penny, and gave a bond for a large ſum in truſt for the loan; and, that they thought it did ſo much good, that they offered to pay the money, and keep the Lee-penny; but the gentleman would not part with it. A copy of this bond is very well atteſted to have been among the family-papers, but ſuppoſed to have been ſpoiled, along with many more valuable ones, about fifty years ago, by rain getting into the charter-room during a long minority, and while no family reſided at Lee.

We have given this hiſtory, not on account of the utility of the information, but as a proof of the ſuperſtition of the times. None of the virtues which the ſtone was formerly ſuppoſed to poſſeſs are now aſcribed to it, excepting, we believe, in the caſe of ſome of the diſeaſes of cattle; and even theſe in more enlightened times will become daily leſs numerous and leſs powerful.

LEE-WA'Y. See the article NAVIGATION.

LEE'A, *ſ.* [ſo named by Linnæus, at the ſuggeſtion of profeſſor David Van Royen of Leyden, in honour of the late *Mr. James Lee*, of the Vineyard at Hammerſmith, author of an Introduction to Botany, of which the firſt edition appeared in 1760, the fourth in 1810. This book, whoſe principles are borrowed from Linnæus, but which is particularly valuable for its gloſſaries and tables of ſynonyms, has been of primary uſe in making the Linnæan ſyſtem popular here. Its author was one of the beſt practical botaniſts, and moſt experienced and ſucceſsful cultivators. He loved to encourage and aſſiſt all who had a taſte for natural hiſtory; and died generally eſteemed, at an advanced age, in July 1795, leaving a ſon in every reſpect worthy to ſuſtain and extend his reputation.] In botany, a genus of the claſs pentandria, order monogynia, natural order of trihilatæ, (ſapotæ, *Juſſ.*) The generic characters are—Calyx: perianthium one-leafed, bell-ſhaped, coriaceous, five-toothed, permanent. Corolla: one-petalled; tube the length of the calyx; border five-cleft; diviſions ovate, acute. Nectary placed on the tube of the corolla, and ſhorter than it, upright, pitcher-ſhaped, five-cleft; lobes emarginate. Stamina: filaments five, inſerted below, within the nectary, between the lobes, incurved; antheræ ovate, verſatile, before impregnation converging and covering the ſtigma. Piſtillum: germ ſubgloboſe, ſuperior; ſtyle ſimple, ſhorter than the nectary; ſtigma headed. Pericarpium: berry orbiculate, depreſſed, quinque-toruloſe, one-celled. Seeds five, on one ſide gibboſe, on the other cornered.—*Eſſential Character.* Corolla one-petalled; nectary on the tube of the corolla, upright, five-cleft; berry five-ſeeded.

Species. 1. Leea ſambucina, or elder-leaved leea; ſtem, peduncles, and leaves, ſmooth. This is a ſmall tree reſembling the elder. Leaves like thoſe of Sambucus Canadenſis. Berry marked with from three to ſix ſwellings, black, aromatic, containing from three to ſix ſeeds. Native of the Eaſt Indies, Africa, and New South Wales.

Gærtner has another ſpecies, (vol. i. 275.) which he calls *Aquilicia otillis*, and ſuſpects to be the ſame with Leea æquata, N° 2. It differs, according to him, from Leea ſambucina in the number of ſeeds, the pale colour of the berry, and the entire want of any aromatic flavour.

2. Leea æquata, or ſhrubby leea: leaves ſmooth; ſtem and peduncles ſcurfy. Native of the Eaſt Indies; introduced, before 1777, by Mr. James Lee.

3. Leea criſpa, or fringe-ſtalked leea: ſtem angular, fringed, curled. Stem ſomewhat woody, but annual, jointed, three feet high, with curled membranaceous angles. Flowers ſnowy-white, very ſmall. Native of the Cape of Good Hope; introduced in 1767 by Mr. William Malcolm; flowers in October.

LEEBYRAN', a ſmall iſland in the Eaſtern Indian Sea, near the north-eaſt coaſt of Borneo. Lat. 6. 1. N. lon. 118. 12. E.

LEECH, or LEACH, *ſ.* [læc, Sax.] A phyſician; a profeſſor of the art of healing: whence we ſtill uſe *cow-leech*:

A *leech*, the which had great inſight
In that diſeaſe of grieved conſcience,
And well could cure the ſame; his name was Patience.
Spenſer's Fairy Queen.

The hoary-wrinkled *leech* has watch'd and toil'd,
Tried every health-reſtoring herb and gum,
And wearied out his painful ſkill in vain. *Rowe.*

A ſkilful *leach*,
They ſay, had wrought this bleſſed deed;
This *leach* Arbuthnot was yclept. *Gay's Paſtorals.*

A long and ſlender worm, which faſtens on animals, and ſucks the blood: it is uſed to draw blood where the lancet is leſs ſafe, whence perhaps the name. See HIRUDO.

—I drew blood by *leeches* behind his ear. *Wiſeman.*

Sticking like *leeches*, till they burſt with blood,
Without remorſe inſatiably. *Roſcommon.*

To LEECH, *v. a.* To treat with medicaments.

LEE'CH-CRAFT, *ſ.* The art of healing:

We ſtudy ſpeech, but others we perſuade:
We *leech-craft* learn, but others cure with it. *Davies.*

LEE'CHES, *ſ.* The borders or edges of a ſail, which are either ſloping or perpendicular. The leeches of all ſails

ſails whoſe tops and bottoms are parallel to the deck, or at right angles to the maſt, are denominated from the ſhip's ſide, and the ſail to which they belong; as the *ſtar-board*-leech of the main-ſail, the *lee*-leech of the fore-top ſail, &c. But the ſails which are fixed obliquely on the maſts have their leeches named from their ſituation with reſpect to the ſhip's length; as the *fore*-leech of the mizen, the *after*-leech of the jib or fore-ſtay ſail, &c.

LEECH-LINES, ropes faſtened to the middle of the leeches of the main-ſail and fore-ſail, and communicating with blocks under the oppoſite ſides of the top, whence they paſs downwards to the deck, ſerving to truſs up thoſe ſails to the yard as occaſion requires.

LEECH-ROPE, that part of the bolt-rope to which the border or ſkirt of a ſail is ſewed. In all ſails whoſe oppoſite leeches are of the ſame length, it is terminated above the earing, and below the clue.

LEE'CHING, *ſ.* The act of treating with medicaments; of practiſing the art of healing.

LEE'CHMAN (William), a learned and excellent Scotch divine, was born at Dolphinſton, in Lanerkſhire, in the year 1706. He was initiated in grammar-learning at his native place, whence he removed to the univerſity of Edinburgh. Here he diſtinguiſhed himſelf by his great proficiency in different branches of learning. He began his theological ſtudies in 1724; and in 1727 he was introduced into the weſtern part of Scotland, which was deſtined hereafter to be the principal ſcene of his uſefulneſs. He undertook the education of a young gentleman at Caldwell, in Renfrewſhire, where he reſided in the ſummer-months; but, during the remainder of the year, he lived at Glaſgow; and was honoured with the friendſhip of profeſſors Hutcheſon and Dunlop. About the beginning of 1731 he was licenſed as a preacher; but it was not till the year 1736 that he had any proſpect of preferment. He was now ordained miniſter of Beith, and remained in the diſcharge of the duties attached to that office during ſeven years. In 1740 he was elected moderator of a meeting of the ſynod at Irvine, and opened the aſſembly at Glaſgow on the 7th of April, 1741, with a ſermon to the clergy, "On the temper, character, and duty, of a miniſter of the goſpel." This is thought to be one of the ableſt charges ever delivered from the pulpit; it has paſſed through many editions, and is ſtill in very high reputation. In 1743 he publiſhed a much longer diſcourſe on "The Nature, Reaſonableneſs, and Advantages of Prayer; with an Attempt to anſwer the Objections againſt it." This ſermon, as well as that juſt noticed, excited great attention at the time of the publication, and it has been frequently reprinted ſince. He was, about this time, invited to ſettle with a congregation at Belfaſt, in Ireland, with the promiſe of a better ſalary than that which he enjoyed at Beith. This offer, upon due deliberation, he declined; and he was ſhortly after elected to the profeſſorſhip of theology at the univerſity of Glaſgow, which he obtained only by the caſting vote of the preſident. Soon after he had been eſtabliſhed in the profeſſorſhip, he took the degree of D. D. He continued in the theological chair ſeventeen years, vindicating and eſtabliſhing the grand truths of natural and revealed religion, in anſwer to the principal objections made to them by Hume, Bolingbroke, and other ſceptical writers. He had, in his lectures, a remarkable talent of ſelecting what was moſt important and ſtriking on every ſubject that he handled; his arguments were ſolid, founded on indiſputable facts; and were urged with a degree of warmth which carried his auditors along with him; for they were addreſſed equally to the judgment and the heart. Dr. Leechman's fame extended far and wide; the divinity-hall at Glaſgow was crowded, in his time, with a greater number of ſcholars than any other in Scotland; and his numerous pupils, however they might differ in their ſentiments on ſpeculative theology and church-government, were all cordially united in affection and veneration for their maſter. In the year 1761, Dr. Leechman was raiſed to the office of principal of the univerſity of Glaſgow by a preſentation from the king. He had previouſly to this been in a very bad ſtate of health; and this change in his avocations was probably the means of prolonging his valuable life for five-and-twenty years. Though releaſed from the more fatiguing part of his duties, he could not remain inactive, but entered warmly into every ſcheme for the benefit and improvement of the ſociety propoſed by other profeſſors, and proſecuted ſome ſchemes of his own ſuggeſtion. He gave a lecture, for ſome time once a-week, to the ſtudents in divinity, and weekly lectures to the whole univerſity. Dr. Leechman's faculties remained in full vigour amidſt the increaſing infirmities of old age, and his taſte for valuable knowledge continued as acute as ever. His mind ſeemed to be in a great meaſure independent of all bodily infirmities and connections. In September 1785, he experienced a violent paralytic ſtroke, from the effects of which he ſpeedily recovered; but a ſecond ſhock of the ſame kind in the following month deprived him of the power of his whole left ſide. Still he continued in the full poſſeſſion of his mental faculties, and was as intelligent, judicious, and even as acute, as ever. Another attack carried him off on the third of December, 1785, when he was almoſt eighty years of age. Dr. Leechman committed nothing to the preſs, except nine ſermons, which went through ſeveral editions during his life-time. Theſe were re-publiſhed, with others, forming together two volumes, in the year 1789. To the firſt of theſe volumes is prefixed an account of the author, to which the reader is referred for farther particulars.

LEEDS, a populous market-town in the Weſt Riding of the county of York, ſituated on the north ſide of the river Aire, over which is a handſome ſtone bridge. It is a place of great antiquity, and its name is regiſtered in the Domeſday ſurvey. Here was formerly a ſtrong caſtle, probably built by Ilbert de Lacy, which was beſieged by king Stephen in 1139; and here the unfortunate Richard II. was confined about the year 1399. No veſtige of this fortreſs remains; but its ſite is ſaid to have been at a place called Mill-hill.

Leeds has long been diſtinguiſhed as a clothing-town; though the pre-eminence it now enjoys is not of a very remote date. Leland ſays it is "a pretty market-town, ſubſiſted chiefly by clothing, reaſonably well builded, and as large as Bradford, but not ſo *quick* as it." Its growth, however, probably ſoon became conſiderable, as it was incorporated by king Charles I. At the commencement of the troubles of that reign, it was held for the king by ſir William Saville; but, after a ſharp action, its fortifications were ſtormed by the forces which marched out of Bradford under ſir Thomas Fairfax. A ſecond charter was granted on the 13th of Charles II. under which the town is now governed. The trade in woollen cloth, which has raiſed Leeds to its preſent conſequence, is carried on here to an extent unequalled in any place in the kingdom. The cloth-markets are held only on Tueſdays and Saturdays, and then only for an hour and a half each day; and the merchants are not allowed to buy, or even to look at cloth, but at theſe appointed hours. At ſix in the morning in ſummer, and ſeven in winter, the market-bell rings; and in a few minutes, without the leaſt diſorder, the whole market is filled, and all the benches are covered with cloth, each proprietor at the ſame time ſtanding behind his own goods. As ſoon as the bell has ceaſed the buyers enter, and, having fixed on certain lots or pieces of cloth, they proceed in a very expeditious and ſecret manner to bargain for the ſame. In theſe places it is related that from ten to twenty thouſand pounds worth of cloth, and ſometimes more, is ſold with a whiſper only. The laws of the market are certainly more ſtrictly obſerved than in any other place in England. The time of ſale is terminated by another bell; and any merchant, ſtaying in the hall after the bell has ceaſed, forfeits five ſhillings. This extenſive buſineſs, which uſed formerly to be carried on

in the open ſtreet, is now conducted in two halls, which have been built for the accommodation of the clothiers. The Mixed-cloth Hall, which is the principal, was erected in 1758; it is a quadrangular building, incloſing an open area of about a hundred yards ſquare, and is divided into ſeven partitions or ſtreets, each of which contains four rows of ſtands; and theſe are the freehold property of ſeparate manufacturers. The whole number of ſtands is 1770. The White-cloth Hall, built in 1775, is partitioned in a ſimilar manner, and contains 1210 ſtands. Over the former building is an aſſembly-room, and over the latter a muſic-hall. The manufacture of broad cloth is now almoſt wholly performed by machinery, which has occaſioned a conſiderable reduction in the price. By this means, very few hands are wanted in the firſt ſtages of the manufacture, particularly in carding and ſcribbling the wool, and in ſpinning it. This circumſtance, on the firſt introduction of machinery, deprived great numbers of people of their cuſtomary employment.

Previous to the reign of Charles I. Leeds had but one church: there are now, however, ſeveral eccleſiaſtical edifices, appropriated to the eſtabliſhed religion, and to different ſects of diſſenters. The church of St. Peter, the original, is built in the form of a croſs, with a tower in the middle; and has a painting in freſco of the Aſcenſion, by Parmentier, who preſented the town with this ſpecimen of his genius. St. John's church was erected in 1634, at the ſole expenſe of Mr. Harriſon, who alſo built a free-ſchool and a market-croſs, and was in other reſpects a great benefactor to the town. The church of the Holy Trinity, which is an elegant ſtructure, with a ſpire, was built in the eighteenth century. Eight other places of worſhip are appropriated to the ſeveral denominations of diſſenters. Here are three alms-houſes, a charity-ſchool, and an extenſive workhouſe, in which children are taught the eaſy branches of the woollen manufacture. A ſpacious infirmary was built by ſubſcription in the year 1786. The ſtreets, in the upper part of the town, are narrow; but in the other parts they are broad, and the houſes are moſtly uniform, and many of them elegant. Here are ſeveral large open ſquares, the areas of which are in ſome caſes planted, and in others uſed as tenter-grounds. The buildings are chiefly of brick, and covered with white ſlate; and every ſtreet has a flagged foot-way on each ſide. The civil government of the town is veſted, by the charter of Charles II. in a mayor, twelve aldermen, and twenty-four common-council men.

A dreadful ſtorm was felt here June 20, 1772, which damaged a great many houſes, barns, &c. the hail-ſtones were ſaid to have been as big as nutmegs. In May 1794, as ſome workmen were pulling down an old houſe, near Zion-chapel, in Leeds, they found a great number of ſilver coins, ſome of them dated 1604, of our James II. and others of Charles XII. and Philip IV. of Sweden, &c. An accident happened at the Methodiſt meeting-houſe here on the 16th of May, 1796; the floor gave way, by which eighteen perſons were killed, and eighty dreadfully bruiſed. In the year 1809, the workmen employed in repairing the pariſh-church in Leeds, found a ſtone coffin, containing a complete ſkeleton, and the bones of two other human ſubjects, under the foundation of the church, near the entrance to the bell-chamber. This coffin has the appearance of having been cut out of a ſolid block about ſeven feet long, by a foot and a half deep; its interior dimenſions are ſix feet three inches in length, about twelve inches deep, and of width ſufficient to hold a tolerably large figure. From the ſituation in which it was found, it muſt have lain in that place ever ſince the church was erected, probably above 700 years; and ſo completely was the air excluded, that the bones remained as firm and entire as if they had been recently interred. A ſtone, ſuppoſed to be the cover, had been previouſly found, but no traces of an inſcription any where appear.

Leeds is 192 miles diſtant from London, and 25 from York. Two fairs are held annually; and two weekly markets, on Tueſdays and Saturdays, are well ſupplied with all kinds of proviſions. A conſiderable pottery is eſtabliſhed here, which furniſhes large quantities of earthen ware, both for home-conſumption and exportation. By means of the rivers Aire and Calder, and the canal navigation, Leeds has communication with Wakefield, York, and Hull; from which latter place the woollen goods are uſually ſhipped to foreign parts. The carriage of coals from the interior of Yorkſhire is alſo a great ſource of traffic; theſe are carried in veſſels from 45 to 60 tons burthen, to Selby, York, Howden, Hull, Beverley, and all the intermediate towns ſituated on the rivers Ouſe and Humber.

Three miles from this town are the grand and picturesque ruins of Kirkſtall Abbey, ſeated on the banks of the river Aire. For an account of theſe, ſee vol. xi. p. 764.

Hunſleet, or Houndfleet, on the ſouth bank of the Aire, almoſt over-againſt Leeds, and in its pariſh, was improved from a dog-kennel, as the name imports, to an eminent town for clothiers, and then to a corporation in the reign of Charles II. becauſe, by making that ſort of cloth called northern-dozens, it had much increaſed the crown-revenue. It had formerly a manor-houſe and park.

Thorp on the Hill is alſo to the ſouth of Leeds. In the neighbourhood there is ſuppoſed to have been a Roman camp; and at a place here called Lingwell-Yate, certain clay moulds were found in 1697, which, by the impreſſions, were ſuppoſed to have been invented for counterfeiting Roman coins.

Oſmondthorp, on the eaſt ſide of Leeds, is more properly Oſwinthorp, it having been a royal village, and the ſeat of the Northumbrian king Oſwin.

At Addle, a village about five miles north of Leeds, was a Roman camp, until lately very entire, being ſurrounded with a ſingle ditch. The occupier, wiſhing to turn the ground to ſome profitable uſe, began, in 1809, to level it with the neighbouring fields, and turned up a conſiderable number of mill-ſtones, about half a yard diameter, which, from their ſize, muſt have been uſed for grinding corn by hand; ſtones hollowed out in the form of bowls, large enough to receive theſe mill-ſtones, have alſo been dug up. This appears to have been a ſtation of ſome conſequence when the Roman empire was in its moſt flouriſhing ſtate, for a road may be traced through Cockridge to Ilkley, another ſtation of the Romans, and the foundations of a city near the camp have been clearly aſcertained, where a vaſt many fragments of urns, ſtatues, and altars, have frequently been found, as well as ſeveral coins of Conſtantine, and various Roman emperors prior to his reign. About a quarter of a mile diſtant is the church, built of ſquare ſtones; it had formerly a ſingular appearance; but a few years ago, when it was "repaired and beautified," one of the two towers that attracted notice was taken down; at the ſame time the inſide was completely renewed, and it is now fitted up in a very neat manner. The fine Saxon gateway at the entrance, and a beautiful light ornamented arch within the church, fortunately eſcaped alteration. In the veſtry are placed two monumental ſtones or altars, lately brought from the Roman camp. On the whole, few places are more deſerving the attention of the antiquary, or appear to have attracted leſs obſervation.

Harewood is a pariſh and ſmall market-town about eight miles from Leeds. The country around here abounds with woods, moſt of which belong to Harewood-houſe, the noble ſeat of lord Harewood. This manſion was built in 1708, and has two handſome architectural fronts. Harewood-caſtle is an intereſting ſpecimen of caſtellated architecture. Soon after the Norman conqueſt it belonged to the family of Romily, from whom it deſcended to the Meſchines's. Mr. King (Archæologia, vol. vi.) aſcribes the preſent building to an age from Edward I. to Edward III. The remains ſtand on the north ſide of a triple-ſquare entrenchment, on the brow of a hill. The em-

bankments are high in ſome places; and the remains of two ſquare towers, a porch, and great hall, are ſtill conſiderable. In the church are ſome curious ancient monuments, with effigies, &c. to the memories of the Rithers's and the Bedmans, who were lords of the caſtle; alſo of the Gaſcoigns of Gawthorp. One of this family, ſir William Gaſcoigne, committed Henry V. when prince of Wales, to priſon for affronting him whilſt he ſat in the judge's chair. He was chief juſtice in the reigns of Henry IV. and V. and a fine monument, with his ſtatue in alabaſter, is preſerved in Harewood church.

LEEDS, a village of England, in the county of Kent. Here is a manſion called Leeds Caſtle, which, in 1321, belonged to Bartholomew lord Badleſmeer. Iſabella, queen of Edward II. being refuſed admittance into the caſtle, it was beſieged and taken by the king. Lord Badleſmeer was abſent; but his wife and child were carried priſoners to the tower; and the reſt concerned in the defence of the caſtle were hanged. The lord himſelf was taken the year following at Boroughbridge, and beheaded. It was then granted to archbiſhop Arundel, on whoſe death it reverted to the crown, and was rebuilt by Henry VII. In the reign of Edward VI. it was granted to ſir Anthony St. Leger, and at preſent belongs to the family of Fairfax. It has generally been aſſerted that Richard II. was impriſoned in this caſtle; but the place of that prince's confinement was Leeds in Yorkſhire, not Leeds in Kent. In 1406, Henry IV. reſided here during the plague. It is ſix miles eaſt of Maidſtone.

LEEDS, a county of Upper Canada, bounded on the eaſt by the county of Grenville, on the ſouth by the river St. Laurence, and on the weſt by the boundary-line of the late townſhip of Pittſburg, running north until it interſects the Ottawa or Grand River, and thence deſcending until it meets the north-weſternmoſt boundary of the county of Grenville. This county comprehends all the iſlands in the river St. Laurence that are near it. The greater part of it lies fronting the St. Laurence.

LEEDS, a townſhip in the county of Leeds, being the twelfth townſhip in aſcending the river St. Laurence. It is watered by the Gananoque river, which has a good harbour at its entrance. There is a port of entry on the weſt bank of the Gananoque, near its mouth in the St. Laurence.

LEEDS, a town of North America, in the eaſtern part of Glouceſter county, New Jerſey: four miles weſt of the mouth of Mullicus river.

LEEDS, a town in Kennebeck county, on the eaſt bank of Amereſkoggin river, oppoſite to the mouth of Twenty-miles ſtream, in the town of Turner, in Cumberland county.

LEEDS, a town, or rather village, of Richmond county, Virginia, on the north bank of Rappahannock river: ſeventy miles north-eaſt of Richmond; near which is a famous courſe for horſe-racing.

LEED'STON, a poſt-town of North America, in Weſtmoreland county, Virginia: 105 miles from Waſhington.

LEEF, *adj.* [*lieve*, *leve*, Dut.] Kind; fond:

Whilome all theſe were low and *leef*,
And lov'd their flocks to feed;
They never ſtrove to be the chief,
And ſimple was their weed. *Spenſer's Paſtorals.*

LEE'FANG, *ſ.* A ſea term; a rope reeved into the courſe to haul in the ſail.

LEEGET'TAN, a ſmall iſland in the Eaſtern Indian Sea, near the eaſt coaſt of the iſland of Borneo. Lat. 4. 10. N. lon. 118. 40. E.

LEEHEE'M, a ſmall iſland near the north-eaſt of Borneo. Lat. 6. 9. N. lon. 118. 16. E.

LEEK, *ſ.* [leac, Sax. *look*, Dut. *leechk*, Erſe.] A plant. See ALLIUM, vol. i. p. 349.—We uſe acid plants inwardly and outwardly in gangrenes; in the ſcurvy, watercreſſes, horſe-radiſh, garlic, or *leek* pottage. *Floyer.*

Tell him I'll knock his *leek* about his pate
Upon St. David's day. *Shakeſpeare.*

The juice of leeks has been uſed with ſucceſs in ſome caſes of dropſy. See Dr. D. Monro on Medical Chemiſtry, vol. iv.

LEEK, *adj.* Made of leeks; impregnated with leeks. *Floyer.*

LEEK, a market-town in Staffordſhire, diſtant from London, by way of Aſhborn, 154 miles; thirty-three from Wolverhampton, thirty-one from Manchester, twenty-four from Stockport, twelve from Macclesfield, and fourteen from Aſhborn. The market is on Wedneſday; fairs, Feb. 10, March 30, May 18, July 4 and 18, Oct. 12, and Nov. 14. The manufactures carried on in this town are for ribbons, ſilk-twiſt, and buttons. The church has a ſquare tower, ſix bells with chimes, and a clock. In the church-yard, at the ſouth-eaſt corner of the chancel, are the remains of a Daniſh croſs, ſtanding, and ten feet high from the ground, beneath which are three ſteps. Here are eight almſhouſes, endowed 1696, by Elizabeth Aſh, widow, eldeſt daughter of William Jolliffe, eſq. for eight widows; they are allowed two ſhillings per week, and ſeven ſhillings and five-pence three-farthings twice a-year for coals; and a new gown once in two years.

At Blue-hills, in the neighbourhood, are coal-mines; and a ſalt ſtream comes from thence, which tinges the ſtones and earth through which it runs with a ruſty colour, and, with the infuſion of galls, turns as black as ink. Here are rocks of a moſt ſurpriſing height, without any turf or mould upon them.

The village of Heracles is north-weſt of Leek.—Grindon is on the ſouth-eaſt ſide of Leek. Dr. Plot ſays this pariſh produces great quantities of excellent marble, of a white, hard, ſhining grit, ſtriped red, which takes ſo good a poliſh, that it is fit for chimney-pieces, monuments, &c.

LEEK, a ſmall iſland of Pennſylvania, in Delaware river.

LEER, *ſ.* in glaſs-making, a ſort of furnace, or oven, intended to anneal and cool by proper degrees the veſſels when made. This properly comprehends two parts, the tower and leer. The tower is that part which lies directly above the melting-furnace, with a partition between them of a foot thick, in the midſt whereof there is a round hole, placed exactly over the furnace, through which the flame and heat paſs into the tower; on the floor of this tower the veſſels are ſet to anneal. There are two openings by which the veſſels are put into this tower; and, after ſtanding there ſome time, they are put into iron pans, which by degrees are drawn out all along that part of this furnace, which is properly called the *leer*, and is five or ſix yards long, that the veſſels may cool by degrees.

LEER, *ſ.* [hleape, Sax.] An oblique view.—I ſpy entertainment in her; ſhe gives the *leer* of invitation. *Shakeſpeare's Merry Wives of Windſor.*

Aſide the devil turn'd
For envy, yet with zealous *leer* malign
Ey'd them aſkance. *Milton.*

A laboured caſt of countenance.—Damn with faint praiſe, concede with civil *leer*. *Pope.*

I place a ſtateſman full before my ſight;
A bloated miniſter in all his geer,
With ſhameleſs viſage, and perfidious *leer*. *Swift.*

[hleor, Sax. face.] The countenance itſelf.—He hath a Roſalind of a better *leer* than you. *Shakeſpeare's As you like it.*—Here's a young lad fram'd of another *leer*. *Titus Andronicus.*—A hunting-term: the place where a deer lies to dry himſelf; properly *lair*.

To LEER, *v. n.* To look obliquely; to look archly.—I wonder whether you taſte the pleaſure of independency, or whether you do not ſometimes *leer* upon the court. *Swift.*—To look with a forced countenance:

Bertran has been taught the arts of courts,
To gild a face with ſmiles, and *leer* a man to ruin. *Dryden.*

LEER, a river of Eaſt Frieſland, which riſes from a lake three miles north-weſt of Oldenburg, and runs into the Ems near Ort.

LEER,

LEER, LEHR, or LIER, a town of Eaſt Frieſland, on a river of the ſame name, which ſoon after joins the Ems: eleven miles ſouth-eaſt of Emden, and twenty-four weſt-north-weſt of Oldenburg. Lat. 53. 12. N. lon. 7. 20. E.

LEER ORT. See ORT.

LEER'DAM, a town of Holland, on the river Linghe, which gave title of count to the noble houſe of Egmont, and afterwards to that of Naſſau. In the year 1574 it was taken by the Spaniards, who deſtroyed the ramparts: eleven miles ſouth of Utrecht, and twenty-ſix ſouth of Amſterdam. Lat. 51. 55. N. lon. 4. 59. E.

LEER'ING, *ſ.* The act of looking obliquely, or with a forced countenance.

LEERS, or LIERS, a town of France, in the department of the Ourthe, where a battle was fought on the 1ſt of October, 1746, between the allies commanded by prince Charles of Lorrain, and the French under the command of comte Saxe, in which the latter were victorious: four miles north of Liege.

LEER'SIA, *ſ.* [ſo named by Dr. Swartz, to honour the memory of *John Daniel Leers*, an apothecary at Herborn in Naſſau, author of the Flora Herbornenſis, publiſhed in 1775. This little octavo volume, now very rare, contains ſixteen plates, in which all the graſſes are engraved by the hand of the author, with ſuch exquiſite and minute preciſion, that they will bear inſpection with a magnifier, almoſt like the plants themſelves; and are unrivalled in natural hiſtory. A life of the author by his ſon is prefixed to this book, by which we learn that he died December 7, 1774, aged 47.] In botany, a genus of the claſs triandria, order digynia, natural order of gramina, or graſſes. The generic characters are—Calyx: none. Corolla: glume bivalve, valves navicular, concave, compreſſed, ciliate-prickly on the back, nearly equal; the exterior larger, oblong, mucronated; the interior twice as narrow, linear, acute. (In the Emendations, p. 818, the corolla is deſcribed thus; viz. glume bivalve, one-flowered, ſhut.) Nectary two-leaved; leaflets lanceolate, acute. Stamina: filaments three, capillary, ſhorter than in the corolla; antheræ oblong. Piſtillum: germ ovate, compreſſed; ſtyles two, capillary, ſhort; ſtigmas feathered. Pericarpium none; the corolla includes the ſeed. Seed ſingle, obovate, compreſſed. The number of ſtamens varies, from one to ſix. *Swartz.—Eſſential Character.* Calyx none; glume two-valved, cloſed.

Species. 1. Leerſia monandra, or one-ſtamened leerſia: panicle ſpreading; ſpikes remote, looſe; ſpikelets directed all one way; roundiſh, one-ſtamened; glumes even. 2. Leerſia hexandra, or ſix-ſtamened leerſia: panicle ſpreading; ſpikelets alternate, ſix-ſtamened; glumes almoſt even. Native of Jamaica.

3. Leerſia oryzoides, or three-ſtamened leerſia: panicle ſpreading, ſpikelets three-ſtamened, keel of the glumes ciliate. A tall graſs, two feet high, or more, with rough leaves: it grows in the marſhes of Virginia in North America, where it is called cut-graſs and ſickle-graſs, and is probably a muſcicapa, or fly-catcher. It occurs alſo in Swiſſerland, the Palatinate, and Perſia; and was introduced into Italy along with rice, whence the name *oryzoides*.

4. Leerſia Virginica, or Virginian leerſia: three-ſtamened; panicle looſe; flowers moſtly erect, cloſe-preſſed; their glumes fringed at the keel. Found in Kentucky, Pennſylvania, and Carolina; *Michaux*. In marſhes in Virginia, amongſt Smilaces and Rubi, flowering in Auguſt; *Clayton*. Michaux thinks this is not ſpecifically diſtinct from the former; but Willdenow, who obſerved them both in a garden, ſays that, "though much alike, they are conſtantly different. The preſent has ſhorter and broader leaves; a ſhorter panicle, whoſe branches are not zigzag, but ſtraight, and whoſe flowers are cloſely preſſed to the ſtalks. The glumes are ſmaller, narrower, ſparingly fringed. The panicle of this is never covered by a leaf, but always expoſed and ſpreading."

5. Leerſia lenticularis, or lenticular leerſia. This graſs was firſt noticed by Michaux; (Flora Boreali Americana, i. 39.) It is a native of the marſhy grounds of the Illinois country, of Virginia, North Carolina, &c. The glume, or corolla, is of an orbicular form, inclining to lenticular, and is much larger than in any of the other American ſpecies, or than it is in the Leerſia oryzoides of Europe and America. The edges of the valves are very diſtinctly ciliated, or furniſhed with a number of fine teeth or delicate ſpinules. It is this ciliate ſtructure that enables the plant to perform the buſineſs of a *muſcicapa*, or fly-catcher. When a ſmall inſect, ſuch as a ſpider, or a minute fly, inſinuates itſelf between the valves (probably in purſuit of a honeyed fluid), the valves cloſe upon it, the ſpinules enfolding each other, thus retaining the inſect, which as ſeldom eſcapes as the inſect that has been caught by the valvular ſtructure at the ends of the leaves of Dionæa muſcipula, or Venus's fly-trap, which ſee deſcribed vol. v. p. 838. *Deſultory Obſervations concerning Vegetable Muſcicæpæ*, by Profeſſor Barton of Philadelphia; 1811.

6. Leerſia Auſtralis, or New-Holland leerſia: panicle looſe, with alternate branches; the lower ones divided; flowers ſix-ſtamened; their glumes fringed at the keel, finely toothed at their ribs; ſmooth at the ſides. Gathered by Mr. R. Brown at Port Jackſon, as well as in the tropical part of New Holland. He thinks it ſo near L. hexandra, as to be doubtful of their being diſtinct.

LEER'STRAND, a town of Norway: eight miles ſouth-weſt of Drontheim.

LEES, *ſ.* [*lie*, Fr. from *limus*, Lat. mud.] Dregs; ſediment: it has ſeldom a ſingular.—The memory of king Richard was ſo ſtrong, that it lay like *lees* at the bottom of men's hearts; and, if the veſſel was but ſtirred, it would come up. *Bacon's Henry* VII.

If they love *lees*, and leave the luſty wine,
Envy them not their palates with the ſwine. *B. Johnſon.*

LEES'BURG, a town of Virginia, on the Potomack: twenty-four miles north-weſt of Waſhington, and twenty-three eaſt of Winchеſter. Lat. 39. 10. N. lon. 77. 33. W.

To LEESE, *v. a.* [*leſen*, Dut.] To loſe: *an old word*:

No cauſe, nor client fat, will Chev'ril *leeſe*,
But as they come on both ſides he takes fees;
And pleaſeth both; for, while he melts his greaſe
For this, that wins for whom he holds his peace. *Johnſon.*

LEES'NITZ, or LEG'NICA, a town of Sileſia, in the principality of Oppeln: thirteen miles eaſt-north-eaſt of Ober Glogau, and eighteen ſouth-ſouth-eaſt of Oppeln.

LEES'TOWN, a town of the ſtate of Kentucky, on the Kentucky river: twenty miles weſt of Lexington.

LEET, *ſ.* See COURT-LEET, vol. v. p. 301.—*Leete*, or *leta*, is otherwiſe called a law-day. The word ſeemeth to have grown from the Saxon leȝe, which was a court of juriſdiction above the wapentake or hundred, comprehending three or four of them, otherwiſe called thirthing, and contained the third part of a province or ſhire; theſe juriſdictions, one and other, be now aboliſhed, and ſwallowed up in the county-court. *Cowel.*

Who has a breaſt ſo pure,
But ſome uncleanly apprehenſions
Keep *leets* and law-days, and in ſeſſions ſit
With meditations lawful? *Shakeſpeare's Othello.*

LEETAKOO', a conſiderable town in ſouthern Africa. A river runs through the midſt of it, which from the extent of the channel muſt be ſometimes of conſiderable magnitude. This town, which was diſcovered by a miſſion from the Cape of Good Hope in 1801 and 1802, is computed to be of as great extent as Cape Town; but the exact number of the houſes, ſays Mr. Barrow, could not be aſcertained, owing to the irregularity of the ſtreets and the lowneſs of the buildings. It contains, according to ſome, about 10,000 inhabitants of all deſcriptions, while others make them amount to nearly 15,000. The ground-plan of every houſe is a complete circle, from twelve to fifteen feet diameter; the floor conſiſts of hard

beaten clay, raiſed four inches above the ſurface of the encloſure. One-fourth of it, commonly facing the eaſt, is entirely open, the other three-fourths walled up with clay and ſtones, to the height of about five feet. The people depoſit their valuable articles in another apartment deſcribed with the ſame radius as the former, ſuch as ſkin-clothing, ivory ornaments, knives, and other articles, which to them are of eſſential ſervice. In this alſo the elder part of the family take their repoſe, and the children ſleep in the half-cloſed *viranda*. The whole houſe is covered with a roof in the form of a tent, ſupported by poles built into the wall. The roof is thatched with reeds, bound together with leathern thongs. The inhabitants preſerve their grain and pulſe in large clay veſſels adjacent to the houſe, exhibiting the appearance of large oil jars, and ſome of them containing about two hundred gallons. The regularity and decorum with which the people of Leetakoo conduct themſelves, give a very favourable opinion of them, as being greatly ſuperior to ſavages, and evince them to be bordering on a ſtate of civilization which it would be no difficult matter to introduce among them. They are friendly, peaceable, and inoffenſive, and appear to live under a government which may be denominated purely patriarchal. They do not appear to have any particular form of religious worſhip, in the common acceptation of that word; yet they circumciſe all male children, and dance in a circle the whole night of the full-moon. They ſeem alſo to believe that there is a power directing the operations of nature, who is infinitely ſuperior to themſelves, and to whoſe influence they are ſubject. Lat. 26. 30. S. lon. 27. 0. E. *Barrow's Travels to Cochin-china.*

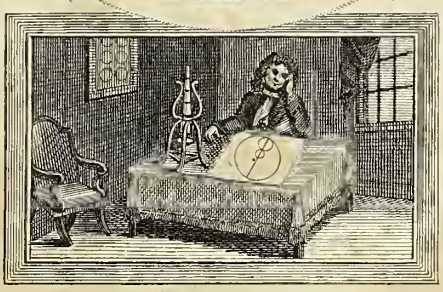
LEEUW (William de), an engraver, was born at Antwerp in the year 1600, and flouriſhed in the Netherlands in 1650. He was a pupil of Soutmans, but did not engrave in his ſtyle; inſtead of which he employed ſhort playful ſtrokes, which produced a pictureſque effect, united with a tolerably good chiaroſcuro. Moſt of his engravings are from Rubens or Rembrandt; but in a ſet of large landſcapes after Nieulandt he has quite altered his manner of execution, and engraved the ground and ſky in a manner ſo delicate, that it requires good eyes to diſtinguiſh it from a tint of Indian ink. The time of his death is not known. The following are his beſt works: Lot and his Daughters, in folio; the Holy Virgin kneeling, ſupported by angels, commonly called the Virgin of Grief, a very rare print, in folio; the Martyrdom of St. Catharine, a very fine and rare print; all after Rubens. Tobit and his Wife, in folio, from Rembrandt; this print is executed in a very good taſte, and has a fine effect. And the following ſet in large folio, from Nieulandt, which are very rare and beautifully executed: A view in the Tyrol, with water, caſcades, and travellers; another ſcene in the mountains of Tryol, with travellers on horſeback; a landſcape of the ſame character as the former with wood and water; and another with fiſhers, and men on horſeback.

LEEUW (John de), an engraver of portraits, and probably related to the above, was born at the Hague ſoon after 1660; but never attained to eminence. In conjunction with John Lamſvelt, he engraved the portraits for the Hiſtory of Louis XIII. by Michael le Vaſſor. He alſo engraved the portrait of John duke of Marlborough, which is inſcribed with the motto *Veni, Vidi, Vici*, in folio; a very neat portrait of Karolus Niellius, in quarto; Joſeph Juſtus Scaliger; and Cowley, the poet.

LEEUWE, or LEEUWEN, a town of France, in the department of the Dyle, called by the Flemings *Stout-Leeuwe*; ſituated on the river Geete, in the midſt of a moraſs: it was formerly a place to which the ſovereigns of the country ſent thoſe they baniſhed. The French took it in 1678, and reſtored it to Spain at the peace of Nimeguen. In 1705 it was taken by the allies, and the garriſon made priſoners of war. It is twenty miles weſt-north-weſt of Liege, and twenty-five eaſt of Bruſſels.

LEEU'WENHOEK (Antony van), a celebrated naturaliſt, was born at Delft, in 1632. An extraordinary degree of ſkill in poliſhing optical glaſſes ſeems firſt to have led him into thoſe reſearches reſpecting the minute parts of the animal and vegetable economy which have conferred celebrity on his name. He was illiterate, and little capable of juſt reaſoning upon what he ſaw; nevertheleſs, his microſcopical obſervations of fifty years have enriched ſcience with many uſeful facts. His experiments began to be publiſhed in 1673, when he made a commencement of the numerous communications which appeared ſucceſſively for a long period in the London Philoſophical Tranſactions. They are found from N° 94 to N° 380 of that collection. He was made a fellow of the Royal Society in 1680. He ſeems to have paſſed his life in his native place, unremittingly employed in examining with his glaſſes a vaſt variety of objects, moſt of which had a reference to anatomy. His reputation ſpread throughout Europe; and, in 1698, the czar Peter, paſſing by Delft, ſent for him, and was much gratified with his demonſtration of the circulation of the blood in an eel's tail. One of the moſt remarkable of his diſcoveries was that of the vermicular bodies in ſemine maſculino, upon which he founded a ſyſtem of generation, now conſidered as chimerical. See the article ANIMALCULE, vol. i. p. 727. He likewiſe firſt taught that the blood was compoſed of globules, and ſaw, or fancied that he ſaw, the ſmaller globules of which they were compounded. The glaſſes which he employed poſſeſſed a magnifying power much inferior to thoſe which naturaliſts have ſince uſed without being able to verify all his ſuppoſed diſcoveries; whence it has been imagined that he often deceived himſelf. The following paſſage, in his own words, will ſerve to ſtate the objection, and the manner in which it was anſwered by the author: "I have often heard, that many perſons diſpute the truth of what I advance in my writings, ſaying that my narrations concerning animalcules, or minute living creatures, are merely of my own invention. And, it ſeems, ſome perſons in France have even ventured to aſſert, that thoſe are not in truth living creatures, which I deſcribe as diſcoverable to our ſight; and allege, that, after water has been boiled, thoſe particles in it which I pronounce to be animalcules will be ſtill obſerved to move. The contrary of this, however, I have demonſtrated to many eminent men; and I will be bold to ſay, that thoſe gentlemen who hold this language have not attained to a degree of proficiency to obſerve ſuch objects truly. For my own part, I will not ſcruple to aſſert, that I can clearly place before my eye the ſmalleſt ſpecies of thoſe animalcules concerning which I now write, and can as plainly ſee them endued with life, as with the naked eye we behold ſmall flies, or gnats ſporting in the open air, though theſe animalcules are more than a million of degrees leſs than a large grain of ſand. For I not only behold their motions in all directions, but I alſo ſee them turn about, remain ſtill, and ſometimes expire; and the larger kinds of them I as plainly perceive running along, as we do mice with the naked eye. Nay, I ſee ſome of them open their mouths, and move the organs or parts within them; and I have diſcovered hairs at the mouths of ſome of theſe ſpecies, though they were ſome thouſand degrees leſs than a grain of ſand. But, ſince it is pronounced to be incredible, that within the ſpace occupied by a grain of ſand ſo many animalcules can be contained, and that it is impoſſible for me to calculate truly ſuch numbers, I have thought on the following method of computation, to place this matter in a clearer light. I lay it down as a poſition or truth, that with the microſcope I can ſee the ſpace occupied by a grain of ſand magnified to the ſize repreſented by a circle of $4\frac{1}{2}$ inches diameter. Next, I ſuppoſe that I obſerve within this ſpace an animalcule ſwimming or running along, the axis or thickneſs of which I conceive to be the twelfth part of the axis of the grain of ſand; therefore, by the common rules of arithmetic,

J. Chapman sculp.



LEEUWENHOEK.

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metic, the ſolid contents of a ſphere or globe, whoſe circumference is deſcribed by that circle, will be 1728 times larger than a ſphere of the ſize of the animalcule. Next, I obſerve another kind of animalcule, which, meaſuring by my eye through a good microſcope, I judge the axis or thickneſs of it to be a fourth part of the ſize of the firſt animalcule; and then, by the ſame rule, the ſize of the ſecond animalcule muſt be 64 times leſs than that of the firſt; and, if this laſt number be multiplied by the former, (1728,) we ſhall find that 110,592 animalcules of that ſize (ſuppoſing their bodies to be of a ſpherical figure) will be required to make up the ſize of the ſphere firſt mentioned. Laſtly, I perceive a third kind of animalcule, the ſize of which appears to be only a tenth part of the ſecond; and that conſequently 1000 of theſe will be no more than equal to the ſize of that ſecond. And, if this number be again multiplied by the former, it will be plain to demonſtration that more than an hundred millions of animalcules can be contained within the compaſs of a grain of ſand."

This paſſage reſpects the ſize of animalcules, which the author repreſents by compariſon with the known ſize of a grain of common ſcowering or glaſs-grinder's ſand. The other minute objects which he frequently deſcribes, as the veſſels in the bodies of inſects, the threads of ſpiders, the filaments or threads of wool, the fibres compoſing the fleſh of animals, and the like; all theſe he conſiders as of a cylindrical form, that is to ſay, if hollow, like a round pipe, and, if ſolid, like a round ſtick, wire, or rope; and he conveys to his readers an idea of their minuteneſs, by comparing them with the known ſize of a ſingle hair. The method uſed by him in aſcertaining this proportion he deſcribes as follows: "In examining the inteſtines of flies and other inſects by the microſcope, I have diſcovered veſſels conveying the blood and juices, the ſmalleſt ramifications or branches whereof appeared to me more than two hundred thouſand times leſs than a hair of my beard. And I will here explain how I compute this proportion, which to many may appear wonderful. I have a plate of copper, with many lines engraven on it, and divided into a number of ſmall equal parts. I then carefully obſerve how many of theſe parts one hair taken from my beard, and ſeen through the microſcope, appears to cover. Suppoſing that the diameter of this hair, when magnified, appears equal to fifty of thoſe parts, then with the point of a needle I trace on the copper a line of the ſame ſize by the naked eye as is equal to one of thoſe ſmall veins or veſſels in a fly, ſeen through the microſcope; and I find that nine of thoſe ſmall lines ſo traced with a needle, when placed cloſe together, are a fiftieth part of the diameter of the hair. If then 450 diameters of thoſe ſmall veins which I moſt plainly ſee in a fly are no more than equal to the diameter of one hair taken from my beard, it follows, by the rules of arithmetic, that one of ſuch hairs is more than 200,000 times larger than thoſe very ſmall blood-veſſels in a fly." The author here conſiders the hair to be round, as well as the ſmall veſſels he alludes to; and, ſuppoſing each of theſe to be cut through or acroſs the middle, the ſection would exhibit a circle. Now, the areas of circles being in proportion to the ſquares of their diameters, the author's propoſition is mathematically demonſtrated thus: $450 \times 450 = 202,500$.

Leeuwenhoek died in 1723, in his ninety-firſt year. Beſides his papers in the Philoſophical Tranſactions, he publiſhed ſeveral works in Dutch. A collection of his writings (but not quite complete) was publiſhed in Latin, at Leyden, in four vols. 4to. 1722; and an Engliſh tranſlation of his "Select Works, from the original Dutch and Latin," has been publiſhed, in 3 vols. 4to. by Mr. Samuel Hoole, (brother to the poet,) who has kindly permitted us to copy the Portrait he has given of that celebrated microſcopic philoſopher.

LEEUWENHOEK'IA, *ſ.* [named in memory of the ſubject of the preceding article, whoſe works, as Mr. Brown obſerves, abound with excellent obſervations on the ſtructure of vegetables.] In botany, a genus of the claſs gynandria, order diandria, natural order ſtylideæ, *Brown*. Generic eſſential character—Calyx ſuperior, two-lipped, in five deep ſegments; corolla tubular; limb irregular in five deep ſegments; the fifth (or lip) unlike the reſt, vaulted, longer than the column, articulated with the tube, and moveable. Column erect, attached below, like the lip, to the ſide of the tube; lobes of the antheræ one above the other, divaricated; ſtigmas two, capillary; capſule of one cell.

Leeuwenhoekia puſilla, the only known ſpecies, was found on the ſouthern coaſt of New Holland by Mr. Brown. It is a little ſmooth herb, with nearly the aſpect and ſtature of Radiola. Leaves alternate, ſtalked; thoſe about the tops of the branches crowded, intermixed with cluſtered flowers. The moveable joint of the lip is analagous to the irritability in the column of Stylidium, and anſwers the ſame end, which is the preſervation of the organs of impregnation; for this lip, which is deflexed in the expanded flower, when affected by any irritating cauſe, is turned upwards with violence, ſo as to cover the upright and immovable column with its concave part. *Brown's Prodr. Nov. Holl.* 572.

LEE'WARD, *adj.* Towards the wind. See LEE.—The *claſſicæ* were called long ſhips, the *onerariæ* round, becauſe of their figure approaching towards circular; this figure, though proper for the ſtowage of goods, was not the fitteſt for ſailing, becauſe of the great quantity of *leeward* way, except when they ſailed full before the wind. *Arbuthnot.*

Let no ſtateſman dare
A kingdom to a ſhip compare;
Leſt he ſhould call our commonweal
A veſſel with a double keel;
Which, juſt like ours, new rigg'd and mann'd,
And got about a league from land,
By change of wind to *leeward* ſide,
The pilot knew not how to guide. *Swift.*

LEE'WARD ISLANDS. The terms *Leeward* and *Windward*, applied to the Weſt-India Iſlands, were given them from their ſituation in a voyage from the ports of Spain to Carthagena, or Porto Bello. The iſlands which lie to leeward, extend from Porto Rico to Dominica.

LEF'CA, a town of the iſland of Cyprus; the reſidence of an aga and a cadi. It was one of the four cities that bore the name of Arſinöe: twenty-eight miles north-north-eaſt of Baffa.

LEF'KEH, a town of Aſiatic Turkey, in the province of Natolia. In the neighbourhood is a convent, in which a Greek biſhop reſides: ſixteen miles ſouth-eaſt of Iſnik, and forty-five eaſt-north-eaſt of Burſa.

LEFOO'GA, one of the Hapaee iſlands, in the South Pacific Ocean, and conſidered as the moſt fertile. This iſland is in many reſpects ſuperior to Annamooka; the plantations were both more numerous and more extenſive. In many places, indeed, towards the ſea, the country is ſtill waſte; owing perhaps to its ſandy ſoil, as it is much lower than Annamboka and its ſurrounding iſles; but toward the middle of the iſland the ſoil is much better, and the marks of conſiderable population, and of improved cultivation, were very conſpicuous. Large ſpots are covered with the paper mulberry trees; and the plantations in general were well ſtocked with ſuch roots and fruits as are the natural produce of the iſland. To theſe captain Cook made ſome additions, by ſowing the ſeeds of Indian corn, melons, pumkins, and the like. At one place was a houſe four or five times as large as thoſe of the common ſort, with a large area of graſs before it; and it was ſuppoſed that the people reſorted thither on certain public occaſions. Near the landing-place was a mount, two or three feet high, covered with gravel; and on it ſtood four or five ſmall huts, in which the bodies of ſome of their principal people had been interred. The iſland is not above ſeven miles long, and in ſome places not above two

or three broad. The eaſt ſide of it, which is expoſed to the trade-wind, has a reef running to a conſiderable breadth from it, on which the ſea breaks with great violence. It is a continuation of this reef that joins Lefooga to Foa, which is not above half a mile diſtant; and at low water the natives can walk upon this reef, which is then partly dry, from the one iſland to the other. The ſhore here is either a coral rock ſix or ſeven feet high, or a ſandy beach; but higher than the weſt ſide, which in general is not more than three or four feet from the level of the ſea, with a ſandy beach its whole length. Lat. 19.49.S. lon. 185.40.E.

LEFT, a town on the north coaſt of the iſland of Kiſhmé: twelve miles north-eaſt of Kiſhmé.

LEFT, participle preter. of *leave*.—Were I left to myſelf, I would rather aim at inſtructing than diverting; but, if we will be uſeful to the world, we muſt take it as we find it. *Addiſon's Spectator.*

Alas, poor lady! deſolate and *left*;
I weep myſelf to think upon thy words. *Shakeſpeare.*

LEFT, *adj.* [*luſte*, Dut. *lævus*, Lat.] Siniſtrous; not right.—That there is alſo in men a natural prepotency in the right, we cannot with conſtancy affirm, if we make obſervation in children, who, permitted the freedom of both hands, do oft-times confine it unto the *left*, and are not without great difficulty reſtrained from it. *Brown's Vulgar Errours.*

The right to Pluto's golden palace guides;
The *left* to that unhappy region tends,
Which to the depth of Tartarus deſcends. *Dryden.*

LEFT-HAN'DED, *adj.* Uſing the left hand rather than right.—The limbs are uſed moſt on the right-ſide, whereby cuſtom helpeth; for we ſee, that ſome are *left-handed*, which are ſuch as have uſed the left hand moſt. *Bacon.*—[A latiniſm.] Inauſpicious.—That would not be put off with *left-handed* cries. *B. Johnſon's Epicæne.*

LEFT-HAN'DEDNESS, *ſ.* Habitual uſe of the left hand:

Although a ſquint *left-handedneſs*
B' ungracious; yet we cannot want that hand. *Donne.*

LEFT-HAN'DINESS, *ſ.* Aukward manner.—An aukward addreſs, ungraceful attitudes and actions, and a certain *left-handineſs* (if I may uſe the expreſſion), proclaim low education. *Cheſterfield.*

LEFT-WIT'TED, *adj.* Miſtaken:

O I *left-witted*, that purge ev'ry ſpring
For choler! *B. Johnſon's Horace.*

LEG, *ſ.* [*leg*, Dan. *leggur*, Iſlandic.] The limb by which we walk; particularly that part between the knee and the foot.—Such intrigues people cannot meet with, who have nothing but *legs* to carry them. *Addiſon.*

Purging comfits, and ants' eggs,
Had almoſt brought him off his *legs*. *Hudibras.*

That by which any thing is ſupported on the ground; as, the *leg* of a table.

To make a LEG. To bow with the leg drawn back.—At court, he that cannot *make a leg*, put off his cap, kiſs his hand, and ſay nothing, has neither *leg*, hands, lip, nor cap. *Shakeſpeare.*—If the boy ſhould not put off his hat, nor *make legs* very gracefully, a dancing-maſter will cure that defect. *Locke.*

Their horſes never give a blow,
But when they *make a leg*, and bow. *Hudibras.*

To ſtand on his own LEGS. To ſupport himſelf.—Perſons of their fortune and quality could well have *ſtood upon their own legs*, and needed not to lay in for countenance and ſupport. *Collier.*

LEG'ABLE, *adj.* [from the Lat. *legabilis*.] Unentailed, capable of being bequeathed as a legacy. *Scott.*

LEG'ACY, *ſ.* [*legatum*, Lat.] Some particular thing given by laſt will and teſtament.—Good counſel is the beſt *legacy* a father can leave a child. *L'Eſtrange.*

Fetch the will thither, and we ſhall determine
How to cut off ſome charge in *legacies*. *Shakeſpeare.*

A bequeſt or gift of goods and chattels by will or teſtament, transfers an inchoate property to the legatee; but the legacy is not perfect without the aſſent of the executor; for, if one has a general or pecuniary legacy, of 100l. or a ſpecific one of a piece of plate, he cannot in either caſe take it without the conſent of the executor: for in him all the chattels are veſted; and it is his buſineſs firſt of all to ſee, whether there is ſufficient ſum left to pay the debts of the teſtator. *Co. Lit.* 111. *Bract.* l. 2. c. 26.

In caſe of a deficiency of aſſets, all the *general legacies* muſt abate proportionably, in order to pay the debts; but a *ſpecific legacy* (of a piece of a plate, a horſe, or the like) is not to abate at all, or allow any thing by way of abatement, unleſs there be not ſufficient without it. Upon the ſame principle, if the legatees have been paid their legacies, they are afterwards bound to refund a rateable part, in caſe debts come in more than ſufficient to exhauſt the reſidue after the legacies paid.

If the legatee dies before the teſtator, the legacy is a loſt or *lapſed* legacy, and ſhall ſink into the reſidue. And, if a *contingent legacy* be left to any one, as *when* he attains, or *if* he attains, the age of twenty-one, and he dies before that time, it is a lapſed legacy. But a legacy to one *to be paid* when he attains the age of twenty-one years, is a *veſted* legacy; and, if the legatee dies before that age, his repreſentatives ſhall receive it out of the teſtator's perſonal eſtate, at the ſame time that it would have become payable in caſe the legatee had lived. But, if ſuch (contingent) legacies be charged upon a real eſtate, in both caſes they ſhall lapſe for the benefit of the heir; for, with regard to deviſes affecting lands, the eccleſiaſtical court hath no concurrent juriſdiction. And, in caſe of a veſted legacy due immediately, and charged on land, or money in the funds, which yields an immediate profit, *intereſt* ſhall be payable thereon from the teſtator's death; but, if charged only on the perſon's eſtate, which cannot be immediately got in, it ſhall carry intereſt only from the end of the year after the death of the teſtator.

Beſides the formal legacies contained in a man's will and teſtament, there is alſo permitted another diſpoſition of property; which is called DONATIO CAUSA MORTIS. See that article, vol. vii. p. 18.

Some perſons are incapable of taking by legacy, under ſeveral ſtatutes; as in ſtat. 13 Will. III. c. 6, officers, counſellors, lawyers, &c. not taking the oaths; and 5 Geo. I. c. 27, artificers going abroad, &c. See farther under the article WILL.

The executor is to pay the legacies after the debts; but executors cannot in equity pay their own legacies firſt, where there is not enough to pay all of them, but ſhall have an equal proportion with the reſt of the legatees. See the article EXECUTOR, vol. vi. p. 112.

As an executor is not obliged to pay a legacy without ſecurity given him by the legatee to refund if there are debts, (becauſe the legacy is not due till the debts are paid;) ſo, in ſome caſes, the executor may be compelled to give ſecurity to the legatee for the payment of his legacy; as where a teſtator bequeathed 1000l. to a perſon, to be paid at the age of twenty-one, and made an executor, and died; afterwards the legatee exhibited a bill in equity againſt the executor, ſetting forth that he had waſted the eſtate, and praying that he might give ſecurity to pay the legacy when it ſhould become due; and it was ordered accordingly.

By various ſtamp-acts, duties *ad valorem* have from time to time been impoſed on receipts given for payment of legacies; and theſe extend now as well to legacies ſecured on *real* as on *perſonal* property. For the amount of theſe ſtamps the executor is made liable, and it is his duty not to pay a legacy without a receipt duly ſtamped. The

ſtamp is from 1l. up to 10l. per cent. in Great Britain, (and from 10s. to 5l. per cent. in Ireland,) according to the propinquity or diſtance of relationſhip between the deviſor and legatee.

If a legacy is deviſed, and no certain time of payment, and the legatee is an infant, he ſhall have intereſt for the legacy from the expiration of one year after the teſtator's death; for ſo long the executor ſhall have, that he may ſee whether there are any debts; and no laches ſhall be imputed to the infant; but, if the legatee be of full age, he ſhall have no intereſt but from the time of the demand of his legacy. Where a legacy is payable at a day certain, it muſt be paid with intereſt from that day.

Legacies being *gratuities*, and no duties, action will not lie at law for the recovery of a legacy, but remedy is to be had in the chancery or ſpiritual court; but, if ſecurity is given by bond to pay a legacy, in ſuch caſe an action at law is the proper remedy; by giving the bond, the legacy is, as it were, extinct, and becomes a debt at common law, and the legatee can never afterwards ſue for it in the ſpiritual court. Alſo, an action at law will lie againſt an executor to recover a ſpecific chattel bequeathed, after his aſſent to the bequeſt.

Where a teſtator gives his debtee a legacy greater than his debt, it ſhall be taken in ſatisfaction for it; but, as a legacy is a gift, ſometimes the legatee has been decreed both. If a greater legacy is given by a codicil to the ſame perſon that was a legatee in the will, it ſhall not be a ſatisfaction unleſs ſo expreſſed, and a bequeſt of the *ſame ſum* by the debtor to the creditor ſhall be applied in ſatisfaction of the debt. Yet, where there are aſſets, and the teſtator intended both, it may be as good equity to conſtrue him both juſt and kind. If a legacy be leſs than the debt, it was never held to go in ſatisfaction; ſo if the legacy were upon condition, or upon a contingency; for the will is intended for the legatee's benefit; and therefore it could not be ſuppoſed that the teſtator would give him an uncertain recompenſe in ſatisfaction of a certain demand. So where the legacy is not equally beneficial with the debt in ſome one particular, although it may be more ſo in another, as in time of payment. So if the thing were of a different nature, as land, it ſhould not go in ſatisfaction of money, unleſs there was a defect of aſſets. So if the debt was contracted after the legacy given; as the teſtator could not have it in contemplation to ſatisfy a debt not then in being. So if the debt was upon an open or running account, ſo that it might not be known to the teſtator whether he owed any money to the legatee or not. Caſes of this nature therefore depend upon circumſtances; and, where a legacy has been decreed to go in ſatisfaction of a debt, it muſt be grounded upon ſome evidence; for the intention of the party is to be the rule.

LE'GAL, *adj.* [*legal*, Fr. *leges*, Lat.] Done or conceived according to law.—Whatſoever was before Richard I. was before time of memory; and what is ſince, is, in a *legal* ſenſe, within the time of memory. *Hale.*—Lawful; not contrary to law.—Aſſigning to every thing capable of ownerſhip a *legal* and determinate owner. *Blackſtone.*—According to the law of the old diſpenſation:

His merits
To ſave them, not their own, though *legal* works. *Milton.*

LEGAL'ITY, *ſ.* Lawfulneſs.

To LE'GALIZE, *v. a.* To authorize; to make lawful.—If any thing can *legalize* revenge, it ſhould be injury from an extremely-obliged perſon; but revenge is ſo abſolutely the peculiar of Heaven, that no conſideration can impower even the beſt men to aſſume the execution of it. *South.*

LE'GALLY, *adv.* Lawfully; according to law.—A prince may not, much leſs may inferior judges, deny juſtice, when it is *legally* and competently demanded. *Taylor.*

LE'GALNESS, *ſ.* The ſame as LEGALITY.

LEGA'NES, a town of Spain, in New Caſtile: five miles ſouth-weſt of Madrid.

LEGAN'TINE. See LEGATINE.

LEG'ATARY, *ſ.* [*legataire*, Fr. from *legatum*, Lat.] One who has a legacy left; a legatee.—An executor ſhall exhibit a true inventory of goods, taken in the preſence of fit perſons, as creditors and *legataries* are, unto the ordinary. *Ayliffe.*

LEG'ATE, *ſ.* [*legatus*, from *legare*, *delegare*, Lat. to ſend or delegate.] A deputy; an ambaſſador:

The *legates* from th' Ætolian prince return:
Sad news they bring, that, after all the coſt
And care employ'd, their embaſſy is loſt. *Dryden.*

A kind of ſpiritual ambaſſador from the pope; a commiſſioner deputed by the pope for eccleſiaſtical affairs.—Upon the *legate's* ſummons, he ſubmitted himſelf to an examination, and appeared before him. *Atterbury.*

Look where the holy *legate* comes apace,
To give us warrant from the hand of Heav'n. *Shakeſpeare.*

There are three kinds of legates, viz. legates *à latere*, legates *de latere*, and legates by office, or *legati nati*. Of theſe the moſt conſiderable are the *legates à latere*, being ſuch as the pope commiſſions to take his place in councils; and ſo called, becauſe he never gives this office to any but his favourites and confidants, who are always *à-latere*, at his ſide. A legate à latere has the power of conferring benefices without a mandate; of legitimating baſtards to hold offices; and has a croſs carried before him, as the enſign of his authority. The *legates de latere* are not cardinals, but yet are entruſted with apoſtolical legation. *Legates by office* are thoſe who have not any particular legation given them; but who become legates by virtue of their dignity and rank in the church; ſuch are the archbiſhops of Rheims and Arles; but the authority of theſe legates is much inferior to that of the legates *à latere*.

The power of a legate is ſometimes given without the title. Some of the nuncios are inveſted with it. It was one of the eccleſiaſtical privileges of England from the Norman conqueſt, that no foreign legate ſhould be obtruded upon the Engliſh, unleſs the king ſhould deſire it upon ſome extraordinary emergency, as when a caſe was too difficult for the Engliſh prelates to determine.

Court of the Legate was a court obtained by cardinal Wolſey of pope Leo X. in the ninth year of Henry VIII. wherein he, as legate of the pope, had power to prove wills, and diſpenſe with offences againſt the ſpiritual laws, &c. It was but of ſhort continuance.

LEGATE'E, *ſ.* [from *legatum*, Lat.] One who has a legacy left him.—My will is, if any of the above-named *legatees* ſhould die before me, that then the reſpective legacies ſhall revert to myſelf. *Swift.*

If he chance to 'ſcape this diſmal bout,
The former *legatees* are blotted out. *Dryden.*

LEG'ATESHIP, *ſ.* The office of a legate.

LEG'ATINE, *adj.* [from *legate.*] Made by a legate.—When any one is abſolved from excommunication, it is provided by a *legatine* conſtitution, that ſome one ſhall publiſh ſuch abſolution. *Ayliffe.*—Belonging to a legate of the Roman ſee:

All thoſe you have done of late,
By your power *legatine* within this kingdom,
Fall in the compaſs of a præmunire. *Shakeſpeare.*

LEGA'TION, *ſ.* [*legatio*, Lat.] Deputation; commiſſion; embaſſy.—After a *legation* ad res repetendas, and a refuſal, and a denunciation or indiction of a war, the war is no more confined to the place of the quarrel, but is left at large. *Bacon.*—In attiring, the duke had a fine and unaffected politeneſs, and upon occaſion coſtly, as in his *legations*. *Wotton.*

LEGA'TOR, *ſ.* [from *lego*, Lat.] One who makes a will, and leaves legacies:

Suppoſe debate
Betwixt pretenders to a fair eſtate,
Bequeath'd by ſome *legator's* laſt intent. *Dryden.*

LEGA'TUS,

LEGA'TUS, *f.* A military officer amongſt the Romans, commanded as deputy of the commander-in-chief. The *legati*, at their firſt inſtitution, were not ſo much to command as to adviſe. As to the number we have no certain information, though we may upon good grounds aſſign one to every legion. In the abſence of the conſul or proconſul, they had the honour to uſe the *faſces*. Under the emperors there were two ſorts of legati, *conſulares* and *prætorii*. The firſt commanded whole armies, as the emperors lieutenant-generals; and the other had the command of particular legions. The legati under the proconſuls in the provinces, ſerved for judging inferior cauſes, and the management of ſmaller concerns, remitting things of great moment to the governor or preſident himſelf. This was the original office of the legati, as was hinted above; though, as we have ſeen, they were afterwards admitted to command in the army.

Alſo, when any conſiderable perſon among the Roman citizens had occaſion to paſs through any of the provinces, the ſenate gave him the title of *legatus*; that is, of envoy from the ſenate, to the end that he might be received with the greater reſpect, and that the cities and towns, through which he travelled, might defray his expences. This they called a free legation, *libera legatio*; becauſe the perſon was not encumbered with any truſt, and might lay aſide the title as ſoon as he pleaſed.

LEGAU', a town of Bavaria, belonging to the abbey of Kempten: twelve miles north-north-weſt of Kempten.

LEG'BERTHWAITE (Vale of). See LEATHES WATER, p. 427.

LEGE', a town of France, in the department of the Lower Loire: twelve miles ſouth-eaſt of Machecoul, and twenty-one ſouth of Nantes.

LEG'END, *f.* [*legenda*, Lat.] A chronicle or regiſter of the lives of ſaints.—*Legends* being grown in a manner to be nothing elſe but heaps of frivolous and ſcandalous vanities, they have been even with diſdain thrown out, the very neſts which bred them abhorring them. *Hooker.*—Any memorial or relation:

And in this *legend* all that glorious deed
Read, whilſt you arm you; arm you whilſt you read.
Fairfax.

An incredible unauthentic narrative.—It is the way of attaining to Heaven, that makes profane ſcorners ſo willingly let go the expectation of it. It is not the articles of the creed, but the duty to God and their neighbour, that is ſuch an inconſiſtent incredible *legend*. *Bentley.*

Who can ſhow the *legends*, that record
More idle tales, or fables ſo abſurd? *Blackmore.*

The Legend was originally a book uſed in the old Romiſh churches, containing the leſſons to be read at divine ſervice; hence the lives of the ſaints and martyrs came to be called *legends*, becauſe chapters were read out of them at matins, and at the refectories of religious houſes. Among theſe the Golden Legend, which is a collection of the lives of the ſaints, was received in the church with great applauſe, which it maintained for two hundred years; though it is ſo full of ridiculous and romantic ſtories, that the Romaniſts themſelves are now aſhamed of it.

LEGEND is alſo applied to the inſcription of medals and coins, which ſerves to explain the figures or devices repreſented on them. See the article MEDAL.

LEG'ENDARY, *adj.* Pertaining to a legend; fabulous.

LEG'ER, LEIGER, or LEDGER, *f.* [from *legger*, Dut. to lie or remain in a place.] Any thing that lies in a place; as, a *leger*-book, a book that lies in the compting-houſe; a *leger* ambaſſador; a reſident; one that continues at the court to which he is ſent:

Lord Angelo, having affairs to Heav'n,
Intends you for his ſwift ambaſſador,
Where you ſhall be an everlaſting *leiger*. *Shakeſpeare.*

Thou art Heav'n's *leiger* here,
Working againſt the ſtates of death and hell. *Herbert.*

LEG'ER, *adj.* Reſident.—If *leiger* ambaſſadors or agents were ſent to remain near the courts of princes, to obſerve their motions, ſuch were made choice of as were vigilant. *Bacon.*—Lying in the ſame place.—I call that a *ledger* bait, which is fixed, or made to reſt, in one certain place, when you ſhall be abſent; and I call that a walking bait which you have ever in motion. *Walton.*

LEG'ER (Anthony), a learned Piedmonteſe proteſtant divine, was born at Ville-Seiche, in the valley of St. Martin, in Piedmont, in the year 1594. After purſuing his ſtudies at Geneva, and other places, he diſcharged the miniſterial functions for ſome years in his native country. In 1637 he was choſen paſtor of the church of St. John, which ſituation he retained about ſix years; during which interval his talents and erudition were advantageouſly diſplayed in defending the proteſtant faith, both in public diſputes and in writing againſt the emiſſaries of the *Propaganda*, and other Catholics. In 1643, finding that he was proſcribed by the duke of Savoy, he ſaved himſelf by flight, and took refuge at Geneva; where, after exerciſing the miniſtry for ſome time in the French and Italian churches, he was appointed profeſſor of the oriental languages and of divinity. He died in 1661, about the age of ſixty-ſeven. Under his ſuperintendence was publiſhed at Geneva, an edition of the New Teſtament both in the original and vulgar Greek, in 2 vols. 4to.

LEG'ER (Anthony), ſon of the above, was educated to the miniſtry, and officiated as paſtor to the church at Chancy, and afterwards at Geneva. He filled ſucceſſively the poſts of profeſſor of philoſophy and of divinity in that univerſity with high reputation; and was greatly admired as a preacher. Five volumes of his Sermons were publiſhed after his death, which took place in 1719, when he was about ſixty-ſeven years of age.

LEG'ER (John), nephew of Anthony Leger the elder, was born at Ville-Seiche, in the year 1615. Having purſued his academical ſtudies at Geneva, and completed a courſe of divinity under M. Spanheim, he was admitted to the miniſtry in his native country in 1639, and choſen paſtor of the churches of Prals and Rodoret. After his uncle had been obliged to fly for his life, he was choſen his ſucceſſor in the church of St. John, and continued his labours with that flock till the year 1655, when the perſecution of the Waldenſes broke out with peculiar rage and enormity, and the moſt horrid ſcenes of violence and bloodſhed were exhibited in every part of their country. Having happily made his eſcape into France, he tranſmitted an affecting account of the cruelties perpetrated on the proteſtants to Oliver Cromwell, who ſent an extraordinary ambaſſador to the duke of Savoy, to remonſtrate with him on theſe proceedings. Leger alſo wrote to the king of France, and to the proteſtant princes and ſtates, ſoliciting their interference on behalf of his countrymen. The effect of their repreſentations was the Treaty of Pignerol, concluded in the ſame year, which promiſed future ſecurity and toleration to the Waldenſes. At the ſigning of this treaty, Leger aſſiſted in the character of deputy-general of the proteſtant communities. It was not long, however, before the terms of this treaty were broken; and oppreſſion and perſecution were again let looſe on the inhabitants of the valleys. Thus circumſtanced, in the year 1661, the afflicted ſufferers conſtituted Leger their deputy to ſeveral of the proteſtant powers, that he might lay before them the particular infractions of the treaty of Pignerol, and ſolicit anew their mediation with the duke of Savoy. This appointment gave ſuch offence at the court of Turin, that orders were given for razing to the ground the houſe of Leger; and he was proclaimed a traitor. Leger met with ſucceſs in his miſſion, and returned to Geneva, where, in 1663, he accepted an invitation to become paſtor of the Walloon church at Leyden. In the following year he ventured ſecretly to viſit the valleys, carrying with him conſiderable ſums of money, collected from the Dutch and other Proteſtants for the relief of his perſecuted countrymen; and afterwards returned to Leyden. We have no information concerning

cerning the time of his death. He was the author of a valuable Hiſtory of the Evangelical Churches in the Vallies of Piedmont, folio. *Moreri.*

LEG'ER-BOOK, *ſ.* A book that lies ready for entering articles of account in.—Theſe are ſupplied from a contemporary entry in the *leger-book* of the chapter. *Blackſtone's Magna Charta.*

This *leger-book* lies in the brain behind,
Like Janus' eye, which in his poll was ſet,
The layman's tables, ſtorehouſe of the mind,
Which doth remember much, and much forget. *Davies.*

Some derive the name from *leger*, Fr. light or ſlight, becauſe an entry in this book is generally compriſed in one line, whereas in the journal or waſte-book you go into the particulars of each tranſaction. See the article BOOK-KEEPING, vol. iii. p. 185. This is certainly the meaning when applied to a leger-line in muſic.

LEG'ER-GILD. See LECHERWITE.

LEG'ER-LINE, *ſ.* in muſic; a line above or below the five, to receive an aſcending or deſcending note.

LEGERDEMA'IN, *ſ.* [*legreté de main*, Fr.] Slight of hand; juggle; power of deceiving the eye by nimble motion; trick; deception; knack.—Of all the tricks and *legerdemain* by which men impoſe upon their own ſouls, there is none ſo common as the plea of a good intention. *South.*

He ſo light was at *legerdemain*,
That what he touch'd came not to light again. *Hubberd.*

LEGERDEMAIN is a denomination given to certain deceptive performances, which either depend altogether upon addreſs and dexterity, or derive but a ſmall degree of aid from philoſophical principles. But in all the branches of this art, it is not ſufficient that a perſon has the requiſite dexterity, or ſlight of hand; it is neceſſary alſo to take off the attention of the ſpectators by ſome entertaining diſcourſe; and of ſuch kind of talk the practiſers of legerdemain are not at all ſparing.

The two chief branches of legerdemain are, cups and balls, and tricks upon cards; and, though in the article JUGGLING we have referred to this place, yet, upon farther conſideration, we think it would not be much to the credit of the work or to the ſatisfaction of the reader to enter into ſuch diſquiſitions; ſince the former is practiſed only by the loweſt claſs of itinerants, and a dexterity in the latter is very apt to lead to a habit of cheating. Some pleaſing experiments have been given under the articles ACOUSTICS, CATOPTRICS, and ELECTRICITY; and many others will follow in their proper order in the alphabet, as under MAGNETISM, MECHANICS, NUMBERS, OPTICS, SOUND, PYROTECHNY, &c.

Adverting once more to the article JUGGLING, we have to obſerve, that the laſt extraordinary caſe there related (vol. xi. p. 500, 1.) had happened ſo recently as to ſeem to want confirmation. That caſe has ſince been fully inveſtigated, and confirmed and authenticated, in conſequence of its having been brought forward by ſir Francis Burdett, in the houſe of commons, on the 15th of April, 1812, as an evidence to what lengths ſome men would go to avoid the puniſhment of *flogging* for deſertion or other offences. In reply, Mr. Perceval totally denied the premiſes and the concluſion: he ſaid, that inquiry had been made; that there was no foundation whatever for the ſtory; and, quoting the words in our account, that "the man had not been heard of ſince," he triumphantly added, that "he had never been heard of before!" This, however, was worſe than *juggling*, ſince it was telling a direct untruth. On the very next day, (the 16th,) one Louis Goldſmith, a man underſtood to be in the confidence of Mr. Perceval, wrote to Mr. Welch, the ſurgeon at Taunton who it was ſaid had operated upon Adams. Mr. W.'s ſon, alſo a ſurgeon, and who really performed the operation in his father's preſence, replied to the letter, fully confirming the fact, and ſtating the caſe nearly in the words we have already given.

LEGEREMEN'T, *adv.* [French.] In muſic-books; lightly, gently.

LEGER'ITY, *ſ.* [*legereté*, Fr.] Lightneſs; nimbleneſs; quickneſs. *Not uſed:*

When the mind is quicken'd,
The organs, though defunct and dead before,
Break up their drowſy grave, and newly move
With caſted ſlough and freſh *legerity*. *Shakeſpeare.*

LEG'ERWOOD, a town of Scotland, in the county of Berwick: four miles ſouth-eaſt of Lauder.

LEG'GED, *adj.* Having legs; furniſhed with legs:

And all to leave what with his toil he won
To that unfeather'd two-*legg'd* thing, a ſon. *Dryden.*

LEGGIARDAMEN'TE, *adv.* in muſic; lively, briſkly.

LEGGIAR'DO, *adv.* in muſic; in a lively manner; briſkly.

LEGHE'A, a town of Nubia: ſixteen miles weſt-north-weſt of Dongola. Lat. 20. 6. N. lon. 29. 30. E.

LEG'HENICH, or LECH'ENICH, a town of France, in the department of the Rhine and Moſelle: ten miles ſouth-ſouth-weſt of Cologne, and fifty eaſt-north-eaſt of Liege. Lat. 50. 50. N. lon. 6. 42. E.

LEG'HI, a town of Arabia, in the province of Yemen: fifty-ſix miles eaſt-north-eaſt of Aden.

LEGHO'RN, or LIVOR'NO, a city and ſeaport of Etruria, or Tuſcany; handſome, but not large, and built in the modern taſte, ſo regular that both gates are ſeen from the market-place. Upon account of its being interſected with canals, it is called the *New Venice*. Leghorn was formerly a place of no note, belonging to the Genoeſe, and by them given in exchange to duke Coſmo I. for the town of Sarzana. But ſince that time it has put on a quite different aſpect: the canals cut in ſeveral parts about the town have rendered the marſhes fit for culture, and, in ſome meaſure, diſſipated the noxious effluvia, though the air cannot ſtill be deemed perfectly healthy. Freſh water is ſo ſcarce, that it muſt be brought from Piſa. The city, beſides good fortifications, has two ſmall forts towards the ſea, and a citadel on the land ſide. The number of inhabitants is computed at 50,000; among whom are upwards of 15,000 Jews, who live in a particular quarter of the city, have a handſome ſynagogue, and, though ſubject to very heavy impoſts, are in a thriving condition, the greateſt part of the commerce going through their hands. The Greeks and Armenians have each their peculiar church. The free Turks and the Turkiſh ſlaves have a moſque; but the Proteſtants are not permitted the public exerciſe of their religion, the Engliſh excepted, who, by being, of all foreign nations, the beſt cuſtomers to Leghorn, are allowed to have a chaplain. Proſtitutes live in a particular quarter, conſiſting of ſeveral ſtreets. The heavy taxes, payable to the government, from a multiplicity of neceſſaries brought in from the continent, together with monopolies of brandy, tobacco, and ſalt, make proviſions and other commodities very dear. The trade of Leghorn is conſiderable, being greatly promoted by the freedom of its port, every bale of goods, whether great or ſmall, paying only two piaſtres, or ſcudi. The harbour is divided into the outward and inward. In the open place before this harbour ſtands a marble ſtatue of Ferdinand I. and at the angles of the pedeſtal four brazen ſtatues, of a gigantic ſize, repreſenting Turkiſh ſlaves in chains. The outward harbour is formed by a mole or dam, ſix hundred paces in length, well paved, and with a partition-wall in the middle, whereby, at any time, the ſhipping are ſheltered from the wind on one ſide. This mole ſerves alſo for a promenade. The harbour is too ſhallow for large ſhips, which, on this account, lie out of the mole, moored to pillars and large iron rings; but, by this means, are in

ſome reſpects ſafer than in the harbour itſelf. The road for a mile or two ſeaward is very good, though with no ſecurity againſt winds or corſairs. The light-houſe, where every night thirty burning lamps are contained in one lantern, ſtands on a ſingle rock in the ſea; and not far from it, on the main land, is the lazaretto, where quarantine is performed by perſons and goods coming from places ſuſpected of infection. On the 28th of June, 1796, this city was taken poſſeſſion of by the French under the command of Bonaparte. Leghorn is 47 miles weſt-ſouth-weſt of Florence, and 140 north-north-weſt of Rome. Lat. 43. 32. N. lon. 10. 16. E.

Leghorn hats have long been an article of importation with us. In the year 1805, Mr. William Corſton received a gold medal from the Society of Arts for his manufacture of them here. This is undoubtedly an invention of great importance to this country; as we are told that the importation of this article of dreſs, during the ten years previouſly to Mr. Corſton's method of manufacture, would furniſh employment for 5000 female children and young women, and give cultivation to two thouſand acres annually of very poor land, to raiſe the ſtraw, unfit for other culture; and thus diffuſe the means of ſupport and happineſs to many hundreds of poor families, by the healthy and productive employment it will afford their children.

LEG'IBLE, *adj.* [*legibilis*, Lat.] Such as may be read. —You obſerve ſome clergymen with their heads held down within an inch of the cuſhion, to read what is hardly *legible*. *Swift.*—Apparent; diſcoverable.—People's opinions of themſelves are *legible* in their countenances. Thus a kind imagination makes a bold man have vigour and enterprize in his air and motion; it ſtamps value and ſignificancy upon his face. *Collier.*

LEG'IBLY, *adv.* In ſuch a manner as may be read.

LEGIF'EROUS, *adj.* [from the Lat. *lex*, a law, and *fero*, to bring.] Making laws; giving laws. *Not uſed. Bailey.*

LEGINEU', a town of Pruſſia, in the province of Ermeland: twenty-two miles ſouth-eaſt of Heilſberg.

LE'GIO, a town of Galilee, from which Jerome determines the diſtances of the places in Galilee; not a bare encampment, though the name might originally be owing to that circumſtance. It lay fifteen miles to the weſt of Nazareth, between Mount Tabor and the Mediterranean. Now thought to be *Legune*.

LE'GION, *ſ.* [*legio*, Lat.] A body of Roman ſoldiers. —The moſt remarkable piece in Antoninus's pillar is, the figure of Jupiter Pluvius ſending rain on the fainting army of Marcus Aurelius, and thunderbolts on his enemies, which is the greateſt confirmation poſſible of the ſtory of the Chriſtian *legion*. *Addiſon.*—A military force:

She to foreign realms
Sends forth her dreadful *legions*. *Phillips.*

Any great number.—The partition between good and evil is broken down; and, where one ſin has entered, *legions* will force their way through the ſame breach. *Rogers.*

Not in the *legions*
Of horrid hell can come a devil more damn'd. *Shakeſpeare.*

The word legion comes from the Latin *legere*, to chooſe; becauſe, when the legions were raiſed, they made choice of ſuch of their youths as were the moſt proper to bear arms. The number of ſoldiers and officers of which the legion conſiſted, was different at different times; but it is impoſſible to determine the preciſe time and manner of their alteration. In the time of Romulus, the inſtitutor of this corps, each legion contained 3000 foot, and 300 equites, or horſe; theſe were divided into three bodies, which make as many orders of battle; each body conſiſting of ten companies, or manipules, ranged at ſome diſtance from each other, though in the ſame front. Each body had two general officers to command it, called *tribunes*; and each manipule, two centurions. Under the conſuls, the legion conſiſted of 4000 or 4200 foot-ſoldiers, who made four bodies, commanded by a conſul, or one of his lieutenants; and each legion had its ſhare of cavalry, which was 300. About the year of Rome 412, it was compoſed of 5000 foot; which was the number of a legion during Julius Cæſar's wars with the Gauls. Under Auguſtus, each legion conſiſted of 6100 foot and 726 horſe; after his death, they were reduced to 5000 foot and 600 horſe. Under Tiberius, the legion was raiſed again to 6000 foot and 600 horſe. In the time of Septimius Severus, the legion was compoſed of 5000 men: under the following emperors, it was the ſame as it had been under Auguſtus. In the time of Marius, thoſe four diviſions of the legion which had taken place under the conſuls, were united into one, and augmented; and cohorts were appointed from five to ſix hundred men, each under the command of a tribune. Each cohort conſiſted of three companies of manipules, each manipule of two centuries; and the legion was divided into ten cohorts, who made as many diſtinct battalions, diſpoſed in three lines; ſo that the legion, then, conſiſted of 6000 men. Iſidore tells us, that the legion conſiſted of 6000 men, and was divided into ſixty centuries, thirty manipules, twelve cohorts, and two hundred troops. According to the French academy, the legion conſiſted of 6000 foot and 725 horſe. The legion conſiſted of four ſorts of ſoldiers, who differed in their age, arms, and names: they were called *velites*, *haſtati*, *principes*, and *triarii*. Till the deſtruction at Carthage, theſe were citizens of Rome; but, after the ſocial war, the freedom of the city was granted to other towns in Italy, and legionary troops were raiſed, which were called Roman, becauſe, as they ſhared the privilege of Roman citizens, they were incorporated in the republic.

The legions were by far the moſt conſiderable part of the Roman army; their number, in the time of Auguſtus, was thirty-three; they were compoſed at that time wholly of Roman citizens. The ſtandard borne by the legions was various; at firſt, a wolf, in honour of that which ſuckled Romulus; afterwards a hog, by reaſon, ſays Feſtus, war is only undertaken with a view to peace, which was concluded by ſacrificing a hog; ſometimes they bore the minotaur, to remind their generals, that their deſigns were to be kept ſecret, and inacceſſible as the minotaur in the labyrinth; they alſo bore a horſe, a boar, &c. Pliny tells us, that Marius was the firſt who changed all theſe for the eagle, being a repreſentation of that bird in ſilver, holding ſometimes a thunderbolt in its claws. The Roman eagle ever after remained in uſe, though Trajan made uſe of the dragon.

The different legions were diſtinguiſhed, according to the order in which they were raiſed, into firſt, ſecond, and third, &c. by the names of the emperors who formed them, into legio Auguſta, Claudia, Flavia, Trajana, &c. by the provinces where they had ſerved, as legio Parthica, Macedonica, &c. and by ſome famous exploit or diſplay of valour.

The arms of the Roman troopers conſiſted of a helmet, an oblong ſhield, light boots, and a coat of mail. A javelin, and a long broad-ſword, were their principal weapons of offence. The uſe of lances and of iron maces they ſeem to have borrowed from the barbarians. Conſiderable levies were regularly made by the Romans among the provincials; and many dependent princes and communities, diſperſed round the frontiers, were permitted, for a while, to hold their freedom and ſecurity by the tenure of military ſervice. Even ſelect troops of hoſtile barbarians were compelled or perſuaded to conſume their valour in remote climates, and for the benefit of the ſtate. All theſe were included under the general name of *auxiliaries*; and their number was ſeldom inferior to that of the legions themſelves. In their march, the legionaries carried their arms, and alſo kitchen-furniture, inſtruments of fortification, and proviſion for many days. Thus laden, they advanced by a regular ſtep, to which they were trained, near twenty miles in about ſix hours. On the appearance

appearance of an enemy, they threw aſide their baggage; and by eaſy and rapid evolutions converted the column of march into an order of battle. The ſlingers and archers ſkirmiſhed in the front; the auxiliaries formed the firſt line, and were ſeconded or ſuſtained by the ſtrength of the legions; the cavalry covered the flanks, and the military engines were placed in the rear.

As to the number of the legions, we may compute, that the legion, which was itſelf a body of 6831 Romans, might, with its attendant auxiliaries, amount to about 12,500 men. The peace-eſtabliſhment of Adrian and his ſucceſſors was compoſed of no leſs than 30 of theſe formidable brigades; and moſt probably formed a ſtanding force of 375,000 men. Under Conſtantine and his ſucceſſors, the legions were very conſiderably reduced. When *ſeven* legions, with ſome auxiliaries, defended the city of Amida againſt the Perſians, the total garriſon, with the inhabitants of both ſexes and the peaſants of the deſerted country, did not exceed the number of 20,000 perſons. Hence we may infer, that the conſtitution of the legionary troops, to which they partly owed their valour and diſcipline, was diſſolved by Conſtantine; and that the bands of Roman infantry, which ſtill aſſumed the ſame names and the ſame honours, conſiſted only of 1000 or 1500 men. Nevertheleſs, the ſucceſſors of Conſtantine indulged their love of oſtentation, by iſſuing their orders to 132 legions, inſcribed on the muſter-roll of their numerous armies. Under them the complete force of the military eſtabliſhment was computed at 645,000 ſoldiers. *Gibbon.*

LEGION, *Theban*, is a name given by ſome authors to a legion of Roman ſoldiers, who, reſolving not to ſacrifice to idols, ſuffered martyrdom under the emperors Dioclesian and Maximilian, about the year of Chriſt 297. But the whole account of them ſeems to be fabulous.

LEGION, *Thundering*, or *Chriſtian*, a name given to a body of Chriſtian ſoldiers in the army of the Roman emperor Marcus Antoninus, who (it is ſaid) by their prayers drew from heaven a refreſhing ſhower upon the army of Marcus Antoninus, ready to periſh with thirſt, when that emperor was at war with the Marcomanni. This remarkable event (which gave to the Chriſtians, to whom it was attributed, the name of the *thundering legion*, on account of the thunder and lightning that deſtroyed the enemy, while the ſhower revived the fainting Romans) has been mentioned by many writers; but, whether it was really miraculous or not, has been much diſputed among learned men. Some think that the Chriſtians, by a pious fort of miſtake, attributed this unexpected and ſeaſonable ſhower, which ſaved the Roman army, to a miraculous interpoſition; and this opinion is, indeed, ſupported by the weightieſt reaſons, as well as by the moſt reſpectable authorities. Let us (ſays Moſheim) diſtinguiſh what is doubtful in this ſtory, from that which is certain. It is certain, that the Roman army, encloſed by the enemy, and reduced to the moſt deplorable, and even deſperate, condition, by the thirſt under which they languiſhed in a parched deſert, was revived by a ſudden and unexpected rain. It is alſo certain, that both the heathens and the Chriſtians looked upon this event as extraordinary and miraculous; the former attributing it to Jupiter, Mercury, or the power of magic; the latter to Chriſt, interpoſing thus unexpectedly, in conſequence of their prayers. It is ſtill further beyond all doubt, that a conſiderable number of Chriſtians ſerved, at this time, in the Roman army; and it is extremely probable, that, in ſuch trying circumſtances of calamity and diſtreſs, they implored the merciful interpoſition and ſuccour of their God and Saviour. And, as the Chriſtians of theſe times looked upon all extraordinary events as miracles, and aſcribed to their prayers all the uncommon and ſingular occurrences of an advantageous nature that happened to the Roman empire, it will not appear ſurpriſing, that, upon the preſent occaſion, they attributed the deliverance of Antoninus and his army to a miraculous interpoſition which they had obtained from above. But, on the other hand, it muſt be carefully obſerved, that it is an invariable maxim, univerſally adopted by the wiſe and judicious, that no events are to be eſteemed miraculous, which may be rationally attributed to natural cauſes, and accounted for by a recourſe to the ordinary diſpenſations of providence; and, as the unexpected ſhower, which reſtored the expiring force of the Romans, may be eaſily explained without riſing beyond the uſual and ordinary courſe of nature, the concluſion is manifeſt; nor can it be doubtful in what light we are to conſider that remarkable event. *Moſheim's Eccl. Hiſt.* cent. ii. ch. 1.

LE'GION OF HON'OUR. See the article KNIGHTHOOD, vol. xi. p. 823.

LE'GIONARY, *adj.* Relating to a legion. Containing a legion. Containing a great indefinite number.—Too many applying themſelves betwixt jeſt and earneſt, make up the *legionary* body of error. *Brown's Vulgar Errours.*

LEGISLA'TION, *ſ.* [from *legiſlator*, Lat.] The act of giving laws.—Pythagoras joined *legiſlation* to his philoſophy, and, like others, pretended to miracles and revelations from God, to give a more venerable ſanction to the laws he preſcribed. *Littleton.*

LEG'ISLATIVE, *adj.* Giving laws; lawgiving.—The poet is a kind of lawgiver, and thoſe qualities are proper to the *legiſlative* ſtyle. *Dryden.*

Their *legiſlative* frenzy they repent,
Enacting it ſhould make no precedent. *Denham.*

LEG'ISLATOR, *ſ.* A lawgiver; one who makes laws for any community.—It ſpoke like a *legiſlator*; the thing ſpoke was a law. *South.*

Heroes in animated marble frown,
And *legiſlators* ſeem to think in ſtone. *Pope.*

The principal ancient legiſlators are—Moſes, legiſlator of the Hebrews; Mercurius Triſmegiſtus, and Bocchyris, of the Egyptians; Italus, of the Œnotrians; Theſeus, Draco, and Solon, of the Athenians; Zoroaſter, of the Bactrians; Charondas, of the Cappadocians; and Charondas, or Phaleas, of the Carthaginians: Androdamas, of the Chalcidians; Eudoxus, of the Cnidians; Phido, of the Corinthians; Minos, of the Cretans; Pythagoras, of the Crotoniates, and moſt of the cities of the Græcia Major; Parmenides and Zeno, of Elea, in Lucania; Xamolxis, of the Getæ; Phoroneus of the Greeks; Bacchus, of the Indians; Saturn, of Italy; Macarius, of the Iſle of Leſbos; Zaleucus, of the Locrians; Nicodorus Athleta, of the city of Mutina; Hippodamia, of Miletus; Charondas, of Rheggio; Lycurgus of the Lacedæmonians; Archytas, of Tarentum; Philolaus, of the Thebans. At Rome the people were in a great meaſure their own legiſlators; though Solon may be ſaid, in ſome ſenſe, to have been their legiſlator, as the decemviri, who were created for the making of laws, borrowed a great number from thoſe of Solon. See the article LAW, p. 337–365.

LEGISLA'TORSHIP, *ſ.* Power of making laws.—There ought to be a difference made between coming out of pupilage, and leaping into *legiſlatorſhip*. *M. of Halifax.*

LEG'ISLATRESS, *ſ.* A female lawgiver.

LEG'ISLATURE, *ſ.* The power that makes laws.—Without the concurrent conſent of all three parts of the *legiſlature*, no law is, or can be, made. *Hale's Com. Law.*

LEGIT'IMACY, *ſ.* [from *legitimate*.] Lawfulneſs of birth.—In reſpect of his *legitimacy*, it will be good. *Ayliffe.*—Genuineneſs; not ſpurioſneſs.—The *legitimacy* or reality of theſe marine bodies vindicated, I now inquire by what means they were hurried out of the ocean. *Woodward.*

LEGIT'IMATE, *adj.* [from *legitimus*, Lat. *legitime*, Fr.] Born in marriage; lawfully begotten.—An adulterous perſon is tied to make proviſion for the children begotten in unlawful embraces, that they may do no injury to the *legitimate* by receiving a portion. *Taylor.*

Legitimate

Legitimate Edgar, I muſt have your land;
Our father's love is to the baſtard Edmund. *Shakeſpeare.*

To LEGIT'IMATE, *v. a.* To procure to any the rights of legitimate birth.—*Legitimate* him that was a baſtard. *Ayliffe.*—To make lawful.—It would be impoſſible for any enterpriſe to be lawful, if that which ſhould *legitimate* it is ſubſequent to it, and can have no influence to make it good or bad. *Decay of Piety.*

LEGIT'IMATELY, *adv.* Lawfully. Genuinely:

By degrees he roſe to Jove's imperial ſeat;
Thus difficulties prove a ſoul *legitimately* great. *Dryden.*

LEGIT'IMATING, *ſ.* The act of making legal, or of giving the right of lawful birth.

LEGITIMA'TION, *ſ.* Lawful birth.—From whence will ariſe many queſtions of *legitimation*, and what in nature is the difference betwixt a wife and a concubine. *Locke.*

I have diſclaim'd my land;
Legitimation, name, and all, is gone:
Then, good my mother, let me know my father. *Shakeſp.*

The act of inveſting with the privileges of lawful birth.

LEGIUNCA'RA, a town of Naples, in the province of Bari: twenty-one miles north-weſt of Matera.

LEGLANTI'ER, a town of France, in the department of the Oiſe: nine miles north of Clermont.

LEGNA'NO, a town of Italy, in the Veroneſe, on the Adige. This is a fortreſs regularly conſtructed, and provided with a draw-bridge. The eaſtern part is called *Porto*, and the weſtern *Legnano*. It has ſeveral monaſteries, and a play-houſe. This populous town carries on a conſiderable trade; and a corn-market is held every Saturday, ſuppoſed to be one of the moſt important in Italy; for of the ſole article of rice as much is often ſold in one week as amounts to 50,000 ducats. In order to render the commerce with the neighbouring places ſtill more advantageous, a canal, which runs from Legnago to Oſtiglia in the territory of Mantua, was formed in 1762, by means of the Tartaro, between the Adige and the Po; and, for the better ſecurity of the navigation, ſluices have been conſtructed at both of its ends. In the year 1799, the French became maſters of it. It is twenty-two miles eaſt-ſouth-eaſt of Verona, and twenty-eight north-north-weſt of Ferrara. Lat. 44. 50. N. lon. 11. 18. E.

LEGNO'TIS, *ſ.* [from λεγνωτος, Gr. fringed; the petals being fringed.] In botany, a genus of the claſs polyandria, order monogynia. The generic characters are —Calyx: perianthium one-leafed, bell-ſhaped, half four or five cleft, permanent; diviſions ovate, acute, upright. Corolla: petals four or five, longer than the calyx; claws ſlender, almoſt the length of the calyx, inſerted into the receptacle; borders ovate, fringed with a great many villoſe diviſions. Stamina: filaments ſixteen, twenty, or more, as far as fifty, filiform, equal, length of the calyx, inſerted into the receptacle; antheræ oblong, upright. Piſtillum: germ roundiſh; ſtyle cylindric, length of the ſtamens; ſtigma headed. Pericarpium: capſule large, three-cornered, three-celled, three-valved, elaſtic. Seed: ſolitary, on one ſide convex, on the other cornered. The number of parts of the fruit is ſometimes increaſed by a fourth.— *Eſſential Character.* Calyx five-cleft; petals five, jagged, inſerted into the receptacle, capſules three-celled.

Species. 1. Legnotis elliptica, or elliptic legnotis: leaves elliptic; flowers pedicelled. Native of Jamaica.

2. Legnotis Caſſipourea, or Guiana legnotis: leaves ovate; flowers ſeſſile. This is a middle-ſized tree; the trunk five feet or more in height, with a grey bark; the wood is white. It has many branches at top, putting forth oppoſite ſhoots, on which are oppoſite almoſt-ſeſſile leaves, joined at the baſe by a very ſhort acute ſtipule. The leaves are entire, ſhining, pointed. Flowers axillary, ſeveral together, enveloped in two ſmall bractes. Calyx hard, coriaceous. Petals white. Native of Guiana, where it flowers in January.

LEGRAD', a town of Croatia, at the union of the Muner and the Drave: fifteen miles eaſt of Varaſdin. Lat. 46. 30. N. lon. 16. 54. E.

LEGREN'ZI (Giovanni), an able maſter and fertile Italian compoſer of the ſeventeenth century. He was a native of Bergamo; and produced for the different theatres of Venice fifteen operas between the years 1664 and 1684. He was likewiſe a favourite compoſer of cantatas, of which he publiſhed at Venice two books; one of ten, in 1674; and a ſecond book containing fourteen, in 1679. During his youth he was ſome time organiſt of Santa Maria Maggiore, in his native city of Bergamo; then maeſtro di cappella of the church Dello Spirito Santo, in Ferrara; and laſtly of St. Mark's at Venice, and maſter of the Conſervatorio de Mendicanti. He was the maſter likewiſe of the two great muſicians, Lotti and Franceſco Gaſparini, both of whom are ſaid to have reſided in his houſe at Venice in the year 1684, in order to receive his inſtructions. He was alſo an inſtrumental compoſer; and, among the moſt early trios for two violins and a baſe, may be numbered, Suonate per Chieſa, by Legrenzi, publiſhed at Venice, 1655; Suonate da Chieſa e Camera, 1656; Una muta di Suonate, 1664; and Suonate a due Violini e Violone, 1677. Though Legrenzi has introduced into theſe pieces ſome of the beſt melody of the times, and there is conſiderable merit in the texture and contrivance of the parts, yet, for want of the knowledge of the bow, and the particular energies and expreſſions of the violin, theſe compoſitions have been long ſince juſtly ſuperſeded and effaced by ſuperior productions of the ſame kind.

LEGRU'ITA, *ſ.* in old records, a fine for criminal converſation with a woman. *Aſh.*

LEGUEVIN', a town of France, in the department of the Upper Garonne: nine miles weſt of Toulouſe.

LEGUI'GNO, a town of the duchy of Parma: eighteen miles ſouth-ſouth-eaſt of Parma.

LEG'UME, or LEG'UMEN, *ſ.* [*legume*, Fr. *legumen*, Lat.] Seeds not reaped, but gathered by the hand; as, beans: in general, all larger ſeeds; pulſe.—Some *legumens*, as peaſe or beans, if newly gathered and diſtilled in a retort, will afford an acid ſpirit. *Boyle.*—In the ſpring fell great rains, upon which enſued a moſt deſtructive mildew upon the corn and *legumes*. *Arbuthnot.*—In botany, a membranous or coriaceous pod, or ſeed-veſſel, opening longitudinally; generally oblong, and having the ſeeds fixed to one valve only.

LEGU'MINOUS, *adj.* Belonging to pulſe; conſiſting of pulſe.—The propereſt food of the vegetable kingdom is taken from the farinaceous ſeeds; as oats, barley, and wheat: or of ſome of the ſiliquoſe or *leguminous*; as peaſe or beans. *Arbuthnot.*

LEGUMINO'SÆ, *ſ.* A natural order of plants in Juſſieu's ſyſtem, the 11th of his 14th claſs; which embraces the Linnæan *Papilionaceæ* and *Lomentaceæ*.

LEH'DEN, a town of Germany, in the county of Tecklenburg: two miles eaſt of Tecklenburg.

LE'HE, a town of the duchy of Bremen: twenty-nine miles eaſt of Stade, and thirty-two north of Bremen.

LE'HEIM, a town of Heſſe Darmſtadt: eight miles weſt of Darmſtadt, and five eaſt of Oppenheim.

LE'HENHOFFEN, a town of the duchy of Stiria: ſix miles weſt-north-weſt of Hardeburg.

LE'HI, [Heb. a jaw-bone.] A city of Paleſtine, in the tribe of Dan, near Eltak or Eltaka. This was a ſacerdotal city, given to the ſons of Kohath. Here Samſon ſlew a thouſand Philiſtines with the jaw-bone of an aſs.

LEHI'GH, a river of Pennſylvania, which runs into the Delaware at Eaſton.

LEHMKU'HLEN, a town of the duchy of Holſtein: eight miles ſouth-weſt of Lutkenborg.

LEHN'BERG, a town of Germany, in the principality of Naſſau Weilburg: three miles north of Weilburg.

LE'HNE, a river which riſes about three miles ſouth of Winterburg, in Weſtphalia, paſſes by Schmalenberg, Bilſtein, Werdohl, Altenau, &c. and runs into the Roer two miles below Schwiert.

LEHOTH'WAN, a town of Bohemia, in the circle of Leitmeritz: four miles north-weſt of Leitmeritz.

LE'HRE, a river which riſes in the principality of Verden, and runs into the Aller ſix miles above the town of Verden.

LE'HRBERG, a town of Germany, in the margravate of Anſpach, on the Unter Retzat: five miles north-weſt of Anſpach.

LE'HSO, a town of Arabia Deſerta: 140 miles ſouth of Cathem.

LEHS'TEN, or LEHESTEN, a town of Saxony, in the principality of Altenburg, celebrated for quarries of ſlate: forty-five miles ſouth-ſouth-weſt of Altenburg, and ſeventeen north-eaſt of Coburg. Lat. 50. 25. N. lon. 11. 35. E.

LEHTIMA'KI, a town of Sweden, in the government of Waſa: ſixty-five miles eaſt-ſouth-eaſt of Waſa.

LEIBAU'. See LIEBAU.

LEI'BEN, a town of Auſtria: ten miles weſt-north-weſt of Crems.—Another, fourteen miles ſouth-weſt of Crems.

LEIBLIN'GEN, or LYPTINGEN, a town of Germany, in the lordſhip of Nellenburg, whence the French were driven by the Auſtrians in March 1799: ſix miles eaſt of Tuttlingen.

LEIB'NITZ (Godfrey William de), an eminent German mathematician and philoſopher, was born at Leipſic in the year 1646. When he was only ſix years of age, he had the misfortune to loſe his father, who was profeſſor of moral philoſophy, and ſecretary, to the univerſity of that city; after which his mother placed him under the care of able maſters, who were ſoon gratified by obſerving the rapid progreſs which he made in learning. Beſides profiting by their inſtructions, when he was ſufficiently maſter of the Latin and Greek languages, he availed himſelf of the advantage of a large and well-choſen library which his father had left him; and read all the books which it contained in regular order; as the poets, orators, hiſtorians, civilians, philoſophers, mathematicians, and divines. This courſe of reading, to which he applied with the greateſt aſſiduity, and with a very tenacious memory, was the means of introducing him to a conſiderable acquaintance with the different branches of ſcience and literature. He knew many of the principal poets by heart; and even in his old age could repeat Virgil almoſt word for word. He had himſelf a talent for verſifying, and is ſaid to have compoſed, in one day, a poem of three hundred Latin verſes, without any eliſion. By the attention which he thus early paid to claſſical and polite learning, he laid the foundation of that correct and elegant taſte which appears in all his writings.

When he was fifteen years of age, Leibnitz became a ſtudent in the univerſity of Leipſic, where he proſecuted with unuſual ſucceſs the various ſtudies of law, medicine, philoſophy, and theology, and made himſelf well acquainted with many eminent writers in each. In the univerſity of Jena, where he finiſhed his academical ſtudies, the principal objects of his attention were hiſtory, law, and mathematics. Upon his return to Leipſic in 1663, he maintained a theſis "De principiis individuationis;" and in the following year he was admitted to the degree of M.A. At this time he continued to ſtudy philoſophy, particularly in the writings of Plato and Ariſtotle, whom he endeavoured to reconcile; as he afterwards attempted to reconcile Ariſtotle with Des Cartes. On theſe ſtudies he was ſo intent, that he ſpent whole days in meditation, in a foreſt near Leipſic. He principally devoted himſelf, however, to the ſtudy of law; in which faculty he was admitted bachelor in 1665. During the following year he ſupplicated for his degree of doctor; but was refuſed, under the pretence that he was too young, being then but twenty years of age. But it was ſurmiſed, that the real cauſe of this refuſal was, his having rejected the principles of Ariſtotle and the ſchoolmen. Reſenting this affront, he went to Altdorf, where he maintained a theſis "De caſibus perplexis;" and, in the public diſputations on this occaſion, diſplayed ſuch uncommon abilities, that he had the degree of doctor conferred on him, and was even offered a profeſſorſhip extraordinary in law, which he declined. In the ſame year, he publiſhed his *Ars Combinatoria*; a work intended to ſhow in what manner univerſal arithmetic may be applied to the elucidation of other ſciences. This was accompanied with A mathematical Demonſtration of the Exiſtence of God. Though this early production was not entirely approved by his own mature judgment, it bore evident marks of an inventive genius.

From Altdorf, Leibnitz went to Nuremberg, to viſit the learned men in that univerſity; and, ſoon after, the baron de Boinebourg, firſt miniſter of the elector of Mentz, paſſing through that place, and meeting with Leibnitz at an entertainment, conceived ſo high an opinion of his abilities and learning, that he adviſed him to apply himſelf particularly to the ſtudy of law and hiſtory; and gave him the ſtrongeſt aſſurances, that he would engage the elector, John Philip de Schonborn, to invite him to his court. Upon this, Leibnitz removed to Frankfort on the Maine, in the neighbourhood of Mentz; and, as a proof of the attention which he had paid to the ſtudy of juriſprudence, in the year 1668 he publiſhed his *Nova Methodus Docendæ Diſcendæque Juriſprudentiæ*; which gained him great applauſe. In the ſame year he wrote a treatiſe, to induce the Poles to chooſe the elector palatine their king; which ſo highly pleaſed the elector, that he invited the author to his court. This invitation he was prevented from accepting by the baron Boinebourg, who obtained for him the office of counſellor of the chamber of review in the chancery of Mentz. Still, however, Leibnitz perſiſted in his philoſophical inquiries; and in the year 1670, he reprinted, with a preface and notes, the treatiſe of Marius Nizolius de Berſello, "De veris Principiis, et vera Ratione Philoſophandi, contra Pſeudo-philoſophos:" to which he ſubjoined a letter, "De Ariſtotele recentioribus reconciliabili."

Finding now that it was in vain to collect any conſiſtent ſyſtem from former philoſophers, he determined to exerciſe his own invention in framing a new hypotheſis. This firſt effort of his philoſophical genius produced a work in 1671, entitled, *Theoria Motus Concreti*, inſcribed to the Royal Society in London; the principles of which were further explained in another work, entitled, *Theoria Motus Abſtracti*, dedicated to the French Academy of Sciences. The ſolution of the phenomena of nature, propoſed in theſe treatiſes, the author afterwards abandoned for his doctrine of monads. In the year 1672, Leibnitz went to Paris, to manage ſome affairs at the French court for baron Boinebourg. Here he became acquainted with the greateſt part of the eminent literati in that metropolis, and made further and conſiderable progreſs in the ſtudy of mathematics and philoſophy; which he owed chiefly, as he ſays, to the works of Paſcal, Gregory St. Vincent, and Huygens. While he was thus engaged, having obſerved the imperfection of Paſcal's arithmetical machine, he invented a new one, which met with the approbation of the miniſter Colbert, and the Academy of Sciences. In this body he was offered a ſeat, with a penſion, and had the proſpect of many other advantages if he would ſettle at Paris; but, as it was neceſſary that for this purpoſe he ſhould embrace the catholic religion, his firſt attachment to proteſtantiſm induced him to decline the propoſal.

In 1673, upon the death of baron Boinebourg, he took a tour to England, where he became acquainted with Mr. Oldenburg, the ſecretary, and Mr. John Collins, a diſtinguiſhed member, of the Royal Society; from whom it ſeems he received ſome hints of the method of *fluxions*, which had been invented, in 1664 or 1665, by the then Mr. Iſaac Newton. Theſe hints appear to have led Leibnitz to the invention of the *calculus differentialis*, which is the ſame method of analyſis with *fluxions*, though under a different name. The claim of theſe two great men to the

discovery of this invention was afterwards the subject of dispute for several years; and though, according to the opinion of some, there are strong presumptions in favour of Leibnitz, that he was no plagiary, yet the glory of Newton as the first inventor, may be said to have been established by it, beyond all question. See the article FLUXIONS, vol. vii. p. 475. and KEILL, vol. xi. p. 652.

While Leibnitz was in England, he received information of the death of his patron, the elector of Mentz, by which he lost his pension. Upon this he returned to France; whence he wrote to Frederic duke of Brunswick-Lunenburg, informing him of his circumstances. That prince returned him a very gracious answer; and, as a pledge of his future favour, appointed him a member of his aulic council, with a regular salary; but he permitted him to continue at Paris till his arithmetical machine should be completed. In the year 1676, after another visit to his mathematical friends in England, he passed through Holland to Hanover, where he settled, and took his place at the council-board. In this situation, together with his civil labours, he diligently employed himself in promoting the interests of learning and knowledge, as well as in the pursuit of his philosophical lucubrations. In the year 1677, he brought to light some discoveries which he had made in mechanics and chemistry; and wrote his *Notitia Opticæ promotæ*, describing a new method of polishing optical glasses, in a letter to Spinoza, who was an excellent optician. Several other memoirs of experiments and observations made by him, are preserved in the Acta Eruditorum of Leipsic; a work in which, from the year 1683, he had a considerable share. One of the most valuable pieces preserved in this periodical work, is his Thoughts on Knowledge, Truth, and Ideas.

In 1679, after the death of the duke of Brunswick-Lunenburg, his successor Ernest-Augustus, the bishop of Osnaburg, showed our author the same favour which his predecessor had done, and engaged him to write the history of the house of Brunswick. This work Leibnitz undertook, and employed himself, during several years, in travelling over Germany and Italy to collect materials; availing himself, at the same time, of the opportunities which these journeys afforded him, for enlarging his knowledge of nature and the arts. While he was in Italy, he met with an adventure, in which he was indebted for his life to his admirable presence of mind. Passing in a small bark from Venice to Mesola, a storm arose; during which the pilot, imagining that he was not understood by a German, whom, being a heretic, he looked on as the cause of the tempest, proposed to strip him of his clothes and money, and throw him overboard. Leibnitz, hearing this, without discovering the least emotion, drew a set of beads from his pocket, and began turning them over with great seeming devoutness. The artifice succeeded; one of the sailors observing to the pilot, that, since the man was no heretic, he ought not to be drowned.

Leibnitz returned to Hanover in 1690, where he pursued with indefatigable industry several objects of entirely-different kinds. He engaged further in mathematical and philosophical researches; he maintained a theological dispute with Pelisson, in which he appeared the able advocate for toleration; and, in 1693, he published an important and curious work on the law of nations, entitled, *Codex Juris Gentium Diplomaticus, &c.* folio. No sooner was this elaborate work finished, than he applied his thoughts to the great design of renovating the science of metaphysics, and, particularly, of correcting and improving the philosophical notion of substance, as the means of arriving, in the most simple way, at the knowledge of nature. With this view he wrote his treatise, *De ipsa Natura, sive Vi insita.* He moreover conceived the idea of a new science of forces, in which the laws of mechanics, and the measure of living forces, might be clearly defined. Of this science, which he called Dynamics, he inserted a specimen in the Acta Eruditorum. In the year 1695, he published, in the Parisian Journal, a specimen of the new system of the nature and communication of substances, and of the union between body and mind; in which he unfolded his notion of a *pre-established harmony* between the body and soul of man, which afterwards so much engaged the attention of philosophers. About the same time he wrote his Thoughts on Locke's Essay on the human Understanding, in which he controverts that philosopher's opinions on innate ideas, substance, a vacuum, and other subjects; communicated to the world his ingenious mathematical invention of the arithmetical binary; and wrote a reply to Bayle, in defence of his doctrine of pre-established harmony. In 1698, Leibnitz published "Accessiones Historicæ, quibus utilia superiorum Temporum illustrandis Scripta Monumentaque nondum hactenus edita, inque iis Scriptores diu desiderati continentur," in 2 vols. 4to. and, in 1700, a supplement to his valuable treatise on the law of nations, entitled, "Mantissa Codicis Juris Gentium Diplomatici," in folio. In the year last mentioned, he was admitted a member of the Royal Academy of Sciences at Paris; and, under the auspices of the elector of Brandenburg, afterwards king of Prussia, completed the establishment of an Academy of Sciences at Berlin. Of this institution he was appointed perpetual president; and, though his other engagements did not admit of his constant residence there, he enriched the memoirs of the academy with many valuable scientific and literary communications. A similar institution was attempted to be introduced by him at Dresden, and the plan of it received the approbation of the king of Poland; but the troubles which soon afterwards broke out in that kingdom, prevented it from being carried into execution. Leibnitz likewise employed himself for a long time on the invention of an universal language; but did not live to complete his design. In the year 1707, he presented to the public the first volume of his collections for a history of the house of Brunswick, entitled, *Scriptores Rerum Brunswicensium Illustrationi inservientes, &c.* folio; of which work a second volume appeared in 1710, and a third in 1711.

While our author was occupied on the various subjects which we have seen, he found leisure to complete and publish a work, in which he explained, more fully than he had before done, the principles of his new system. It was entitled, *Theodicæa*, or a Dissertation on the Goodness of God, the Liberty of Man, and the Origin of Evil; in 2 vols. 8vo. 1710. In the same year he sent into the world the first volume of the Memoirs of the Royal Academy of Sciences at Berlin, which derived a greater value from his various communications in the departments of history, antiquities, etymology, natural philosophy, mathematics, &c. Leibnitz's writings had now for a long time rendered his name famous in every part of Europe; and he had honours and rewards bestowed upon him by other princes besides the electors of Hanover and Brandenburg. In the year 1711, he was made aulic counsellor to the emperor; and the czar Peter the Great appointed him his privy-counsellor of justice, with a pension of a thousand ducats. He also undertook to establish an academy of sciences at Vienna; but was prevented from completing that project, according to some writers, by the breaking out of the plague. But, whatever might be the cause of his miscarriage in this instance, the emperor rewarded him for his exertions with a pension of two thousand florins; and afterwards gave him a promise of doubling that pension, upon the condition of his coming to reside at Vienna; which invitation he was inclined to accept, had he not been prevented by death. In the mean time, upon his return to Hanover in 1714, he found that the elector, who was then raised to the throne of Great Britain, had appointed Mr. Echard his colleague in writing the history of the house of Brunswick; the prosecution of which had been considerably interrupted by his other studies and engagements. About the close of the year, Leibnitz passed over to England, where he received new marks of favour and friendship from his Britannic majesty, and frequently made his appearance at court. During this visit,

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at the inſtance of the princeſs of Wales, afterwards queen Caroline, he was engaged in a diſpute with the celebrated Dr. Samuel Clarke, upon the ſubject of free will, the reality of ſpace, and other philoſophical topics; which was carried on by letters which paſſed through her royal highneſs's hands, and was conducted with great learning and candour on both ſides. This controverſy was continued after Leibnitz's return to Hanover, and terminated only with his death; which took place in November 1716, in conſequence of a violent attack of the gout, and the ſtone, when he was in the 70th year of his age.

Beſides the pieces enumerated in the preceding biographical ſketch, Leibnitz was the author of numerous other works, on various ſubjects, ſome of which were publiſhed ſeparately, and others in the memoirs of different learned ſocieties. M. G. Hanſcius collected, with great care, every thing that Leibnitz had ſaid, in different paſſages of his works, on the ſubject of philoſophy; and formed of them a complete ſyſtem, under the title of "G. G. Leibnitzii Principia Philoſophiæ, More Geometrico demonſtrata," &c. 4to. 1728; and in 1734 and 1735 there was publiſhed a collection of his letters, entitled "Epiſtolæ ad diverſos Theologici, Juridici, Medici, Philoſophici, Mathematici, Hiſtorici, et Philologici Argumenti M.S.S. Auctores; cum Annotationibus ſuis, primùm divulgavit Chriſtian Cortholtus." But all his works were collected, diſtributed into claſſes by M. Dutens, and publiſhed at Geneva in ſix large volumes 4to. in 1768, entitled, *Gothofredi Guillelmi Leibnitii Opera omnia*, &c.

Leibnitz was in perſon of a middle ſtature, and of a thin habit of body. He had a ſtudious air, and a pleaſing aſpect, though near-ſighted. He was temperate in eating and drinking, and lived on plain food, which he took at no regular hours, but only when hunger prompted him. His temper was naturally quick and warm; but he had acquired, by degrees, a philoſophic command of it. In converſation he was affable and polite, and greatly averſe to diſputes. He was thought to love money, and amaſſed ſeveral thouſand pounds; yet he certainly was not a man of the world in the management of his property; for only a ſmall part of it was put out at intereſt, and the remainder was found lying uſeleſs in his apartments, after his death. He was never married; and paid his addreſſes to a lady only once, when he was about fifty years of age; and, as ſhe did not immediately accept his offer, but took time to conſider of it, he alſo took the ſame opportunity to reconſider the matter, and troubled her with no further ſolicitation. He was accuſtomed to ſay, "that marriage was a good thing; but that a wiſe man ought to conſider of it all his life." He always profeſſed the Lutheran religion; and, as we have ſeen, made ſome ſacrifices in early life rather than renounce it; but he ſeldom or never attended on public worſhip; and when, in his laſt illneſs, a favourite ſervant propoſed to ſend for a miniſter, he would not permit it, ſaying that he had no occaſion for one. His intellectual abilities and attainments entitle him to be ranked among thoſe univerſal geniuſes, who at once ſurpriſe and benefit the world. With wonderful ſtrength of underſtanding, an excellent faculty of invention, and a moſt capacious and retentive memory, he united an uncommon degree of induſtry. He frequently ſpent a great part of the night, as well as the day, in reading; and has been known to paſs whole months in his ſtudy. Hence he was enabled, not only to acquire much general knowledge, but to become eminent in attainments of various kinds. The following animated and juſt character of him is given in Miéville's Tombeaux du 18me Siècle:

"Approach this tomb, and behold the man whom it contains. Obſerve the works depoſited with him; his writings on theology and metaphyſics; his letters on toleration; his profound reſearches on international law; the maſs of his phyſical and mathematical ſolutions; and a variety of other intricate diſquiſitions which combined to give him the character of the moſt general ſcholar of his age. He was ſo fortunate as to receive the moſt flattering diſtinctions, the moſt magnificent recompences, and the eſteem of almoſt every ſovereign in Europe. The princes of the houſe of Brunſwick employed him to write the hiſtory of their family; the elector of Mentz admitted him into the liſt of his counſellors; the elector of Brandenburgh placed him at the head of his academy; the emperor of Germany granted him a penſion and a title; and he had the honour of ſharing the invention of the differential calculus with the immortal Newton. An hiſtorian, a civilian, a metaphyſician, a mathematician, and a poet, Leibnitz may be ſaid to have embraced every thing. The treaſures of ancient learning were his, and he had the ambition to attempt a knowledge of the moſt abſtruſe ſubjects. He was thus led into bold ſpeculations, from the purſuit of which he was ſometimes recalled by the admonitory leſſons of hiſtory; while at other times he ventured beyond his powers, and allowed the guiding thread to eſcape from his hold, but proceeded unconſcious of his loſs, and bewildered himſelf in the illuſions of ſyſtem. He then no longer argued; an ardent imagination created for him an aſſemblage of fantaſtic beings; dazzling hypotheſes deceived his reaſon; and, when he hoped to have ſucceeded in laying open one labrynth, he little perceived that he was entangled in another." In the Antiquities of the houſe of Brunſwick, (Gibbon's Miſcellaneous Works, vol. ii. p. 638.) a character is drawn of Leibnitz, which is not indeed a model of encomiaſtic criticiſm, yet its concluſion is ſpirited and juſt: "The example of Leibnitz may diſplay the extent and powers of the human underſtanding; but even his powers were diſſipated by the multiplicity of his purſuits. He attempted more than he could finiſh, he deſigned more than he could execute; his imagination was too eaſily ſatisfied with a bold and rapid glance on the ſubject he was impatient to leave; and Leibnitz may be compared to thoſe heroes, whoſe empire has been loſt in the ambition of univerſal conqueſt."

The *Philoſophy of Leibnitz* is a ſyſtem formed, partly in emendation of the Carteſian, and partly in oppoſition to the Newtonian. In this ſyſtem, the author retained the Carteſian ſubtile matter, with the vortices and univerſal plenum; and he repreſented the univerſe as a machine that ſhould proceed for ever, by the laws of mechaniſm, in the moſt perfect ſtate, by an abſolute and inviolable neceſſity. After Newton's Philoſophy was publiſhed, in 1687, he printed an eſſay on the celeſtial motions, in the Acta Erud. for 1689, in which he admits of the circulation of the ether with Des Cartes, and of gravity with Newton; but he never explained how theſe principles could be reconciled, and adjuſted together, ſo as to account for the planetary revolutions in their reſpective orbits. His ſyſtem is alſo defective, as it does not reconcile the circulation of the ether with the free motions of the comets in all directions, or with the obliquity of the planes of the planetary orbits; nor reſolve other objections to which the hypotheſis of the vortices and plenum is liable. Soon after the period above-mentioned, the diſpute commenced concerning the invention of the calculus of infiniteſimals, or the method of fluxions, which led Leibnitz to take a very decided part in oppoſition to the philoſophy of Newton. From the wiſdom and goodneſs of the Deity, and his principle of a *ſufficient reaſon*, he concluded the univerſe to be a perfect work, or the beſt that could poſſibly have been made; and that other things, which are evil or incommodious, were permitted as neceſſary conſequences of what was beſt; that the material ſyſtem, conſidered as a perfect machine, can never fall into diſorder, or require to be ſet right; and that to ſuppoſe that God interpoſes in it, is to leſſen the ſkill of the author, and the perfection of his work. He expreſsly charged an impious tendency on the philoſophy of Newton, becauſe he aſſerts, that the fabric of the univerſe and the courſe of nature could not continue for ever in its preſent ſtate, but in proceſs of time would require to be re-eſtabliſhed or renewed by the ſame hand that formed it.

it. The hypotheſis of the perfection of the univerſe, in conſequence of which it is capable of continuing for ever by mechanical laws in its preſent ſtate, led Leibnitz to diſtinguiſh between the quantity of motion and the force of bodies; and, while he owns, in oppoſition to Des Cartes, that the former varies, to maintain that the quantity of force is for ever the ſame in the univerſe; and to meaſure the force of bodies by the ſquare of their velocities. He propoſes two principles as the foundation of all our knowledge: The firſt, That it is impoſſible for a thing to be and not to be at the ſame time; which, he ſays, is the foundation of ſpeculative truth. The other is, That nothing is without a *ſufficient reaſon* why it ſhould be ſo rather than otherwiſe; and by this principle, according to him, we make a tranſition from abſtracted truths to natural philoſophy. Hence he concludes, that the mind is naturally determined, in its volitions or elections, by the greateſt apparent good; and that it is impoſſible to make a choice between things perfectly like, which he calls *indiſcernibles*; whence he infers, that two things perfectly like could not have been produced, even by the Deity. For this reaſon, and other metaphyſical conſiderations, he rejects a *vacuum*, the parts of which muſt be ſuppoſed perfectly like to each other. For the ſame reaſon he alſo rejects atoms, and all ſimilar particles of matter; to each of which, though diviſible *in infinitum*, he aſcribes a *monad*, or active kind of principle, endued with perception and appetite. The eſſence of ſubſtance he places in action or activity; or, as he expreſſes it, in ſomething that is between acting and the faculty of acting. He affirms that abſolute reſt is impoſſible; and holds motion, or a ſort of *niſus*, to be eſſential to all material ſubſtances. Each *monad* he deſcribes as repreſentative of the whole univerſe from its point of ſight; and, after all, in one of his letters tells us, that matter is not a ſubſtance, but a *ſubſtantiatum*, or *phénomène bien fondé*.

The power of mechaniſm was never more magnified than by Leibnitz's famous doctrine of a *pre-eſtabliſhed harmony*, as he calls it. According to Des Cartes, the brutes were mere machines; and this doctrine, to many, appeared incredible. But this is nothing in compariſon to what Leibnitz would have us believe, when he tells us that the ſoul does not act on the body, nor the body on the ſoul; that both proceed by neceſſary laws, the ſoul in its perceptions and volitions, and the body in its motions, without affecting each other; but that each is to be conſidered as a ſeparate independent machine. The volitions of the mind are followed inſtantly by the deſired motions of the body, not in conſequence of thoſe volitions in the leaſt, but of the nice and well-adjuſted machinery of the body. The impreſſions produced in the ſenſory have no effect on the mind; but the correſponding idea ariſes, at that preciſe time, in conſequence of a chain of cauſes of a different kind. Thus *all that men do or ſay is no more than the effect of exquiſite machinery*, according to his philoſophy.

LEIB'NITZ, a town of Saxony, in the margravate of Meiſſen: four miles ſouth of Dreſden.

LEIB'NITZ, a town of the duchy of Stiria, on the Sulm, the uſual reſidence of the biſhop of Seckau: ſixteen miles ſouth of Gratz.

LEICES'TER, the county-town of Leiceſterſhire. This place makes an evident ſhow of conſiderable antiquity. It has been ſaid that Leiceſter was built two thouſand five hundred years ago; or, 884 B. C. King Lear built Caire Lear, now called Leiceſter; he had three daughters, Goneral, Regale, and Cordelle, which Cordelle ſucceeded him in his kingdom when he had reigned forty years. Much credit is not however to be given to accounts of that diſtant period. King Lear has the reputation of building the great temple of Janus, which ſtood near the banks of the river Leir, now Soar, and wherein, it is ſaid, he was buried. That a great temple, or heathen edifice, ſtood near the ſcite of St. Nicholas church, is probable, foundations of ſtrong and amazingly-thick walls having been frequently diſcovered leading from that church nearly to the banks of the river. It is agreed by all writers, that Leiceſter was built long before the time of the Romans; indeed the variation of its name demonſtrates that it has paſſed through a long ſucceſſion of time; its firſt name was Caer Leir, or Lerion, afterwards Lege Ceſtria, Leogora, Legeoceſter, in the Saxon annals Legerceaſter, and, with ſome other little variations, now Leiceſter. Concerning the antiquity of Leiceſter; many writers ſtate, that there were anciently in Britain twenty-eight flamens, and three archflamens, placed in twenty-eight cities; that theſe, upon the converſion of the Britons to Chriſtianity, about the year 180 after the birth of Chriſt, were made biſhops' ſees. Ninnius, the monk of Bangor, who lived about the year of Chriſt 620, gave a particular account of theſe cities, one of which was Cair Lerion, ſignifying the City of King Leir, now Leiceſter. It flouriſhed long in the time of the ancient Britons; and afterwards was a place of conſequence in the time of the Romans, according to Camden, by the name of *Ratæ*. In ſupport of his opinion, the ſtone found near Thurmaſton turnpike is mentioned: this ſtone was found in the year 1771, near the old foſs-road, by workmen digging for gravel; it ſerved as a baſe to a large milliare; its height three feet ſix inches, and in circumference five feet ſeven inches; the inſcription is reckoned the moſt ancient in Britain. The foſs or Roman road, which paſſes through the town of Leiceſter, is another work of great antiquity; its remains are viſible in many parts of Leiceſterſhire; it interſected the Watling-ſtreet Roman road at High-croſs in this county, and took its courſe thence in a right line, between the villages of Sharnford and Froleſworth, and ſo on towards Narborough, leaving that village a little on the left; it then, taking nearly a middle courſe between Ailſtone and Braunſtone, paſſes by the upper end of the paddock of Weſtcoats, and the garden of Danet's Hall, to Ratæ, from or by Leiceſter, through Thurmaſtone, near Syſton and Ratcliff-on-the Wreek, leaving both the latter on the right, to Seg's Hill, for Newark in Nottinghamſhire. Roman pavements are found in Leiceſter at various diſtances from the ſurface of the earth: the moſt curious of them is that called Diana and Actæon, preſerved in a cellar near the town-gaol. Roman coins which have been found in Leiceſter alſo prove its antiquity; they are innumerable; the greateſt diſcoveries of them were in the year 1718, near the north gate; about ſix feet under ground, there was found an earthen jug, which held about three pints, full of them: they were of a ſort of copper, moſt of them about the ſize of a ſilver twopence, and ſome about the ſize of a copper halfpenny; among them were obſerved the coins of Titus, Trajan, Diocleſian, Conſtantine the Great, Conſtantine jun. Conſtantius, Valentinian, Theodoſius, Gratian, Arcadius, and Honorius. A fine gold Roman coin has lately been found in Northgate-ſtreet, among the ruins of an old building. It is in the higheſt ſtate of preſervation, and weighs four dwts. twelve grains. Round the head is IMP. CÆS. TER. TRAIANO OPTIMO. AUG. GER. DAC. On the reverſe, P. M. TR. COS. VI, P. P. SPOR. which is underſtood to be "*Pontifex Maximus tribunicia poteſtate conſul ſext. pater patriæ Senatus Populuſque Romanus.*" Roman pottery has alſo at various times been found on the weſt ſide of the town. In 1783, as ſome men were digging for gravel in a farm-yard in Humberſtone-gate, they diſcovered, about four feet below the ſurface of the earth, a ſtrong leaden coffin, on which had been placed a baſon, and ſix urns round it. The lead of the coffin was uncommonly thick, it weighed five cwt. over which, to ſupport the lid, were placed ſtrong iron bars, ſome of which were eaten through.

The hiſtory of Leiceſter, during the Saxon heptarchy, is very vague and uncertain, though, from the concurrent teſtimony of all writers, it was certainly a place of conſiderable note from the departure of the Romans to the time of the Norman conqueſt. According to Godwin, a biſhop's ſee was transferred from Sidnaceſter to Leiceſter

in the year 737. At this period the Saxon kingdom of Mercia had, according to ſome authors, three epiſcopal ſees: Lichfield, Dorcheſter, and Leiceſter. From the Saxon annals it appears, that Ethelfrid king of Northumberland, being an avowed enemy to Chriſtianity, marched an army to Leiceſter, where he made a great ſlaughter of the inhabitants. Jowallenſis relates, that Ethelred king of Mercia, and his queen Elfreda, who was daughter of Alfred the Great, repaired the town about the year 901, and rebuilt and enlarged the walls, which were now made to incloſe the caſtle; previous to that period the caſtle appears to have been on the outſide of the town. On the conqueſt of England by William the Norman, Leiceſter ſoon became part of the royal demeſne; and a caſtle was either newly erected or enlarged and ſtrengthened, to enſure the ſubmiſſion of the inhabitants, and thoſe of the ſurrounding country. On the death of the conqueror, Leiceſter citadel, being held by the adherents of duke Robert, was nearly demoliſhed by the ſucceſsful partiſans of William Rufus. In the reign of Henry I. Robert earl of Leiceſter repaired, enlarged, and fortified, the caſtle, which he made his principal reſidence. He was very liberal to the town; as was alſo his ſon Robert Boſſu; but the arrogant behaviour of the latter to the king involved this place in broils and war; it being the practice in thoſe times for ſovereigns to revenge themſelves, for the offences of the nobles, on the people and places immediately under the patronage of the offenders. This was fatally experienced in the reign of Henry II. when, earl Robert Blanchmains (Whitehands) leaguing with the king's ſon in his unnatural rebellion, Leiceſter, the chief reſort of the diſaffected, was, after a long ſiege, almoſt deſtroyed, and the caſtle reduced to a heap of ruins. Scarcely any thing now remains of the latter building, but an artificial mound, or the earth-work of the keep, near which is a part of the town with ſome ancient buildings, called the *Newark*, or New-work. This name appears to have been given to diſtinguiſh it from the caſtle with its original buildings, which was conſidered as the old work. The Newark is ſaid to have been founded by Henry, third earl of Lancaſter, and his ſon Henry, the firſt duke of that name. By theſe two noblemen ſome large buildings were erected here; and John of Gaunt, who was earl of Leiceſter, added conſiderably to the pile. When completed, the whole muſt have formed a grand diſplay; but nearly all of theſe have fallen beneath the devaſtating hand of man, and the ſlowly-devouring tooth of time. From the remains of the ſurrounding walls, it is preſumed that the Newark was an incloſed area, bounded on the north by the caſtle, on the ſouth by fields, on the weſt by a branch of the river Soar, and on the eaſt by a ſtreet of the ſuburbs. At this ſide is ſtill remaining a large caſtellated gateway, called the *magazine*, which name it obtained in 1682, when it was purchaſed by the county, and applied to the uſe of the train-hands. This gateway has a large pointed arched entrance with a ſmall poſtern doorway, and communicates with an area nearly ſurrounded with buildings.

The names of the churches ſtanding in 1220 were, St. Mary, St. Nicholas, St. Clement, St. Leonard, All Saints, St. Michael, St. Martin, St. Peter, Chapel of the Holy Sepulchre, and St. Margaret, ten in number. At this time there are but five. The church of St. Mary, as a building, cannot be diſtinguiſhed by the appellation of either chaſte or beautiful; it is the patch-work of a variety of periods. The chancel is Saxon, perhaps the fineſt remains of that period in the county. The ſpire of this church was partly demoliſhed by a ſtorm in 1763 and 1783. St. Nicholas' church is ſuppoſed to be the oldeſt in Leiceſter; it is a plain Gothic building, which formerly conſiſted of three aiſles, but, in the year 1697, the north aiſle was taken down, it being found in a ruinous condition, and the pariſh was then unable to rebuild it. There is an old wall here called the Jewry-wall, compoſed of rag-ſtone and Roman brick; and not far off is a place, called Holy-bones, where have been dug up the bones of many oxen, ſuppoſed to have been ſacrificed there. St. Clement's has been long deſtroyed. St. Leonard's had been rebuilt but a little time before its final deſtruction in the civil wars. The church of All Saints is a fair ſtructure, built of free-ſtone; it has three aiſles, a good chancel, and is very well pewed. St. Michael's was totally demoliſhed ſome time about 1400. St. Martin's church ſtands nearly central; it is one of the largeſt, and eſteemed the principal church in the county. The biſhops of the dioceſe, and the judges of aſſiſe, attend divine ſervice here. There is a remarkable epitaph in this church, ſhowing, that Mr. Herric, who died in 1589, aged 76, lived in one houſe with his wife fifty-two years, and in all that time buried neither man, woman, nor child, though there were ſometimes twenty in family; and the widow, who died in 1611, aged ninety-ſeven, ſaw, before her death, one hundred and forty-three children, grand-children, and great grand-children. To this church a valuable chime of bells has lately been added, which play every three hours. The chapel of the Holy Sepulchre ſtood near where the preſent infirmary ſtands. St. Margaret's was once a cathedral church; and it is very viſible that this church, like ſome others in the town, is the patch-work of different ages. Near this church is a piece of ground ſtill called the Biſhop's Barn-cloſe, and a royalty called to this day the Biſhop's Fee.

Leiceſter-abbey was founded in 1143, by Robert Boſſu, earl of Leiceſter, in honour of the Virgin Mary. The death of cardinal Wolſey happened at this abbey November 29, 1530, on his journey from York to London. This abbey, at the time of the ſuppreſſion, was eſtimated to expend 1062l. per annum. The Gray-Friars houſe was ſituated near St. Martin's church. King Richard III. who was killed in the battle of Boſworth, was interred in the church of the Gray-Friars; his coffin was afterwards converted into a trough for horſes to drink out of, at the White Horſe inn; but it has been deſtroyed ſome years. The collegiate-church, which ſtood in the Newark, was a beautiful little church, once the admiration of all ſtrangers who paſſed through the town: it was founded by a noble Plantagenet, Henry, created earl of Derby in his father's life-time, and who ſucceeded at that prince's death to the title of duke of Lancaſter. The Hoſpital of St. John the Baptiſt was given by queen Elizabeth to the corporation; it was afterwards uſed as a wool-hall; but, at the latter end of the reign of James I. a benefaction was raiſed of ſeventeen pounds a-year, and ſix poor widows placed in it. Bent's Hoſpital was endowed in 1703 by Mr. Bent, an alderman; it ſupports four widows. Simond's Hoſpital, Counteſs's Hoſpital, and Spittle Houſes, are places of inferior note. Trinity Hoſpital was founded by Henry duke of Lancaſter, (who died in 1361,) in which he placed one hundred poor and weak men, and ten able women to aſſiſt them. Wigſton's Hoſpital was founded in the reign of Henry VI. it is a regular building, with ſeparate apartments for the members of the hoſpital; it conſiſts of a maſter, confrater, twelve men, and twelve women, by the rules of the houſe all ſingle. The Conſanguinitarium is a building of ſtone, finiſhed in 1792, named by and erected at the expenſe of John Johnſon, eſq. a native of this place; the rooms are neat and convenient, and the windows are glazed with fine ſtained glaſs. Leiceſter Infirmary was built in 1771 by voluntary ſubſcription, and opened the ſame year for the reception of patients, ſick and lame, from any country. The Female Aſylum is a more recent inſtitution.

Beſides the churches, here are chapels or meeting-houſes for different ſects of diſſenters, preſbyterians, independents, and baptiſts. The county-gaol, erected in the year 1791, at the expenſe of 6000l. occupies the ſite of an old priſon, and is built after the plan recommended by Mr. Howard, with ſolitary cells, &c. The town-gaol is a commodious ſtone building, deſigned by Mr. Johnſon, a native of this town, and executed by Mr. Firmadge in 1792.

1792. The other public buildings are a free grammar-ſchool of great antiquity; ſeveral charity-ſchools; various hoſpitals; an aſylum for indigent lunatics; an exchange for public buſineſs; the hotel, now uſed as aſſembly rooms; and a commodious theatre. Among the curioſities of the town, is the old wooden bedſtead ſaid to have belonged to king Richard, and on which he ſlept, or rather reclined, the night preceding the battle of Boſworth.

The old town-library muſt not be forgotten, as thereby hangs a tale, which tale is told by M. Nemnich, a German traveller, (1800,) in the following terms: "In Throſby's Hiſtory of Leiceſter, the town-library is highly praiſed, and is ſaid to contain a thouſand volumes. It was erected in 1633. Concerning one manuſcript, which Throſby erroneouſly pronounces to be Syriac, he informs us that it is vulgarly believed to be the hand-writing of our Saviour, or of one of his apoſtles. I therefore ran with great eagerneſs to ſee this library. A mean dirty-looking woman, who acts as librarian, conducted me to an old dark room, where there might be about a thouſand books, but which nobody ever reads. I aſked the woman to ſhow me the hand-writing of our Saviour; and ſhe fetched out of her cloſet an old quarto volume, to which was fixed a thick clumſy chain. The leaves were almoſt all torn out: and, on my inquiring how this had happened, ſhe told me that it was done by people who wiſhed to poſſeſs a piece of this ſacred relic; but that now ſhe took care that none ſhould appropriate to themſelves any morſel of it. However, this female Argus was not ſo quick-ſighted but that I contrived to carry off a ſmall fragment; which, on my return to Hamburgh, I ſent to the celebrated Hofrath Tychſen at Roſtock, and received from him the following anſwer: 'The ſcrap which you ſent to me, of a poem neatly written in the Perſian character called *tealik* [the leaning], with a Turkiſh tranſlation annexed on the oppoſite page, may probably have been written about the beginning of the 18th century. From the few lines compriſed in this piece, it appears to be part of a love-ſong; in which the lover, tormented with jealouſy, bitterly complains of a rival, and wiſhes to find ſome balſam for his lacerated ſoul, ſome relief from his intolerable anguiſh, if he may not be allowed acceſs to the garden of roſes.' Such, then, being the ſtate of the caſe with the pretended hand-writing of our Saviour, my ſcrap will no longer be preſerved as a ſacred relic, but merely as an inſtance of the ſuperſtitious turn which prevails at Leiceſter."

Here is alſo a county-library of modern inſtitution, kept up by ſubſcription. Likewiſe an agriculture-ſociety, ſupported by almoſt all the gentlemen of landed property in the county, intended to promote uſeful diſcoveries and inventions relative to agriculture; and to reward deſerving huſbandmen of certain deſcriptions. A valuable mineral ſpring was diſcovered in 1787, ſimilar to the waters of Harrowgate and Keddleſtone; its beneficial effects have been repeatedly proved in diſeaſes of the ſkin; in obſtructed glands; in habitual coſtiveneſs, and the piles; and in ſome particular complaints of the ſtomach and bowels, which are cleanſed by its operation. Poor perſons, recommended by any of the faculty, may drink the water gratis. Subſcriptions for a family one guinea, and for a ſingle perſon half-a-guinea, for the ſeaſon.

In this town was formerly a *mintage*; and the ſeries of coins that have been collected, prove that at the Leiceſter mint, a regular ſucceſſion of coinage has been produced from the reign of the Saxon king Athelſtan down to Henry II. This ſeries has been engraved in Mr. Nichols's valuable Hiſtory of this town.

The firſt charter granted to Leiceſter was by king John in the firſt year of his reign; and at the ſame time Robert Fitz-Parnel, earl of Leiceſter, inveſted the burgeſſes with the power of buying and ſelling lands, &c. A charter, granted in the following reign by earl Simon de Montfort, ſhows the peculiar intolerance of the times; it ſpecifies, that "no Jew or Jeweſs, in my time, or in the time of any of my heirs, to the end of the world, ſhall inhabit, or remain in" the town of Leiceſter. Henry VII. by charter dated 1504, confirmed all the previous privileges, and empowered the juſtices to take cognizance of treaſons, murders, felonies, &c. A charter by queen Elizabeth ſpecifies, that the borough of Leiceſter is very ancient and populous, and from remote times has been a borough incorporate; and the former liberties and immunities are ſpecified and extended. The corporation are thereby empowered, among other privileges, to refuſe the building of malt-kilns within the diſtance of thirty yards from any other building. This charter alſo grants a market for wool-yarn and worſted, and for other commodities. All fines and amercements were ordered to be applied to the uſe of the poor. The corporation conſiſts of a mayor, recorder, ſteward, bailiffs, twenty-four aldermen, forty-eight common-councilmen, and a town-clerk; the freemen are toll-free of all the markets and fairs in England. As a parliamentary borough, Leiceſter has returned two members to the national councils from the time of Edward I. One of the repreſentatives was formerly elected by the "mayor and his brethren," and the other by the commonalty. This mode having excited much popular diſturbance, Henry VII. ordained that "the mayor and his brethren ſhould chooſe forty-eight of the moſt diſcreet inhabitants of the town," who ſhould elect all officers for the borough, and members of parliament. Thus it continued till the reign of Charles II. from which time the right of election has been veſted in "the freemen not receiving alms, and in the inhabitants paying ſcot and lot;" but perſons living in the borough of Leiceſter by certificate, not having gained a ſettlement by renting ten pounds per annum, or ſerving in an annual office, are not entitled, by paying ſcot and lot, to vote. The mayor and bailiff are the returning-officers; number of voters, about 2000.

The principal and almoſt only article of manufacture in Leiceſter, is that of ſtockings, which has been an eſtabliſhed and ſtaple commodity here for above two centuries. It finds employment for a great number of perſons, as hoſiers, ſtocking-makers, wool-combers, dyers, frame-ſmiths, comb-makers, winders, ſizers, ſeamers, ſpinners, hobbiners, ſinker-makers, ſtocking-needle-makers, &c. &c. Mr. Throſby ſtates that in Leiceſter there were "upwards of ſeventy manufactures called hoſiers, who, it is computed, employ 3000 frames; including the wrought goods they individually purchaſe; about 6000 perſons being directly or indirectly employed in this great buſineſs." This town and its vicinity, with Nottingham and its neighbourhood, are the principal places in England for the manufacture of ſtockings; the latter is the moſt noted for ſilk, and the finer ſort of goods, while the former is chiefly devoted to the coarſer articles, of which a very large quantity is annually made. The trade at preſent is very flouriſhing; and in the Walk through Leiceſter it is ſtated, "that 15,000 dozen per week" of ſtockings are made on an average. Leiceſter is ninety-ſeven miles diſtant from London: the market is held on Saturdays; and eight fairs annually, all on a very large ſcale. This town was returned to parliament in the year 1811 as containing 23,146 inhabitants. Lat. 52. 39. N. lon. 1. 8. W.

At Huſband's Boſworth, near Leiceſter, nine witches were executed together on the 18th of July, 1616.

At Ratby, three miles from Leiceſter, a Roman camp has been diſcovered, and, by the affinity of its name, ſuppoſed to have been the *Ratæ* of Antoninus. It is very perfect, as well as the vallum or rampart, and forms a parallelogram of about 280 yards long by 155 broad: it was diſcovered in 1773. Near it is a place called Ratby-ſprings, about half a mile from the village. *Britiſh Directory. Nemnich's Travels in England. Nichols's Hiſt. of Leiceſterſhire.*

LEICES'TER, a township of North America, in Addison-county, Vermont, situated on the east side of Otter-creek, containing 522 inhabitants.

LEICES'TER, called by the Indian natives *Towtuid*, a considerable post-town in Worcester-county, Massachusetts, containing 1103 inhabitants; situated upon the post-road from Boston to Hartford, New York, and Philadelphia: six miles west of Worcester, and fifty-four west by south of Boston; settled in 1703, and incorporated in 1720 or 1721. It has three meeting-houses, for congregationalists, anabaptists, and quakers; and an academy, incorporated in 1784, and well endowed. Wool-cards are manufactured in this town.

LEICES'TERSHIRE, called in the Domesday survey *Ledecestrescire*, is an inland county, situated nearly in the middle of England, and environed by the counties of Rutland and Lincoln to the east, Nottingham and Derby on the north, Staffordshire and Warwickshire to the west, whilst part of the latter county and Northamptonshire attach to the southern border. A part of the great Roman road, called Watling-street, appears to have formed a regular division between Leicestershire and Warwickshire. The district included within these boundaries was, at an early period, a part of the territory belonging to the Coritani. After the Romans had subjugated the Britons, and had established colonies in different parts of the island, this county was included within the province of Flavia Cæsariensis, and had military stations established at Ratæ (Leicester); Vernometum, on the northern border of the county; Benonæ, near High-Cross; and Manduessedum, at Manceter. These stations were connected by regular artificial roads, or military ways, known by the names of Watling-Street, Fosse-Way, and Via Devana. After the Romans had evacuated the island, this district became part of the kingdom of Mercia; and, when the subdivision of the Anglo-Saxon provinces into counties was established, and bishops' sees erected, the town of Leicester was constituted the seat of the diocesan. The Mercian kingdom was divided into southern and northern; and the inhabitants of Leicestershire were denominated *Mediterranæ*, or Middle Angles. They were frequently harassed by the invading Danes, who, entering the district from the eastern coast, laid the whole country under contribution between the German ocean and Leicester; and, having conquered this place, established themselves here for some length of time: indeed, Leicester was considered as one of their five chief cities in the island. After the Norman invasion in 1066, Leicestershire experienced a complete revolution in its civil and manorial privileges; as the conqueror divided it among his relations and adherents. Two hundred and twenty-eight lordships, the chief parts of the country, were allotted and parcelled out to different Norman chiefs; who again re-granted various allotments to their following dependants, to be held of them by knight's service. The king, the archbishop of York, and the bishops of Lincoln and Constance, were also possessed of landed property in the county; and some was annexed to the abbeys of Peterborough, Coventry, and Croyland. The Norman chiefs, in order to secure their newly-acquired possessions, soon built, on their respective estates, strong and magnificent castles, which might at once secure themselves, and keep the conquered English in awe. The several townships, in which such castles are known to have been erected, with the names of the founders, are Leicester, Mount Sorel, Whitwick, and Shilton, founded by the earls of Leicester; Groby and Hinckley, by Hugo de Grentemaisnell; Donington, by Eustace baron of Halton; Melton, by Roger lord Mowbray; Ravenston, by Goesfrid Hanselin; Sauvey, by lord Basset of Weldon; and Thorpe, by Ernald de Bois. Most of these castles, during the unquiet reigns of Henry II. John, and Henry III. being held by the rebellious barons, and rendered receptacles of thieves and freebooters, were, by command of the latter king, utterly demolished; and, though some of them were afterwards rebuilt, yet at this day there is not one of them remaining entire, and even the ruins of most of them are entirely defaced. The Norman chiefs, after settling their possessions, and fortifying themselves within their respective domains, next directed their attention to the religious habits and prejudices of the times; as to secure the favour and influence of the monks, in an age when they were almost omnipotent, or at least could command and intimidate the whole community, was a necessary branch of military policy, which the provincial barons neither overlooked nor neglected. Accordingly, part of their estates were appropriated to the foundation of abbeys, priories, nunneries, and other monastic establishments. In this county were founded four abbeys, at Croxton, Garendon, Leicester, and Olveston; twelve priories, at Belvoir, Bradley, Bredon, Charley, Hinckley, Kirkby Beler, Laund; at Leicester were four, for Eremites, Black Friars, Gray Friars, and Austin Friars; and Ulveston; two nunneries at Gracedieu and Langley; two collegiate churches in Leicester; and various free chapels, hospitals, preceptories, and chantries, in differents parts of the county.

At the time of compiling that great national work, the Domesday survey, Leicestershire was divided into four wapentakes or hundreds; Framland, Guthlaxton, Gartre, and Goscote; and thus it continued till the 20th of Edward III. when an additional hundred, Sparkenhoe, was taken out of Guthlaxton; and afterwards Goscote was divided into two, denominated, from their situations, East and West Goscote. In these six hundreds are 196 parishes, and 12 market-towns, viz. Leicester, Ashby de la Zouch, Bosworth, Hallaton, Harborough, Lutterworth, Melton Mowbray, Mount Sorel, Billesdon, Hinckley, Loughborough, and Waltham on the Wold. The whole county is within the ecclesiastical jurisdiction of the see of Lincoln, and in the province of Canterbury; under one archdeacon, and six deaneries. Mr. Nichols states, from the Domesday survey, that the whole county, at the time that record was compiled, contained 34,000 inhabitants. The number returned to parliament, under the population act of the year 1810, was 155,100. The representatives in parliament are but four: two for the county, and two for the borough of Leicester.

This county has not any rivers of importance; but those which pass through it are convenient and ornamental. The chief are the Soar, the Swift, the Welland, the Avon, the Wreke, and the Anchor. The Soar, anciently called *Leire*, which is the largest of these, rises from two heads or sources in the south-western part of the county, and, after receiving a small tributary stream near Whetstone, passes by the west and north sides of the town of Leicester.

Leicestershire, being more an agricultural than a commercial district, and deprived of any particular mines, has not equally participated with many other English counties in canal navigation. Some plans for this purpose have been projected at different periods, and a few have been executed. In 1782, a bill was brought into parliament for making a navigable canal from Chilver's Coton in Warwickshire, to pass through a great part of Leicestershire; but, being opposed by a variety of interests, it failed of success. In 1790, another bill was introduced for opening a canal communication between Loughborough and Leicester; but it was thrown out on the second reading. In 1791, another application was made with better success; and an act was obtained for making the said Communication: the Proprietors are styled in this act "the Company and Proprietors of the Leicester Navigation." In the same year, another act was obtained for making navigable the rivers Wreke and Eye; and, in 1793, a bill was passed for making the Oakham Canal, from a town of that name in Rutlandshire, to Melton Mowbray. See the article CANAL NAVIGATION, vol. iii. p. 681.

The whole of Leicestershire presents nearly a flat surface, and is chiefly appropriated to the grazing system. It has obtained peculiar celebrity, among agriculturists, for a breed of sheep, distinguished by the name of the

shire;

ſhire; and the late Robert Bakewell, of Diſhley, acquired for himſelf and the county much popularity, by the experiments and improvements he made in the breed of cattle and ſheep. Among the different breeds of ſheep in the county, the Old Leiceſter, the Foreſt, and the New Leiceſter, or Diſhley, conſtitute the principal ſorts, and of them the latter is in the higheſt repute. The extraordinary price for which many of the New-Leiceſter ſheep have been ſold at public auctions, and the large ſums for which ſome of the rams and bulls have been let out for the ſeaſon, ſerve at once to ſhow their eſtimation in public opinion, and the laudable zeal that prevails for improving the breeds of cattle, &c.

It will be difficult to define the ſoils of the whole county. Very little of the land can with propriety he called a mere ſand or gravelly ſoil; nor is there any great quantity that may properly be called clay. The beſt ſoil is upon the hills; and the worſt, or neareſt approaching to the clay or cold lands, in the valleys; though there are many exceptions to this rule. The ſoil, or what the farmers generally call *mould*, is commonly deep, which makes it very proper for graſs; ſuch deep ſoils not being very ſoon affected by dry weather. About Lutterworth, ſome part is a light rich loam, excellent for turnips and barley; a part ſtiff, inclining to marl, or rich clay; the remainder, chiefly a ſort of medium between both, with a ſubſoil inclining to marl, bearing excellent crops of oats and wheat, and good turnips alſo, though not ſo well adapted for being eaten off the land by ſheep. Moſt of the land round Hinckley is a good mixed ſoil, bearing large crops of graſs. Aſhby-de-la-Zouch, and the northern parts of the county, exhibit various ſoils, ſand, gravel, loam, and clay. In Melton Mowbray the ſoil is in general a heavy loam; and immediately underneath a very ſtiff impervious clay, mixed with ſmall pieces of lime-ſtone. Theſe lands are very wet in winter, and the turf ſo tender as ſcarcely to be able to bear the treading of ſheep without injury. At Market Harborough the ſoil is in general a very ſtrong clay, chiefly in graſs. Mr. Bakewell, who has been engaged in a mineralogical examination of the inexhauſtible mineral wealth of Charnwood Foreſt, in Leiceſterſhire, for earl Moira, has lately diſcovered, amongſt the granite rocks of the diſtrict, a variety of *ſcenite*, of ſingular beauty, ſurpaſſing that from Egypt, or the continent of Europe: like other ſtones of this ſpecies, it conſiſts principally of hernblende and felſpar: the latter is of a pale red colour; the former is cryſtalline, and of a beautiful green, reſembling ſmaragdolite. It exiſts in large blocks, and might be applied to purpoſes of ornamental or ſepulchral architecture and ſculpture. It is from this kind of ſtone that the durable monuments of antiquity were conſtructed.

Since the commencement of the laſt century, cheeſe has become an article of ſome importance to the Leiceſterſhire farmers; and a large cheeſe-fair is annually held in the county-town. Among the different ſorts manufactured in the county, that called Stilton cheeſe is deemed the fineſt, and conſequently obtains the higheſt price. It acquired the title of Stilton from a place of that name, on the great north road in Huntingdonſhire, where it is well known to have been firſt publicly ſold by retail; but it is manufactured in the pariſh of Little Dalby. It firſt began to be made there by Mrs. Orton, about the year 1730, in ſmall quantities; for it was then ſuppoſed that it could only be made from the milk of the cows which fed in one cloſe, now called Orton's Cloſe; but this was afterwards found to be an error. In 1756 it was made only by three perſons, and that in ſmall quantities; but it is now made from almoſt every cloſe in this pariſh, and in many of the neighbouring ones. It is well-known that this ſort of cheeſe is made in the ſhape, and of the ſize, of a collar of brawn. It is extremely rich, becauſe they mix among the new milk as much cream as it will bear. It requires much care and attendance; and, being in great requeſt, it fetches a high price.

An ancient cuſtom ſubſiſts at HALLATON, in this county, which has not been noticed under that word in our ninth volume. It is thus related in Nichols's Hiſtory of Leiceſterſhire, vol. ii. "A piece of land was many years ago given, the rents and profits of which the rector for the time being was to receive for his own uſe, on condition of providing two hare-pies, a quantity of ale, and two dozen of penny-loaves, to he ſcrambled for on Eaſter Monday annually, after divine ſervice and a ſermon preached. The land, during the open-field ſtate, was called *Hare-crop-Leys*; and, when the incloſure took place in 1770, land was allotted to the rector in his allotment in lieu of the ſaid Hare-crop-Leys. The manner of ſcrambling is thus: Two large pies (which, inſtead of hares, are now made of veal and bacon) are made in raiſed cruſts at the rector's houſe; and, when baked, are cut into quarters or parts, and put into a ſack; the ale (now about two gallons) is put into two wooden bottles, without handles or ſtrings to hold them by, the corks well thruſt in, and cut off cloſe to the bottle-mouths, and put into a ſack alſo; the loaves are quartered, and put into a baſket, which a man carries; as do two others the ſacks; when the proceſſion begins, conſiſting of men, women, and children. The ſpot appropriated for the ſcrambling for the pies and ale is about a quarter of a mile ſouth of the town, a ſmall oblong bank, ten yards long and ſix wide; with a ſmall old trench round it, and a circular hole in the centre; and is called *Hare-Pie Bank*. After they have left the town, the man with the bread walks towards the bank; and, as he proceeds, at times throws the pieces of bread before him, which is eagerly caught by the boys which ſurround him, the bread being all diſtributed before they arrive at the ſpot deſtined for the ſcrambling for the pies and ale. As ſoon as the men with the ſacks arrive at the bank, the pies and ale are tumbled promiſcuouſly out of the ſacks into the hole in the centre, when a ſcene of noiſe and confuſion takes place, and bloody noſes and bruiſed fingers are often the conſequence; one will ſeize a piece of the pie, or a bottle of the ale; a ſecond will trip up his heels, and fall upon him; and a third perhaps ſeize and keep poſſeſſion of the prize, until a fourth ſerves him the ſame; and ſo on, until four or five fellows agree to form a party, and aſſiſt each other in bearing away the wiſhed-for bottle to a convenient place, and there divide the ſpoil. The afternoon is ſpent in feſtivity, ringing of bells, fighting of cocks, quoits and ſuch like exerciſes, by Hallaton and the neighbouring youth." Hallaton is fifteen miles ſouth-eaſt of Leiceſter.

LEI'CHAU, a town of Germany, in the principality of Culmbach: four miles ſouth-eaſt of Culmbach.

LEICHLIN'GEN, a town of the grand duchy of Berg: four miles ſouth of Solingen.

LEID, *ſ.* A lath, a principal diviſion of a county.

LEI'DENDORFF, a town of Auſtria: four miles eaſt of St. Polten.

LEI'DENSDORF, a town of Bohemia, in Leitmeritz: twenty miles weſt of Leitmeritz.

LEI'DGRAVE, *ſ.* [from *leid.*] An officer, under the Saxon government, who had juriſdiction over a lath.

LEI'ESBACH, a river of Sileſia, which runs into the Oder three miles eaſt of Parchwitz.

LEJEU'NE (Claude), the moſt renowned French muſician of his time, was a native of Valenciennes. He was an early follower of Calvin; but flouriſhed ſomewhat later than *Goudimel*, with whom he is often confounded; both having the name of Claude, both being Hugonots, both great muſicians, and both in high favour with the Calviniſts for ſetting Clement Marot's tranſlation of the Pſalms to muſic for their temple-worſhip, which rendered both ſo obnoxious to the Catholics, that one of them was maſſacred on St. Bartholomew's day, 1572, and the other narrowly eſcaped.

Concerning the miſtaken identity of theſe muſicians. Bayle has cleared up that point with his uſual accuracy; and proved, from indiſputable authority, that Lejeune was living, and in the higheſt public favour, even at court, though

though a Hugonot, many years after the fatal feaſt of St. Bartholomew, particularly in 1581, when the wonders which he is ſaid to have performed by his mufical art at the wedding of the duke de Joyeuſe are recorded. The works of Lejeune conſiſted chiefly of miſcellaneous ſongs and pſalms; of which he publiſhed many books. His *Melanges* conſiſt of ſongs and motets, in French, Italian, and Latin. His ſongs are chiefly French, and in many parts like the madrigals of Italy. Of his pſalms in ſimple counterparts of three and four parts, Dr. Burney pronounces them admirable. Few of the melodies probably were of his own invention, but were the productions of the firſt German reformers; they however went through more editions perhaps than any mufical work ſince the invention of printing.

LEI'FERS, a town of the county of Tyrol: three miles ſouth of Bolzano.

LEIGH, *ſ.* An old word for a meadow.

LEIGH, a market-town in Lancaſhire. It is divided into ſix townſhips, which are, Bedford, Aſtley, Tidſley with Shakerley, Leigh and Pennington, Chaw-Bent, and Weſt Leigh; containing together about 13,000 inhabitants. It is diſtant from London 189 miles, ten from Warrington, fourteen from Manchester, ſeven from Wigan, five from Newton, and eight from Boulton. The market-day is Saturday; and there is a fair the 26th of April. The manufactures are chiefly of fuſtians. The church is a noble ſtructure, with a ſquare tower containing eight bells, and a handſome organ; the body of the church is ſupported by two rows of pillars, twelve in number; it was repaired in 1779. Lat. 53. 28. N. lon. 2. 27. W.

The townſhip of Aſtley lies on the road from Leigh to Manchester.

Chaw-Bent has greatly increaſed in houſes and population within the laſt twenty years. Its chapel, though regularly conſecrated by the biſhop of Sodor and Man, is exempt from epiſcopal juriſdiction, and the patronage is veſted in the proprietor of Atherton-hall, which formerly was the ſeat of a family of that name, but is now the property of the Hon. T. Powis. The houſe, which was built by Gibbs, is large, and has a ſpacious cubical entrance-hall. A plan of this manſion is given in the Vitruvius Britannicus.

Tyldeſley has grown up with the manufactures of the county. A family of that name was ſeated here ſo early as the reign of Henry III. Of this family was ſir Thomas Tyldeſley, who ſignalized himſelf during the troubles of Charles I's reign, and fell in the battle of Wigan-lane, Auguſt 25, 1650. He was buried in Leigh-church; and on a pillar near Wigan is fixed a braſs plate, with an inſcription to perpetuate his memory. *Beauties of England. Britiſh Directory.*

LEIGH, a village about ſeven miles from Worceſter. The pariſh is large, having rich meadows towards the north, adjoining Teme; in which is a place called the Caſtle, though no traces of any building remains. In its church are ſeveral ancient monuments. Southward it extends to Malvern-hills; on whoſe ſide lies Cowleigh, a manſion-houſe which ſeparates the counties of Worceſter and Hereford. Within this pariſh is Braunsford and Braces Leigh; the former has a bridge over the Teme, with a ſnuff-mill adjoining; the latter formerly belonged to the Braces, a family in this county almoſt from the conqueſt, from whom it took its name. In 1776 an act of parliament paſſed for incloſing this pariſh; but, ſome difficulties ariſing in reſpect of its being within the chaſe of Malvern, it was not completed till 1778. The church, dedicated to St. Edburgh, has ancient monuments of Sir Walter Devereux and his lady, W. Colles and G. Freke, eſqrs. &c.

LEIGH, or LEA, a village in the county of Eſſex, on the ſide of the river Thames, with a cuſtom-houſe and officers: twenty-one miles eaſt-ſouth-eaſt of Billericay, and thirty-nine eaſt of London. Lat. 51. 34. N. lon. 0. 37. E.

LEIGH (Charles), a phyſician and naturaliſt, was born in the ſeventeenth century, at Grange in Lancaſhire. He took the degree of doctor of phyſic at Cambridge, and was admitted a fellow of the Royal Society in 1685. No particulars are recorded of his life, which was continued to the early part of the next century. From his writings, he appears to have reſided and practiſed a conſiderable time in his native county. He publiſhed, 1. Phthiſiologia Lancaſtrienſis, Lond. 1694, 8vo. This is an account of the different ſpecies of conſumptions reigning in Lancaſhire, eſpecially of that which he conſiders as endemial, and calls the ſcorbutic, attributing it to chemical cauſes. 2. Exercitationes Quinque de Aquis medicatis, Morbis acutis, Morbis intermittentibus, Hydrope, Lond. 1697, 8vo. This contains an account of an epidemic fever prevailing in Lancaſhire from 1693 to 1696, and of his practice in that and other diſeaſes. 3. Natural Hiſtory of Lancaſhire, Cheſhire, and Derbyſhire, Lond. 1700, folio. This is formed upon the plan of Dr. Plot's county-hiſtories, and is moſt full with reſpect to mineral productions and medicinal waters. It alſo contains an account of indigenous plants with their virtues, and ſome philoſophical obſervations on vegetation.

LEIGH (Sir Edward), a very learned Engliſhman, was born at Shawell, in Leiceſterſhire, in the year 1602. He was inſtructed in grammar-learning at Walſal in Staffordſhire; and, in 1616, was entered a commoner of Magdalen-hall, Oxford. He proceeded in arts in 1623; but, before his regency expired, removed to the Middle Temple, where he made conſiderable progreſs in the ſtudy of the common law. When the plague broke out in 1625, he went into France, and ſpent ſix months in that country with great improvement; after which he returned to the Temple, where he ſedulouſly devoted ſeveral years to the ſtudy, not only of the law, but alſo of divinity, hiſtory, and the learned languages. Soon after the commencement of the civil war, he took his ſeat in parliament, as member for the town of Stafford; and was one of the commons who were appointed to ſit in the aſſembly of divines. When, in 1648, the preſbyterian party was excluded from the houſe by the army, he was in the number of the proſcribed members, and was for ſome time kept in confinement. From that period till the reſtoration, he chiefly employed himſelf in proſecuting his literary ſtudies, and in publiſhing various works, which diſcover profound erudition, an intimate acquaintance with the learned languages, extenſive knowledge, and much critical ſagacity. He died at his houſe called Ruſhall-hall, in Staffordſhire, in 1671, about the age of ſixty-nine. He was the author of, 1. Selected and choice Obſervations concerning the Twelve firſt Cæſars, &c. 1635, 8vo. to which he added, in another edition, obſervations on ſix more; and, in 1670, his eldeſt ſon, Henry Leigh, republiſhed the work, with obſervations on the Greek emperors, illuſtrative engravings, &c. under the title of *Analecta Cæſarum Romanorum*. 2. A Treatiſe of Divine Promiſes, 1633, 8vo. 3. Critica Sacra, on the Hebrew words of the Old, and on the Greek of the New Teſtament, in 2 vols. 4to. 1639 and 1646, and afterwards in 2 vols. folio; and a ſupplement in 1662, folio. 4. A Treatiſe of Divinity, in three Books, 1646, 4to. 5. The Saint's Encouragement in Evil Times, or Obſervations concerning the Martyrs in general, 1648, 8vo. 6. Annotations on all the New Teſtament, 1650, folio. 7. A philological Commentary, or an Illuſtration of the moſt obvious and uſeful Words in the Law, &c. 1652, 8vo. 8. A Syſtem or Body of Divinity, in ten Books, 1654, folio. 9. A Treatiſe of Religion and Learning, in ſix Books, 1656, folio. 10. Annotations on the five poetical Books of the Old Teſtament, viz. Job, Pſalms, Proverbs, Eccleſiaſtes, and Canticles, 1657, folio. 11. Choice Obſervations on all the Kings of England, from the Saxons to the Death of King Charles I. 1661, 8vo. &c. *Wood's Athen. Oxon.*

LEIGH's ISLAND, a ſmall iſland on the ſouth-eaſt coaſt

coaſt of New Ireland, a little to the ſouth-eaſt of Cocoa-Nut Iſland.

LEIGH'LIN, a biſhopric of Ireland, in the province of Dublin, founded in 632, and united with Ferns in 1600. The united biſhopric compriſes the whole counties of Carlow and Wexford, with part of the Queen's county, Wicklow, and Kilkenny. There are 232 pariſhes in the union, forming 79 benefices, in which are 71 churches and ſix glebe-houſes. The cathedrals are ſmall, and ſerve for pariſh-churches. The reſidence of the biſhop is at Ferns.

LEIGH'LIN (Old), a village of Ireland, near the river Barrow, and in the county of Carlow, 2¼ miles weſt by north from Leighlin Bridge. It was incorporated in the year 1216, and continued to ſend members to parliament till the union; and is ſtill the ſeat of the cathedral church of the dioceſe.

LEIGH'LIN BRIDGE, a town of Ireland, in the county of Carlow, ſituated on the river Barrow: ſeven miles ſouth of Carlow, and eleven north-eaſt of Kilkenny.

LE'IGHTON, a village in Huntingdonſhire, five miles north of Kimbolton, which gives name to the hundred. It has fairs on May 12 and Oct. 5.

LE'IGHTON, Leighton-Buzzard, or Beaudesert, a town of England, in the county of Bedford, ſituated on the river Ouzel, on the borders of Buckinghamſhire; with a weekly market on Tueſday, well ſtored with cattle; and a great horſe-fair on Whit-Tueſday, particularly thoſe for coach and cart; beſides three others, viz. Jan. 25, July 26, and Oct. 24. It is eight miles weſt-north-weſt of Dunſtable, and forty-one north-weſt of London. Lat. 51. 59. N. lon. 0. 38. W.

LE'IGHTON, or Leighton in the Mooring, a village to the ſouth-eaſt of Rotherham, Yorkſhire; with a fair on the 24th of June.

LE'IGHTON (Alexander), a Scotch preſbyterian divine, was born at Edinburgh in 1587. He became noted for the ſufferings which he endured in the reign of Charles I. on account of a work which he publiſhed, entitled Zion's Plea. For this he was tried in the high-commiſſion court, and convicted, which, in thoſe days, and in that court, was but another term for being accuſed; his ſentence has been given at length in the life of Laud, p. 287. and, excepting the impriſonment for life, and the fine, the ſentence was put into execution to the full extent. He was releaſed by the long parliament after an impriſonment for ten years. His confinement and cruel uſage had ſo impaired his health, that when he was releaſed he had ſcarcely the power of walking, or ſeeing, or hearing. As a ſort of remuneration for his troubles, the parliament appointed him keeper of Lambeth palace, at that time converted into a priſon. He died in 1644, inſane.

LE'IGHTON (Robert), a Scotch prelate in the ſeventeenth century, was ſon of the preceding. He was educated in Scotland, where he diſtinguiſhed himſelf above his contemporaries in all the branches of uſeful learning, particularly in the ſtudy of the ſcriptures. Having finiſhed his courſe of academical ſtudies, he went to the continent for improvement, and ſpent ſome years in France. On his return he obtained preſbyterian ordination, and was choſen to a congregation at Newbottle, near Edinburgh. Very ſoon after his ſettlement at this place he conceived a diſlike to the preſbyterian form and manner of church-diſcipline, and choſe rather a life of retirement than to attend at the preſbytery. In the year 1648, he declared himſelf for the engagement for the king, on account of which he would have expoſed himſelf to much trouble, had not the earl of Lothian, who lived in his pariſh, proved his friend, and prevailed with the men in power not to moleſt him. At length, finding that he could no longer ſubmit to the eccleſiaſtical impoſitions of the preſbyterians, and being unwilling to live in ſtrife and contention, he reſigned his pariſh in ſilence, and withdrew into retirement. Shortly after, he was choſen principal of the college of Edinburgh, the duties of which office he performed with great reputation during ten years. Upon the reſtoration, when it was determined to eſtabliſh epiſcopacy in Scotland, Leighton was fixed on as a proper perſon for the mitre. He was conſecrated, with other biſhops, at Weſtminſter; he would now gladly have promoted ſome plan for uniting the preſbyterians and epiſcopalians, but was thwarted in all views on this ſubject. When he found that the government was determined to enforce conformity on the preſbyterians by the moſt rigorous meaſures, he laboured with all zeal to ſhow the impolicy of ſuch proceedings; but he ſtruggled ineffectually againſt the current, and all that he could do was to practiſe, in his own dioceſe, the moderation which he had recommended generally, and to ſet an edifying example to the reſt of his dignified brethren. They however profited very little, either from his advice or from the exemplary conduct which he manifeſted. He remonſtrated with the king reſpecting the arbitrary proceedings of the eccleſiaſtical high-commiſſion court; and more lenient meaſures were promiſed to be purſued with reſpect to Scotland. He begged permiſſion to reſign his ſee; but the king, ſo far from liſtening to the prayer of his petition, urged him to accept of the dioceſe of Glaſgow, which was a more important biſhopric, and one in which he might be more uſeful. To induce him to accept of this preferment, he was promiſed the aſſiſtance of the court in bringing about his favourite ſcheme of a comprehenſion of the preſbyterians. He accepted the ſee; but after a ſhort time found himſelf wholly unable to carry on his great deſigns of healing the diviſions, and reforming the abuſes, in the church, and begged permiſſion to retire into private life, which was at length granted him. He went to live in Suſſex, where he occupied himſelf in doing all the good in his power. He died in 1684, at about the age of eighty. He was the author of, 1. Prælectiones Theologicæ. 2. A Commentary on the firſt and ſecond Chapters of the Firſt Epiſtle of St. Peter. 3. Sermons, including other pieces. To the volume of ſermons, publiſhed in 1758, is prefixed a life of the author, to which the reader is referred for farther particulars.

LEI'GNE, a river of France, which runs into the Seine a little to the ſouth of Bar ſur Seine.

LEI'LAM, or LEY'LAM, a town of the Arabian Irak. Near it, in 1733, the Turks were defeated by the Perſians under Kouli Khan; the Turks were commanded by the ſeraſkier Topal Oſman, who was killed in the field; they loſt all their baggage and artillery, with the military cheſt, and not leſs than 40,000 men, including many baſhaws and perſons of diſtinction: thirty miles north of Bagdad.

LEI'MA, a river of Ruſſia, which runs into the Irtiſch twenty-four miles north of Tobolſk.

LEIM'BACH, a town of Weſtphalia, in the county of Mansfeld: one mile north-eaſt of Mansfeld.—A town of the duchy of Wurzburg: three miles ſouth-ſouth-weſt of Eltman.

LEI'MBURG, a town of Germany, in the territory of Nuremberg: four miles ſouth of Lauf.

LEIN, a river of Wurtemberg, which riſes three miles ſouth-ſouth-eaſt of Murhart, and runs into the Kocher at Abtſgmund.

LEI'NA, a town of Germany, in the principality of Gotha: four miles ſouth-ſouth-weſt of Gotha.

LEI'NA, or Leine, a river of Weſtphalia, which riſes two miles ſouth-weſt of Worbis, in the territory of Eichfeld; paſſes by Heiligenſtadt, Göttingen, Hanover, &c. and joins the Aller about two miles below Zelle.

LEI'NACH, a town of the duchy of Wurzburg: four miles north-eaſt of Lauringen.—Another, ſix miles ſouth of Carlſtadt.

LEI'NBACH, a town of Germany, in the county of Schwarzenburg: two miles ſouth of Schainfeld.

LEI'NE, a river of Germany, which runs into the Neſſa four miles north of Gotha.

LEI'NEN,

LEI'NEN ZUM', a town of Pruſſia, in the palatinate of Culm: nine miles eaſt of Thorn.

LEI'NINGEN, or LINAN'GE, lately a county of Germany, almoſt ſurrounded by the Palatinate, and bordering on the biſhoprics of Worms and Spire. The ſoil is fertile in corn, fruit, and wine; in the foreſt is plenty of game, with mines of copper and iron, and quarries of ſtone. At the peace of Luneville it was annexed to France.

LEI'NINGEN, a town of France, in the department of Mont Tonnere, lately held in common between the count of Leiningen and the biſhop of Worms. The caſtle was demoliſhed by the French: eleven miles ſouth-weſt of Worms, and thirty ſouth of Mentz. Lat. 49. 30. N. lon. 8. 4. E.

LEI'NINGEN (Old), a caſtle and village of France: three miles north-weſt of Leiningen.

LEI'NLETTER, a town of Bavaria: ten miles ſouth-eaſt of Bamberg.

LEIN'STER, the eaſtern province of Ireland, which contains the twelve following counties, viz. Louth, Meath, Dublin, Wicklow, Wexford, Kilkenny, Carlow, Kildare, Queen's County, King's County, Weſt Meath, and Longford. Leinſter is bounded by Ulſter on the north, by Connaught and Munſter on the weſt and ſouth-weſt, and by the ſea on the ſouth and eaſt. Its length is 104 miles, the breadth about 55, and the circuit 360; and includes 992 pariſhes, one archbiſhopric, and three biſhoprics. It is, in general, well cultivated, and enjoys good air and ſoil; and is the moſt populous, containing the capital and the ſeat of the government. The principal rivers are the Boyne, Barrow, Liffey, Noir, and May.

LEI'NUGEN, or LEINUNGEN, a town of Weſtphalia, in the county of Mansfeld: ſix miles ſouth-weſt of Wippra.

LEIOPO'DES, *ſ.* [of the Gr. λειος, light, and πες, foot.] An epithet uſed by the old medical writers to expreſs ſuch perſons who had feet perfectly ſmooth and even at the bottom, without the uſual hollow between the heel and the fore part of the foot.

LEIP'HEIM, a town of Bavaria, in the territory of Ulm, on the ſouth ſide of the Danube, ravaged and pillaged in the year 1634: twenty-two miles weſt-north-weſt of Augſburg, and eleven north-eaſt of Ulm.

LEIP'NIK, a town of Moravia, in the circle of Prerau, ſix miles north-eaſt of Prerau. Lat. 49. 28. N. lon. 17. 35. E.

LEIPODER'MOS, *ſ.* [from the Gr. λειπω, to be deficient, and δερμα, the ſkin.] One who has loſt the prepuce.

LEIP'PA. See LEYPA.

LEI'PPE, a town of Sileſia, in the principality of Neiſſe: two miles north-eaſt of Grotkau.

LEIP'SIC, or LEIPZIG, a city of Saxony, and capital of a circle of the ſame name. This is one of the fineſt and moſt celebrated towns in all Germany, ſituated in a pleaſant and fertile plain, on the river Pleiſſe. Its circuit is eſtimated at 8954 paces; but the ſuburbs are well built, large, and furniſhed with gardens. Between the town and the ſuburbs, a fine walk of lime-trees was laid out in the year 1702, which runs quite round the town. In the town-ditches alſo are planted mulberry-trees. It is the ſeat of a very flouriſhing and famous univerſity, which was founded and dedicated in 1409, containing ſix colleges; of two good Latin ſchools; and of two celebrated ſocieties, namely, a German ſociety, and another for the encouragement of the liberal arts. Leipſic is one of the principal trading-towns in all Germany, inaſmuch as it enjoys not only an important foreign trade, but alſo, at its three celebrated fairs, which are kept at Eaſter, Michaelmas, and the beginning of the new year, carries on a very extenſive commerce both in domeſtic and foreign wares. It is likewiſe poſſeſſed of the ſtaple right, by virtue of which all ſtaple commodities, imported within ſixty miles round, muſt be unladen here at leaſt for three days, and offered to ſale to ſuch of the trading and mercantile people here as are burghers; and then, for the firſt time, carried farther, but to be unladen no-where elſe. The Pleiſſenburg here is a ſtrong citadel on the Pleiſſe, where a mint was founded in 1752. Here alſo in a chapel the Roman-catholics perform their worſhip. In the centre of the town is a ſpacious and fine market-place, near which alſo the council-houſe ſtands: the exchange is well built, and the roof of its hall well painted. Here are eight pariſh-churches for Lutherans, beſides the Roman-catholic chapel, and a place of worſhip for Calviniſts. Various ſorts of manufactures are carried on in this town; gold, ſilver, ſilk, wool, and linen yarn, being worked here, in all manner of ſtuffs, velvets, ſtockings, cloths, and linen. There are alſo houſes here for the dying of ſilk, as likewiſe for the making of tapeſtry and linen, and the printing of cotton. Leather, and Pruſſian blue, &c. are prepared here, and the orphan-houſe is appropriated to the culture of ſilk. The inſtitution for the deaf and dumb (opened in 1805) is gradually becoming a moſt uſeful eſtabliſhment. The pupils all learn to ſpeak diſtinctly, and the moſt forward of them comprehend what is ſaid to them by the motion of the lips. They are inſtructed in religious knowledge, reading, writing, accounts, &c.

Leipſic, in all probability, received its origin from the Sorbenwends. Dithmar, in his Chronicle, ſpeaks of it ſo early as the year 1015, under the title of a town. According to the received opinion, it belonged to the biſhopric of Merſeburg, till Conrad margrave of Meiſſen obtained the poſſeſſion of it in the year 1134, by exchange. In 1519, a theological conference was held here between Martin Luther and Dr. Eck; and in 1631, another appointed between the Saxon or Lutheran, and the Brandenburg and Heſſian, or Calviniſt, divines. In 1547, this town was beſieged in vain by the elector John Frederic; as alſo in 1637, by Banner, the Swediſh general. In 1631 and 1632, it was taken by the Imperialiſts; and, in 1642, by the Swedes. In 1745 and 1756, it was garriſoned by the Pruſſians, to whom it was obliged to pay very conſiderable ſums of money, by way of contribution. In 1759, it was taken by the Imperialiſts. The circle contains thirty-three towns, and upwards of 1000 villages: fifty-ſix miles weſt-north-weſt of Dreſden. Lat. 51. 13. N. lon. 12. 19. E.

LEIRE (King of), a title aſſumed by the kings of Zealand in the fourth century; from *Leire*, the royal reſidence. Theſe kings of Leire claimed the ſupremacy, and ſtyled themſelves head-kings of all Denmark, becauſe Dan Mykaliti, at the cloſe of the third century, had ſubdued the whole country, and compelled thoſe petty kings, whom he left in their territories, to pay tribute, and acknowledge ſubordination to him. But the kings of Leire were often mere ſhadows, much inferior in power to thoſe whom they wanted to be regarded as their vaſſals, till the end of the ninth century, when they ſucceeded in reducing the whole country under their government.

LEIR'IA. See LEYRIA.

LEIR'STETTEN, a town of Germany, in the margravate of Anſpach: five miles eaſt of Schwabach.

LEI'SEBACH, a river of Seleſia, which runs into the Oder one mile weſt of Stœdtl Leubus.

LEI'SELSHEIM, a town of France, in the department of Mont Tonnerre: three miles weſt-north-weſt of Worms.

LEI'SSE, a town of Pruſſia, in Pomerelia: eight miles north of Marienburg.

LE'ISURABLE, *adj.* Done at leiſure; not hurried; enjoying leiſure.—A relation inexcuſable in his works of *leiſurable* hours, the examination being as ready as the relation. *Brown.*

LE'ISURABLY, *adv.* At leiſure; without tumult or hurry.—Let us beg of God, that, when the hour of our reſt is come, the patterns of our diſſolution may be Jacob, Moſes, Joſhua, and David, who, *leiſurably* tending their lives in peace, prayed for the mercies of God upon their poſterity. *Hooker.*

LE'ISURE, *ſ.* [*loiſir*, Fr.] Freedom from buſineſs or hurry; vacancy of mind; power to ſpend time according to choice.—Where ambition and avarice have made no entrance, the deſire of *leiſure* is much more natural than of

buſineſs and care. *Temple.*—Convenience of time.—We'll make our *leiſures* to attend on yours. *Shakeſpeare.*

He ſigh'd, and had no *leiſure* more to ſay,
His honour call'd his eyes another way. *Dryden.*

Want of leiſure. *Not uſed:*

More than I have ſaid, loving countrymen;
The *leiſure* and enforcement of the time
Forbids to dwell on. *Shakeſpeare's Richard* III.

LE'ISURELY, *adj.* Not haſty; deliberate; done without hurry.—The bridge is human life: upon a *leiſurely* ſurvey of it, I found that it conſiſted of threeſcore and ten intire arches. *Addiſon.*

He was the wretched'ſt thing when he was young,
So long a growing, and ſo *leiſurely*,
That, if the rule were true, he ſhould be gracious. *Shakeſ.*

LE'ISURELY, *adv.* Not in a hurry; ſlowly; deliberately.—We deſcended very *leiſurely*, my friend being careful to count the ſteps. *Addiſon.*

The Belgians hop'd, that with diſorder'd haſte
Our deep-cut keels upon the ſands might run;
Or, if with caution *leiſurely* we paſt,
Their numerous groſs might charge us one by one. *Dryd.*

LE'ISZNIG, a town of Saxony, on the Mulda, with manufactures of cloth, lace, ſtockings, &c. It has two churches. The citadel is called Mildenſtein: twenty-four miles eaſt-ſouth-eaſt of Leipſic, and thirty-two north-weſt of Dreſden. Lat. 51. 7. N. lon. 12. 50. E.

LEI'STENAU, a town of Pruſſia, in the province of Oberland: ſix miles weſt of Biſchofswerder.

LEI'TA, LEY'TA, or LEY'THA, a river which riſes in the ſouth-weſt part of Auſtria, and joins the Raab at Raab in Hungary; after which the united ſtream runs into a branch of the Danube nine miles weſt of Comorn.

LEI'TENBERG. See LEUTENBERG.

LEI'TERBACH, or LETTER, a town of Bavaria, eleven miles north of Bamberg.

LEITH, on the coaſt of Sweden, particularly the paſſage round the Point of Landſoort to the city of Stockholm, means a channel, and is uſed as a general appellation for that purpoſe; but we have not met with any other inſtance of ſuch an application of the word. *Malham.*

LEITH, the ſea-port of EDINBURGH. See vol. v. p. 247.

LEITH HILL. See WOTTON.

LEITH WATER, a river of Scotland, which runs into the Forth at Leith.

LEI'THEN, a river of Scotland, which runs into the Tweed at Inverleithen.

LEI'TMERITZ, a city of Bohemia, in a circle of the ſame name, ſituated on the Elbe well built and populous; the ſee of a biſhop, ſuffragan of Prague. The circle is ſo fertile and fine a country, as to have been called the Bohemian Paradiſe; excluſive of which, it is ſupplied, by means of the river Elbe, with the products of the reſt of the provinces of the kingdom, and alſo of other countries. The wines called *podſkalſky*, which grow near Auſti, are particularly famous, and the warm mineral waters of Toplitz are very wholeſome: we alſo find here tin and precious ſtones. In this circle are reckoned eighty-nine ſeigniories, eſtates, and ſeats. It is twenty-eight miles north-north-weſt of Prague, and thirty-four ſouth-ſouth-eaſt of Dreſden. Lat. 50. 31. N. lon. 14. 15. E.

LEITOMIS'CHEL. See LEUTOMISCHEL.

LEI'TRIM, a county of Ireland, in the province of Connaught, which is bounded on the north by Donegal and Fermanagh; on the eaſt by Cavan; on the ſouth by Cavan, Longford, and Roſcommon and on the weſt by Sligo. In form ſomewhat like an hour-glaſs, it varies greatly in breadth, being in the wideſt parts ſixteen, and in the narroweſt only ſix, miles acroſs. Its length is forty-one Iriſh, or fifty-two Engliſh, miles. It contains 255,950 acres, or about 400 ſquare miles; (407,260 acres, or 652 ſquare miles, in Engliſh meaſure.) The pariſhes are ſeventeen in number, partly in the dioceſe of Kilmore, and partly in that of Ardagh. Of the five baronies into which Leitrim is divided, the two northern are not ſo populous as the other three. Towards the ſea there is an aſſemblage of wild and lofty mountains, which are divided from one another by deep valleys. Theſe are the mountains of Sliebh-anewr and Dartry, the latter of which towers to an immenſe height above the level of the ſea. Near the interior, the immenſe Sliebh-an-Erin divides the mountainous from the level parts of the country. Theſe great hills are far from unprofitable; for, producing abundance of coarſe-graſs, they annually pour forth immenſe droves of young cattle. The ſouthern baronies are level.

Few counties are ſo plentifully watered as this. The Shannon riſes in a plain at the baſe of Quilca mountain, forming Lough Clean, a ſmall lake, which is conſidered as the fountain of that noble river; from this it flows to Lough Allen, nearly in the centre of the county, which is ſeven miles long and about thirty in circumference; and then, curling in a variety of forms, it glides by Carrick on Shannon, where it leaves the county, taking a ſouthern direction. There are ſeveral other lakes and ſmall ſtreams, which are ſtored with trout, pike, eel, perch, and bream. The natural wants of this county ſeem abundantly outweighed by its numerous minerals: iron-ore is contained in great quantities in the high grounds; deep and rich beds of it are alſo found on the lower grounds; and a vigorous ſearch would undoubtedly diſcover it in almoſt every ſituation; copper and lead are alſo met with, but not in ſuch quantities; coal in deep and rich ſtrata is viſible in many places; a variety of clays and plenty of limeſtone-gravel are likewiſe found. The ſoil is exceedingly diverſified. A rich dark ſoil on a limeſtone bottom, a ferruginous loam on the mountains, and an argillaceous ſtratum, are its chief characteriſtics. Great quantities of bog and moor tend to interrupt the general fertility of the county. The mode of agriculture adopted by the farmers is injudicious in many particulars. Potatoes, barley, rye, and wheat, are reared in ſmall quantities; oats in abundance for home-conſumption. A conſiderable portion of the land is paſturage. The farms are ſmall, and generally occupied in common by a number of tenantry. Draining is greatly neglected. Manufactures are rapidly improving, particularly that of linen. There are ſeveral bleach-greens. Potteries are numerous about Leitrim and Dromahare. The traveller who is anxious for variety, will no-where find it in greater perfection than in Leitrim. Extenſive tracts of waſte may be contraſted with rich lands. The uniform and regular improvements of art are loſt in the wild grandeur of picturesque natural diſorder. The dale is frequently terminated by the ſtupendous mountain; and the beauties of the rich luxuriant woods on the demeſnes are enriched by the vicinity of beautiful ſheets of water. Near a century ago, the county was a continued foreſt. Immenſe heaps of charred timber are ſeen at Dromſhambo. A conſiderable time ago, great exertions were made to plant woods; and it now abounds with almoſt every variety which the nurſery can afford. No town of any ſize ornaments the county. Carrick on Shannon is the ſhire-town, but does not contain above a hundred houſes.

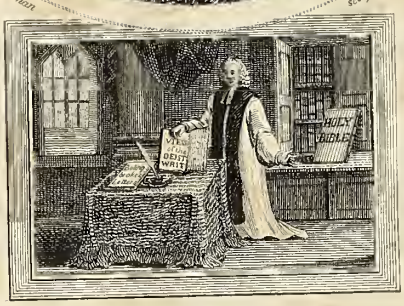
LE'ITRIM, a ſmall town of Ireland, which gives name to the county, but is not conſiderable enough to be a poſt-town. It is three miles north by eaſt from Carrick on Shannon, and ſituated on the river Shannon.

LEI'TSCHACH, a town of the duchy of Stiria: thirteen miles north-weſt of Marburg.

LEITUR'GOI, *ſ.* [Greek.] Among the Athenians, perſons of conſiderable eſtates; who, by their own tribe, or the whole people, were ordered to perform ſome public duty, or ſupply the commonwealth with neceſſaries at their own expenſes.

LEI'TZEN, a town of Brandenburg, in the Middle Mark: four miles ſouth-weſt of Seelow.

LEI'TZESTORFF,



DR LELAND.

London Published Mar 1 1813 by G Jones.

LEI'TZESTORFF, a town of Auſtria: three miles north-eaſt of Storkerau.

LEI'TZKO, or LEITZKE, a town of the Middle Mark of Brandenburg, inſulated in the duchy of Magdeburg: fourteen miles eaſt-ſouth-eaſt of Magdeburg.

LEIX'LIP, a poſt-town of the county of Kildare, Ireland. It is beautifully ſituated on the banks of the river Liffey; and near it is a fine waterfall, called the Salmon Leap. It is eight miles weſt from Dublin.

LEK'ENFIELD, a village of Yorkſhire, in the Eaſt Riding, north of Beverley; has a fair for a week, commencing September 14.

LEKE'O, one of the Japan iſlands, about 120 miles in circumference; twenty miles ſouth of Ximo. Lat. 31. 20. N. lon. 132. 40. E.

LEK'HAM, a village in Wilts, with a bridge over the Avon, ſouth of Chippenham. Roman coins are often found here.

LEKINPOU'R, a town of Hindooſtan, in the province of Cattack: twelve miles north-eaſt of Cattack.

LEK'NO, a town of the duchy of Warſaw: twenty-eight miles north-north-weſt of Gneſna.

LEK'SAND, a town of Sweden, in Dalecarlia: twenty miles north-weſt of Falun.

LE'LAND, a village in Cornwall, five miles from Penzance; with a fair on the 15th of Auguſt.

LE'LAND (John), an eminent Engliſh antiquary, was born in London, probably about the end of Henry VII's reign. He was educated at St. Paul's ſchool under William Lily, whence he was ſent to Chriſt's college, Cambridge. After a reſidence of ſome years in that univerſity, he removed to Oxford, and entered at All-Souls' college. For farther improvement, eſpecially in the Greek language, he travelled to Paris, where he cultivated an acquaintance with ſome of the greateſt ſcholars of the age, and alſo acquired a knowledge of ſeveral modern languages. Upon his return he took orders, and obtained a rectory in the marches of Calais. Henry VIII. appointed him one of his chaplains, and the keeper of his library; and conferred upon him the title of *royal antiquary*, which no other perſon in this kingdom, before or after, poſſeſſed. This was not a mere title; for, in 1533, a commiſſion was iſſued under the great ſeal, empowering Leland to make ſearch after all objects of antiquity in the libraries of all cathedrals, abbeys, priories, colleges, &c. as alſo all places in which records and public writings were depoſited. In conſequence he ſpent above ſix years in travelling through England, ſuffering no part to eſcape his reſearches; nor did he confine himſelf to the objects particularly mentioned in his commiſſion, but viſited all the remains of ancient buildings and monuments of every kind, with a view of collecting every thing that could illuſtrate the hiſtory and antiquities of this nation. At the diſſolution of the monaſteries, he was much affected with the probable loſs of many of the manuſcripts they contained; and made application to ſecretary Cromwell to get them conveyed to the king's library. Other benefices were conferred upon him; one of which was a canonry in King's college, now Chriſt-church, Oxford; another, a prebend in the church of Sarum. He retired, with his great collections, to his houſe in London, for the purpoſe of digeſting them, and preparing the great publications he had promiſed to the world; but either too intenſe ſtudy, or ſome other cauſe, brought upon him a derangement of mind, about the year 1550, from which he never recovered. He died in 1552, and was buried in his pariſh-church of St. Michael le Quern, which was deſtroyed by the great fire in 1666. Leland publiſhed during his life ſeveral Latin poems of conſiderable elegance, and ſome tracts on antiquarian ſubjects. His manuſcript collections, after paſſing through various hands, came for the moſt part into the Bodleian library, and great uſe has been made of them by Bale, Camden, Burton, Dugdale, and other antiquaries. A volume of his ſmall Latin poems was publiſhed in 1589, by Thomas Newton, of Cheſhire, with the title of "Principum & illuſtrium aliquot & eruditorum in Anglia Virorum Encomia," &c. Lond. 4to. From his collections, Antony Hall publiſhed, in 1709, "Commentarii de Scriptoribus Britannicis," Oxon. 2 vols. 8vo. "The Itinerary of John Leland, the Antiquary," was publiſhed by Hearne, at Oxford, in 9 vols. 8vo. 1710, reprinted in 1745. The ſame editor publiſhed "Joannis Lelandi Antiquarii de Rebus Britannicis Collectanea," Oxon. 1715, 6 vols. 8vo. reprinted in 1770. *Biog. Brit.*

LE'LAND (Dr. John), a learned Engliſh proteſtant-diſſenting divine; was born at Wigan, in Lancaſhire, in the year 1691. When he was very young, his father removed with his family to Dublin, where the ſubject of this article was ſeized with the ſmall-pox, which was of ſo malignant a kind, that it entirely deprived him of his underſtanding and memory. In this melancholy condition he remained almoſt twelve months; and, when the uſe of his faculties was reſtored, all his former ideas ſeemed expunged, and he had entirely forgotten whatever he had learned before he was attacked by this diſtemper. He now diſcovered, however, great quickneſs of apprehenſion, and a ſtrong memory, by which he recommended himſelf ſo much to notice, that his parents reſolved to bring him up to a learned profeſſion. Being ſent to a proper ſchool, he ſoon made ſuch a proficiency as fully anſwered the expectations of his friends; and was then placed under a celebrated tutor, with whom he went through a courſe of philoſophy. Afterwards, with the aſſiſtance of ſome learned and worthy miniſters, he diligently applied himſelf to the ſtudy of Hebrew and divinity, till he became well qualified for the miniſterial office. He had not long engaged in this character, before he was invited to preach ſtatedly to a congregation of proteſtant-diſſenters in Dublin, with a view to a future ſettlement with them; and he gave ſuch ſatisfaction both in his profeſſional exerciſes, and in his private conduct and manners, that he was ſoon invited to become joint-paſtor with the Rev. Mr. Weld; to which office he was ordained in 1716. The duties of this new relation were diſcharged by Mr. Leland with the utmoſt diligence and fidelity; while, at the ſame time, by indefatigable application to his ſtudies, he acquired ſuch a conſiderable ſtock of literature and uſeful knowledge, as raiſed him to diſtinguiſhed reputation in the learned world. In the year 1733 he firſt commenced author, by publiſhing "An Anſwer to a late Book, entitled, Chriſtianity as old as the Creation," &c. in two vols. 8vo. In the year 1737 he embarked in controverſy with Dr. Morgan, by publiſhing, "The Divine Authority of the Old and New Teſtament aſſerted," &c. againſt the unjuſt Aſperſions and falſe Reaſonings of a Book, entitled The Moral Philoſopher," 8vo. The deſign of this treatiſe was, to take a diſtinct view of what Dr. Morgan had offered, both againſt revelation in general, and the Holy Scriptures in particular; and it induced the doctor to level the ſecond volume of his "Moral Philoſopher" chiefly at our author. In reply to this attack, Mr. Leland publiſhed a ſecond volume of "The Divine Authority of the Old and New Teſtament aſſerted;" in which the various miſrepreſentations, the unjuſt aſperſions, and the confident attempts, of his antagoniſt to impoſe falſehoods upon his readers, are very ſatisfactorily detected and expoſed. In the year 1739, the univerſity of Aberdeen conferred upon him, in the moſt honourable manner, the degree of doctor of divinity.

In the year 1742, appeared the celebrated pamphlet, entitled, "Chriſtianity not founded on Argument;" in which the author, under ſpecious appearances of zeal for religion, endeavoured to ſhow, that the Chriſtian faith has no foundation in reaſon, nor any thing to ſupport it but a wild and ſenſeleſs enthuſiaſm, deſtitute of all proof and evidence. In anſwer to this diſguiſed and illiberal attempt to expoſe Chriſtianity to the deriſion of mankind, Dr. Leland wrote "Remarks on a late Pamphlet, entitled, Chriſtianity not founded on Argument," in two letters,

which were publiſhed ſeparately; in which he repreſents, with great perſpicuity and conciſeneſs, the abſurdity and ill-tendency, as well as the manifold inconſiſtencies, of this author's ſcheme; and, at the ſame time, gives a plain confutation of the principal arguments from Scripture and reaſon by which he pretended to ſupport it. In the year 1753, Dr. Leland diſtinguiſhed himſelf ſtill farther as the advocate of Chriſtianity againſt its moſt inſidious opponents, by publiſhing, "Reflections on the late Lord Bolingbroke's Letters on the Study and Uſe of Hiſtory; eſpecially ſo far as they relate to Chriſtianity and the Holy Scriptures," 8vo.

Dr. Leland was now juſtly conſidered to be a maſter in this branch of controverſy, the courſe of his ſtudies having made him particularly converſant with thoſe writings which about this period were ſo frequently publiſhed for the purpoſe of ſetting aſide all revelation. And he had ably ſucceeded, in conjunction with other valuable writers, in detecting their ſophiſtry and miſrepreſentations, in refuting their fallacious reaſonings, and in ſhowing that they were far from being ſuch formidable champions for the deiſtical cauſe as many had been apt to ſuppoſe. Since, however, there are few who have leiſure or patience for a particular inquiry into a voluminous controverſy, ſome judicious well-wiſhers to the intereſts of Chriſtianity were of opinion, that it might be of eſſential ſervice to give a ſummary view of the moſt noted books which had been publiſhed againſt revealed religion, for above a century, with proper obſervations upon them. This taſk our author was engaged to undertake, by ſome perſons for whom he had a particular regard; and, in 1745, he committed to the preſs "A View of the principal Deiſtical Writers that have appeared in England, in the laſt and preſent Century; with Obſervations upon them, and ſome Account of the Anſwers that have been publiſhed againſt them; in ſeveral Letters to a Friend," 8vo. In this work the author ably maintained the reputation which he had acquired by his former productions, and it deſervedly met with a very favourable reception from the public.

When Dr. Leland publiſhed this View of the Deiſtical Writers, he had no intention of engaging any farther in a work of that nature; but, ſoon after its appearance, ſome judicious perſons expreſſed their ſurpriſe that no notice was taken of Mr. Hume, who was looked upon to be one of the moſt ſubtle writers who had of late appeared againſt Chriſtianity. About the ſame time, likewiſe, the works of lord Bolingbroke were publiſhed, in 5 vols. 4to. of which the laſt three ſeemed to be principally intended againſt revealed, and even againſt ſome important principles of natural, religion. It was therefore thought proper that Dr. Leland, in order to complete the deſign which he had propoſed in publiſhing his View, ſhould add a ſupplement, relating to the productions of theſe two celebrated authors. Accordingly, after a careful peruſal of them, in 1756, he publiſhed his obſervations upon them in a ſecond volume, conducted, like the former, in the epiſtolary form. Soon after the appearance of this volume, the author received ſome letters relating to his work, which induced him to reconſider ſome parts of it, and to give ſuch farther additions and illuſtrations as he thought might be of advantage to the main deſign. At the ſame time he had been deſired to prepare a new edition of the Reflections upon Lord Bolingbroke's Letters, &c. and, as the ſubject has a near affinity to thoſe which are treated of in the View, and would conſequently help to complete that part of the work which relates to his lordſhip, it was judged adviſeable to publiſh a diſtinct volume, comprehending the author's additions and illuſtrations, together with theſe Reflections. The whole of this uſeful work was thus extended to three volumes; and ſecured to the author not only very general public approbation, but the particular notice of ſome perſons of great merit and diſtinction, whoſe concern for religion, and zeal for our common Chriſtianity, inclined them candidly to overlook ſmaller differences and diſtinctions. Dr. Leland was thus encouraged to continue his active exertions in this good cauſe to a very advanced age. When he was more than ſeventy years old, he was attacked with ſo violent a fever, that his recovery was doubtful; and, though he was entirely reſigned to the will of God, it gave him no ſmall pleaſure to have his days a little prolonged, that he might put the finiſhing hand to another work which had coſt him more application than any of his former writings, and with which he intended to cloſe his learned labours: accordingly, ſoon after the reſtoration of his health, this work made its appearance, in two volumes, 4to. under the title of "The Advantage and Neceſſity of the Chriſtian Revelation, ſhown from the State of Religion in the ancient heathen World, eſpecially with reſpect to the Knowledge and Worſhip of the one true God; a Rule of moral Duty; and a State of future Rewards and Puniſhments," &c. This valuable performance, alſo, met with the reception from the public of which it was deſerving; and it was afterwards reprinted, in 8vo. From this time our author enjoyed a greater ſhare of health and ſpirits than he had known for many years before, until a few months before his death, occaſioned by an inflammation of his lungs, which proved fatal to him on the 16th of January, 1766, when he was in the ſeventy-fifth year of his age.

Dr. Leland was diſtinguiſhed by conſiderable abilities, and very extenſive learning. He had a quick apprehenſion, a ſolid judgment, and a memory ſo remarkably tenacious, that he was often called *a walking library*. His moral character was equally amiable and excellent. As he entertained the nobleſt ſentiments of the Deity, his perfections and providence, ſo his piety was liberal, rational, and manly; and, indeed, the whole of his conduct was regulated by the principles of that religion which he knew ſo well how to defend. His temper was naturally warm; but, by maintaining a ſtrict diſcipline over his paſſions, he never ſuffered it to betray him into improper behaviour; and, in his diſcharge of every relative and ſocial duty, he was truly exemplary. Soon after his death, a collection of his Sermons was publiſhed, in 4 vols. 8vo. with a preface, giving ſome account of the life, character, and writings, of the author.

LE'LAND (Dr. Thomas), a divine of the church of England, was born at Dublin about the year 1702. Having received the elements of a good education, he was admitted a ſtudent, and afterwards became fellow, of Trinity College, Dublin. He was author of 1. A Hiſtory of Ireland, 4to. 2. The Life of Philip of Macedon. The Principles of Human Eloquence. He alſo tranſlated the Orations of Demoſthenes, in 2 vols. 8vo. which came out ſeparately, and were well received by the public. Dr. Leland died in 1785, at the age of eighty-three.

LE'LAPS, in fabulous hiſtory, the name of a dog that never failed to ſeize and conquer whatever animal he was ordered to purſue. It was given to Procris by Diana, and Procris reconciled herſelf to her huſband by preſenting him with that valuable preſent. According to ſome, Procris had received it from Minos, as a reward for the dangerous wounds of which ſhe had cured him. *Hygin.* fab. 128. *Ovid. Met.* 7.

LELC'ZA, a town of Ruſſian Poland, in the palatinate of Volhynia: ſixty miles north of Zytomiers.

LELEGE'IS, the ancient name of Miletus, from the Leleges, the firſt inhabitants of it.

LEL'EGES, anciently a people of Aſia, of Greek original; the name denoting "a collection of people." They firſt occupied the iſlands; then, paſſing over to the continent, they ſettled partly in Myſia on the Sinus Adramyttenus, and partly in that part of Ionia next Caria.—There were Leleges alſo of Laconia. Theſe went to the Trojan war with Altes their king. Achilles plundered their country, and obliged them to retire to the neighbourhood of Halicarnaſſus, where they fixed their habitation.—The inhabitants of Laconia and of Megara alſo bore this name for ſome time, from Lelex, one of their kings.

LE'LEX, an Egyptian who came with a colony to Megara, where he reigned about 200 years before the Trojan war. His ſubjects were called, from him, *Leleges.*—Alſo the name of a Greek who was the firſt king of Laconia, in Peloponneſus. His ſubjects were alſo called *Leleges*, and the country where he reigned *Lelegia.*

LE'LIAN, a town on the north coaſt of the iſland of Bouro. Lat. 3. 10. S. lon. 127. 12. E.

LE'LIT PAT'TAN. See PATTAN.

LEL'KA, a town of Poland, in the palatinate of Belcz: ſix miles north of Belcz.

LEL'OW, a town of Auſtrian Poland, in the palatinate of Cracow: thirty-two miles north-weſt of Cracow.

LELUN'DA, a river of Africa, which joins the Zaire about ſixty miles from its mouth.

LELUN'DA, a town of Africa, in the kingdom of Congo, on the river ſo called, which runs into the Zaire: thirty-five miles eaſt of St. Salvador.

LEL'Y (Sir Peter), a celebrated portrait-painter, was born at Soeſt, in Weſtphalia, in 1617. His father, whoſe family name was Vander Vaas, a native of Holland, was a captain in the garriſon of that town. Peter received his firſt inſtructions in painting from Grebber, at Haerlem, and began with practiſing in landſcape, and hiſtorical pieces leſs than life. Attracted by the encouragement given to the arts by Charles I. he came over to England in 1641, and was led by the fame and fortune of Vandyke to emulate him in portrait-painting. He obtained an introduction to the king, and painted his portrait, as he alſo did that of Cromwell; but it was not till after the reſtoration that he roſe to the height of his fame and proſperity. He painted with a light and delicate pencil, and a lovely tone of colouring; gave great grace to the airs of his heads, and the attitudes of his figures; made his fancy-draperies flow with eaſe and elegance; and, by his attention to impart beauty even where he did not find it, became the favourite ladies' painter. He has tranſmitted the features of moſt of the fine women in the court of Charles II. if not with ſtriking truth, yet in their faireſt form; but he diſplays more art than genius, and, by an uniform attention to pleaſe, has fallen into an uniformity of manner. He was, however, not only employed upon beauties, but ſeveral of the eminent men of the time choſe to be repreſented to poſterity by his pencil. Lely was in great favour with Charles II. who made him his principal painter, and honoured him with knighthood. He acquired wealth, part of which he employed in the purchaſe of a fine collection of pictures and drawings, which after his death ſold for 26,000l. Sir Peter married an Engliſh lady of beauty and family, and purchaſed an eſtate at Kew, where he reſided in the ſummer, living in a ſtyle ſuited to his fortune. He was not free from jealouſy as an artiſt, and viewed with anxiety the riſing reputation of Kneller. He was ſeized, as he was painting the ducheſs of Somerſet, with an apoplectic fit, of which he died in 1680, at the age of ſixty-three. His remains were interred in Covent-garden church, under a monument, with his buſt carved by Gibbons. Lely's works are diſperſed in collections throughout England. The *beauties* at Windſor by his hand are much admired, and form a principal decoration of that palace. *Walpole's Anecd.*

LEM-TCHIN', a town of Thibet: twelve miles weſt-north-weſt of Pitchan.

LE'MA, a ſmall iſland in the Chineſe Sea. Lat. 22. N. lon. 114. 17. E.

LE'MA I'SLANDS, a cluſter of ſmall iſlands in the Eaſtern Indian Sea, near the weſt coaſt of the iſland of Borneo. Lat. 1. 10. S. lon. 108. 48. E.

LEM'AN, *ſ.* [Generally ſuppoſed to be *l'amant*, the lover, Fr. but imagined by Junius, with almoſt equal probability, to be derived from *leaf*, Dut. or leop, Sax. beloved, and *man.* The etymology is ſtrongly ſupported by the ancient orthography, according to which it was written *leveman.*] A ſweetheart; a gallant; or a miſtreſs. *Hanmer.*

Hold for my ſake, and do him not to dye;
But, vanquiſh'd, thine eternal bondſlave make,
And me thy worthy meed unto thy *leman* take. *Spenſer.*

A cup of wine,
That's briſk and fine,
And drink unto the *leman* mine. *Shakeſpeare.*

LEM'AN, a river of England, which runs into the Ex near Tiverton.

LEM'AN (Department of), a diviſion of France, formed by the Genevois, and named from the lake, called indifferently the Leman Lake, or the Lake of Geneva. It is bounded on the north by the lake, Swiſſerland, and the department of Jura; on the eaſt by the Valais, and the departments of the Doria and Mont Blanc; on the ſouth by the department of Mont Blanc; and on the weſt by the departments of the Ain and Mont Blanc. The chief towns are Geneva, Thonon, and Bonneville.

LEM'AN LA'KE. See GENEVA, vol. viii. p. 320.

LEMA'NIS, a place in Britain, where Cæſar is ſuppoſed to have firſt landed; and therefore placed by ſome at Lime in Kent.

LEMAN'NUS, a lake in the country of the Allobroges, through which the Rhone flows. It is now called the Lake of Geneva or Lauſanne.

LEMA'VI, in ancient geography, a people of Spain, in the Tarragonenſis. Their capital was Dactonium, according to Ptolemy.

LEM'BA, a town of Africa, in the kingdom of Congo.

LEM'BA, a town on the weſt coaſt of the iſland of Celebes. Lat. 3. 15. S. lon. 119. 52. E.

LEM'BA, or LIBON'GO, a river of Africa, which is too ſhallow for navigation, and has no harbour at its mouth. It runs into the Atlantic ten miles ſouth of the Onza.

LEM'BACH, a town of the duchy of Stiria: three miles ſouth-ſouth-weſt of Marburg.

LEM'BACH, a town of Auſtria: nine miles ſouth of Aigen.

LEM'BECK, a town of Germany, in the biſhopric of Munſter: ſix miles weſt-north-weſt of Haltern.

LEMBEE'CK, a town of France, in the department of the Scheldt: eight miles ſouth of Ghent.

LEMBE'GE, a town of France, in the department of the Lower Pyrenées: fifteen miles north-north-weſt of Tarbe, and fifteen north-eaſt of Pau.

LEM'BERG, or LE'OPOLD, a city of Auſtrian Poland, and capital of Galicia. It is a large and opulent city, and pretty well fortified in the Poliſh manner, that is, only with timber; and lies low, on the banks of the river Peltew, which ſoon after joins the Bug; being ſurrounded with hills and mountains which command the town. Lemberg is the ſee of a Popiſh archbiſhop, and likewiſe of a Ruſſian and Armenian biſhop. It carries on a conſiderable trade; and has two caſtles, one within and another without its walls. The latter ſtands on a high hill; and the Carmelite monaſtery, which is fortified, may ſerve for a citadel to this caſtle. Here is a magnificent cathedral, and ſeveral other churches; a gymnaſium, or ſeminary, an arſenal, a public granary, two Jewiſh ſchools, &c. A provincial diet and court of judicature are alſo held in this town. The inhabitants of this city are a mixture of ſeveral nations. Lemberg was erected into an archbiſhop's ſee in 1361 or 1362. In the year 1375 the ſee was removed to Halicz, but in 1416 it was reſtored to this city. In 1656, Lemberg held out two months, when beſieged by the Ruſſians and Coſacs; and in 1672 it alſo baffled the attempts of the Turks, who at laſt purchaſed it for 80,000 dollars. But in 1704 it was taken, ſword in hand, by Charles XII. king of Sweden. It is ſeventy-two miles ſouth-ſouth-eaſt of Chelm, 156 eaſt of Cracow, and 300 ſouth-ſouth-eaſt of Konigſberg. Lat. 49. 51. N. lon. 23. 59. E.

LEM'BERG, a town of France, in the department of the Moſelle: three miles ſouth-weſt of Bitche, and twelve ſouth-eaſt of Sarguemines.

LEM'BERG, a town of France, in the department of Mont Tonnere; fourteen miles ſouth-weſt of Deux Ponts, and eighteen weſt of Landau.

LEM'BERG. See LÖWENBERG, vol. xiii.

LEM'BERG, a town of the duchy of Stiria: five miles north of Cilley.

LEM'BERGHE, a town of France, in the department of the Scheldt: ſix miles ſouth of Ghent.

LEM'BO, a town of Africa, in the kingdom of Congo, on the Zaire: forty miles ſouth-weſt of Eſſeno.

LEMBOU'LA, a river of France, which runs into the Tarn near Moiſſac.

LEME'NE, a river of Italy, which riſes in Friuli, and runs into the Gulf of Venice near Caorla.

LEM'ERY (Nicholas), an eminent chemiſt, ſon of Julian Lemery, a procureur in the parliament of Normandy, of the Calviniſt perſuaſion, was born at Rouen in 1645. He was brought up to the buſineſs of pharmacy in his native city; and in 1666 went to Paris in order to obtain that knowledge of chemiſtry which he perceived to be the baſis of the art of preparing medicines. He took ſome inſtructions from Glaſer, demonſtrator of chemiſtry in the royal garden; and then travelled for further improvement. He ſpent a conſiderable time at Montpellier, then famous for its apothecaries and preparations; and returned to Paris in 1672, well furniſhed with all the knowledge in his branch which the kingdom at that time would afford. Through the friendſhip of M. Martin, apothecary to the prince of Condé, he gave a courſe of chemical lectures, at the laboratory in the hotel of that prince. He had ſoon after a laboratory of his own, at which, though little better than a dark cellar, he aſſembled a brilliant auditory, conſiſting not only of men of ſcience, but even of ladies, who were drawn thither partly by love of knowledge, and partly by faſhion. He alſo took boarders in his houſe, whom he inſtructed in chemiſtry and pharmacy; and the preparations which came from his hand had a great ſale in Paris and the provinces. One article in particular was the ſource of great profit; the magiſtery of biſmuth, known as a coſmetic by the name of *Spaniſh white*, which no perſon in Paris but himſelf knew how to prepare. Lemery performed a real ſervice to ſcience, by diveſting chemiſtry of the veil of obſcure and myſtic language which it had ſo long worn, and placing its facts within the reach of all perſons of ſenſe and education. In 1675, he gave to the public from the preſs his *Cours de Chymie*; and ſeldom has a work upon a ſcientific topic been ſo popular. It ſold (ſays Fontenelle) like a novel or a ſatire; new editions followed year after year, and it was tranſlated into Latin, and into various modern languages. The chief value of this work conſiſted in the clearneſs and accuracy with which the operations on the different kingdoms of nature were deſcribed; the ſcience was not yet ſufficiently advanced for a rational theory of theſe proceſſes.

The perſecuting ſpirit which diſgraced the latter part of the reign of Louis XIV. began, in 1681, to diſquiet our chemiſt; and he received an order to lay down his office of public lecturer within a limited time. In 1683 he went to England, and was favourably received by Charles II. who had an attachment to chemical purſuits. He returned, however, to his own country; and thought to protect himſelf by the degree of doctor of phyſic, which he obtained at Caen. At Paris he acquired employment in his new character; but the revocation of the edict of Nantes, which interdicted the practice of phyſic to proteſtants, reduced him to ſuch difficulties, that his conſtancy at length gave way; and, in 1686, he, with his family, was reconciled to the catholic church. He now reſumed medical practice, and eaſily obtained letters patent from the king, permitting him to continue his lectures, and to vend his chemical remedies, ſeveral of which he kept ſecret. In 1697, Lemery publiſhed his *Pharmacopée Univerſelle*. This work conſiſts of a collection of all the formulæ given in all the books of pharmacy and diſpenſatories in Europe, with corrections and improvements; and, though overloaded with articles, was a valuable performance at the time. In the next year appeared his *Dictionnaire Univerſel des Drogues ſimples*, a ſtill more uſeful work, though conſiderably ſhort of perfection. Of its various editions, that with the additions of Juſſieu is the beſt. Upon the re-eſtabliſhment of the Academy of Sciences, in 1699, Lemery was appointed aſſociate-chemiſt; and ſoon after, on the death of Bourdelin, he obtained a penſioner's place. He communicated ſome memoirs to this body, and read before it the papers which in 1707 he publiſhed collectively, under the title of *Traité de l'Antimoine*. This was a complete account of all the medicinal preparations of that mineral known at that period. He ſoon after began to feel the infirmities of age; and in 1715 was carried off by an apoplexy. *Fontenelle, Eloges des Academiciens.*

LEM'ERY (Louis), ſon of the preceding, was born at Paris in 1677. He acquired under his father a taſte for chemiſtry and medicine; and was admitted to his doctor's degree in 1698. He gave chemical lectures in the royal garden in 1708; and was made one of the phyſicians of the Hotel Dieu in 1710, which place he held to his death. In 1712 he was received as an aſſociate in the Academy of Sciences; and became a penſioner on the death of his father, in 1715. He purchaſed a place of king's phyſician, and in that quality attended the infanta of Spain back to her own country. In 1731 he obtained the profeſſorſhip of chemiſtry in the royal garden, in place of Geoffroy. He was afterwards particularly attached to the ducheſs of Brunſwick, and the dowager princeſs of Conti, in whoſe hotel he paſſed great part of his time. He died in 1743. The works of Louis Lemery are, 1. Traité des Alimens, 1702, 12mo. chiefly relating to vegetable articles of food, of which it gives a deſcription, with an account of their qualities: this work was much augmented in an edition by Bruhier, 2 vols. 12mo. 1755. 2. Diſſertation ſur la Nourriture des Os, 1704, 12mo. in this treatiſe he maintains the opinion, that the bones are nouriſhed by a peculiar gelatinous fluid, depoſited in their ſubſtance by the ſmall arteries, and not by the marrow. To this are added three letters on the generation of worms, againſt Andry. In the Memoirs of the Academy of Sciences, he has given ſeveral papers on the analyſis of plants, and on other chemical topics, on monſtrous births, &c. *Eloy. Dict.*

LEMEYBAM'BA, a town of Peru, in the dioceſe of Truxillo: twenty-two miles ſouth-weſt of Chacapoyas.

LEM'FORD, or LEV'ENFURT, a town of Germany, in the county of Diepholz: eight miles ſouth of Diepholz.

LEM'GO, or LEM'GOW, a town of Weſtphalia, in the county of Lippe, on a ſmall river, near the Werra, divided into Old and New Town, each of which is governed by its reſpective magiſtrates; formerly one of the Hanſe-towns. It is ſeventeen miles ſouth-ſouth-weſt of Minden, and thirty-two north-north-eaſt of Lippſtadt. Lat. 52. 2. N. lon. 8. 44. E.

LE'MIA, a ſmall iſland on the Pacific Ocean, near the coaſt of Chili. Lat. 44 6. S.

LE'MING, or LEM'MING, *ſ.* See MUS LEMMUS.

LEM'INGTON, a poſt-town of America, in York county, Maine: 610 miles north-eaſt from Waſhington.

LEM'INGTON, a townſhip in Eſſex county, Vermont, on the weſt bank of Connecticut River, and near the north-eaſt corner of the ſtate.

LEM'INGTON (Lower), a village in Glouceſterſhire, five miles from Shipton in Worceſterſhire. The Roman foſſe-way enters Glouceſterſhire at this place; and a great many Roman coins have been found, which makes it ſuppoſed they had a fort or ſtation here.

LEM'INGTON (Upper), near the above; a hamlet in the pariſh of Toddenham.

LEM'INGTON PRI'ORS, a village and watering-place in Warwickſhire. Here are two medicinal ſprings, which, in ſcorbutic, gouty, and rheumatic, caſes, are held in great repute. For rural retirement it has many advantages, being

being nearly in the middle of the kingdom, within two miles of Warwick; a pleaſant morning's walk from Guy's Cliff, once the noted reſidence of our country's champion, and the venerable ruins of Kenilworth Caſtle; and about nine miles from Coventry. The canal coming near the village makes the neceſſaries of life moderate; the dryneſs of its ſituation renders it healthy; and the roads are clean and pleaſant.

"Lemington Priors takes its name from its ſituation on the ſouth ſide of the river Leame. In the Conqueror's time, earl Roger held it to the extent thereof, being certified at two hides, which were valued at 4l. having two mills rated at 24s. The church, dedicated to All Saints, was originally but a chapel belonging to Wooton, being therewith confirmed to the canons of Kenilworth, by Ric. Peche, biſhop of Coventry, in Henry the Second's days, and appropriated to them by G. Muſchamp, his ſucceſſor, in king John's time, 1291. 19 Edw. I. it was valued at ſix marks over and above a penſion of 20s. then iſſuing out of the abby of Malmſbury, and the vicarage of 20s. But in 26 Henry 8th, the ſame was valued at 6l. 10s. the penſion at 33s. 4d. added by the canons of Kenilworth computed. All that is further obſervable touching this place is, that, nigh to the eaſt end of the church, is a ſpring of ſalt-water (not above a ſtone's throw from the river Leame), whereof the inhabitants make uſe for ſeaſoning of meat."

"*Newbold Comyn.* This place (the original occaſion of whoſe name is diſcovered by the latter ſyllable *bold*, which in the Saxon language ſignifieth *houſe*) is one of thoſe depopulated villages whereof John Rous (an antiquarian and ſome time chantry-prieſt at Guy's Cliffe) complained, and lyeth on the north ſide of Leame. In Edward Confeſſor's time it was the inheritance of one Vleucine, who gave it to the abby of Malmſbury at ſuch time as he was ſhorn a monk in that monaſtery; and by the Conqueror's Survey is certified to contain 3 hides, at which time there was a mill yielding 8s. per annum: the value of the whole being 50s. But it was not long after the Norman conqueſt that the monks of Malmſbury enfeoft one Radulphus Vicecomes in this their land at Newbold; which Ralph had iſſue, Wibert, and he a ſon called Anſelme, who left one only daughter, ſc. Joan, within age at her father's deceaſe, and in ward to the Abbott, by whom ſhe was given in marriage to Elias Comyn. From which Elias and Joan deſcended theſe Comyns, who had their ſeat here, and for diſtinction from other Newbolds gave the addition of their own name to this place. In 31 Henry III. upon difference that grew betwixt John Comyn and Geffry de Simely, lord of Radford, touching liberty of fiſhing in the river Leame, they came to an agreement that the ſaid John ſhould fiſh as far as his own land extended." *Dugdale.*

Such was the ſtate in former times of theſe two villages, which conſtitute one pariſh, or conſtablewick; the river, which riſes in this county, divides their diſtricts, waſhing the banks from an eaſtern to a weſtern direction; a handſome ſtone bridge of three arches has lately been erected, which holds a communication between the two villages, and from whence proceeds a road leading to Coventry, &c.

The ſpring which ſupplies the old baths was diſcovered in 1786, in which year a cold and a warm bath were conſtructed. Upon ſinking the well, a rock was found at the depth of eighteen feet; and the water riſes from about the depth of three feet within the rock. This water is pellucid when it firſt riſes from the ſpring; in ſmall quantities it does not loſe its tranſparency; a very ſmall ſediment is depoſited by boiling, ſo ſmall indeed that ſufficient cannot be collected in this way for examination. However, when the bath has been newly filled, in ſome hours the tranſparency of this large body of water is deſtroyed by expoſure to the atmoſphere, and it contracts a whitiſh colour.

The ſpring now called the new baths was diſcovered in the year 1790, at the depth of forty-two feet from the ſurface of the ground. A well is ſunk about twenty-four feet deep. In the courſe of this depth there is a rock the thickneſs of eight or ten feet; afterwards a bed of marl; after penetrating which, another rock, much harder than the former, is found. Through this ſecond rock a bore is made eighteen feet deep, where there is a ſmall cleft in the rock. There are many little ſprings found in this courſe; but from this cleft the water riſes with violence to the level of four feet above the ſurface of the ground; and it affords a conſtant and copious ſupply of freſh water.

The water, when freſh drawn, ſmells of ſulphurated hydrogen, or hepatic gas; but it quickly becomes inodorous by expoſure to the atmoſphere. A ſediment falls to the bottom, and adheres to the ſides of the bath. It is of a yellow colour, and acquires additional brightneſs by expoſure to the atmoſphere. A ſimilar ſediment may be ſeparated by boiling the freſh water. From a gallon of water, ·75 of a grain is procured. This diſſolves readily in acids, and ſhows all the common and well-known appearances of oxyd of iron. Several phenomena demonſtrate the exiſtence of ſome metallic ſubſtance in this water, beſides the precipitate already deſcribed; but it is ſo peculiarly combined, or otherwiſe modified, as to elude, in a great meaſure, the action of the ordinary re-agents. When the water is boiled in contact with ſome of the metals, it becomes turbid; and the metal is partly oxydated, and partly diſſolved. The iron, which has been uſed in the conſtruction of the baths, is almoſt deſtroyed; the tin, which lined a veſſel uſed as warm bath for children, has ſuffered in like manner. If the water be only boiled and poured into a wine-glaſs with a bright key in it, the liquor becomes turbid before it is cold. Copper ſeems to reſiſt its action better; but this is only in a low temperature; for, if the water be boiled in a copper veſſel, ſimilar effects are produced; a precipitate is formed, and ſome copper is diſſolved in the water. This is readily proved by putting a bright piece of iron into the liquor, which, in a few hours, acquires a coppery coating. This remark evinces the ſtrong neceſſity of a chemical examination of all the ſubſtances uſed as medicines. It is very common to warm the water with a view of quickening its laxative power. It is evident with what caution veſſels in which copper is an ingredient ſhould be uſed for this purpoſe; or, rather with what care they ſhould be utterly avoided.

Table of Subſtances contained in the two Springs.

Gaſeous fluids contained in a wine-gallon in cubic inches.

	Old Bath.	*New Bath.*
Hepatic gas	too ſmall to be meaſured.	too ſmall to be weighed.
Azotic gas	·3	3·5
Carbonic acid gas		·5

Solid contents of a wine-gallon in grains.

Carbonat of iron		·75
Oxyds of iron and manganeſe	too ſmall to be weighed.	
Oxygenated muriat of iron and manganeſe	unknown, but very ſmall.	unknown, but very ſmall.
Sulphur - -		unknown, but very ſmall.
Muriat of magneſia - -	58	11·5
Muriat of ſoda	330	430
Sulphat of ſoda	62	152
Sulphat of lime	146	112

It is to be obſerved, that both theſe ſprings are affected by rainy weather; and that, conſequently, their contents vary conſiderably according to the ſeaſons. *Lambe* in the *Mancheſter Mem.* vol. v. part 1.

In the ſummer of the year 1808, a ſalt ſpring was opened on the Newbold ſide, at about the diſtance of twenty yards from the river and bridge, to which baths and proper conveniences are made for uſing the water. A new town is likewiſe building on this ſide for accommodation,

modation, which is marked out on an extenſive ſcale; and, for the laſt three years, both ſides of the river have been honoured with the preſence of many of the nobility, and other families of character and diſtinction. It has been aſcertained that not leſs than fifteen hundred perſons viſited the place for the benefit of the waters during the laſt ſeaſon, excluſive of ſervants and children. Notwithſtanding the accommodations increaſe very rapidly, they are not equal to the demand of the company; but that inconvenience will be ſhortly obviated by the extenſive and commodious houſes now erecting by the Lemington Building Society, and other ſpirited individuals. Poor invalids, who ſeek the benefit of the waters in diſtreſſed circumſtances, are liberally relieved from a fund eſtabliſhed for that laudable purpoſe.

LEM'KENDORF, a town of Denmark, in the iſland of Femern: four miles weſt of Borg.

LEM'LAND, a ſmall iſland in the Baltic, near the ſouth-eaſt of Aland, about twenty miles in circumference. Lat. 60. 4. N. lon. 19. 58. E.

LEM'LEM, a country of Africa, in the internal part of Negroland: 500 miles eaſt-ſouth-eaſt from Tombuctou.

LEM'LUM, a town of the Arabian Irak: thirty-three miles ſouth-eaſt of Helleh. Lat. 31. 43. N.

LEM'MA, *ſ.* [Gr. of λαμβανω, I aſſume.] In mathematics, a propoſition previouſly laid down in order to clear the way for ſome following demonſtration; and prefixed either to theorems, in order to render their demonſtration leſs perplexed and intricate; or to problems, to make their reſolution more eaſy and ſhort. Thus, to prove a pyramid one third of a priſm, or parallelopiped, of the ſame baſe and height with it, the demonſtration whereof in the ordinary way is difficult and troubleſome; this lemma may be premiſed, which is proved in the rules of progreſſion, that the ſum of the ſeries of the ſquares, in numbers in arithmetical progreſſion, beginning from 0, and going on 1, 4, 9, 16, 25, 36, &c. is always ſubtriple of the ſum of as many terms, each equal to the greateſt; or is always one-third of the greateſt term multiplied by the number of terms. Alſo, to find the inflection of a curve line, this lemma is firſt premiſed, that a tangent may be drawn to the given curve in a given point. So in phyſics, to the demonſtration of moſt propoſitions, ſuch lemmata as theſe are neceſſary firſt to be allowed; that there is no penetration of dimenſions; that all matter is diviſible; and the like. As alſo in the theory of medicine, that where the blood circulates, there is life, &c.

LEMMA, a ſubject propoſed, or title.—That's the *lemma*, mark it. *Ben Johnſon's Poetaſter.*

LEMMA, in pharmacy, a term uſed to expreſs the huſk or ſhell of certain fruits, as the almond and the like; and, in general, whatever is taken off in decortication; thus, the huſks of oats, barley, &c. are the lemmata of thoſe ſeeds.

LEM'MER, a ſeaport of Frieſland, ſituated near the Zuyder Zee. In October 1799, this place ſubmitted to the Britiſh ſhip the Wolverene, commanded by captain Bolton: it is twenty miles ſouth of Lewarden, and fifteen weſt of Staveren. Lat. 52. 52. N. lon. 5. 30. E.

LEM'MER, *ſ.* in zoology. See MUS.

LEM'NA, *ſ.* DUCK'S MEAT; in botany, a genus of the claſs monoecia, order diandria, natural order of miſcellaneæ, (naiades, *Juſſ.*) The generic characters are—I. Male flower. Calyx: one-leafed, roundiſh, gaping on the ſide, obliquely dilated outwards, obtuſe, ſpreading, depreſſed, large, entire. Corolla: none. Stamina: filaments two, awl-ſhaped, incurved, length of the calyx; antheræ twin, globoſe. Piſtillum: germ ovate; ſtyle ſhort, permanent; ſtigma obſcure. Pericarpium: abortient. II. Female flower in the ſame plant with the male. Calyx as in the male. Corolla: none. Piſtillum: germ ſubovate; ſtyle ſhort, permanent; ſtigma ſimple. Pericarpium: capſule globoſe with a point, one-celled. Seeds ſome, oblong, ſharp on each ſide, nearly the length of the capſule, ſtriated on one ſide. Ehrhart and Hedwig have ſeen hermaphrodite flowers.—*Eſſential Character.* Male: Calyx one-leafed; corolla none. Female: Calyx one-leafed; corolla none; ſtyle one; capſule one-celled.

Species. 1. Lemna triſulca, or ivy-leaved duck's meat: leaves petioled, lanceolate. Stem dichotomous, filiform, divaricated, having a lanceolate leaf at the angle of the branches, but proliferous ones terminating the branches; that is, ſimilar leaves growing out of their ſides at right angles; where theſe three leaves are conjoined, there ſhoots out a pendent radicle, with a conical papilla at its baſe. Linnæus obſerves, that the ſtems are flatted and proliferous, croſſing each other, and thus reſembling in the mode of growth Cactus opuntia, or Indian fig. Dr. Withering adds, that the leaf-ſtalks iſſue from the edge of another leaf, from a fiſſure parallel to the ſides of the leaf. Native of moſt parts of Europe in ditches and ſtagnant waters; flowering from June to September.

2. Lemna minor, or leaſt duck's meat, or duck-weed: leaves ſeſſile, flattiſh on both ſides, roots ſolitary. The leaves of the common duck-weed are very ſmall, of a roundiſh ovate form, collected into heaps, by twos or threes, and forming extenſive green plats on ſtagnant waters, and covering the ditches; each leaf drops a ſingle radicle. It is common in moſt part of Europe, and flowers from June to September; Linnæus ſays in the dog-days. This plant affords nouriſhment not only to ducks, but to the freſh-water polype, Phalæna lemnata, &c. Its quick and extenſive propagation makes it troubleſome in ſome caſes; but at the ſame it muſt be conſidered that it arreſts a vaſt quantity of inflammable air from putrid water, and converts it into vital elaſtic air, adapted to reſpiration. It is remarked, in the third volume of the *Atta della Societa di Firenze*, that duck-weed, in places where it totally covers the water, retires, or contracts itſelf, as ſoon as a branch of the Rhus radicans is dipped into the water near it. If a bit of the leaf-ſtalk of the latter be thrown into the water, it moves itſelf for ſome time in all directions, while an oily matter iſſues ſometimes from one end and ſometimes from the other; which, without doubt, is the cauſe of its movement. A like motion is obſerved in other plants which emit a milky juice; the Schinus molle exhibits this phenomenon ſtrongeſt next to the Rhus.

3. Lemna gibba, gibbous duck's meat, or duck-weed: leaves ſeſſile, hemiſpherical underneath, roots ſolitary. This differs from the preceding in having the leaves obovate, or narroweſt where they are joined together, the under ſurface ſlightly convex, and generally tinged with purple; the upper ſurface very convex, white, of a reticulated ſpongy appearance, and filled with water, ſomething reſembling the internal ſtructure of Scirpus lacuſtris, but not ſo regular, Roots filiform, from the centre of the under ſide of the leaf; leaves three, four, or five, together, one growing out of the edge of the other. Capſule two-celled, containing two ſeeds, ſomewhat compreſſed, and a little depreſſed in the middle, more globular when farther advanced. According to Gerard and Hudſon, this is a mere variety of the preceding. Native of ſeveral parts of Europe, in ditches and ponds; flowering in July and Auguſt.

4. Lemna polyrhiza, greater duck's meat, or duck-weed: leaves ſeſſile, roots cluſtered. The leaves of this are much larger than in the common ſort; they are thick, ſucculent, inflated, oblong-cordate, blunt, grooved above, bright green, ſmooth; purple underneath; five lines long, and four wide. This ſpecies is alſo diſtinguiſhed by its dropping packets of thick black fibres from the lower ſurface of the leaves. The flowers are the ſame as in the preceding, but are placed differently; they are to be found between the duplicature of each lamina, on that ſide where one leaf inſinuates itſelf into the other. The fruit is larger and more flatted. Linnæus ſays, it floats on the ſurface of the water on the appearance of the ſwallows, and ſinks again at their diſappearance. All the ſpecies ſink in the winter, and riſe again in the ſpring. Native

of

of moſt parts of Europe, in ditches, ponds, &c. flowering in July and Auguſt.

5. Lemna obcordata, or obcordate duck's meat: leaves ſeſſile obcordate, roots cluſtered. Leaves very ſmall; the upper ſurface in front bright green, but the hinder part, with the lower ſurface, and roots, purple; they have a longitudinal groove running along the middle, which is forked in front, each branch running to the end of each lobe, and dividing them as it were in two. Native of the Eaſt Indies.

6. Lemna arhiza, or rootleſs duck's meat: leaves in pairs, rootleſs. This has commonly two leaves cohering together, one ſmaller than the other, and no roots. This latter circumſtance makes it very probable that it is only Lemna polyrhiza in a naſcent ſtate, as Wiggers has obſerved. Native of Italy and France.

Theſe plants are all annual, and float on ſtagnant water. Their flowers were obſerved in Italy long ſince by Micheli and Valliſnieri; but, not being produced ſo freely in more northern climates, they were long thought by ſome to be cryptogamous plants. The fructification, however, has been well aſcertained by Ehrhart and Graner in L. gibba, by Linnæus in L. minor, and by Graner in L. polyrhiza. Dr. Withering, alſo, having examined ſome of them in a flowering ſtate, bears witneſs to the accuracy of Micheli's figures. See MARSILEA.

LEM'NIAN, *adj.* Belonging to Lemnos, imported from Lemnos.

LEM'NIAN, *ſ.* A native or inhabitant of Lemnos.

LEM'NIS, in ancient geography, an iſland of Africa, in Mauritania Cæſarienſis, eaſt-north-eaſt of the mouth of the river Malva.

LEMNIS'CIA, *ſ.* [λημνισκος, Gr. a fillet, ribband, or bandage; from the form of the petals.] In botany, a genus of the claſs polyandria, order monogynia. The generic characters are—Calyx: perianthium one-leafed, five-toothed, acute, ſhort. Corolla: petals five, linear, long, acute, recurved, growing to the nectary. Nectary cup-ſhaped; fleſhy, very ſhort, girding the germ. Stamina: filaments numerous (ſeventy to eighty), capillary, longer than the corolla, inſerted into the nectary; antheræ roundiſh, ſmall. Piſtillum: germ roundiſh, immerſed into the nectary; ſtyle filiform, length of the ſtamens; ſtigma obtuſe. Pericarpium: five-celled. Seeds ſolitary.—*Eſſential Character.* Calyx five-toothed; corolla five-petalled, recurved; nectary cup-ſhaped, girding the germ; pericarpium five-celled; ſeeds ſolitary.

Lemniſcia Guianenſis, a ſingle ſpecies, the Vantanea Guianenſis of Aublet. This is a tree from fifteen to twenty feet in height, and a foot in diameter. The bark is brown and ſmooth; the wood white and compact; abundance of twiſted branches ſpread in every direction. Leaves alternate, ſmooth, firm entire, ovate, acuminate, on a ſhort petiole; the largeſt leaves are five inches in length, and two in breadth. Flowers at the ends of the ſhoots, very numerous, in large corymbs, on a woody peduncle; corolla of a fine coral red. Native of Guiana, where it is called *Jouantan*, whence Aublet has conſtructed its name. It flowers in Auguſt.

LEM'NITZ, a river of Saxony, which runs into the Saal five miles ſouth-eaſt of Saalburg.

LEM'NITZ, a town of Saxony, in Neuſtadt: three miles eaſt of Neuſtadt.

LEM'NIUS, a ſurname of Vulcan.

LEM'NIUS, or LEMMENS (Levinus), was born at Zirickſee, in Zealand, in May 1505. He ſtudied at Louvain, and by the advice of his friends applied both to medicine and theology. He principally diſtinguiſhed himſelf, however, in the former of theſe ſciences, and practiſed the profeſſion for upwards of forty years, chiefly in his native place, where he ſettled in 1527. He obtained the full confidence of his patients by his knowledge and eloquence, and eſpecially by a mild and humane expreſſion of countenance and manner, which never failed to intereſt the ſick. After the death of his wife, Lemnius became a prieſt, and was made a canon of the church of St. Lieven, at Zirickſee, where he died in July 1568. He was the author of ſeveral works, the ſtyle of which has ſome force, and even elegance. Theſe are: 1. De Aſtrologia, De termino vitæ; De honeſto animi et corporis oblectamento; Antwerp, 1554. 2. De occultis naturæ miraculis, 1559. 3. De occultis naturæ miraculis, 1564. Theſe works contain many obſervations relative to natural philoſophy, botany, phyſiology, and medicine, and eſpecially concerning generation and monſters; but they alſo contain many fables. One ſtrange remark of his has been quoted from the laſt of theſe works, to which an Engliſhman will hardly give his aſſent; namely, "that ſailors, and the inhabitants of maritime regions, are prompted to many crimes, and are of a ferocious temper, becauſe the ſalt humour, which preſides in them, obnubilates the intellect, and prompts them to injury." 4. De Habitu et Conſtitutione Corporis, quam triviales Complexionem vocant, 1566, and ſeveral ſubſequent editions. 5. Similitudinum et Parabolarum, quæ in Bibliis ex herbis atque arboribus deſumuntur dilucida explicatio, 1569; many times reprinted and tranſlated. 6. De Zelandis ſuis Commentariolus; Leyden, 1611.

LEM'NOS, an iſland in the Ægean Sea, between Tenedos, Imbros, and Samothrace. It was ſacred to Vulcan, called *Lemnius Pater*, who fell there when kicked down from heaven by Jupiter. It was celebrated for two horrible maſſacres: that of the Lemnian women murdering their huſbands; and that of the Lemnians, or Pelaſgi, in killing all the children they had had by ſome Athenian women whom they had carried away to become their wives. Theſe two acts of cruelty gave riſe to the proverb of *Lemnian actions*, as applied to barbarous and inhuman deeds. The firſt inhabitants of Lemnos were the Pelaſgi, or rather the Thracians, who were murdered by their wives. After them came the children of the Lemnian widows by the Argonauts, whoſe deſcendants were at laſt expelled by the Pelaſgi, about 1160 years before the Chriſtian era. Lemnos is about 112 miles in circumference, according to Pliny, who ſays, that it is often ſhadowed by Mount Athos, though at the diſtance of 87 miles. It has been called *Hipſipyle*, from queen Hipſipyle. This iſland was conſecrated to Vulcan in the time of Homer, probably on account of two volcanoes, which were here continually caſting forth flames, and which were conſidered as the forges of the huſband of Venus. No veſtiges of theſe volcanoes now remain; but Sonnini thinks it probable that interior fires are ſtill burning here; for he met with a ſpring of hot water, which has been brought to ſupply baths, and another of aluminous water. The prieſts of Lemnos were reckoned famous for the cure of wounds. For this reaſon the Greeks, who went to the ſiege of Troy, left here Philoctetus, after he had been wounded in the foot by one of the arrows of Hercules. The efficacy of their ſkill depended, as it has been ſaid, upon the quality of that bole called *Lemnian earth*; which ſee under *Argilla* in the article MINERALOGY. It is alſo ſaid, that Galen made a voyage to Lemnos on purpoſe for aſcertaining the virtues of this earth; and that he found a perſon who had availed himſelf of it as an antidote to the bites of reptiles, and to poiſon. This iſland retained the name of Lemnos, by which it is even now known; but navigators have given it the name of *Stalimene*. The iſland is hilly, but extremely fertile; it yields corn, cotton, oil, and ſilk, with which a few light ſtuffs are manufactured. To be flouriſhing, ſays Sonnini, Lemnos wants only to be delivered from its oppreſſors. Nature has done every thing for it; and we lament the ſtate of languor and wretchedneſs to which its deſtiny has reduced it. Its inhabitants were formerly much given to navigation, or at leaſt to the carrying-trade; they are ſtill trading mariners, becauſe this kind of induſtry eſcapes more eaſily the cupidity of tyrants than affluence produced

duced only by agriculture, or by a ſedentary traffic. Some of the women are extremely beautiful. The whole eaſt coaſt is inacceſſible, on account of a ſhoal, which extends four leagues into the offing; the weſt coaſt affords to ſhips a few places of ſhelter againſt northerly winds. To the north is a large road; but there are no real harbours except on the ſouth part, where are two, at no great diſtance from each other, viz. Port Cadia and Port St. Antonio. *Sonnini's Travels.*

LE'MO, a river of France, which runs into the Orba near Alexandria, in the department of Marengo.

LE'MO, a town of Sweden, in the government of Abo: twelve miles north-weſt of Abo.

LEM'ON, *ſ.* [*limon*, Fr. *limonium*, low Lat.] The fruit of the lemon-tree. See CITRUS, vol. iv. p. 626.—The juice of *lemons* is more cooling and aſtringent than that of oranges. *Arbuthnot.*

Bear me, Pomona!
To where the *lemon* and the piercing lime,
With the deep orange, glowing through the green,
Their lighter glories blend. *Thomſon.*

LEM'ON, *adj.* Belonging to the lemon-tree; impregnated with the juice of lemons.

LEM'ON (Water). See PASSIFLORA.

LEM'ON-I'SLAND, one of the Skelig iſlands ſo called; ſituated off the coaſt of the county of Kerry, in the province of Munſter, in Ireland. It is rather a round rock, always above water, and therefore no-way dangerous to ſhips. An incredible number of gannets and other birds breed here; and it is remarkable that the gannet neſtles no-where on the ſouthern coaſts of Ireland but on this rock, though many of them are ſeen on all parts of our coaſt on the wing. There is another rock on the northern coaſt of Ireland remarkable for the ſame circumſtance.

LEM'ON-JUICE, *ſ.* The juice of lemons.

LEM'ON-PEEL, *ſ.* The peel of lemon, whether plain or candied for ſweetmeat:

But tulip-leaves and *lemon-peel*
Serve only to adorn the meal. *Prior's Alma.*

LEM'ON-TREE, *ſ.* The tree that bears lemons.—The *lemon-tree* hath large ſtiff leaves; the flower conſiſts of many leaves, which expand in form of a roſe; the fruit is almoſt of an oval figure, and divided into ſeveral cells, in which are lodged hard ſeeds, ſurrounded by a thick fleſhy ſubſtance, which, for the moſt part, is full of an acid juice. There are many varieties of this tree, and the fruit is yearly imported from Liſbon in great plenty. *Miller.*

LEMONA'DE, *ſ.* Liquor made of water, ſugar, and the juice of lemons.—Thou, and thy wife, and children, ſhould walk in my garden, buy toys, and drink *lemonade. Arbuth. J. Bull.*—This factitious liquor is ſo popular in Paris, that it has given its name to a new-eſtabliſhed company called *lemonadiers.*

LEM'OND, a town of North Carolina, on the Tar: twenty-four miles weſt of Tarburg.

LEMON'NIER. See MONNIER.

LE'MOS, a diſtrict of Spain, in Galicia, eaſt of Minho; the chief place is Montforte de Lemos.

LE'MOS (Thomas de), a learned Spaniſh Dominican monk, and celebrated defender of the doctrines of Aquinas againſt the Moliniſts, was born at Rivadavia, in Gallicia, about the year 1545. When the diſputes commenced between the Dominicans and Jeſuits, relating to the ſubject of grace, towards the cloſe of the ſixteenth century, he acquired high reputation by the zeal and dexterity with which he ſupported the opinions of St. Thomas at Valladolid. After ſilence had been impoſed on the contending parties by pope Clement VIII. and he had aſſembled at Rome a ſort of council for the deciſion of this controverſy, known by the name of the congregation *de auxiliis*, Lemos was appointed, at a general chapter of his order held at Naples in 1600, to plead the cauſe of their patron at the papal tribunal. Here he obtained great applauſe by the learning, ſkill, and eloquence, which he diſplayed; and is conſidered by his order as having immortalized himſelf by the ſucceſs with which he defended the glory of St. Thomas. After the congregation was diſſolved he returned to Spain, where Philip II. offered him a biſhopric, which he declined; but he accepted of a penſion from the royal treaſury. He died in 1629, about the age of eighty-four. He was the author of, 1. Panoplia Gratiæ, publiſhed in 1766, in 2 vols. folio, in which the queſtions concerning grace, free-will, and predeſtination, are largely and profoundly diſcuſſed. 2. Acta Congregationum et Diſputationum, quæ coram Clemente VIII. et Paulo V. de Auxiliis divinæ gratiæ ſunt celebratæ, 1702, folio; and numerous treatiſes in controverſial divinity. *Moreri.*

LEMOSA'NO, a town of Naples, in the county of Moliſe: eight miles north-eaſt of Moliſe.

LE'MOV (Niznei), a town of Ruſſia, in the government of Penza: ſeventy-two miles weſt of Penza. Lat. 53. 25. N. lon. 43. 34. E.

LE'MOV (Verchnei), a town of Ruſſia, in the government of Penza: thirty-eight miles ſouth-weſt of Penza. Lat. 53. 16. N. lon. 43. 14. E.

LEMOV'ICES, a people of Aquitania, ſituated between the Bituriges Cubi to the north, the Arverni to the eaſt, the Cadurci to the ſouth, and the Pictones to the weſt. Now the *Limoſin* and *La Marche.*

LEM'PA, a river of Mexico, which runs into the Pacific Ocean in lat. 13. 36. N.

LEM'PACH, a town of Auſtria: fourteen miles weſt-ſouth-weſt of Vienna.

LEM'PALA, a town of Sweden, in Tavaſtland: twenty-ſeven miles north-weſt of Tavaſthus.

LEMP'DE, a town of France, in the department of the Upper Loire: nine miles north-weſt of Brioude, and twenty-four north of St. Flour.

LEMPS LE GRAND, a town of France, in the department of the Iſere: thirteen miles ſouth of La Tour du Pin, and eighteen north-weſt of Grenoble.

LEMP'STER, a townſhip of North America, in Cheſhire county, New Hampſhire; incorporated in 1761, and containing 729 inhabitants.

LEMP'TA, a ſeaport town of Africa, on the eaſt coaſt of the kingdom of Tunis; the name denotes a port or ſtation for veſſels. This was the Leptis, or Leptis Parva, of the ancients; the other Leptis being in the kingdom of Tripoli, ſeveral leagues to the ſouthward. Lempta has been a mile or more in circuit; but at preſent nothing remains beſides the ruins of a caſtle, with a low ſhelf of rocks, that probably made the northern mound of the ancient Cothon. It is ſixty miles ſouth of Tunis. Lat. 35. 30. N. lon. 10. 54. E.

LEMP'TA, a deſert country of Africa, inhabited by a fierce and barbarous people, who rob the caravans that paſs from Conſtantina and other towns towards Nubia; ſituated about lat. 26. 30. N. lon. 9. E.

LEMP'TA, or ST. NICHOLAS, a river of Africa, which riſes in the country of Calbari, and runs into the Atlantic.

LEM'UEL, [Heb. God with him.] A man's name.

LEM'UI, a ſmall iſland in the Pacific Ocean, between the iſland of Chiloe and the continent. Lat. 44. 10. S.

LEM'VIG, a town of Denmark, in North Jutland, ſituated on the Lime Fiord, or Lympfurt: eighty-four miles north of Ripen. Lat. 56. 44. N. lon. 8. 18. E.

LE'MUR, *ſ.* in zoology, the MAUCAUCO; a genus of quadrupeds of the claſs mammalia, order primates. The generic characters are given by Gmelin as follows: Four front-teeth in the upper jaw, the intermediate ones being remote; ſix in the lower, long, compreſſed, parallel; the dog-teeth are ſolitary; the grinders ſomewhat lobated.

The maucaucos were long confounded with the monkeys, whom they reſemble in many reſpects, eſpecially in their agility; in having two nipples at the breaſts, and hands and feet like the human. But the hind legs are much longer in proportion than the monkeys have them, ſo that, when they go upon all four, the hinder parts are much

much raiſed, and they ſeem to be in an uneaſy poſition. The length of their legs gives a great facility to climbing trees; and ſo nimble are they, that Sonnerat ſays the eye can hardly follow them; in this again they reſemble the monkeys. They are indeed a ſingular race, having the muzzle of a fox and the paws of an ape; they ſeem, therefore, deſtined to fill the ſpace which exiſts between thoſe animals which moſt nearly reſemble man, and the real quadrupeds. They are allied to the former by the organs of motion, and to the latter by the conical form and length of the head; they have four cutting teeth in the upper jaw, and ſix in the lower, like the carnivorous animals. To the monkeys however they approach the neareſt: like them, they have two paps placed in the front of the breaſt; the organs of generation viſible; the motions of pronation and ſupination as eaſy as in man; a thumb ſeparated from the fingers, and ſuſceptible of being brought in contact with them; eyes placed in front of the head; and, above all, the ſocket of the eye diſtinct from the temporal foſſa, a character the more important, as it is not met with in any other digitated mammalia.

But, with all theſe common characteriſtics, the maucaucos are ſtill ſufficiently diſtinct from the monkeys. They have a penetrating and agreeable phyſiognomy; a form ſlender and elegant; the hind legs longer than the fore ones; the hair ſoft, ſilky, plentiful, and extremely clean; of the inciſive teeth the upper ones are ſeparated in pairs, the under ones directed outwards. Such are the traits which diſtinguiſh theſe pretty animals.

They have another peculiarity which might be diſregarded, becauſe it belongs to thoſe organs which are moſt ſubject to vary; it is the nail of the ſecond toe on the hind foot, which is long, arched, grooved, and terminated in a point: this nail is the only one which is thus formed; the others are, as in all the Simia tribe, ſhort, ſtraight, and flatted.

M. Geoffroy, profeſſor of zoology in the muſeum of natural hiſtory at Paris, urges the neceſſity of making a diviſion in this genus; for he obſerved that the Lemur indri and Lemur laniger of Gmelin had but *four* cutting teeth in the lower jaw, which were horizontally placed, concave within and convex without; whereas the other maucaucos have ſix, and they are placed diagonally; ſo that he thinks theſe two ſpecies ſhould form a genus of themſelves, between the Simia and the Lemur. Others perhaps will think that theſe two might be thrown into the genus Simia, or even that of all the maucaucos might be included under the ſame genus. We have but ten ſpecies of Lemur in Gmelin; yet Geoffroy makes five genera of theſe, and Audebert ſix. Theſe are as follow: 1. *Indri*, including the Lemur indri and laniger. 2. *Lemur*, comprehending the Lemur mongooz, macaco, catta, &c. 3. *Loris*, conſiſting of the Lemur tardigradus. 4. *Galago*, a ſpecies diſcovered by Geoffroy. 5. *Tarſius*, the tarſier of Pallas and Daubenton, the Didelphis macrotarſus of Gmelen. 6. *Galeopithecus*: this is the Lemur volans, or flying maucauco, which, after the example of Pallas, is made a ſeparate genus by Audebert. It is neceſſary to acquaint the reader with theſe arrangements, leſt he ſhould be loſt in the maze of new genera when peruſing the works of theſe authors; but we ſhall purſue the ſimple and luminous ſyſtem of Linnæus, as corrected by Gmelin.

1. Lemur tardigradus, the loris. Specific character, tail none, body tawnyiſh. This has a produced dog-like viſage; forehead high above the noſe; ears large, thin, and rounded, body ſlender and weak; limbs very long and ſlender, thumb on each foot more diſtinct, and ſeparate from the toes; on that, and the three outmoſt toes, are flat nails; on the interior toe of every foot a crooked claw. The hair on the body is univerſally ſhort, and delicately ſoft; the colour on the upper part tawny, beneath whitiſh; ſpace round the eyes duſky; on the head is a dart-ſhaped ſpot, with the end pointing to the interval between the eyes. Its length, from the tip of the noſe to the anus, is only eight inches. Notwithſtanding the epithet of *ſloth* given in Seba, it is very active, aſcends trees moſt nimbly, and has all the actions of an ape. If we credit Seba, the male climbs the trees, and taſtes the fruits before it preſents them to its mate. The female has four teats.

2. Lemur ecaudatus, the tailleſs maucauco: tail none; a dark ruſty line along the middle of the back from the rump to the forehead, where it becomes forked; orbits of the eyes ſurrounded by a blackiſh circle. This, and not the preceding, appears to be the "loris, or ſlow-paced lemur," deſcribed by ſir William Jones, in the Aſiatic Reſearches, vol. iv. We ſhall copy his account, as it contains many traits of his benevolent mind.

"This (male) animal had four hands, each five-fingered; palms naked; nails round, except thoſe of the indices behind, which were long, curved, pointed; hair very thick, eſpecially on the haunches, extremely ſoft, moſtly dark grey, varied above with brown and a tinge of ruſſet; darker on the back, paler about the face and under the throat, reddiſh towards the rump; no tail; a dorſal ſtripe, broad, cheſnut-coloured, narrower towards the neck; a head almoſt ſpherical; a countenance expreſſive and intereſting; eyes round, large, approximated, weak in the day-time, glowing and animated at night; a white vertical ſtripe between them; eyelaſhes black, ſhort; ears dark, rounded, concave; great acuteneſs at night both in ſeeing and hearing, a face hairy, flattiſh; a noſe pointed, not much elongated; the upper lip cleft; canine teeth comparatively long, very ſharp. In his manners he was for the moſt part gentle, except in the cold ſeaſon, when his temper ſeemed wholly changed; and his Creator, who made him ſo ſenſible of cold, to which he muſt often have been expoſed even in his native foreſts, gave him, probably for that reaſon, his thick fur, which we rarely ſee on animals in theſe tropical climates. To me, who not only conſtantly fed him, but bathed him twice a-week in water accommodated to the ſeaſons, and whom he clearly diſtinguiſhed from others, he was at all times grateful; but, when I diſturbed him in winter, he was uſually indignant, and ſeemed to reproach me with the uneaſineſs which he felt, though no poſſible precautions had been omitted to keep him in a proper degree of warmth. At all times he was pleaſed with being ſtroked on the head and throat, and frequently ſuffered me to touch his very ſharp teeth; but at all times his temper was quick, and, when he was unſeaſonably diſturbed, he expreſſed a little reſentment by an obſcure murmur, like that of a ſquirrel, or a greater degree of diſpleaſure by a peeviſh cry, eſpecially in winter, when he was often as fierce, on being much importuned, as any beaſt of the woods. From half an hour after ſunriſe to half an hour before ſunſet, he ſlept without intermiſſion, rolled up like a hedgehog; and, as ſoon as he awoke, he began to prepare himſelf for the labours of *his* approaching day, licking and dreſſing himſelf like a cat; an operation which the flexibility of his neck and limbs enabled him to perform very completely; he was then ready for a ſlight breakfaſt, after which he commonly took a ſhort nap; but, when the ſun was quite ſet, he recovered all his vivacity. His ordinary food was the ſweet fruit of his country; plantains always, and mangos during the ſeaſon; but he refuſed peaches, and was not fond of mulberries, or even of guaiavas; milk he lapped eagerly, but was contented with plain water. In general he was not voracious, but never appeared ſatiated with graſshoppers; and paſſed the whole night, while the hot ſeaſon laſted, in prowling for them; when a graſshopper, or any inſect, alighted within his reach, his eyes, which he fixed on his prey, glowed with uncommon fire; and, having drawn himſelf back to ſpring on it with greater force, he ſeized the victim with both his fore paws, but held it in one of them while he devoured it. For other purpoſes, and ſometimes even for that of holding his food, he uſed all his paws indifferently as hands; and frequently graſped with one of them the higher part of his ample cage, while his three others were ſeve-

rally engaged at the bottom of it. But the poſture, of which he ſeemed fondeſt, was to cling with all four of them to the upper wires, his body being inverted; and in the evening he uſually ſtood erect for many minutes playing on the wires with his fingers, and rapidly moving his body from ſide to ſide, as if he had found the utility of exerciſe in his unnatural ſtate of confinement. A little before day-break, when my early hours gave me frequent opportunities of obſerving him, he ſeemed to ſolicit my attention; and, if I preſented my finger to him, he licked or nibbled it with great gentleneſs, but eagerly took fruit when I offered it; though he ſeldom ate much at his morning repaſt; when the *day brought back his night*, his eyes loſt their luſtre and ſtrength, and he compoſed himſelf for a ſlumber of ten or eleven hours.

"The Pandits know little or nothing of this animal: the lower Hindoos of this province generally call it *lajjá-bánar*, or the baſhful ape; and the Muſſulmans, retaining the ſenſe of the epithet, gave it the abſurd appellation of a cat; but it is neither a cat nor baſhful; for, though a Pandit, who ſaw my loris by day-light, remarked that he was *lajjálu*, or modeſt (a word which the Hindoos apply to all ſenſitive plants), yet he only ſeemed haſhful, while in fact he was dim-ſighted and drowſy; for at night, as you perceive by his figure, he had open eyes, and as much boldneſs as any of the lemures, poetical or Linnæan. As to his country, the firſt of the ſpecies that I ſaw in India was in the diſtrict of Tipra, properly Tripura, whither it had been brought, like mine, from the Garrow Mountains; and Dr. Anderſon informs me, that it is found in the woods on the coaſt of Coromandel: another had been ſent to a member of our ſociety from one of the eaſtern iſles; and, though it may be alſo a native of Ceylon, yet I cannot agree with M. De Buffon, that it is the minute, ſociable, and docile, animal, mentioned by Thevenot, which it reſembles neither in ſize nor in diſpoſition. My little friend was, on the whole, very engaging; and, when he was found lifeleſs, in the ſame poſture in which he would naturally have ſlept, I conſoled myſelf with believing, that he had died without pain, and lived with as much pleaſure as he could have enjoyed in a ſtate of captivity."

3. Lemur indri, the indri: tail none; colour black. This has a produced dog-like viſage, ſhort ears, briefly tufted; hair ſilky and thick; face and lower parts greyiſh, rump white; whole upper part of the neck and body black; nails flat, but pointed at the ends; and without a tail. The largeſt are three feet and a half high; their note is that like a child's crying. It is a very gentle animal; when taken young, it is trained for the chace as dogs are. It inhabits Madagaſcar, where it is called *indri*, or man of the wood.

4. Lemur potto, the potto: tailed, body and tail ſubferruginous. An obſcurely-deſcribed ſpecies, conceived to differ from the indri only in the length of the tail. Boſman, who relates the ſuppoſed hiſtory of this animal, on the authority of the negroes, (in his account of Guinea,) attributes to it nearly the ſame manners as thoſe of the European ſloth. Inhabits Guinea.

5. Lemur mongoz, the woolly maucauco: tailed; body and tail grey. This ſpecies is diſtinguiſhed by orange-coloured irides, ſhort round ears, end of the noſe black, eyes lodged in a circle of black, the ſpace between them of the ſame colour, the reſt of the noſe and lower ſides of the cheeks white. When in full health, the whole upper part of the body is covered with long, ſoft, and thick, fur, a little curled or waved, of a deep browniſh aſh-colour; the tail is very long, covered with the ſame ſort of hair, and of the ſame colour; the breaſt and belly white, the hands and feet naked, and duſky; nails flat, except that of the inner toe of the hind feet; it is about the ſize of a cat, and varies, ſometimes with white or yellow paws, and with a face wholly brown. It inhabits Madagaſcar and the adjacent iſles, ſleeps on trees, and turns its tail over its head to protect it from rain. It lives on fruits, is very ſportive and good-natured, but very tender; and is found as far as Celebes or Macaſſar.

Linnæus has five varieties: β. Body grey or brown; face and hands black. γ. Body grey or black, near the eyes a black ſpot. δ. Body brown; noſe and hands white. ε. Body entirely brown. ζ. Body grey; face black, hands yellow. This laſt is the *brown maucauco* of Geoffroy, and the *mongous* of Buffon. It is one third larger than the woolly maucauco, the head rounder, and his ſnout ſharper: the tail, not ſo thick and more woolly, diminiſhes in ſize towards the extremity. The colour is different alſo; being brown above, aſh-coloured underneath. The buttocks and legs are tinged with olive-colour, the eyes are of a bright orange-yellow, the head entirely black. Hence we may ſee the impropriety, before pointed out by Buffon, of calling this the *brown* maucauco. Inhabits Madagaſcar, whence indeed all the ſpecies and varieties of this genus have been brought. We have ſufficiently noticed the reſemblance of this genus to the monkeys: we muſt therefore mention a ſingular fact, that no monkeys are found at Madagaſcar.

6. Lemur rufus, the red maucauco. Perhaps a variety of the mongous. The ears, however, are ſhorter, the hair on the tail is not ſo long, and the general colour is reddiſh, whereas the mongous is grey. They are of the ſame ſize; the muzzle of this is black, the ears ſhort and rounded; the top of the head, the temples, the cheeks, and throat, are of a dirty white; a black line paſſes from the forehead to the top of the head. The body is of a yellowiſh red; the tail is much more ſlender than that of the mongous, and brown at the end.

7. Lemur macaco, the ruffed maucauco; tailed, black; collar bearded. This has orange-coloured irides, long hair round the ſides of the head, ſtanding out like a ruff; tail long; the colour of the whole animal black, but not always, being ſometimes white ſpotted with black; but the feet are uniformly black. Size of a large cat. It inhabits Madagaſcar, is very fierce in its wild ſtate, and makes a violent noiſe in the woods. When tamed, they are very gentle and good-natured. The hind thighs and legs are very long, which makes their pace ſideling and bounding.

There are three varieties: β. Body brown. γ. Body white. δ. Body black and white mixed. This is the *vari* of Buffon; and is figured by Audebert with white legs, arms, and ruff, and a white belt round the middle of the body.

8. Lemur catta, the ring-tailed maucauco: tail white, with black rings. This ſpecies is remarkable for its large handſome tail, which is moſtly erect, and conſiſting of at leaſt thirty rings, alternately black and white, quite diſtinct and ſeparate. The coat of this beautiful animal always neat and ſhining, changes little its colour: that of the lower part of the body is white; it is aſh-colour with a ſlight tint of red upon the back. The head, to which a muzzle pointed and erect, an eye lively and animated, give much grace, is remarkable for the contraſt of its colours: all the muzzle, the contour of the eyes, and the occiput, are black; the forehead and ears are black; and the cheeks aſh-colour; the upper part of the arms is alſo of this colour; a black liſt ſurrounds the throat and falls over the ſhoulders. It is repreſented at fig. 1. on the annexed Plate.

The individual which was in the Paris Muſeum in the year 1801, had lived nineteen years: it firſt belonged to the marquis de Neſle, and afterwards to M. Merlin de Thionville, who preſented it to the national menagerie. It is evident, from the great age of this maucauco, that he endured the climate of Paris tolerably well: but he always appeared incommoded with the cold; he ſhowed that he was ſenſible of it, by gathering himſelf up in a heap, drawing his legs up to his belly, and covering his back with his tail. He was kept in winter within reach of a ſtove; before which he ſeated himſelf, ſtretching out his arms to approach nearer the fire; and in this manner he uſed to warm himſelf. He loved the fire ſo much, as ſometimes to ſinge his whiſkers and ſcorch his face before he would remove to a convenient diſtance; inſtead of drawing

drawing back, he would merely turn his head from ſide to ſide. He had been accuſtomed to enjoy a certain degree of liberty; of this they did not wiſh to deprive him by ſhutting him up in one of the cages of the menagerie: he was placed in the laboratory, where diſſecting and ſtuffing animals was carried on. But it was neceſſary to watch him with great attention: reſtleſs, ever in motion, he examined, touched, and turned over, every thing within his reach. A kind of ſhelf over the door of the laboratory ſerved him for a bed; to which he repaired every night after having very prudently prepared himſelf for ſleep by great exerciſe: he ſcarcely ever once omitted to employ the laſt half-hour of every day in regular leaps: this kind of dance finiſhed, he repaired to his bed, where he immediately fell aſleep. He was fed with bread, carrots, and fruits, which he loved very much; he would eat eggs alſo; and at an early age he had acquired a reliſh for cooked meat and ſpirituous liquors. He was an animal of the greateſt docility, ſenſible to careſſes, familiar with every body, but more reſerved in his latter years. He was not fond of any perſon in particular; but jumped into the lap, or climbed on the ſhoulders, of every body who came to viſit him. This is the ſpecies which has moſt frequently been brought to Europe; but we know little of their manners in a wild ſtate: Flacourt informs us only, that they live upon trees, and are found in parties of thirty or forty.

9. Lemur murinus, the murine maucauco: tailed; cinereous; tail tawny. This maucauco has the head and body of an elegant light grey, inſide of the ears white, orbits rufous, tail far exceeding the body in length, buſhy at the end, and of a bright ruſt-colour; the nails are flat and rounded. It is in length about five inches. It inhabits Madagaſcar.

10. Lemur bicolor, the American maucauco: a large white heart-ſhaped ſpot on the forehead between the ears, pointing downwards; face, noſe, body, and ſides, almoſt as low as the belly, black; breaſt, ſhoulders, legs, and reſt of the ſides, and belly, white; tail much longer than the body, thickeſt at the end, and quite black; limbs ſtrong, toes long and ſlender, nails long, ſtraight, and very ſlender; its feet are an exception to the genus. It inhabits South America.

11. Lemur laniger, the little maucauco: above reddiſh yellow, beneath white; tail tawny red; prehenſile. This animal has a rounded head, ſharp noſe, and long whiſkers; two canine teeth in each jaw; four cutting teeth in the upper jaw, ſix in the lower, and ſeven grinders on each ſide; the neareſt ſharp, the more diſtant lobated; the ears are large, roundiſh, naked, and membranaceous; eyes very large and full: the toes are long, but of unequal lengths; the ends are round: the nails are round, and very ſhort; that of the firſt toe is ſtraight, ſharp, and long; the tail hairy, of the length of the body, and is prehenſile. The colour of the upper part is cinereous, of the lower white, and the ſpace round the eyes is dark. It is rather leſs than the black rat, and is deſcribed from a living animal in the poſſeſſion of Marmaduke Tunſtal, eſq. This ſeems to be the ſame animal, which Buffon calls *le rat de Madagaſcar*. It is ſuppoſed to live in the palm-trees, and feed on fruits. It eats, holding its food in its fore-paws, like ſquirrels; it is very lively, and has a weak cry; and, when it ſleeps, it rolls itſelf up in a round poſture. There are two or three ſuppoſed varieties of this ſpecies.

12. Lemur albifrons, the white-headed maucauco: Geoffroy ſuppoſes this to be a variety of the preceding; but it is larger than the mongous; the muzzle is black and very long; the ears fleſh-colour; the head and cheeks white; the body is greeniſh brown; and the tail, which is ſlenderer than that of the mongous, is longer than the body and head together. Geoffroy ſaw three perfectly alike.

13. Lemur galago, the galago: this ſpecies is deſcribed by Geoffroy as having but two cutting teeth very far apart in the upper jaw, and ſix in the lower; theſe are directed obliquely forwards, but they are thin, and do not ſeem capable of cruſhing hard bodies, ſuch as the ſeeds of leguminous plants. The upper canine teeth are thick and bent, the lower ones lie over the cutting teeth; the grinders next to the canine teeth are ſimilar to them in form and poſition; and the upper jaw contains one grinder more. From finding but two cutting teeth in the upper jaw, Geoffroy was induced to make this a ſeparate genus by the name of *Galago*, which is its common appellation at Senegal: "In habits and manners," ſays he, "theſe differ but little from the monkeys and ſquirrels; they are very gentle; are commonly perched on trees, and live upon inſects, which they catch with their fore paws, and devour with wonderful celerity. They ſleep in hollow trees, where they prepare a bed lined with graſs for their young. The negroes of Galam hunt them for food." The galago is ſix inches and a half from the muzzle to the origin of the tail. The head is round; the ears very large, and naked. The arms and fingers are ſhort, with flat nails; but the legs are very long; the toes however are ſhort in proportion to the length of the tarſus; the toe-nails are ſhort and flat, except the ſecond, which is long and ſubulated, like moſt of the maucaucos properly ſo called. The tail is longer than the body and head. The hair in general is long and thick; the lips and ſnout are of a pale yellow. The top of the head, round the eyes, and the cheeks, are black; the back yelloviſh brown; growing lighter on the ſides, ſhoulders, and thighs; and lighter ſtill on the arms, legs, neck, breaſt, and belly. This is repreſented on the Plate, at fig. 2.

Adanſon ſays there are two other ſpecies of this genus at Senegal; the one larger, as big as a cat; the other ſmaller, not much bigger than a mouſe.

14. Lemur volans, the flying maucauco: tailed, and ſurrounded by a membrane formed for flying. This is made a ſeparate genus by Audebert, under the denomination of Galeopithecus. Travellers have called it flying cat, flying fox, flying monkey, &c. but ſyſtematic authors have hitherto called it the flying maucauco; for, notwithſtanding it is inveſted with a membrane which at firſt ſight might make it paſs for a bat, yet it has more of the generic characters of the Lemur than of the Veſpertilio. Audebert, however, has pointed out very exactly the differences between this animal and the maucauco, and which have induced him, not without reaſon it muſt be confeſſed, to create a new genus, which may include this and the following, and any other ſpecies that may hereafter be diſcovered. In the firſt place, the fingers of the flying maucauco are not diſpoſed for laying hold in the manner of thoſe of the other maucaucos; the thumb has not a direction or movement oppoſite to the fingers, ſo neceſſary for holding any thing ſecurely; all the fingers are united by a membrane, ſomewhat like the palmipede birds; they are flat like the blade of a knife; the nails are large, flattened in the ſame manner, much hooked, and very ſharp. Thus they can climb trees only by ſticking theſe ſharp claws into the bark, as the ſquirrels do; but the membrane which covers their limbs even to the nails muſt prevent them from having the nimbleneſs of thoſe animals. In the next place, they differ with reſpect to the teeth. There is ſome difficulty, in the upper jaw, in diſtinguiſhing the cutting teeth from the canine; ſome authors reckon two of each ſort; others deſcribe this animal as having four cutting teeth in the upper jaw, and no canine teeth at all. In the lower jaw there are ſix cutting teeth; the four intermediate ones are directed forwards; they are broad, flat, and like a comb, having eight very deep, narrow, parallel, ſerratures in each; the lateral ones are ſeparated from the intermediate ones about two thirds of the breadth of one; they are ſomewhat thicker, and have each five ſerratures not near ſo deep; and they are more upright. Another conſiderable difference is, that the legs are not longer than the arms.

We have been more particular in the deſcription of

this ſpecies, as its hiſtory hitherto has been very obſcure. Seba deſcribes it by the name of *flying cat of Ternate*; he ſays it flies quick, but very low, like our bats, making circles when in queſt of food. His deſcription is correct, but his deſign does not ſhow the ſingular conformation of the fingers. It inhabits the iſlands of the Indian Ocean, Guzerat, the Moluccas, the Philippines, and the Pelews. In Keate's account of the Pelew Iſlands, the following paſſage ſeems to relate to this animal: "While ſeated with the king, they ſaw a flying fox in a tree near them. Captain Wilſon's ſervant, being juſt returned from hunting, ſhot it with his muſket. This animal reſembles our bat, but is five or ſix times as large; it has a head like a fox, and it ſtinks like one; the natives call it *oleck*. It runs along the ground, and climbs trees like a cat; and it has wings, which it ſtretches out, and flies like a bird. It is reckoned delicate food by the inhabitants."

This animal is eleven inches in length from the tip of the muzzle to the ſetting-on of the tail. The head is like that of the maucauco; but the ſnout is more arched; the eyes are large, and far apart; the ears are ſmall and naked, of an oval ſhape, and black; the noſe is black. The arms are very long and thin, and the lower part almoſt naked; the reſt covered with hair; the fingers are five in number, an inch long. The thighs are almoſt bare, but the legs are covered with hair; there are five toes on each foot, ſimilar to the fingers on the hands. The tail is not ſo long as the body and head. The membrane incloſes and adheres to the arms, legs, and tail; comes firſt from the chin to the nails of the fingers; then to the toe-nails, and covers the tail to the very tip. The hair upon the head, back, and outſide of the membrane, is ſmooth, and of a ſtrong deep red; on the breaſt, belly, and arms, it is lighter, and rather curled. The inner part of the flying membrane is almoſt bare; but there is a tranſverſe line near the elbow quite covered with hair. See the Plate, fig. 3.

This animal, by its faculty of ſuſtaining itſelf in the air, bears a certain reſemblance to the bat and the flying ſquirrel. They differ from the latter, and approach to the former, by their broad membrane preſenting a greater ſurface to the air; for the ſquirrel only glides as it were; but this maucauco abſolutely flies like a bird, according to captain Wilſon; and turns round in the air, from Seba's account. But it is probable that its flight is not ſo firm as the bat's, ſince theſe have genuine wings, or ſails, formed by a membrane which incloſes their long front claws, and gives them a facility of ſtriking the air in every direction, and of moving with great velocity; whereas the flying maucauco, having head, hands, and feet, and tail, all encloſed in the membrane, cannot certainly perform ſuch varied evolutions; it is probable that their movements are by jumps, between the gliding of the ſquirrels and the flying of the bat. What confirms this, is that the membrane of the flying ſquirrel is covered with hair outſide and inſide; the maucauco has it covered with hair on the outſide only, being almoſt naked within; but the flying membrane of the bat is entirely naked. Now it has been lately diſcovered, (ſee the article VESPERTILIO,) that bats, when deprived of ſight, can not only fly ſtraight, but even avoid obſtacles which lie in their way; and it appears to us, that this faculty may partly be attributed to the nakedneſs of their wings, which are doubtleſs endued with a nice ſenſe of feeling; which ſenſe we ſuppoſe to be duller in the flying maucauco, and not to exiſt at all in the flying ſquirrel.

15. Lemur variegatus, the variegated flying maucauco: this is not above half the ſize of the former; the head is thicker in proportion, and not ſo long. The hair is of a darker colour, but variegated with ſeveral different ſhades, and marked with white ſpots. It is given by Geoffroy as a new ſpecies, but may be only a young one of the preceding. It is about ſix inches long, excluſive of the tail; the head is larger, and the limbs ſhorter, in proportion to the thickneſs of the body, than the preceding. The upper ſurface and membrane are dark brown; the limbs ſpotted with white; the under parts of a browniſh grey.

LEMURA'LIA. See LEMURIA.

LEM'URES, *ſ. pl.* [Latin.] Evil ſpirits:

In conſecrated earth,
And on the holy hearth,
The lars and *lemures* moan with midnight plaint. *Milton.*

The *lemures* are the ſame with the *larvæ*, which the ancients imagined to wander round the world, to frighten good people, and plague the bad. For which reaſon at Rome they had *lemuria*, or feaſts inſtituted to appeaſe the manes of the defunct. See LARS.

Apuleius explains the ancient notion of manes thus: The ſouls of men releaſed from the bands of the body, and freed from performing their bodily functions, became a kind of demons or genii, formerly called *lemures*. Of theſe *lemures*, thoſe that were kind to their families were called *lares familiares*; but thoſe who, for their crimes, were condemned to wander continually, without meeting with any place of reſt, and terrified good men, and hurt the bad, are vulgarly called *larvæ*.

An ancient commentator on Horace mentions, that the Romans wrote *lemures* for *remures*; which laſt word was formed from Remus, who was killed by his brother Romulus, and who returned to the earth to torment him. But Apuleius obſerves, that in the ancient Latin tongue *lemures* ſignifies the ſoul of a man ſeparated from the body by death.

LEMU'RIA, or LEMURA'LIA, a feaſt ſolemnized at Rome on the 9th of May, to pacify the manes of the dead, or in honour of the lemures. It was inſtituted by Romulus, to appeaſe the ghoſt of his murdered brother Remus, which he thought was continually purſuing him to revenge the horrid crime. The name lemuria is therefore ſuppoſed to be a corruption of *Remuria*, i.e. the feaſt of Remus. Sacrifices continued for three nights, the temples were ſhut up, and marriages were prohibited during the ſolemnity. A variety of whimſical ceremonies were performed, magical words made uſe of, and the ghoſts deſired to withdraw, without endeavouring to hurt or affright their friends above ground. The chief formalities were ablution, putting black beans into their mouths, and beating kettles and pans, to make the goblins keep their diſtance.

LEN, a river of England, in the county of Kent, which runs into the Medway near Maidſtone.

LE'NA, a river of Ruſſia, which riſes in a moraſs, ſituated in lat. 50. 20. N. lon. 108. 14. E. in the government of Irkutſk; paſſes by Vercholenſk, Tutura, Kirenſk, Vitimſkoi, Olekminſk, Yakutſk, Ziganſk, &c. and runs into the Frozen Ocean in lat. 73. N. lon. 119. 14. E.

LE'NA, a harbour on the weſt coaſt of Mindanao in lat. 6. 42. N. lon. 122. 12. E.

LENÆ'A, a feſtival kept by the Greeks in honour of Bacchus, (who had the ſurname of Lenæus, from ληνος, a wine-preſs,) at which there was much feaſting and Bacchanalian jollity, accompanied with poetical contentions, and the exhibition of tragedies. The poor goat was generally ſacrificed on the occaſion, and treated with various marks of cruelty and contempt, as being naturally fond of browſing on the vine-ſhoots.

LENA'TO, a town of Italy, in the department of the Olona: five miles ſouth of Milan.

LENBERAN', a town of Perſian Armenia: 168 miles eaſt of Erivan.

LENCH-CHURCH, a village in Worceſterſhire, between Lench-Rowſe and Lench-Wick, north of Eveſham, ſituated on a hill, with an extenſive proſpect into Warwickſhire. Near it are the villages of Lench-Shreeve, Aſt-Lench, and Habbe-Lench.

LENCK'ERSHEIM, a town of Germany, in the principality of Culmbach: three miles eaſt of Windſheim.

LENCLOI'STRE, a town of France, in the department of the Vienne: fourteen miles north of Poitiers.

L'ENCLO'S,

L'ENCLO'S (Anne, or Ninon, de), one of the famous women of a licentious and frivolous age and country, was born at Paris in 1616. Her father, a gentleman of Touraine, had ſerved with reputation in the army; her mother was a devotee. She loſt both parents at the age of fifteen; and, being left miſtreſs of a good fortune, without any one to controul her, ſhe determined to adopt a mode of life entirely ſuited to her inclinations. She had derived her philoſophy from the works of Charron and Montaigne, which ſhe began to meditate at the age of ten. Nature had given her beauty; but this quality, without the graces, was, according to her, "only a hook without a bait." She therefore made herſelf miſtreſs of all the accompliſhments proper to her ſex; ſhe played well on the harpſicord, ſang with taſte, and danced with elegance. She likewiſe ſtudied the art of converſation, and qualified herſelf for the company of the moſt cultivated perſons of her time. Amorous by conſtitution, and licentious by principle, ſhe reſolved to give free indulgence to the tender paſſion without the ſhackles of a ſerious engagement. She was not mercenary, and never ſold her favours; her fugitive attachments ſeem partly to have been prompted by perſonal attractions, partly by vanity; for they included men of high rank and reputation, as well as men of gallantry and faſhion. It is much leſs extraordinary, that ſhe was complimented and conſulted by ſome of the moſt eminent writers of the time, than that her friendſhip was ſought by ſome of the moſt reſpectable of her own ſex. She was long intimate with the celebrated madame de Maintenon, when the wife and the widow of Scarron; and it is ſaid, that this illuſtrious lady, when a partner in the throne, wiſhed to engage Ninon, firſt reformed, to live with her, and diſpel the dreadful ennui which was the price of her elevation. Ninon, however, wiſely preferred her liberty to the priſon of Verſailles; and was proof againſt all the efforts of directors and devotees to bring her to ſober reflections. As ſhe retained her perſonal charms to a late period, and her mental attractions to the cloſe of life, ſhe was long the object of admiration, and had the honour of forming more than one generation of young men of faſhion. Mothers were pleaſed to ſee their ſons in her train, as ſhe always promoted decorum, and the air of good company, and was capable of diſintereſted friendſhip to thoſe who confided in her. The power of her mature beauty was tragically illuſtrated by the often-told adventure of one of her ſons, who, being brought up in ignorance of his birth, fell deſperately in love with his mother. It is ſaid that ſhe diſcloſed the ſecret at the moment when he thought himſelf at the point of obtaining his wiſhes; and that the ſhock ſo overpowered him, that he threw himſelf upon his ſword. The credit and apparent ſatisfaction in which ſhe paſſed her days could not but favour the prevailing diſſoluteneſs of manners, and forms a ſatire on French morality; yet that ſhe was herſelf conſcious of having miſtaken the way to true happineſs appears from a paſſage in one of her letters to St. Evremond: "Every one tells me (ſays ſhe) that I have leſs cauſe to complain of time than any other perſon. However that be, if ſuch a life had been propoſed to me, I would have hanged myſelf." She died at the age of eighty. Whether her laſt moments correſponded with the reſt of her life, or whether ſhe died as a good Chriſtian, (for both have been aſſerted,) is of very little conſequence to mankind. A ſet of ſuppoſitious letters in her name to the marquis de Sevigné has been given to the public. Some of her real ones, contained in the works of St. Evremond, are written with more nature and delicacy.

LENC'ZICZ, or LENT'SCHITZ, a town of Warſaw, ſome time ſince capital of a palatinate of the ſame name in Poland. It is ſurrounded with a wall and a moat, and defended by a caſtle, which ſtands on a rock. A provincial diet, a court of judicature, and provincial ſynods of the clergy, are held in this town. In 1462, it was burnt by an accidental fire; in 1494, it was laid in aſhes by the Lithuanians; and, in 1656, when it was garriſoned by the Swedes, it was burned by the Poles, who put moſt of the inhabitants, eſpecially the Jews, to the ſword. It is ſixty miles weſt-ſouth-weſt of Warſaw, and 145 ſouth of Dantzic. Lat. 51. 52. N. lon. 19. 17. E.

LENCZ'NA, a town of Poland, in the palatinate of Lublin: ſixteen miles north-eaſt of Lublin.

To LEND, *v. a.* preterite and part. paſſ. *lent*: [lænan, Sax. *leenen*, Dut.] To afford or ſupply, on condition of repayment.—Thou ſhalt not give him thy money upon uſury, nor *lend* him thy victuals for increaſe. *Lev.* xxv. 37.

In common worldly things 'tis call'd ungrateful
With dull unwillingneſs to pay a debt,
Which, with a bounteous hand, was kindly *lent*;
Much more to be thus oppoſite with Heav'n. *Shakeſpeare.*

To ſuffer to be uſed on condition that it be reſtored.—I'll *lend* it thee, my dear; but have no power to give it from me. *Shakeſpeare.*

The fair bleſſing we vouchſafe to ſend;
Nor can we ſpare you long, though often we may *lend*.
Dryden.

To afford; to grant in general.—Covetouſneſs, like the ſea, receives the tribute of all rivers, though far unlike it in *lending* any back again. *Decay of Piety.*—Painting and poeſy are two ſiſters ſo like, that they lend to each other their name and office: one is called a dumb poeſy, and the other a ſpeaking picture. *Dryden's Dufreſnoy.*

From thy new hope, and from thy growing ſtore,
Now *lend* aſſiſtance, and relieve the poor. *Dryden.*

Cato, *lend* me for a while thy patience,
And condeſcend to hear a young man ſpeak. *Addiſon.*

LENDAR', a town of Iſtria: nineteen miles eaſt of Capo d'Iſtria.

LENDENA'RA, a town of Italy, in the Poliſe di Rovigo. It contains two churches and four convents. It is eight miles weſt of Rovigo.

LEN'DER, *ſ.* One who lends any thing. One who makes a trade of putting money to intereſt.—Let the ſtate be anſwered ſome ſmall matter, and the reſt left to the *lender*; if the abatement be ſmall, it will not diſcourage the *lender*: he that took ten in the hundred will ſooner deſcend to eight than give over this trade. *Bacon.*

Whole droves of *lenders* crowd the bankers' doors
To call in money. *Dryden's Spaniſh Fryar.*

LEN'DING, *ſ.* The act of delivering to another on condition of repayment; giving the uſe for a time; granting.

LEN'DING-HOUSE. See PAWNBROKER.

LENDO'RA, a town of Ruſſia, in the government of Olonetz: 100 miles weſt-north-weſt of Povenetz.

LENDSI'EDEL, a town of Germany, in the county of Hohenlohe: four miles of Kirchberg.

LE'NE LO'UGH, a lake of Ireland, in the county of Weſtmeath, near the ſmall town of Fore.

LE'NES, a ſmall iſland in the North Sea, near the coaſt of Norway. Lat. 67. 40. N.

L'ENFAN'T (David), a French Dominican monk and voluminous writer, was born at Paris in the year 1603. He embraced the eccleſiaſtical life when he was about ſeventeen years of age; and by his conduct and manners acquired the eſteem of his ſuperiors, while he ſecured their applauſe by his uncommon literary induſtry. He died in 1688, when about eighty-five years old. In 1655, he publiſhed *Sancti Bernardi Abbatis Biblia*, in 4to. containing a collection of all the illuſtrations of texts of ſcripture diſperſed through the works of that writer. In 1656 and 1665, he publiſhed *Concordantiæ Auguſtinianæ*, in two vols. folio, conſiſting of a concordance to all the opinions of that father; and, in 1661, a collection of all the paſſages illuſtrative of texts of ſcripture in his works, under the title of *Biblia Auguſtiniana*, in 2 vols. folio. In 1657 and 1659,

he ſent into the world a ſimilar collection of all the texts from the Old Teſtament, with their illuſtrations, which occur in the publications of Thomas Aquinas, with the title of *S. Thomæ Aquinatis Biblia*, in 3 vols. 4to. and in 1680, he publiſhed A general Hiſtory of all Ages, in 3 vols. 12mo. which he extended to 6 vols. in 1684. This is a curious and ſingular, though ſuperficial, production, exhibiting a kind of chronological ſketch of the moſt remarkable events, both in the church and the world, for every day in the year, from the birth of Chriſt to the date of its appearance.

L'ENFA'NT (James), a learned and eloquent French proteſtant divine, was born at Bazoche en Beauce, in the year 1661. He commenced his theological ſtudies at Saumur, under the learned Louis Cappel, profeſſor of Hebrew; and continued them afterwards at Geneva. He removed from Geneva to Heidelberg in 1683, where he was admitted to the miniſtry in the following year, and ordained paſtor of the French church in that place. His pulpit-talents were much admired, and recommended him to the dowager electreſs-palatine, who appointed him her chaplain. In 1688, the invaſion of the Palatinate by the French rendering it unſafe for him to remain at Heidelberg, he removed to Berlin, where Frederic elector of Brandenburgh appointed him paſtor of one of the churches. Not long afterwards, Charlotte-Sophia, queen of Pruſſia, nominated him her preacher; and, upon the death of this princeſs, he was made chaplain to the king her ſon. He was alſo appointed a counſellor of the ſuperior conſiſtory, and elected a member of the Academy of Sciences at Berlin. In the year 1707, he paid a viſit to England, where he preached before queen Anne, who was ſo much pleaſed with him that ſhe offered him the poſt of one of her chaplains; but his attachment to Berlin induced him to decline this honour. His grand object in this journey was, to collect or conſult ſcarce books and manuſcripts, in order to procure materials for the hiſtorical works which are mentioned below. With this view, in the ſame year, he viſited Holland; and at ſubſequent periods, Helmſtadt, Leipſic, and Breſlaw. He died of a paralytic attack in 1728, about the age of ſixty-ſeven.

In perſon he was middle-ſized, with an open pleaſing countenance; his manners were ſimple and engaging; and his diſpoſition truly amiable. His publications were very numerous in the departments of divinity, eccleſiaſtical hiſtory, criticiſm, polite and miſcellaneous literature. The moſt important of them are, 1. Hiſtory of the Council of Piſa, 2 vols. 4to. 1724. 2. Hiſtory of the Council of Conſtance, 2 vols. 4to. 1727. 3. Hiſtory of the Council of Baſil, 2 vols. 4to. 1731. Theſe hiſtories are written with great ability and impartiality, and abound in intereſting facts. 4. (conjointly with M. Beauſobre,) The New Teſtament, tranſlated from the original Greek into French, 2 vols. 4to. 1728, with Notes, and a general preface, or introduction to the reading of the Scriptures. 5. Diſſertations on the New Teſtament, being a continuation of Saurin's Diſſertations on the Bible; 1 vol. folio, 3 vols. 8vo. 6. De Inquirenda Veritate, 4to. 1691, which is a Latin tranſlation of Malebranche's Search after Truth; 7. The Hiſtory of Pope Joan, taken from the Latin Diſſertation of M. Spanheim, 12mo. 1694. 8. Poggiana, or the Life, Character, Opinions, and Bon Mots, of Poggio the Florentine, with his Hiſtory of the Republic of Florence, 2 vols. 12mo. 1720. 9. Sermons, 2 vols. 12mo.

LEN'GA DE BAZA'SA, a province on the coaſt of Caramania. Lat. 36. 33. N. lon. 34. 11. E.

LEN'GEFELD, a town of Saxony, in Erzgeburg: twelve miles ſouth-eaſt of Chemnitz, and thirty ſouth-weſt of Dreſden. Lat. 50. 40. N. lon. 13. 7. E.

LEN'GEFELD, or LEN'GENFELD, a town of Saxony, in the Vogtland: ten miles north-eaſt of Plauen, and ten ſouth-ſouth-weſt Zwickaw. Lat. 50. 27. N. lon. 12. 22. E.

LEN'GENWANG, a town of the biſhopric of Augſburg: nine miles ſouth of Oberdorf.

LEN'GER, a town of Perſia, in Choraſan: 162 miles north-north-weſt of Herat.

LEN'GER KU'RAN, a town of Perſia, in Chilan: 120 miles north-weſt of Reſhd.

LEN'GERICH, a town of Germany, in the county of Tecklenburg: four miles ſouth of Tecklenburg.

LENG'FELD, a town of Germany, in the county of Wertheim: nine miles north-north-weſt of Wertheim.

LENG'FELD, a town of the duchy of Wurzburg: three miles north-north-eaſt of Wurzburg.

LENG'FURT, a town of Germany, in the county of Wertheim: twelve miles ſouth-ſouth-eaſt of Wertheim.

LENGHI'ER, a town of Perſia, in the province of Choraſan: ſeventy miles eaſt of Herat.

LEN'GIUM, a town of Sweden, in Weſt Gothland: forty-two miles eaſt of Gothenburg.

LENGLE'T DU FRESNOY' (Nicholas), a copious French writer, was born at Beauvois in 1674. After he had paſſed through his initiatory ſtudies at Paris, he applied particularly to theology, and compoſed ſeveral works in a ſtrain of freedom which attracted the cenſure of the Sorbonne and other eſtabliſhed bodies. He ſhowed himſelf little favourable to the myſtic rhapſodies of Mary of Agreda, and attacked the reality of alleged viſions, apparitions, &c. Diſguſted probably with the oppoſition he met with, he quitted divinity for politics; and in 1705 was ſent by the miniſter for foreign affairs, Torcy, to reſide at the court of the elector of Cologne, at Lille, in quality of ſecretary for the Latin and French languages. He was alſo entruſted with the management of the foreign correſpondence with Bruſſels and Holland, by means of which he became acquainted with various plots and intrigues againſt the French intereſt. A diſcovery of this kind rendered him inſtrumental in defeating the treachery of an officer who had engaged to deliver one of the gates of Mons to the duke of Marlborough. Lenglet returned to France at the concluſion of this war, and employed himſelf in compoſing various literary works. At the time of the conſpiracy of the prince of Cellemare, ſet on foot by cardinal Alberoni, he was choſen by the French miniſtry to penetrate into this intrigue; and his ſucceſs was ſuch, that he was rewarded with a penſion for life. He took a journey to Vienna in 1721, and was appointed by prince Eugene (who had before known and favoured him) his librarian; but he ſoon loſt the poſt, for ſome miſconduct. He refuſed the invitation of an opulent ſiſter who wiſhed him to reſide with her, and rather choſe to remain in an obſcure lodging with one ſervant. His mean appearance did not, however, prevent his being received in many great houſes, on account of the vivacity of his converſation, and the extent of his knowledge. He was much inclined to cauſticity, and frequently paſſed the bounds both of prudence and decency in his writings; nor could he be prevailed upon to alter what was liable to objection. This freedom cauſed him ten or twelve times to be ſent to the Baſtille; and it is ſaid, that he became ſo accuſtomed to this puniſhment, that, upon ſeeing the uſual exempt enter his room, he would ſay, "Ah! good morning, Mr. Tapin! Here, quick (to his maid), my bundle of linen, ſnuff, &c." and then cheerfully walked away with his conductor. In his latter years he was attached to chemiſtry, and was thought to be in queſt of the philoſopher's ſtone. The end of this ſingular man was tragical. Having ſat down to read near the fire, he ſlumbered over his book, and, falling upon the hearth, was burnt to death. He was then in his eighty-ſecond year; and, from the ſoundneſs of his conſtitution, ſeemed likely to laſt ſome years longer. The long catalogue of the publications of Lenglet is not now worth copying. A great part of them conſiſt of editions of other writers, to which he added notes and illuſtrations, often ſatirical, and not unfrequently licentious. His beſt work is eſteemed to be his "Methode pour etudier l'Hiſtoire, avec un Catalogue des principaux Hiſtoriens," 12 vols. 12mo. 7 vols.

7 vols. 4to. Another upon a similar plan, also well received, was his "Methode pour etudier la Geographie," with a catalogue of the best maps, and an account of the principal geographers. Among the more curious of his works are "Traité historique & dogmatique du Secret inviolable de la Confession;" and "Histoire de la Philosophie Hermetique." *Moreri.*

LEN'GO SENGAN'DO, a town of Africa, in the kingdom of Congo: forty-five miles south-south-west of Bombi.

LENGTH, *s.* [from lenz, Sax.] The extent of any thing material from end to end; the longest line that can be drawn through a body.—There is in Ticinum a church that is in *length* one hundred feet, in breadth twenty, and in height near fifty; it reporteth the voice twelve or thirteen times. *Bacon.*—Horizontal extension:

Mezentius rushes on his foes,
And first unhappy Acron overthrows;
Stretch'd at his *length* he spurns the swarthy ground. *Dryd.*

Comparative extent; a certain portion of space or time: in this sense it has a plural:

Time glides along with undiscover'd haste,
The future but a *length* beyond the past. *Dryden.*

Large *lengths* of seas and shores
Between my father and my mother lay. *Shakespeare.*

Left danger, fears, and foes, behind,
And beat at least three *lengths* the wind. *Hudibras.*

Extent of duration or space.—Having thus got the idea of duration, the next thing is to get some measure of this common duration, whereby to judge of its different *lengths*. *Locke.*

What *length* of lands, what oceans have you pass'd,
What storms sustain'd, and on what shores been cast? *Dryd.*

Long duration or protraction.—In *length* of time it will cover the whole plain, and make one mountain with that on which it now stands. *Addison.*

Such toil requir'd the Roman name,
Such *length* of labour for so vast a flame. *Dryden.*

Reach or expansion of any thing.—I do not recommend to all a pursuit of sciences to those extensive *lengths* to which the moderns have advanced. *Watts.*—Full extent; uncontracted state.—If Lætitia, who sent me this account, will acquaint me with the worthy gentleman's name, I will insert it at *length* in one of my papers. *Addison's Spectator.*—Distance.—He had marched to the *length* of Exeter, which he had some thought of besieging. *Clarendon.*—End; latter part of any assignable time.—Churches purged of things burdensome, all was brought at the *length* unto that wherein now we stand. *Hooker.*—A crooked stick is not straightened, unless it be bent as far on the clear contrary side, that so it may settle itself at the *length* in a middle state of evenness between them both. *Hooker.*

At LENGTH. [An adverbial mode of speech. It was formerly written *at the length.*] At last; in conclusion:

At length, at length, I have thee in my arms,
Though our malevolent stars have struggled hard,
And held us long asunder. *Dryden's King Arthur.*

To LENG'THEN, *v. a.* To draw out; to make longer; to elongate.—Relaxing the fibres, is making them flexible, or easy to be *lengthened* without rupture. *Arbuthnot.*

Falling dews with spangles deck'd the glade,
And the low sun had *lengthen'd* every shade. *Pope.*

To protract; to continue.—Break off thy sins by righteousness, and thine iniquities by showing mercy to the poor; if it may be a *lengthening* of thy tranquillity. *Daniel.*

Frame your mind to mirth and merriment,
Which bars a thousand harms, and *lengthens* life. *Shakesp.*

To protract pronunciation.—The learned languages were less constrained in the quantity of every syllable, beside helps of grammatical figures for the *lengthening* or abbreviation of them. *Dryden.*

To LENGTHEN *out.* [The particle *out* is only emphatical.] To protract; to extend.—It *lengthens out* every act of worship, and produces more lasting and permanent impressions in the mind, than those which accompany any transient form of words. *Addison.*

What if I please to *lengthen out* his date
A day, and take a pride to cozen fate! *Dryden.*

To LENG'THEN, *v. n.* To grow longer; to increase in length.—One may as well make a yard whose parts *lengthen* and shrink, as a measure of trade in materials that have not always a settled value. *Locke.*

Still 'tis farther from its end;
Still finds its error *lengthen* with its way. *Prior.*

LENG'THENING, *s.* The act of extending in length, or protracting.

LENGTH'WISE, *adv.* According to the length; in a longitudinal direction.

LENGUE'GLIO, a town of Genoa: five miles south of Albenga.

LENGUR', a town of Persia, in the province of Mazanderan: fifteen miles north-west of Amol.

LEN'HAM, a town in the county of Kent, with a market on Tuesday, and fairs June 6 and Oct. 23; situated near the source of the Len, between Maidstone and Canterbury. It is nine miles east of Maidstone, and forty-eight east of London. Lat. 51. 14. N. lon. 0. 43. E. In relation to this place, the continuator of Camden records the following extraordinary circumstance: "At Lenham (says he) is a thing exceeding remarkable, mentioned on the tomb of Robert Thompson, esq. in the church there, who was grandchild to that truly religious matron, Mary Honywood, wife of Robert Honywood, esq. of Charing. She had at her decease, lawfully descended from her, three hundred and sixty-seven children; sixteen of her own body, one hundred and fourteen grandchildren, two hundred and twenty-eight in the third generation, and nine in the fourth. Her renown liveth with her posterity; her body lieth in the church; and her monument may be seen in Mark's Hall, Essex, where she died."

Five miles south of Lenham, by the Medway, is the village of Smarden, which has a fair on the 10th of October.

LENHOF'DA, a town of Sweden, in the province of Smaland: thirty miles north-west of Calmar.

LE'NIENT, *adj.* [*leniens*, Lat.] Assuasive; softening; mitigating:

In this one passion man can strength enjoy;
Time, that on all things lays his *lenient* hand,
Yet tames not this; it sticks to our last sand. *Pope.*

With *of*:

Consolatories writ
With study'd argument, and much persuasion sought,
Lenient of grief and anxious thought. *Milton.*

Laxative; emollient.—Oils relax the fibres, are *lenient*, balsamic, and abate acrimony in the blood. *Arbuthnot on Aliments.*

LE'NIENT, *s.* An emollient, or assuasive application.—I dressed it with *lenients*. *Wiseman's Surgery.*

To LE'NIFY, *v. n.* [*lenifier*, old Fr. *lenio*, Lat.] To assuage; to mitigate.—Used for squinancies and inflammations in the throat, it seemeth to have a mollifying and *lenifying* virtue. *Bacon.*

All soft'ning simples, known of sov'reign use,
He presses out, and pours their noble juice;
These first infus'd, to *lenify* the pain,
He tugs with pincers, but he tugs in vain. *Dryden.*

LE'NIFYING, *s.* The act of softening; the act of assuaging.

LE'NIOR,

LE'NIOR, a county of America, in Newbern diſtrict, North Carolina, ſurrounded by Glaſgow, Craven, Jones, and Dauphin; containing 3898 free inhabitants, and 1457 ſlaves. The chief town is Kingſton.

LE'NIS SPIR'ITUS, in proſody. See SPIRIT.

LEN'ITIVE, *adj.* [*lenitif*, Fr. *lenio*, Lat.] Aſſuaſive; emollient.—Some plants have a milk in them; the cauſe may be an inception of putrefaction: for thoſe milks have all an acrimony, though one would think they ſhould be *lenitive*. *Bacon*.—There is aliment *lenitive*, expelling the fœces without ſtimulating the bowels; ſuch are animal oils. *Arbuthnot*.

LEN'ITIVE, *ſ.* Any thing medicinally applied to eaſe pain. A palliative.—There are *lenitives* that friendſhip will apply, before it would be brought to decretory rigours. *South's Sermons*.

LEN'ITIVENESS, *ſ.* The ſtate or quality of being lenitive. *Scott*.

LEN'ITUDE, *ſ.* Lenity. *Cole*.

LEN'ITY, *ſ.* [*lenitas*, Lat.] Mildneſs; mercy; tenderneſs; ſoftneſs of temper.—Albeit ſo ample a pardon was proclaimed touching treaſon, yet could not the boldneſs be beaten down either with ſeverity, or with *lenity* be abated. *Hayward*.

The old impriſon'd king,
Whoſe *lenity* firſt pleas'd the gaping crowd:
But when long try'd, and found ſupinely good,
Like Æſop's log, they leapt upon his back. *Dryden*.

LE'NIUS, a man's name; the name of ſeveral Romans.

LENKERAN', a town of Perſia, in the province Ghilan, near the Caſpian Sea: 110 miles north-weſt of Reſhd, and fifteen north of Aſtara. Lat. 28. 40. N. lon. 49. E.

LENNAN', a town of Peru, in the dioceſe of La Paz: twenty-ſeven miles north of Potoli.

LEN'NE, a river of Germany, which riſes near Berleburg, and runs into the Roer two miles weſt from Schwiert, in the county of Mark.

LEN'NEP, a town of the grand duchy of Berg. The magiſtrates and principal part of the inhabitants are Lutherans. In 1564, this town was almoſt wholly deſtroyed by fire: twenty miles eaſt-ſouth-eaſt of Duſſeldorf. Lat. 51. 9. N. lon. 7. 18. E.

LEN'NICK ST. MAR'TIN, a town of France, in the department of the Dyle, and chief place of a canton, in the diſtrict of Bruſſels. The place contains 1559, and the canton 10,606, inhabitants, on a territory of 120 kiliometres, in 12 communes.

LEN'NOX (Charlotte), a lady long diſtinguiſhed in the literary world, as the protégée of Dr. Johnſon, and the friend of Richardſon, was born in the year 1720. Her father was a field-officer, lieutenant-governor of New York, who ſent her over at the age of fifteen to a wealthy aunt, who unfortunately, on the arrival of her niece, was out of her ſenſes, and never recovered them; immediately after which the father died, and the daughter from that time ſupported herſelf by her literary talents, which ſhe always employed uſefully. Her latter days were clouded by penury and ſickneſs; calamities which were in a conſiderable degree alleviated by the kindneſs of ſome friends, who revered alike her literary and her moral character; but the moſt effectual balm to her wounded ſpirit aroſe from the aſſiſtance ſhe received from the Literary Fund Society, by whoſe timely aid her only ſon was enabled to fit himſelf out for an employment in the Anglo-American ſtates; and by whoſe bounty the means of decent ſubſiſtence were afforded to the mother till the cloſe of her long life, which took place in London in the month of February, 1804.

Her works were pretty numerous. She publiſhed, in the year 1752, The Female Quixote, and Memoirs of Harriet Stuart. In the former of theſe novels, the character of Arabella is the counterpart of Don Quixote; and the work was very favourably received. In the following year ſhe publiſhed Shakeſpeare Illuſtrated, in 2 vols. 12mo. to which ſhe afterwards added a third. This work conſiſts of the novels and hiſtories on which the plays of Shakeſpeare are founded, collected and tranſlated from the original authors: to which are added critical notes, intended to prove that Shakeſpeare has generally ſpoilt every ſtory on which his plays are founded, by torturing them into low contrivances, abſurd intrigues, and improbable incidents. In 1756 ſhe publiſhed, The Memoirs of the Counteſs of Berci, taken from the French, 2 vols. 12mo. and Sully's Memoirs, tranſlated, 3 vols. 4to. which have ſince been frequently reprinted in 8vo. and are executed with no ſmall ability. In 1758 ſhe produced Philander, a Dramatic Paſtoral, and Henrietta, a novel of conſiderable merit, 2 vols. 12mo. and, in 1760, with the aſſiſtance of the earl of Cork and Orrery, and Dr. Johnſon, ſhe publiſhed a tranſlation of Father Brumoy's Greek Theatre, 3 vols. 4to. the merit of which varies materially in different parts of the work. Two years after, ſhe publiſhed Sophia, a Novel, 2 vols. 12mo. which is inferior to her earlier performances; and, after an interval of ſeven years, ſhe brought out, at Covent-garden theatre, The Siſters, a Comedy, taken from her novel of Henrietta, which was condemned on the firſt night of its appearance. In 1773, ſhe furniſhed Drury-lane theatre with a comedy, intitled, Old City Manners. Her laſt publication was Euphemia, a Novel, 1790, 4 vols. 12mo. a performance which by no means deviates from the creditable line in which ſhe always moved.

LE'NO, a harbour on the weſt coaſt of the iſland of Mindanao. Lat. 6. 38. N. lon. 124. 21. E.

LE'NO, or LE'NON, *ſ.* in anatomy, the torcular; a part of the brain.

LE'NOS, *ſ.* in Hippocrates, denotes an old machine for reducing fractures and diſlocations.

LENONCOU'RT, a town of France, in the department of the Mearte: four miles eaſt-ſouth-eaſt of Nancy, and ſeven north-weſt of Luneville.

LENO'NIAN, *adj.* [*leno*, Lat. a bawd.] Belonging to a bawd. *Cole*.

LEN'OX, or DUMBARTONSHIRE, a county of Scotland. See DUMBARTON, vol. vi. The title of *Lenox*, with the property of great part of the ſhire, was heretofore veſted in a branch of the royal family of Stuart, with which it was reunited in the perſon of James VI. whoſe father, Henry lord Darnley, was ſon of the duke of Lenox. This prince conferred the title upon his kinſman Eſme Stuart, ſon of John lord d'Aubigny in France; but, his race failing at the death of Charles duke of Lenox and Richmond, and the eſtate devolving to the crown, Charles II. conferred both titles on his own natural ſon by the ducheſs of Portſmouth; and they are ſtill enjoyed by his poſterity.

LEN'OX, an iſland in the Mergui Archipelago, about five miles in circumference. Lat. 9. 2. N

LEN'OX, the ſhire-town of Berkſhire county, Maſſachuſetts: it is a pleaſant and thriving town, and has a court-houſe and a goal. The river Houſatonick traverſes the town. It is 145 miles north of Boſton. The number of inhabitants is 1041.

LEN'OX CAS'TLE, a poſt-town of Buckingham county, North Carolina; 390 miles from Waſhington.

LENS, *ſ.* [from its reſemblance to the ſeed of a lentil.] A glaſs ſpherically convex on both ſides, ſuch as is a burning-glaſs, or ſpectacle-glaſs, or an object-glaſs of a teleſcope. See the article OPTICS.—According to the difference of the *lenſes*, I uſed various diſtances. *Newton's Optics*.—In botany, ſee ERVUM, GLYCINE, HEDYSARUM, LEMNA, MARSILEA, MEDICAGO, MIMOSA, and RICCIA.

LENS, a town of France, in the department of the Straits of Calais; built in 1028, by Baldwin count of Flanders and Artois: it was formerly fortified, but is now open. In 1553, it was taken and burned by the French; in 1582, it was taken and pillaged by the garriſon of Cambray, and eight days afterwards retaken by the prince of Epinoi, governor of Artois. In 1647, marſhal Gaſſion, who beſieged it, was mortally wounded by a muſket-ſhot,

and died ſoon after at Arras; the following year it was ſeized by the Spaniards; but, being defeated by the prince of Condé, on the open country near it, called the Plains of Lens, they were obliged to abandon it; and, by the peace of the Pyrenées, in 1658, it was confirmed to France. It is ſeven miles north-weſt of Douay, and ſeventy-two north of Paris.

LENS'WYCK, a town of Norway: twenty miles weſt-north-weſt of Drontheim.

LENT, part. paſſ. from *lend:*

By Jove the ſtranger and the poor is ſent;
And what to thoſe we give, to Jove is *lent*. *Pope.*

LENT, *ſ.* [lenten, Sax. the ſpring.] The quadrageſimal faſt; a time of abſtinence; the time from Aſh Wedneſday to Eaſter-day.—*Lent* is from ſpringing, becauſe it falleth in the ſpring; for which our progenitors, the Germans, uſe *glent*. *Camden*.

The Romiſh church, and ſome of the Proteſtant communion, maintain, that lent was always a faſt of forty days, and, as ſuch, of apoſtolical inſtitution. Others think it was only of eccleſiaſtical inſtitution, and that it was variouſly obſerved in different churches, and grew by degrees from a faſt of forty hours (the time our Saviour lay in the tomb) to a faſt of forty days: this is the ſentiment of Morton, biſhop Taylor, Du Moulin, Daillé, and others. Its inſtitution is not ſpoken of in any council; but many of the ancient councils, particularly that of Nice, that of Laodicea, &c. and ſome of the oldeſt fathers, particularly Tertullian, ſpeak of it as a thing of ſome ſtanding. Some will have it to have been firſt inſtituted by pope Teleſphorus, in the ſecond century; others, who own that there was a kind of abſtinence obſerved in the ancient church before Eaſter, yet contend that it was entirely voluntary, and was never enjoined by any law till the third century.

The ancient Latin monks had three lents: the grand lent before Eaſter; another before Chriſtmas, called the lent of St. Martin; and a third after Whitſunday, called the lent of St. John Baptiſt; each of which conſiſted of forty days. The Greeks, beſides that before Eaſter, obſerved four others; that of the Apoſtles, of the Aſſumption, of Chriſtmas, and of the Transfiguration; but they reduced each of them to the ſpace of ſeven days. The Jacobites added a fifth, which they called the Repentance of Nineveh; and the Maronites a ſixth, called the Exaltation of the Holy Croſs.

The forty days in lent, ſay ſome, are obſerved in remembrance of the forty days wherein the world was drowned; or, as others ſay, of the forty years wherein the Jews wandered in the deſert; others of the forty days allowed Nineveh for repentance; others of the forty ſtripes by which malefactors were to be corrected; or the forty days during which Moſes faſted at the receiving of the law; or the forty days faſt of Elias; or, finally, the forty days faſt of our Saviour.

The manner of obſerving lent among thoſe who were piouſly diſpoſed, was to abſtain from food till evening; their only refreſhment was a ſupper; and then it was indifferent whether it was fleſh or any other food, provided it was uſed with ſobriety and moderation. Lent was thought the proper time for exerciſing, more abundantly, every ſpecies of charity. Thus what they ſpared from their own bodies, by abridging them of a meal, was uſually given to the poor; they employed their vacant hours in viſiting the ſick and thoſe that were in priſon, in entertaining ſtrangers, and reconciling differences. The imperial laws forbade all proſecution of men in criminal actions, that might bring them to corporal puniſhment and torture, during the whole ſeaſon. This was a time of more than ordinary ſtrictneſs and devotion; and therefore in many of the great churches they had religious aſſemblies for prayer and preaching every day. All public games and ſtage-plays were prohibited at this ſeaſon; as alſo the celebration of all feſtivals, birth-days, and marriages.

Among the cuſtoms which formerly prevailed in this country during lent, was the following: An officer, denominated the king's cock-crower, crowed the hour each night, within the precincts of the palace, inſtead of proclaiming it in the ordinary manner of watchmen. This abſurd ceremony did not fall into diſuſe till the reign of George I.

LENT, *adj.* Belonging to the quadrageſimal faſt; done in the time of lent.

LENT AU DOM'BES, a town of France, in the department of the Ain: five miles ſouth of Bourg en Breſſe.

LEN'TA, a river of Naples, which runs into the Adriatic between Peſcara and Ortona a Mare. Lat. 42. 28. N. lon. 14. 20. E.

LENTA'GO, *ſ.* in botany. See VIBURNUM.

LEN'TE, a town of the duchy of Holſtein: three miles north-north-weſt of Futyn.

LENTEL'LA, a town of Naples, in Albruzzo Citra: eighteen miles north-eaſt of Civita Borella.

LENTEMEN'T, *adv.* [French.] In muſic-books, is equivalent to *largo* in Italian, and implies a ſlow movement. Its ſuperlative, *tres lentement*, very ſlow, is the ſloweſt of all movements.

LEN'TEN, *adj.* Such as is uſed in lent; ſparing.—My lord, if you delight not in man, what *lenten* entertainment ſhall the players receive from you! *Shakeſp. Hamlet.*

She quench'd her fury at the flood,
And with a *lenten* ſalad cool'd her blood.
Their commons, though but coarſe, were nothing ſcant.
Dryden's Hind and Panther.

LEN'TEN, a town of Norway: twenty miles north of Berga.

LEN'TERSHAUSEN, a town of the duchy of Wurzburg: five miles eaſt-ſouth-eaſt of Lauringen.

LEN'TES, *ſ.* The leaſt denomination of weight among the Romans.

LEN'THALL (William), an Engliſh lawyer, and famous as a ſpeaker in the long parliament, was born at Henley in Oxfordſhire, in 1591, and educated at Alban-hall, Oxford, from whence he removed to Lincoln's Inn, where he was called to the bar. In 1639 he was elected into parliament for Woodſtock; and in 1640 was choſen ſpeaker, in which capacity he was ſaid to have made a conſiderable fortune by joining the ruling party. He was alſo maſter of the rolls, a commiſſioner of the great ſeal, and chancellor of the duchy of Lancaſter. At the reſtoration he was exempted from the act of indemnity, but obtained a pardon from the king. He died, it has been aſſerted, expreſſing great penitence for the part which he had borne in the rebellion, in 1662. Several of his ſpeeches and letters have been printed.

LENTIBULA'RIA, *ſ.* in botany. See UTRICULARIA.

LENTIC'ULA, *ſ.* in botany, ſee ALDROVANDA, CALLITRICHE, FUCUS, LEMNA, MARSILEA, and PISTIA. In optics, a ſmall lens. With phyſicians, a kind of fever; the lentigo.

LENTIC'ULAR, *adj.* Doubly convex; of the form of a lens.—The cryſtalline humour is of a *lenticular* figure, convex on both ſides. *Ray on Creation.*—Reſembling ſmall lentiles.

LENTICULA'RIA, *ſ.* in botany. See LEMNA.

LEN'TIFORM, *adj.* Having the form of a lens.

LENTIG'INOUS, *adj.* [from *lentigo*, Lat.] Scurfy; furfuraceous.

LENTI'GO, *ſ.* [Latin] A freckly or ſcurfy eruption upon the ſkin; ſuch eſpecially as is common to women in child-bearing. *Quincy.*

LEN'TIL, *ſ.* [*lens*, Lat. *lentille*, Fr.] A plant. See ERVUM, vol. vi. p. 912.—It hath a papilionaceous flower, the pointal of which becomes a ſhort pod, containing orbicular ſeeds, for the moſt part convex; the leaves are conjugated, growing to one mid-rib, and are terminated by tendrils. *Miller.*—The Philiſtines were gathered together where was a piece of ground full of *lentiles*. 2 *Sam.* xxiii. 11.

LENTIL'IUS. See LINSENBAHRT.

LENTI'NI, a town of Sicily, in the valley of Noto, ſituated on a river of the ſame name, about five miles from the ſea; very conſiderable before it was almoſt deſtroyed by an earthquake in 1693. This city, anciently called *Leontini*, was built by the Chalcidians, under the conduct of Theocles the Athenian, in the firſt year of 13th Olympiad, as Thucydides informs us; in whoſe time it was defended by two ſtrong citadels, the one called the citadel of Phocea, the other the citadel of Bricinnia. At a ſmall diſtance from the city was a lake abounding in fiſh, and about twenty miles in compaſs. The vapours ariſing from the marſhes, made by the overflowing of the lake, greatly infected the air, which was there deemed very unwholeſome; but, to make amends for this, the fields were ſo fruitful, that, according to Pliny, they yielded an hundred fold; whence the city of Leontini was called by Tully the Grand Magazine of Sicily. The wines it produced were thought the moſt delicious of the whole iſland; but the inhabitants abuſed the benefit by their intemperance, which gave riſe to the proverb, "The people of Leontini are always at their cups." Dionyſius the Tyrant, having made himſelf maſter of this city, removed the inhabitants to Syracuſe. Thirteen miles ſouth-ſouth-weſt of Catania, ten north-weſt of Auguſta, and nineteen north-north-weſt of Syracuſe. Lat. 37. 18. N. lon. 15. 0. E.

LEN'TISK, *ſ.* [*lentiſcus*, Lat. *lentiſque*, Fr.] *Lentiſk*-wood is of a pale brown, almoſt whitiſh, reſinous, fragrant, and acrid: it is the tree which produces maſtic, eſteemed aſtringent and balſamic. *Hill.*—*Lentiſk* is a beautiful evergreen, the maſtic or gum of which is of uſe for the teeth or gums. *Mortimer's Huſbandry.*—See PISTACHIA.

LEN'TISK (African and Peruvian). See SCHINUS.

LENTISCO'SA, a town of Naples, in Principato Citra: nine miles ſouth-weſt of Policaſtro.

LEN'TITUDE, *ſ.* [from *lentus*, Lat.] Sluggiſhneſs; ſlowneſs.

LENT'NER, *ſ.* A kind of hawk.—I ſhould enlarge my diſcourſe to the obſervation of the haggard, and the two ſorts of *lentners*. *Walton's Angler*.

LEN'TO, *adv.* [Italian.] A muſical term for ſlow, or a movement between largo and grave.

LEN'TO, a town of the iſland of Corſica: eleven miles ſouth of Oletta.

LEN'TON, a village ſo called from its ſituation by the river Len, two miles ſouth-weſt of Nottingham, was before the conqueſt a hamlet of Arnal. Fair on Wedneſday after Whitſun-week, and ſix days following; and a horſe fair on the 18th of November.

LEN'TOR, *ſ.* [*lentor*, Lat. *lenteur*, Fr.] Tenacity; viſcoſity.—Some bodies have a kind of *lentor*, and more depectible nature than others. *Bacon.*—Slowneſs; delay; ſluggiſh coldneſs.—The *lentor* of eruptions, not inflammatory, points to an acid cauſe. *Arbuthnot on Diet.*—[In phyſic.] That ſizy, viſcid, coagulated, part of the blood, which, in malignant fevers, obſtructs the capillary veſſels. *Quincy*.

LEN'TOUS, *adj.* [*lentus*, Lat.] Viſcous; tenacious; capable to be drawn out.—In this ſpawn of a *lentous* and tranſparent body, are to be diſcerned many ſpecks which became black, a ſubſtance more compacted and terreſtrious than the other; for it riſeth not in diſtillation. *Brown*.

LEN'TULUS, a celebrated family at Rome, which produced many great men in the commonwealth. The moſt noted were—L. CORNELIUS LENTULUS, a conſul, A.U.C. 428. who diſperſed the robbers who infeſted Umbria.—CORNELIUS LENTULUS, ſurnamed *Sura*. He joined in Catiline's conſpiracy, and aſſiſted in corrupting the Allobroges: he was convicted in full ſenate by Cicero, and put in priſon, and afterwards executed.—CORNELIUS LENTULUS, ſurnamed *Gætulicus*, was made conſul A. D. 26. and was, ſome time after, put to death by Tiberius, who was jealous of his great popularity. He wrote a hiſtory, mentioned by Suetonius; and attempted poetry.—P. LENTULUS, a friend of Brutus, mentioned by Cicero as a great and conſummate ſtateſman. The conſulſhip was in the family of the Lentuli in the years of Rome 428, 477, 515, 516, 551, 553, 594, 596, &c.

LENTZ, a town of Pruſſia, in the territory of Ermeland: eight miles north-eaſt of Elbing.

LENTZ'BURG, an extenſive bailiwick of Swiſſerland, in the canton of Berne; formerly a rich and powerful country, which came to the houſe of Habſburg in 1264, and was ſurrendered by Frederic duke of Auſtria to the canton of Berne in 1418.

LENTZ'BURG, a town of Swiſſerland, in the canton of Berne, and capital of a bailiwick, and one of the four municipal towns of the Argau; it has a conſiderable trade, with manufactures of flowered linens and cottons, tobacco, &c. It is ſixteen miles weſt of Zurich, and thirty-five north-eaſt of Berne.

LEN'TZEN, a town of Brandenburg, in the Mark of Pregnitz, near the Elbe: fourteen miles weſt of Perleburg, and ſeventy-four north-weſt of Berlin. Lat. 53. 9. N. lon. 11. 36. E.

LEN'TZENDORF, a town of Germany, in the principality of Culmbach: ſeven miles north of Bayreuth.

L'ENVOY', *ſ.* [French.] An old title for a few detached verſes at the concluſion of a poem:

Is not *l'envoy* a ſalve?
No, page, it is an epilogue, or diſcourſe to make plain
Some obſcure precedence, that hath tofore been ſain.
Shakeſ. Love's Lab. loſt.

LEN'ZA, a ſmall iſland in the Adriatic. Lat. 44. 5. N. lon. 15. 31. E.

LE'O, the LION, a conſiderable conſtellation of the northern hemiſphere, being one of the forty-eight old conſtellations, and the fifth ſign of the zodiac. It is marked thus ♌, as a rude ſketch of the animal. The Greeks fabled that this was the Nemæan lion, which had dropped from the moon, but, being ſlain by Hercules, was raiſed to the heavens by Jupiter, in commemoration of the dreadful conflict, and in honour of that hero. But the hieroglyphical meaning of this ſign, ſo depicted by the Egyptians long before the invention of the fables of Hercules, was probably no more than to ſignify, by the fury of the lion, the violent heats occaſioned by the ſun when he entered that part of the ecliptic. The ſtars in the conſtellation Leo, in Ptolemy's Catalogue are 27, beſides 8 unformed ones, now counted in later times in the conſtellation Coma Berenices; in Tycho's, 30; in that of Hevelius, 49; and in Flamſteed's, 95. One of them, of the firſt magnitude, in the breaſt of the Lion, is called Regulus, and Cor Leonis, or Lion's Heart.

LEO MINOR, *the Little Lion*, a conſtellation of the northern hemiſphere, and one of the new ones that were formed out of what were left by the ancients under the name of *ſtellæ informes*, or unformed ſtars, and added to the 48 old ones. It contains 53 ſtars in Flamſteed's Catalogue.

LE'O, a man's name.

LE'O, a native of Byzantium, who flouriſhed 350 years before the Chriſtian era. His philoſophical and political talents endeared him to his countrymen; and he was always ſent upon every important occaſion as ambaſſador to Athens, or to the court of Philip king of Macedonia. This monarch, well acquainted with the abilities of Leo, was ſenſible that his views and claims to Byzantium would never ſucceed while it was protected by the vigilance of ſuch a patriotic citizen. To remove him he had recourſe to artifice and perfidy. A letter was forged, in which Leo made ſolemn promiſes of betraying his country to the king of Macedonia for money. This was no ſooner known, than the people ran enraged to the houſe of Leo; and the philoſopher, to avoid their fury, and without attempting his juſtification, ſtrangled himſelf. He had written ſome treatiſes upon phyſic and hiſtory, which are loſt. *Plutarch*.

LEO I. (Pope), ſurnamed the Great, and a ſaint in the Roman

Roman calendar, was ſaid to be a native of Tuſcany; but, according to more probable authorities, he was born at Rome, where it is certain that he was brought up and educated. We are furniſhed with no certain particulars of his earlier years, before he was raiſed to the dignity of archdeacon of the Roman church, under the pontificate of pope Celeſtine. He occupied the ſame poſt under pope Sixtus III. and acquired a high reputation for piety, orthodox zeal, eloquence, addreſs, and prudence in the management of buſineſs. The firſt memorable tranſaction in which we find him engaged was in the year 439, when the weſtern empire was reduced to the loweſt ebb, being overrun by the Goths, Burgundians, Franks, and Huns, and governed by the empreſs Placidia, and her ſon Valentinian III. a youth of no experience, and of very ſlender abilities. In this criſis, a difference had ariſen in Gaul, between the famous Aetius, the greateſt general of his time, and Albinus, a lord in that country, of great intereſt and power, which threatened the moſt fatal conſequences. To prevent them, Leo was ſent to Gaul, as the fitteſt perſon who could be employed in ſuch a negociation, to attempt a reconciliation between thoſe great men; and happily ſucceeded in the object of his miſſion. His ſucceſs in this undertaking cauſed him to be honoured at the imperial court as the deliverer of the empire, and added no little weight to the reputation which he had already obtained with the clergy and people of Rome. While he was yet in Gaul, pope Sixtus III. died, in the month of Auguſt 440; upon which the univerſal voice of the Romans proclaimed Leo his ſucceſſor, no perſon preſuming to enter into competition with a man of ſuch exalted merit. A deputation was immediately ſent to notify to him his election; and, upon his return to Rome ſix weeks afterwards, he was received, by the people and clergy, with the greateſt demonſtrations of joy, and ordained to his high office in the month of September. He commenced his pontificate with the moſt zealous exertions as a Chriſtian biſhop, inſtructing the people committed to his care by his ſermons, and the reſt of the Chriſtian world by his letters; endeavouring to revive the ancient diſcipline, and to baniſh many of the abuſes which had crept into the church; but, at the ſame time he directed his particular attention to the advancement of the authority and grandeur of the papal ſee. In the year 442, he wrote a letter to Ruſticus biſhop of Narbonne, in which he extended the law of celibacy of the ſubdeacons, who, nevertheleſs, were not to abandon the wives whom they had married while in inferior degrees, but, changing the carnal into a ſpiritual marriage, live with them, not as wives, but as ſiſters. In the year 445, he quarrelled with Hilary biſhop of Arles, for oppoſing the power of the papal ſee; and, though he could never conquer Hilary's independent ſpirit, he obtained an edict from the emperor Valentinian, which put an end to the ancient liberties of the Gallican churches, and enforced thoſe appeals to Rome, which gradually ſubjected all the weſtern churches to the juriſdiction of the pretended ſucceſſors of St. Peter.

About this time many of the Manichæans, flying from Africa after the conqueſt of Carthage by Genſeric king of the Vandals, had repaired to Rome, as to a place of ſafety. The orthodox zeal of Leo, however, would not ſuffer them long to enjoy tranquillity. As they had been deprived of the protection of the Roman laws by the unrepealed edicts of different emperors, he cauſed the ſtricteſt ſearch to be made after them, and great numbers to be ſeized and impriſoned. Thoſe of them who were influenced by his arguments or threatenings to abjure their diſtinguiſhing tenets, were received by him into communion; but all thoſe who ſteadily adhered to their principles, were condemned to perpetual baniſhment. But it was not againſt the Manichæans alone, that Leo exerciſed his zeal for the catholic faith. In his time the ſect of the Priſcillians began to revive in Spain. Their ſentiments appear to have been a compound of gnoſticiſm and unitarianiſm, and they made high pretenſions to ſanctity and purity, and practiſed uncommon mortifications. For propagating them, their leader, after whom they were called, and ſeveral of his followers, were cruelly put to death, about the year 386. This treatment cauſed Priſcillian to be venerated as a martyr; and his doctrines made conſiderable progreſs in the Spaniſh churches, eſpecially in thoſe of Gallicia. Alarmed at this circumſtance, Turibius biſhop of Aſtorga endeavoured to rouſe his brethren of the epiſcopal order to unite with him in adopting vigorous meaſures for ſuppreſſing them. Not being able to obtain their concurrence, he had recourſe to Leo; and, in a letter to that pontiff, written in 447, containing a ſummary of the doctrines of the Priſcillians, implored his aſſiſtance againſt the ſpreading evil. Leo, in his anſwer, applauded the zeal of Turibius; condemned the doctrines of the ſect as impious and deteſtable; declared all who tolerated hereſies no leſs guilty than thoſe who embraced them; and alſo expreſſed his approbation of the puniſhment inflicted on Priſcillian.

The doctrine of Eutyches, who maintained that there was but one nature in Chriſt, began about this time to make a great noiſe in the eaſt, and opened a ſtill larger field for the diſplay of Leo's catholic zeal. See EUTYCHES, vol. vii. p. 90. Eutyches was condemned by a council held at Conſtantinople, in the year 448, deprived of the government of his monaſtery, and cut off from the communion of the church; but he appealed from their ſentence to an œcumenical council, which was ſummoned to meet at Epheſus in the year 449; and Leo was invited by the emperor to attend it. This invitation Leo declined, but promiſed to ſend legates, who ſhould act in his name. In the mean time, Leo, being informed by Flavianus biſhop of Conſtantinople of what had paſſed in the council of 448, highly approved of the proceedings and deciſions of that aſſembly; openly declared againſt Eutyches, condemning his doctrine as heretical and blaſphemous; and ſtrictly enjoined his legates, on their ſetting out for the eaſt, to act wholly in concert with the biſhop of Conſtantinople. To that prelate he wrote a letter which is deemed one of the moſt curious monuments of antiquity, and is thought to have contributed more than any thing elſe to the great fame and reputation which he afterwards acquired. It contains a particular explanation of the catholic doctrine of the incarnation, together with the paſſages adduced in ſupport of it, from the ſcriptures and from the fathers. This letter was afterwards received by the œcumenical council of Chalcedon, and by all the biſhops of the catholic church; and in the weſtern churches it was conſtantly read, during Advent, with the goſpel. By the fathers of the council of Apamea, held about the year 535, it was ſtyled "the true column of the orthodox faith." Leo alſo wrote letters on this occaſion to the emperor Theodoſius, to the empreſs Pulcheria, to the abbots of Conſtantinople, and to the council, all intended to eſtabliſh the doctrines of the two natures, to confute the oppoſite opinion, and to encourage thoſe to whom they were addreſſed to contribute, as far as in them lay, towards ſuppreſſing the opinion of Eutyches. Notwithſtanding all this, when the council met at Epheſus, which, from the fraud and violence practiſed in it, was afterwards diſtinguiſhed by the name of "the aſſembly of robbers," the partiſans of Eutyches obtained a complete triumph over their adverſaries, no one daring to oppoſe them but Hilarius, one of the papal legates, who proteſted againſt their proceedings. No ſooner was Leo informed of what had paſſed at Epheſus, than he aſſembled, without delay, a council at Rome, conſiſting of almoſt all the weſtern biſhops; and, with their advice, he wrote to Theodoſius, complaining of the violence with which matters had been conducted at Epheſus, and entreating him to declare null what had been done there, and to leave all things in the condition in which they were before the council of Conſtantinople, till a greater number of biſhops ſhould aſſemble from all parts of

of the world, to give their opinion concerning a queſtion in which they were all equally concerned. At the ſame time he wrote to the empreſs Pulcheria, to the clergy, nobility, and people, of Conſtantinople, and to others, in which he exhorted them to adhere ſteadily to the orthodox faith, and to join him in defending the truth, and in combating, even at the expenſe of their lives, againſt the oppoſite errors. In the year 450 he wrote anew to Theodoſius and Pulcheria on the ſame ſubject, and ſent his letters by four ambaſſadors whom he diſpatched to Conſtantinople, for the purpoſe of giving weight to his application. Upon their arrival at that city, they found that Theodoſius was dead, and that his ſiſter Pulcheria, who had ſhared the ſovereignty with him, had married Marcian, a perſon of extraordinary qualifications, on whom ſhe beſtowed the empire. In the month of May 451, Marcian directed that a circular letter ſhould be ſent to all the biſhops in his dominions, ſummoning them to meet at Nice in Bithynia, by the firſt of September following. It was no ſmall diſappointment to Leo, that he could not prevail with the emperor to fix the place of that aſſembly in Italy; however he ſent legates to aſſiſt at the council, which met firſt at Nice, but immediately was removed to Chalcedon, ſeparated only by the Boſphorus from Conſtantinople, that the emperor, who, on account of the eruption of the Huns into Illyrium, was unwilling to go far from that city, might have it in his power to aſſiſt at it in perſon. This is reckoned the fourth general or œcumenical council, and is ſaid to have conſiſted of 630 biſhops, over whom the pope's legates were appointed to preſide. In this council, the acts of the council of Epheſus were annulled; Eutyches was condemned, though he had already been ſent into baniſhment, and deprived of his ſacerdotal dignity; the letter of Leo to Flavianus, already mentioned, was received; and a ſymbol or decree was ſubſcribed by every member, "that in Chriſt two diſtinct natures were united in one perſon, and that without any change, mixture, or confuſion." Next to matters of faith, the council took into conſideration the diſcipline of the church, and enacted that famous canon which equalled the ſee of Conſtantinople, in all reſpects excepting precedency, to the ſee of Rome. This canon the council was induced to paſs, that the biſhop of Conſtantinople might be enabled to check the growing power, and to oppoſe the daily encroachments, of the biſhop of Rome; and alſo to ſhow their reſentment of the diſguſting arrogance and preſumption diſplayed by the papal legates. No ſooner, however, was the motion for this canon made, than the legates quitted their ſeats, and, after declaring that they had no inſtructions concerning matters of that nature, haſtily withdrew from the council. To their great mortification, no one of the numerous biſhops preſent followed their example; and on the day following that on which the canon was decreed, when they proteſted againſt it, pretending that it was ſurreptitious, or extorted by force, they had the ſtill further mortification of hearing that inſinuation indignantly repelled by the unanimous voice of the aſſembly, and by the expreſs declarations of the chief men among them in particular. Upon this the canon was confirmed by the imperial commiſſioners; and it proved the occaſion of repeated conteſts between the ſees of Rome and Conſtantinople. The two firſt biſhops of the church, who ſhould have ſet a better example to the reſt, diſputing, in defiance of the goſpel, and to the great ſcandal of the Chriſtian name and religion, who ſhould be the greateſt, till they became irreconcileable enemies, and renounced for ever all communication with each other. Hence the ſeparation of the Greek and Latin churches.

In the year 453, Leo's zeal was directed towards the converſion of the monks of Paleſtine and Egypt, who denounced war againſt all the abettors of the council of Chalcedon, and maſſacred without mercy ſuch of the clergy and laity as had the courage to profeſs their belief of two natures in Chriſt. With this view he wrote a long letter to the monks themſelves, in which he endeavoured to prove the doctrine of Eutyches, condemned at Chalcedon, to be no leſs dangerous hereſy than that of Neſtorius, condemned at Epheſus. But his eloquence ſeems to have made little impreſſion; and it was found neceſſary to employ the imperial troops to quell the ſedition of theſe furious zealots, and to reſtore thoſe countries to tranquillity.

In the year 455, Leo's attention was drawn off from the affairs of the eaſt, by the calamities produced in Italy in conſequence of the death of Valentinian. A ſhort time after, the famous Genſeric, king of the Vandals in Africa, ſuddenly debarked a powerful army in the neighbourhood of Rome. His appearance ſtruck the daſtardly Romans with ſuch terror and diſmay, that, inſtead of preparing for defence, they threw open their gates, and ſurrendered at diſcretion. In this extremity Leo went out to meet the enemy, and endeavoured by prayers and tears to mediate for the ſafety of the city. Genſeric received Leo with the reſpect due to his rank and character; but, as the pontiff had nothing to offer which Genſeric had not now in his power, he could not prevail upon the king to refrain from pillaging the city, the public as well as the private houſes, and even the churches, or from carrying the inhabitants into captivity. Genſeric promiſed, however, that the city ſhould not be ſet on fire, and that no blood ſhould be ſhed where no oppoſition was met with; and he faithfully kept his word. After ſpending fourteen days in ranſacking the houſes, churches, and public buildings, and ſtripping them of all their wealth, and valuable monuments, the Vandals re-embarked, and returned to Africa with an immenſe booty, and as many captives as they could carry on-board their fleet.

Theſe troubles, and the miſchiefs which they occaſioned, engroſſed much of Leo's care and attention to mitigate them, till, upon the death of the emperor Marcian, in 457, the Eutychians once more obtained the aſcendency in Egypt. The chief of this revolution was Timothy, ſurnamed *Ælurus*, or the Cat, who had been originally a monk, but was ordained prieſt by Dioſcorus, to whom he adhered after that prelate was condemned and depoſed by the council of Chalcedon. On this account he was condemned, and moſt probably ſent into exile, by Proterius, who was choſen to ſucceed Dioſcorus in the ſee of Alexandria, at a council held in that city in the year 452. The death of Marcian encouraged him to make his appearance again in Egypt; and he now aſpired to the biſhopric of Alexandria. Knowing that the people were greatly diſſatisfied with Proterius, and ready to revolt at the inſtigation of any daring leader, he ſecured the concurrence of the monks, by practiſing on their credulity till they were perſuaded that he was appointed their biſhop by God himſelf, and that they themſelves were the inſtruments choſen to raiſe him to that dignity. Filled with an enthuſiaſtic zeal for this darling of heaven, they repaired, by his direction, to Alexandria, where they raiſed a dreadful tumult; in the height of which Ælurus, attended by the monks, and a band of armed deſperadoes, broke open the doors of the great church, and cauſed himſelf to be ordained by two of the proſcribed biſhops of his party. After the ceremony was over, the monks, and the rabble, with loud huzzas, proclaimed him ſole lawful biſhop of Alexandria, and metropolitan of all Egypt. In the mean time Proterius found it neceſſary to fly for his life, and took ſanctuary in a baptiſtery adjoining to the church of St. Quirinus. But the ſacredneſs of the place was no protection againſt the ambition of Ælurus, or the rage of his followers; and they cruelly murdered the prelate, together with ſix of his eccleſiaſtics who had attended him in his flight. Having thus removed his rival out of the way, Ælurus loſt no time in aſſembling his council, conſiſting of a ſmall number of Eutychian biſhops, in which he openly anathematized the council of Chalcedon, pope Leo, and all the catholic biſhops. In virtue of this ſentence, he excommunicated, depoſed, and drove from

their ſees all the biſhops of the patriarchate of Alexandria who refuſed to abjure the faith of Chalcedon, and in their room took care to place ſuch as had diſtinguiſhed themſelves by their zeal for the Eutychian doctrine.

Notwithſtanding the notorious crimes by which Ælurus had thus poſſeſſed himſelf of the biſhopric of Alexandria, he had friends at the court of the emperor Leo, the ſucceſſor of Marcian, who had ſufficient intereſt, not only to ſcreen him from the puniſhment which he deſerved, but even to maintain him for ſome years in the undiſturbed poſſeſſion of his ſee. Theſe friends had ſuch influence with the emperor, that by their importunity they led him to intimate his deſign of aſſembling a new œcumenical council, to re-examine the points which had been determined at the council of Chalcedon. Pope Leo was no ſooner acquainted with this deſign, than he exerted all his credit, intereſt, and authority, to divert him from it. With this view he wrote repeated letters to the emperor and the men in power, which were ſeconded by the metropolitans and biſhops of moſt note in the eaſt; whoſe united efforts occaſioned that deſign to be relinquiſhed. In the year 458, the emperor invited Leo to Conſtantinople, that he might converſe with him in perſon on the ſubjects of the decree of Chalcedon, and the intruſion of Ælurus. To this invitation Leo replied in two letters; one containing his excuſes for not undertaking ſuch a journey, and the other intended to explain, and confirm with the teſtimony of the fathers, the doctrine of two natures. The laſt-mentioned letter became very famous with the orthodox, and was often quoted by the writers of that and of the ſucceeding ages. A copy of it being tranſmitted by the emperor to Ælurus, the latter took that opportunity of writing to the emperor; and, in his letter, cenſured, with great ſmartneſs and freedom, both Leo's letter and the council of Chalcedon. At the ſame time, Ælurus entreated that he would allow a diſpute to be held in his preſence, between the diſciples of Eutyches and any of whom Leo ſhould name or appoint. This propoſal met with the approbation of the emperor; who wrote to Leo, acquainting him with it, and deſiring him to ſend into the eaſt ſuch perſons as he ſhould think beſt qualified to enter the liſts with the Eutychians. But Leo abſolutely refuſed to comply with the propoſal, alleging, what he had urged in all his letters, that it was both dangerous and unneceſſary to examine anew, or to queſtion, what had been already examined and defined by an œcumenical council.

From this time Leo continued his efforts, with unabated zeal, in defence of the catholic cauſe, and omitted no opportunity of endeavouring to impreſs the emperor's mind with a ſenſe of the heinouſneſs and enormity of Ælurus's crime. At length, in the year 460, the biſhops of the eaſt, and particularly Gennadius, the new biſhop of Conſtantinople, united in the ſame cauſe with ſo much ardour, that an order was obtained from the emperor, commanding the expulſion and baniſhment of Ælurus; which was carried into execution accordingly. This event was immediately followed by the election of a catholic biſhop to the ſee of Alexandria, and the reſtoration of thoſe prelates who had been diſplaced for their adherence to the council of Chalcedon. The tidings of this change afforded the higheſt ſatisfaction to Leo; but he did not long enjoy it, as he died towards the cloſe of the year 461, after having preſided over the Roman church twenty-one years, and between one and two months.

Leo was, unqueſtionably, a man of conſiderable learning, and of very eminent abilities, greatly ſuperior to thoſe of any of his predeceſſors in the government of the Roman church, and ſcarcely equalled by thoſe of the moſt celebrated of his ſucceſſors; but his ambition was unbounded, and with him every object, every conſideration, was made to yield to his predominant paſſion for aggrandizing his ſee, or, in other words, for extending his own power and authority. This deſign was purſued by him during a long courſe of years, with ſuch ſkill, addreſs, and intrepidity, that he is to be claſſed among the principal founders of the exorbitant power of the papal church. His works conſiſt of one hundred and forty-one Letters, and ninety-ſix Sermons; the ſubjects of which may be ſeen in Dupin. Their ſtyle is frequently energetic, and always elegant, though ſometimes too highly poliſhed; and they abound in beautiful and well-choſen epithets, and happy antitheſes, which are, perhaps, too often introduced. The beſt edition of this pope's works was publiſhed at Paris, in 1675, by father Queſnel, a prieſt of the congregation of the oratory, in 2 vols. 4to. which was reprinted at Lyons, in 1700, in folio. *Platina de Vit. Pont. Cave's Hiſt. Lit. Dupin. Lardner's Cred.*

LEO II. (Pope), a Sicilian by birth, and raiſed to the papal dignity on the death of Agatho, in the year 682. With the decree confirming his election, he received a letter from the emperor Conſtantine Pogonatus, acquainting him with the proceedings of the ſixth general council, held at Conſtantinople in the two preceding years, by which pope Honorius I. was anathematized as a monothelite. In anſwer to this letter, Leo wrote, that he received this council as he received the five preceding general councils, and anathematized all whom the council had anathematized; and, among others, he particulariſes Honorius, who, he acknowledges, "had not adorned the apoſtolical church with the doctrine of apoſtolical tradition, but had treacherouſly endeavoured to ſubvert the catholic faith. Leo alſo ſent letters to the metropolitans of the different provinces of the weſt, acquainting them with the proceedings of this council, and requiring them to receive it, as well as to cauſe it to be received by the biſhops in their reſpective juriſdictions. By this conduct he acquired ſo much intereſt at court, that he found the opportunity favourable for extending the power of the papal ſee, and procured an imperial edict, ſubjecting for ever the independent ſee of Ravenna to that of Rome. He died in 683, after a pontificate of only ten months and ſeventeen days. Five of his Letters are inſerted in the ſixth volume of the Collect. Concil.

LEO III. (Pope), a native of Rome, of which church he became preſbyter; and, upon the death of Adrian in the year 795, he was elected to the papal ſee, by the unanimous voice of the nobility, clergy, and people. Soon after his ordination he wrote to Charlemagne, acquainting him with his promotion; ſending him, at the ſame time, the keys of the tomb of St. Peter, and the ſtandard of the city of Rome, with other preſents; and requeſting him to ſend ſome lord of his court to Rome, to receive the oath of allegiance from the Roman people. Upon this Charlemagne directed the abbot Angilbert, one of his principal favourites, to repair to that city; who carried a letter to the new pope, which, beſides complimentary expreſſions of ſatisfaction at his promotion, contained exhortations to his holineſs to edify the church by his good example, and a ſtrict obſervance of the canons, and alſo promiſes of protection to the catholic church and apoſtolical ſee. This letter Charlemagne accompanied with immenſe treaſures, from the ſpoils of the Huns, to be employed by Leo in repairing and adorning the churches of Rome, eſpecially that of St. Peter. In the year 796, on the propoſal of Renulph king of Mercia, he reſtored the ſee of Canterbury to that juriſdiction over all the churches of England which had been curtailed by Offa, who had appointed Lichfield, the metropolis of the kingdom of Mercia, an archbiſhopric, ſubjecting to it, as ſuffragans, the biſhops of the kingdoms of Mercia and the Eaſt Angles. In the year 799, a conſpiracy was formed againſt Leo by two nephews of the late pope Adrian, to whom Leo had been indebted for his election. This circumſtance led them to flatter themſelves, that, out of gratitude, he would ſuffer them to exerciſe the ſame unlimited power under him which they had enjoyed under their uncle. Being diſappointed in this, they formed the deſign of murdering Leo, and of procuring the election of ſome other perſon, who would be guided by their councils. They made their

attempt on the feſtival of St. Mark, when the pope was proceeding from the Lateran palace to join in an annual proceſſion. As ſoon as he came to the monaſtery of St. Stephen and St. Silveſter, a number of ruffians ruſhed out of the neighbouring houſes, who ſurrounded the pope, and cruelly beat him till he was covered with blood. The ſight of him in this miſerable condition, it is ſaid, moved the conſpirators to compaſſion, and ſtopt them from any further proceeding againſt his life; but they put him into cloſe confinement, in a priſon unknown to his friends. His firſt chamberlain, however, having diſcovered the place where he was, found means to effectuate his eſcape, and to conceal him, till the duke of Spoleto, hearing of his ſituation, haſtened to Rome at the head of his army, and delivered Leo out of danger by carrying him into his own territory.

From Spoleto the pope wrote to Charlemagne, to acquaint him with the cruel treatment which he had met with; and ſoon afterwards he ſet out on a viſit to that prince, to ſolicit his protection. Charlemagne was now at Paderborn, in Germany, upon the point of entering Saxony, where he received Leo with the greateſt marks of reſpect and friendſhip, and, after aſſuring him of his protection, ſent him back to Rome, attended by ſeveral biſhops, ſome of the chief lords of his court, and a ſufficient force to guard him againſt any further attempt of his enemies. With this retinue he entered the city amidſt the loud acclamations of the people, and took poſſeſſion anew of the Lateran palace; where the nobles and biſhops who had accompanied him aſſembled, and ſummoned the conſpirators, and all who had any ſubject of complaint againſt Leo, to appear before them, being commiſſioned by the king to hear them, and to do them juſtice, if in any reſpect injured by the pope or his miniſters. Some did appear, and among the reſt the nephews of pope Adrian; who accuſed him of ſeveral crimes; but, not being able to make good their charge, were ſent to priſon, and afterwards into baniſhment. In the year 809, the diſpute revived in France on the queſtion concerning the proceſſion of the Holy Ghoſt. By the firſt council of Conſtantinople, an addition was made to the ſymbol of Nice, declaring, "that the Holy Ghoſt proceeded from the Father." In the fifth and ſixth centuries the churches of Spain added to the ſymbol of Nice and Conſtantinople the words, "and from the Son," *filioque*; and their example was followed by moſt of the Gallican churches. The queſtion now debated was, whether the expreſſion *filioque* ought to be added to the ſymbol, or omitted? When Leo was conſulted on this ſubject by envoys ſent to him by Charlemagne, he gave it as his opinion that the expreſſion ſhould be omitted; notwithſtanding that he allowed the doctrine implied by it to be a neceſſary article of faith, and would not communicate with any who held the oppoſite opinion. The addition of that article, he obſerved, were it received by the churches, would afford a fair plea for the addition of many other articles, of equal importance, which would ſwell the ſymbol to an immoderate length. To ſhow that he did not approve of it, he cauſed two tables of ſilver to be ſet up at the tomb of St. Peter, and the ſymbol to be engraved in Greek on the one, and the other in Latin, without the words "and from the Son," which, however, were afterwards added to the ſymbol by his ſucceſſors. Leo continued in tranquillity till the death of his great protector and aggrandizer Charlemagne, in the year 814; when the relations of the late pope Adrian and their partiſans formed a new conſpiracy with the deſign of depoſing and murdering him. This plot he diſcovered in 815, before it was ripe for execution, and cauſed all who were concerned in it to be apprehended, and put to death without mercy; and it is even ſaid, that he ſatiated his revenge by executing ſome of them with his own hands. His ſeverity on this occaſion excited the diſpleaſure of the new emperor Louis, ſurnamed the Gentle, who had ſucceeded his father in the empire of the weſt; and he was no ſooner informed of it, than he commanded his nephew Bernard, king of Italy, to proceed immediately to Rome, and to take cognizance of the whole affair upon the ſpot. According to the catholic hiſtorians, the emperor was entirely ſatisfied with Leo's juſtification of his conduct; but in the mean time, the pope being ſeized with a dangerous malady, the populace, incenſed againſt his cruelty, broke out into inſurrection, burnt his farm-houſes, plundered his farms and country ſeats, and would have committed great diſorders in Rome itſelf, had they not been ſuppreſſed and diſperſed by a body of troops under the duke of Spoleto. The pope's illneſs proved fatal in June 816, when he had preſided over the Roman church twenty years and between five and ſix months. He is more celebrated for having enriched the churches of Rome with coſtly and valuable ornaments, by means of the vaſt treaſures which the generoſity of Charlemagne beſtowed upon him, than for his virtues as a Chriſtian biſhop. Thirteen of his Letters may be ſeen in the ſeventh volume of the Collect. Concil. For further particulars as to the political hiſtory of this and the other popes, ſee the article ROME.

LEO IV. (Pope), a native of Rome, was educated in the monaſtery of St. Martin, ordained ſubdeacon by Gregory IV. and preſbyter of the Roman church by Sergius II. Upon the death of Sergius in the year 847, he was called to the pontifical throne by the univerſal voice of the Romans, but not ordained till between two or three months after his election, as he waited for the arrival of the imperial deputies to examine and confirm it. The firſt object of his care was to reſtore to their former ſplendour, at an immenſe expenſe, the churches of St. Peter and St. Paul, which had been deſpoiled of all their valuable ornaments by the Saracens; and, in the next place, to ſecure them againſt the future attempts of ſuch plunderers. With that deſign he reſolved to build a new city upon the Vatican, and to incloſe it, as well as the church of St. Peter, by a ſtrong wall. This reſolution met with the approbation of the emperor, who generouſly contributed himſelf, and prevailed upon his two brothers, Charles king of Neuſtria, and Louis king of Bavaria, to ſend liberal contributions towards carrying on ſo great a work. The Roman nobility alſo gave large ſums on this occaſion. Thus encouraged, Leo provided the neceſſary materials, and workmen from the different provinces of Italy, and then ſet about the undertaking with the utmoſt diligence and ardour, performing himſelf the daily office of overſeer, in all kinds of weather. During the year 849 he was obliged to interrupt the work for ſome time, in conſequence of receiving information that the Saracens were equiping a powerful fleet in Africa, with the deſign of making a ſecond attempt upon Rome. In theſe circumſtances the pope had the ſatisfaction of being unexpectedly ſupported by a fleet of armed veſſels from Naples, Amalfi, Gaieta, and other maritime places, who conſidered that their own fate was intimately connected with that of Rome. Soon after their arrival, the fleet of the Saracens appearing off Oſtia, that of the Chriſtians immediately put to ſea, and an engagement commenced; but the fleets were ſoon ſeparated by a violent ſtorm, which drove the greateſt of the enemy's ſhips on ſhore, where they were daſhed in pieces, and all on-board periſhed. Almoſt all the reſt of the Saracens' ſhips either foundered at ſea, or were taken, and their crews carried priſoners to Rome. There, as well as along the coaſt, many of them were hanged, and left on the gibbets to ſtrike terror into their countrymen; and the reſt were put in irons, and forced to labour on the pope's new works. With this acceſſion of ſtrength, Leo had the ſatisfaction, in 852, of ſeeing his new city completed; which was called, after the name of its founder, the *Leonine City*, and conſecrated with great ſolemnity on the 27th of June. During the following year Leo aſſembled a council at Rome, by which ſome canons were iſſued calculated to reſtore the eccleſiaſtical diſcipline, and to baniſh many of the abuſes which had inſenſibly crept into the church. Before the council broke up, they depoſed Anaſtaſius, cardinal preſbyter of the church of St. Marcellus

Marcellus in Rome, for abſenting himſelf five years from his benefice. In the ſame year the famous Alfred, ſon of Æthelwulph king of the Weſt Saxons, was ſent by his father to Rome, to be educated under the care and direction of the pope. In the year 854, finding that the Saracens ſtill continued to infeſt the coaſt, notwithſtanding their late diſaſter, Leo fortified the city of Porto, at a great expenſe, and planted in it a colony of Corſicans, whom he ſupplied with cattle and tools of agriculture, and arms for their defence. He alſo fortified many other cities on the coaſt; and, finding that the inhabitants of Centumcellæ had abandoned their city, and choſe rather to live in the woods than on a ſpot where they were expoſed to continual viſits from the Saracens, he determined to build them a new city. This place he called *Leopolis*; but, in proceſs of time, the inhabitants, diſliking its ſituation, abandoned it and returned to Centumcellæ, giving the latter place the name of *Civita Vecchia*, or the Old City, which it bears to this day. Leo died in 855, after a pontificate of eight years, and rather more than three months. According to Anaſtaſius, *he poſſeſſed all the moral and Chriſtian virtues, without the alloy of one ſingle vice or defect.* Two Letters, and a diſcourſe deſigned for the inſtruction of the clergy in the duties of their office, which have been commonly aſcribed to this pope, are inſerted in the eighth volume of the Collect. Concil.

LEO V. (Pope), was a native of Ardea, and choſen ſucceſſor to Benedict IV. in the year 903. He had not filled the pontifical throne much more than one month, before he was depoſed by one of his own prieſts named Chriſtopher, and thrown into priſon; where he died of grief.

LEO VI. (Pope), was a Roman by birth, and elected to the papal dignity on the death of John X. in the year 928. Platina ſpeaks highly of his character, and of his intentions for reforming the corruptions of the age, and ſecuring the peace of Rome and Italy; but he died before he had time to carry them into execution, and when he had poſſeſſed the popedom only ſix months and fifteen days.

LEO VII. (Pope), was born at Rome, and raiſed to the papacy by the unanimous vote of the clergy and people, on the death of John XI. in the year 936. He is highly commended for his perſonal virtues, and for his zealous endeavours to reſtore eccleſiaſtical diſcipline, to reform the monaſtic orders, and to correct the abuſes which prevailed in the Roman and other churches. He died in 939, after he had held the Roman ſee three years, ſix months, and ſome days. Three of his Letters are in the ninth volume of the Collect. Concil.

LEO VIII. (Pope), or, according to ſome writers, antipope, was a native of Rome, and ſon of John, chief ſecretary of the Roman church; in which office he ſucceeded his father. Upon the depoſition of John XII. in the year 963, the excellent character of Leo recommended him to the Roman people and clergy, who, with the approbation of the emperor Otho, who was then at Rome, elected him to the pontifical dignity. In our life of John XII. (vol. xi. p. 212.) we have ſeen that the Romans were ſoon afterwards inſtigated by him to rebel, and to compel Leo to fly for protection to the emperor. When John had fallen a ſacrifice to his vices, his partiſans elevated Benedict V. to the papal throne, binding themſelves by an oath not to ſubmit to Leo, whom they called the *emperor's pope*. That prince, however, marching at the head of his army to Rome, inveſted it ſo cloſely, that the inhabitants were, in a very ſhort time, obliged to ſurrender at diſcretion; and Benedict was taken priſoner, diveſted of the pontifical dignity and of the prieſthood, and condemned to baniſhment. Leo did not long ſurvive his reſtoration, for he died in 965, after a pontificate of one year and three months.

LE'O IX. (Pope), and a ſaint in the Roman calendar, originally called *Bruno*, was the ſon of Hugh, a near relation of the emperor Conrad, and born at Toul, in Lorraine, in the year 1002. Having been educated for the church, he was ordained deacon in 1025, and promoted to the biſhopric of Toul in the following year. By his conduct in this ſee he acquired ſo high a reputation for learning, prudence, and piety, that on the death of pope Damaſus II. in the year 1048, he was conſidered to be the perſon moſt worthy of being choſen his ſucceſſor. He was nominated to that dignity by the unanimous voice of an aſſembly of the chief lords and biſhops of Germany, convened at Worms by the emperor Henry III. This nomination was for ſome time reſiſted, with great apparent ſincerity, by Bruno himſelf, who was at length compelled to yield to the preſſing inſtances of the whole aſſembly and of the emperor; but only upon the condition that the Roman people and clergy approved of and confirmed his election. He went from Toul to Rome in the habit of a pilgrim, and was received by the Romans, who had been informed of what had paſſed in the aſſembly at Worms, with ſongs of joy and loud acclamations. Immediately a meeting of the people and clergy was held, at which he informed them of his having been nominated to the apoſtolic ſee by the emperor; but that, in conformity to the canons, he did not conſider any election of a biſhop to be valid, unleſs made by them; that, therefore, they were at full liberty to chooſe or reject him; and that, if he were not unanimouſly choſen by them, he would return to his biſhopric as willingly as he had left it unwillingly. This addreſs was received with the greateſt demonſtrations of ſatisfaction by the whole aſſembly, which unanimouſly concurred in proclaiming Bruno ſovereign pontiff, who at his ordination took the name of Leo IX. In the year 1049, he aſſembled a council at Rome, which was attended by all the Italian, and the greater part of the Gallican biſhops. By this council all ſimoniacal bargains were forbidden, on pain of excommunication and depoſition; ſome biſhops convicted of ſimony were depoſed; and ſeveral canons were iſſued, calculated to correct and reform the licentious lives of the laity as well as clergy. Soon after his council broke up, Leo took a journey into Saxony, to viſit the emperor, with whom he celebrated the feſtival of St. Peter and St. Paul at Cologne; and, having ſummoned the Gallican biſhops and abbots to meet him at Rheims, he opened a council there on the firſt of October. By this council ſome biſhops and abbots were depoſed, for ſimony, incontinence, or other ſcandalous crimes; and canons were enacted to baniſh ſimony out of the church; to reſtrain the clergy from bearing arms or ſerving in war; to prevent marriages within the forbidden degrees; and to reſtore to the people and clergy the right of chooſing their own paſtors. From Rheims, Leo proceeded to Mentz, where he held another council of German prelates, at which the emperor himſelf, and the chief lords and princes of Germany, aſſiſted. Of the proceedings of this aſſembly we have no other information, than that all ſimoniacal contracts were forbidden in it, on pain of excommunication; and that the marriages of prieſts were not only prohibited, but declared null.

Leo returned to Rome towards the cloſe of the year 1049; and in the early part of the following year he viſited ſeveral Italian cities, reſtoring every-where the decayed diſcipline, and particularly inquiring himſelf, upon the ſpot, reſpecting the conduct and manners of the clergy. At Sipontum, a city no longer in exiſtence, he held a council, by which two archbiſhops, who were convicted of ſimony, were depoſed; and ſoon afterwards he held another council at Rome, which is chiefly memorable for the unjuſt ſentence of condemnation which it paſſed upon the celebrated Berenger, without hearing him in his own defence, or ſo much as ſummoning him to attend. See vol. ii. p. 902. In 1051, Leo paid a ſecond viſit to Germany, where he kept the feaſt of the purification at Augſburg, with the emperor; and, returning thence to Rome, he held a council, in which the canons which had been iſſued by other councils againſt the incontinence of the clergy were confirmed, and ſome new ones were added to them; and, in order more effectually to check the ſcan-

dalous irregularities of the Roman clergy in particular, it was decreed, that all women, who ſhould for the future proſtitute themſelves to prieſts within the walls of Rome, ſhould be condemned to ſerve as ſlaves in the Lateran palace. As ſoon as this council had broken up, the pope took a third journey into Germany, to mediate a peace between the emperor and Andrew king of Hungary, who had refuſed the tribute which his anceſtors had annually paid as an acknowledgment of their ſubjection to the empire; and in the year 1052 we find him ſtill in that country, where he celebrated the Chriſtmas feſtival with the emperor at Worms, and negociated the exchange of the biſhopric of Bamberg, the monaſtery of Fulda, and ſome other places, for the city of Beneventum in Apulia. On his return to Rome in the beginning of the following year, he aſſembled a council at Mantua, with the intention of inquiring into the conduct and lives of the biſhops and clergy in the northern parts of Italy; but theſe eccleſiaſtics, who were conſcious that they merited the ſevereſt cenſures, by inſtigating their domeſtics to quarrel with thoſe of the pope's retinue, produced ſuch diſturbances and tumults, that the pope was expoſed to perſonal danger, and found himſelf under the neceſſity of ſpeedily diſmiſſing the aſſembly.

In the year 1053, the pope being then at Beneventum, received a reſpectful letter from the emperor Conſtantine Monomachus, in which he expreſſed a great deſire to ſee the ancient union reſtored between the ſees of Conſtantinople and Rome, and offered to contribute whatever lay in his power towards ſo good a work. Leo immediately diſpatched three legates into the eaſt, who were received by the emperor at Conſtantinople with extraordinary marks of diſtinction, and were promiſed every aſſiſtance in furthering the deſign of their miſſion. The patriarch, however, could by no means be prevailed upon to confer with them, or even to ſee them. Notwithſtanding all the perſuaſions, the threatenings, and the promiſes, of the emperor, he would conſent to no propoſals for altering any of the practices in which the Greek church differed from the Roman; nor would he ſubſcribe to any declaration, which implied the ſubjection of the Conſtantinopolitan ſee to that of Rome. The legates, therefore, finding that he was unalterable, and well knowing that the imperial power was too weak to contend againſt his influence over the clergy and people of Conſtantinople, repaired to the church of St. Sophia; and, after complaining of the obſtinacy of the patriarch in the preſence of the multitude aſſembled to aſſiſt at divine ſervice, laid the ſentence of excommunication againſt him in writing upon the high altar, and took their departure homewards. On leaving the city, they alſo pronounced a ſentence of excommunication againſt all who ſhould from that time receive the ſacrament adminiſtered by any Greek who found fault with the maſs of the Latins. In the mean time pope Leo was ſeized with an illneſs at Beneventum, which appearing of a threatening nature, he was removed by convenient ſtages to Rome; where he died in the year 1054, about the age of fifty-two, after having governed the Roman church five years and rather more than two months. We have already ſeen how zealous he was to correct many of the ſcandalous abuſes in the diſcipline of the church, which had been tolerated and encouraged by his predeceſſors. He is commended for his prudence, his generoſity to the poor, and his ardent piety. In private life he practiſed all the auſterities of the cloiſter. In his endeavours, however, to aggrandize his ſee, he followed the example of his moſt ambitious predeceſſors; on which account he has been honoured with a place in the Roman calendar. He was the firſt pope who made uſe of the Chriſtian era in the date of his bulls, his predeceſſors having followed that of the indictions. Nineteen of his Letters are preſerved in the ninth volume of the Collect. Concil. and ſeveral of his Homilies, or Sermons, were publiſhed at Louvain in 1565, and afterwards at other places.

LEO X. (Pope), born at Florence in December 1475, was the ſecond ſon of Lorenzo de Medici the Magnificent, and bore the baptiſmal name of *Giovanni*, (John.) Originally deſtined by his father for the church, he received the tonſure at ſeven years of age. Being then declared capable of eccleſiaſtical preferment, Lorenzo by his intereſt with the French king Louis XI. and with the pope Sixtus IV. obtained for him two rich abbacies; and the liſt given of the preferments accumulated upon him at an early age, amounts to the number of twenty-nine; a proof both of the great intereſt of the Medici family, and of the ſcandalous corruption of the church! As it was a main object of the father's ambition to decorate his houſe with the popedom, the early acquiſition of the cardinalate for his ſon was a point which he purſued with unremitting aſſiduity; and the acceſſion of Innocent VIII. to the pontificate was ſo favourable to his wiſhes, that, in 1488, Giovanni, then thirteen years of age, was nominated to that high dignity. Whatever cenſure Lorenzo may deſerve for urging a meaſure ſo derogatory to the credit of the catholic church, it muſt be admitted that he was not wanting in efforts to make his ſon worthy of his premature advancement. His early education was entruſted to that eminent ſcholar Angelo Poliziano; and other learned men who frequented the Medici palace were called upon to aſſiſt in his ſtudies. His own diſpoſition, which was grave and ſolid beyond his years, contributed to the ſucceſs of his inſtructors. When he was nominated to the cardinalate, it was made a condition that he ſhould ſpend three years at the univerſity of Piſa in profeſſional ſtudies, before his formal inveſtiment with the purple. In 1492 this ſolemn act took place; and he immediately went to reſide at Rome, as one of the ſacred college. His father ſoon after died, and was ſucceeded in his honours in the Florentine republic by his eldeſt ſon Piero.

The young cardinal's oppoſition to the election of pope Alexander VI. rendered it expedient for him to withdraw to Florence, where he acquired much perſonal reſpect; but, the events attending the invaſion of Italy by the French king Charles VIII. having brought on a ſtorm of civil odium againſt his brother Piero, he was involved in the expulſion of his family, and obliged to take refuge at Bologna. After the failure of ſeveral attempts made by his brothers to recover their ſtation in Florence, the cardinal, accompanied by his couſin Giulio de Medici, with a ſmall party of friends, in 1499, made a tour through the ſtates of Venice, Germany, and France, returning by Genoa. In that city he abode for ſome time, and then fixed his reſidence in Rome, where his prudent conduct enabled him to live in reſpect and ſafety during the remainder of Alexander's pontificate. During the early part of that of Julius II. he continued at Rome, cultivating polite literature and the pleaſures of elegant ſociety, and indulging his taſte for the fine arts, for muſic, and the chaſe, to which latter amuſement he was paſſionately addicted. The depreſſion of his houſe occaſioned frequent embarraſſment in his finances, which were inadequate to the liberal mode of living that his inclination and early habits led him to adopt; but his cheerful temper ſupported him under his difficulties, and he extricated himſelf without loſs of honour.

It was not till his thirtieth year, A. D. 1505, that he began to take an active part in public affairs; when Julius, who had commenced his vigorous career with the ſeizure of Perugia, appointed the cardinal de Medici to its government. By his firm adherence to the intereſt of the pope, the cardinal acquired his confidence to ſuch a degree, as to be entruſted with the ſupreme direction of the papal army in the holy league againſt the French, in 1511, with the title of legate of Bologna. In this office he retained the enſigns of an eccleſiaſtic and a man of peace, and found his opinion treated with little deference by the Spaniſh general of the allied army; but, though unable to direct the military operations, he uſefully exerted himſelf in maintaining good order in the camp. At the bloody battle of Ravenna, in 1512, he was made priſoner,

priſoner, and conveyed to Milan, where the ſacredneſs of his function cauſed him to be treated with great reſpect. When the French, from the decline of their cauſe, were obliged to make a haſty retreat, they carried the cardinal de Medici with them; but, on his arrival at the banks of the Po, he found means to engage a party to reſcue him, and effected his eſcape. He returned to Bologna, and aſſumed the government of the diſtrict in quality of the pope's legate. Not long after, the reſtoration of the family of Medici to their former condition in Florence took place, and the popular conſtitution of that republic was overthrown. The cardinal contributed, with his brother and relatives, to this event; and he remained at Florence, till the death of Julius II. called him ſuddenly to Rome.

At the ſcrutiny for a new pontiff, in March 1513, the election was declared to have fallen on the cardinal de Medici, who was then in the thirty-eighth year of his age. What were the particular motives which influenced the conclave in the choice of ſo young a cardinal, and one who ſeems by no means to have been hitherto diſtinguiſhed for the vigour and abilities requiſite to fill ſo exalted and difficult a ſtation, does not clearly appear. It is agreed, however, that the election was not procured by the corrupt practices uſual on ſuch occaſions; and the new pope, who aſſumed the name of Leo X. aſcended the throne with greater manifeſtations of good-will, both from Italians and foreigners, than moſt of his predeceſſors had done. One of his firſt acts was to interpoſe in favour of ſome conſpirators againſt the houſe of Medici, at Florence; and he treated with great kindneſs the family of Soderini, which had long been the head of the oppoſite party in that republic. His taſte and affection for literature were diſplayed by the appointment of two of the moſt elegant ſcholars of the age, Bembo and Sadoleti, to the office of papal ſecretaries.

With reſpect to foreign politics, he purſued the ſyſtem of his predeceſſor, in attempting to free Italy from the dominion of foreign powers; and, as Louis XII. now allied with the Venetians, meditated a new invaſion of the Milaneſe, Leo formed a counter-league to oppoſe him. He alſo took into pay a large body of Swiſs, by whoſe valour the bloody victory of Novara was gained over the French; of which the conſequence was, their expulſion from Italy. In order to counteract the anti-papal council of Piſa, which was now aſſembled at Lyons, he renewed the meetings of the council of Lateran, which Julius II. had begun; and he had the good fortune to terminate a diviſion which threatened a ſchiſm in the church. Louis XII. who had incurred eccleſiaſtical cenſure, made a formal ſubmiſſion, and received abſolution.

Having thus, in the firſt year of his pontificate, ſecured external tranquillity, Leo did not delay to conſult the intereſts of literature, by an ample patronage of learned ſtudies. Many of his predeceſſors had honourably diſtinguiſhed themſelves by ſimilar attentions: even the infamous Alexander VI. had merited the applauſe of the votaries of learning. The ſtormy pontificate of Julius II. however, had been unfavourable to letters, not only in Rome, but throughout Italy; and peculiar exertions were requiſite to recover them from the depreſſion into which they had ſunk. One of the new pope's firſt cares was to reſtore to its former ſplendour the Roman gymnaſium, or univerſity, which he effected by new grants of its revenues and privileges, and by filling its profeſſorſhips with eminent men invited from all quarters. The ſtudy of the Greek language was next a particular object of his encouragement. Under the direction of Janus Laſcaris, (ſee p. 254.) a college of noble Grecian youths was founded at Rome for the purpoſe of editing Greek authors; and a Greek preſs was eſtabliſhed in that city, of which Laſcaris was appointed ſuperintendant. Public notice was given throughout Europe, that all perſons who poſſeſſed manuſcripts of ancient authors would be liberally rewarded on bringing them to the pope, who would alſo print them at his own expenſe. The firſt appearance from the preſs of the five firſt books of Tacitus's Annals, was one of the reſults of this invitation. Nor was Leo, although principally attached to claſſical literature, wholly inattentive to the promotion of oriental learning; and the firſt profeſſorſhip in Italy of the Syriac and Chaldaic languages was founded by him in the univerſity of Bologna.

The embarraſſed politics of the time occupied in ſtill more ſerious concerns the mind of the pontiff, who had two leading objects in view; the maintenance of that balance of power which might protect Italy from the over-bearing influence of any one foreign potentate, and the aggrandizement of the houſe of Medici. In order to prevent a propoſed alliance between the courts of France, Spain, and Auſtria, he promoted a reconciliation between the kings of France and England, cemented by the marriage of the former to the ſiſter of the latter; and he affected to favour Louis in his purpoſe of a new attempt to recover the duchy of Milan. The ambitious views he had entertained of obtaining the kingdom of Naples for one branch of his family, and forming a ſtate out of Tuſcany with the ducheſs of Ferrara and Urbino for another, rendered the friendſhip of that monarch neceſſary to him, and occaſioned a ſecret alliance between them. Yet, apparently intimidated at the nearer proſpect of a French army upon his frontiers, he not only ſtrengthened himſelf by the purchaſe of Modena from the emperor Maximilian, but ſent Bembo as his legate to Venice, to detach that republic from their connexion with Louis; in which attempt, however, he failed. Theſe crooked and mutable politics were at that time ſo familiar to all the European ſovereigns, that perhaps no one of them could juſtly complain of another on that head; yet the popes, having uſually a double intereſt in view, were peculiarly liable to the charges of fluctuation and double-dealing, and Leo ſeems to have imbibed a full portion of the ſpirit of his ſee.

When the death of Louis XII. placed Francis I. on the throne of France, it ſoon became apparent that a new war was to be expected in the north of Italy; and Leo, after ſome ineffectual attempts to remain neuter, found himſelf obliged to join in a league with the emperor, the king of Arragon, the ſtates of Florence and Milan, and the Swiſs cantons, againſt the French king and the ſtate of Venice. The rapid ſucceſſes of the French arms, however, ſoon brought him to temporize; and, after the Swiſs, almoſt unaided, had been defeated in the terrible combat of Marignano, the pope thought it expedient to detach his cauſe from that of his allies, and to form an union with Francis. Theſe two ſovereigns, in the cloſe of 1515, had an interview at Bologna, at which, among other political arrangements, the *pragmatic ſanction*, which was conſidered as the baſis of the rights of the Gallican church, was aboliſhed, and a concordat was eſtabliſhed in its ſtead. This change was advantageous both to the papal authority and to the regal prerogative, but was extremely diſpleaſing to the French nation, both clergy and laity.

The death of Leo's brother, Giuliano de Medici, a man of a weak conſtitution and unambitious temper, left his nephew Lorenzo the principal object of that paſſion for aggrandizing his family, which this pontiff felt in a degree not inferior to that of any of his predeceſſors. Under its influence he found pretexts, in 1516, for iſſuing a monitory againſt the duke of Urbino; and, upon his non-appearance, Leo launched an excommunication againſt him, and ſeized his whole territory, with which, together with the ducal title, he inveſted his nephew Lorenzo. In the ſame year, a general pacification took place among the contending powers, notwithſtanding all the efforts of the pope to prevent it. A conduct ſo oppoſite to the duty of the general father of Chriſtendom has been attributed to Leo's regard for the laſting peace and independence of Italy, which could not but reſt on frail foundations while Milan and Naples were in the poſſeſſion of two powerful foreign princes. The character of the pontiff, however,

juſtifies the ſuppoſition, that he was in this inſtance chiefly actuated by perſonal motives.

In 1517, the expelled duke of Urbino collected an army, and by rapid movements completely regained his capital and dominions. Leo, exceſſively chagrined at this event, wiſhed to engage all the Chriſtian princes in a cruſade againſt him. By a profuſe application of the treaſures of the church, he raiſed a conſiderable army under the command of his nephew, and finally compelled the duke to reſign his dominions upon honourable terms. The violation of a ſafe-conduct granted by Lorenzo to the duke's ſecretary, who was ſeized at Rome and put to the torture, in order to force him to reveal his maſter's ſecrets, imprints an indelible ſtain on the memory of this pontiff.

In the ſame year his life was endangered, and his peace of mind broken, by a conſpiracy formed againſt him in his own court. The principal author of it was cardinal Petrucci, who had conceived a violent diſpleaſure againſt the pope, on account of the expulſion of his brother from Sienna, and the ruin of his family. He laid a plan for deſtroying Leo by poiſon, which having failed of execution, he withdrew from Rome for a time, ſtill maintaining a correſpondence on the ſubject with his ſecretary. Some of his letters being intercepted, he was decoyed to Rome by a ſafe-conduct from the pope, confirmed by a ſolemn promiſe of his ſecurity made to the Spaniſh ambaſſador. He was, nevertheleſs, arreſted on his arrival, and committed to priſon. Suſpicion fell upon ſeveral other cardinals as being partakers in the conſpiracy, and ſome of them were induced to confeſs their guilt. In concluſion, Petrucci was ſtrangled, his agents in the plot were put to death with horrid tortures, and ſome of the other cardinals were degraded and ſubjected to heavy fines. The conduct of Leo on this trying occaſion ſeems to have done little honour either to his fortitude or his clemency; and doubts were entertained concerning the reality of the conſpiracy, at leaſt with reſpect to ſeveral of thoſe who were charged with it. In order effectually to ſecure himſelf againſt any future diſaffection lurking near his perſon, the pope created in one day thirty-one new cardinals, many of them his relations and friends not yet dignified with the prelacy; but it muſt be confeſſed, that many of them were perſons who, from their talents and virtues, were well worthy of this elevation. He beſtowed upon theſe objects of his choice rich benefices and preferments, as well in the remote parts of Chriſtendom as in Italy; and thus formed round him a numerous and ſplendid court, attached to his perſon, and adding to the pomp and grandeur of his capital.

From the pontificate of Leo, however, an event takes its date which inflicted the ſevereſt wound upon the church of Rome that it had ever experienced; a wound never to be healed! This was, the reformation of religion under Luther. Leo's unbounded profuſion in every object of expenſe, attached to a taſte for luxurious magnificence, had rendered it neceſſary to deviſe means for repleniſhing his exhauſted treaſury; and one of thoſe which occurred was the ſale of thoſe indulgences which the church claimed a right of diſpenſing from the ſtore of her ſpiritual wealth. The commiſſaries appointed for this traffic in Germany cried up the efficacy of their wares in ſuch ſcandalous and extravagant terms, as gave great offence to pious and thinking men. Luther, then a doctor in theology and public preacher in Wittemberg, warmly proteſted againſt this abuſe, both in his ſermons, and in a letter addreſſed to the elector of Mentz. He further publiſhed a ſet of propoſitions, in which he called in queſtion the authority of the pope to remit ſins, and made ſome ſevere ſtrictures on this method of raiſing money. As his remonſtrances produced a conſiderable effect, ſeveral eccleſiaſtics undertook to refute him, and an angry controverſy was thus kindled. Leo, who probably regarded theological quarrels with contempt, and from his pontifical throne looked down upon the efforts of a petty German doctor with ſcorn, ſeems at firſt to have treated the matter lightly; and, when his interference was thought neceſſary, he ſhowed an inclination to lenient meaſures. A direct application from the emperor Maximilian induced him, however, to proceed with more vigour; and he iſſued a monitory for Luther's appearance before him at Rome. By the interpoſition of ſome of Luther's favourers, permiſſion was given for the cardinal of Gaeta to hear his defence at Augſburg. As uſual in ſuch conferences, nothing ſatisfactory was determined; and Leo, in November 1518, publiſhed a bull, aſſerting the pope's authority to grant indulgences, which will avail both the living, and the dead in purgatory. Luther appealed to a general council; and thus an open war was declared, in which the reforming party ſoon appeared with a ſtrength certainly little calculated upon by the court of Rome. The ſentiments of the Chriſtian world were, indeed, at this time, by no means favourable to that court. The ſcandal incurred by the infamy of Alexander VI. and the violence of Julius II. was not much alleviated in the reign of a pontiff who was characteriſed by an inordinate love of pomp and pleaſure, and whoſe claſſical taſtes even cauſed him to be regarded by many as more of a heathen than a Chriſtian.

Leo, deſirous of trying the effect of an amicable negociation, employed a Saxon nobleman to treat in perſon with Luther. But, although the reformer ſhowed himſelf not averſe to a reconciliation, yet the differences between the two parties were ſo aggravated by writings and public diſputations, and came to involve ſo many eſſential points, that no ground was left for conciliation. In fact, while Luther firmly adhered to the principle of unreſtrained appeal to the words of ſcripture, and the pope inſiſted upon unqualified ſubmiſſion to the decrees of the catholic church, it was obvious that no medium of agreement could ſubſiſt between them. Luther was perſuaded to write a letter to the pope; but, inſtead of expreſſions of humiliation, it contained the bittereſt invectives againſt the court of Rome. It was therefore reſolved to proceed to a direct condemnation of him and his doctrines; and a bull to that purpoſe was iſſued on June 15, 1520, which effected a total ſeparation between the papal ſee and the reformers. The writings of Luther were publicly burnt in various places, which inſult he retaliated by an equally ſolemn and public conflagration of the papal decrees and conſtitutions, and the bull itſelf. Nothing further on this ſubject remains to be noticed during the pontificate of Leo; unleſs the conferring of the title of defender of the faith upon Henry VIII. of England, for his ſpontaneous appearance on the ſide of the church as a controverſialiſt, be deemed ſuch.

In the year 1519, Leo had incurred a ſevere domeſtic misfortune in the death of his nephew Lorenzo, who left behind him an infant daughter, afterwards the Catharine de Medicis who was ſo conſpicuous as queen and regent of France. The immediate conſequences of this event were the annexation of the duchy of Urbino with its dependencies to the Roman ſee, and the appointment of Giulio, cardinal de Medici, Leo's couſin, (afterwards pope Clement VII.) to the ſupreme direction of the ſtate of Florence.

The tranquil ſtate of Italy at this period permitted the pope to indulge his taſte for magnificence in ſhows and ſpectacles, and in the employment of thoſe great artiſts who have reflected ſo much luſtre on his reign. His private hours were chiefly devoted to indolence, or to amuſements, often of a kind little ſuited to the dignity of his ſtation. Hunting, muſic, and the company of jeſters and buffoons, appear to have been his favourite pleaſures. He was not, however, ſo much abſorbed in them as to neglect the aggrandizement of his family and his ſee. Several cities and diſtricts in the vicinity of the papal territories, and to which the church had claims, had been ſeized upon by powerful citizens, or military adventurers, who held them as ſovereigns. One of theſe was Perugia, which was poſſeſſed by Baglioni, a chief of a tyrannical character.

racter. Being ſummoned to the papal court, he at firſt declined compliance, and ſent his ſon to apologize for him. Leo, however, found means to decoy him by a ſafe-conduct, which he made no ſcruple of violating as ſoon as he got him into his power; and, after forcing him by torture to confeſs the enormities of which he had been guilty, he put him to death, and ſeized his dominion. Againſt Frederic, a commander who occupied the city of Fermo, he ſent a body of troops, who killed him as he was making his eſcape, and took poſſeſſion of the place. Others who held towns or fortreſſes in the Marche of Ancona, terrified by theſe examples, either fled, or repaired to Rome in order to juſtify themſelves, and ſolicit Leo's clemency; but of the latter, ſeveral were impriſoned and put to death. The more juſtifiable policy of expelling the French from Italy was never out of Leo's mind, notwithſtanding his temporary alliances with that court; and, in 1521, he formed a treaty with the emperor for the re-eſtabliſhment of the family of Sforza in the duchy of Milan. He hired a large body of Swiſs mercenaries, which, by means of a fictitious negociation with Francis for an invaſion of the Neapolitan territories, was ſuffered to march acroſs the Milaneſe into Romagna. When it was time to take off the maſk, the papal troops, in conjunction with the Spaniſh and German auxiliaries, took poſſeſſion of Parma, which, together with Placenza, was to be united to the domain of the church. The Swiſs in the ſervice of France having been prevailed upon to deſert, the allies croſſed the Adda, and were received without oppoſition into Milan. They next entered the territories of the duke of Ferrara, who had joined the French, and againſt whom the pope had already launched the thunders of the church. Several of his ſtrong places were taken, and the ſiege of his capital was impending, when an event took place which ſuddenly changed the ſtate of affairs in Italy. Leo, who was at one of his villas when the tidings of theſe ſucceſſes arrived, repaired to Rome for the purpoſe of being preſent at the public rejoicings, which were ordered for three ſucceſſive days. An indiſpoſition apparently ſlight, attributed to cold, confined him to his chamber from the day of his return; and ſo rapid was its progreſs, that after a week's illneſs he expired on December 1, 1521, in the forty-ſixth year of his age, and the ninth of his pontificate. Although the account of his diſorder is obſcure, there ſeems no reaſon to give credit to the ſuſpicion of poiſon, which was current among his attendants, but was ſupported by no evidence. A groſs and morbid habit of body made him liable to ſink ſpeedily under occaſional diſeaſe. The people of Rome, who had felt the benefits of his ſplendour and munificence, expreſſed great concern at his death; but the public honours paid to his memory were not ſuch as might have been expected. An exhauſted treaſury was made the pretext of an economical funeral; and, amidſt all the eminent ſcholars of his court, an illiterate chamberlain was appointed to pronounce his panegyric. The college Della Sapienza, however, made amends, by inſtituting an annual oration to his praiſe.

The Life of Leo the Tenth has been written in maſterly manner by Mr. Roſcoe. The ſervices of Leo in the promotion of literature and the reſtoration of the arts, had never before been ſufficiently appreciated, or collected into one point of view. The Life by Paulus Jovius was ſhort; and that by Fabroni gave but a conciſe account of the progreſs which was made, in Leo's pontificate, in the department of ſcience, of literature, or of art; or of thoſe diſtinguiſhed men to whoſe writings and labours the reign of that pontiff is indebted for its principal luſtre. To what was given in theſe hiſtories, Mr. Roſcoe has added all that was material to his purpoſe from the literary hiſtorians of Italy, with the ſtill-more uſeful addition of original letters and documents, not only from the public and private libraries of his own country, but from the library at Paris, the Palazzo Vecchio at Florence, the Vatican, and the library of St. Mark at Venice. To that excellent work we muſt therefore refer the reader for a full and complete delineation of the moral and political character of this celebrated pontiff, about which mankind have been ſo much divided. It may however be fairly aſſerted, that he claims the gratitude of poſterity for the ample encouragement which he afforded to men of ſcience and literature, and the eagerneſs with which he promoted the ſtudy of the fine arts; qualities ſufficient to veil all the failings or faults which can juſtly be charged to his account. This character of Leo has been finely celebrated by Pope in the following lines:

But ſee! each muſe, in Leo's golden days,
Starts from her trance, and trims her wither'd bays;
Rome's ancient Genius, o'er its ruins ſpread,
Shakes off the duſt, and rears his rev'rend head.
Then Sculpture and her ſiſter arts revive:
Stones leap to form, and rocks begin to live;
With ſweeter notes each riſing temple rung;
A Raphael painted, and a Vida ſung.

LEO XI. (Pope), whoſe former name was *Alexander*, was the ſon of Octavian de Medici, couſin of Coſmo, great duke of Tuſcany, and born in the year 1535. He was made archbiſhop of Florence, and filled the poſt of ambaſſador from Francis, the great duke, at the court of Rome. By Gregory XIII. he was created cardinal, under the title of St. John and St. Paul; and by Clement VIII. he was ſent legate to Henry IV. king of France. At Paris, his talents were ſucceſsfully employed in adjuſting the terms of peace between Philip II. king of Spain, and the French monarch; and for his good offices he received from the latter a noble preſent. On the death of pope Clement VIII. in the year 1605, the conclave for the choice of a ſucceſſor was divided into French, Spaniſh, and Italian, parties, who carried on their intrigues in favour of their reſpective candidates with all the art and addreſs uſually practiſed on ſuch occaſions. At one time the votes were ſo numerous for the famous cardinal Baronius, that he would have been elected, had not the Spaniſh party oppoſed him, out of reſentment for what he had written, in the eleventh volume of his Eccleſiaſtical Annals, againſt the king of Spain's title to the kingdom of Sicily. At length, the French and Italian parties having united, cardinal Joyeuſe nominated Alexander de Medici; who was no ſooner propoſed, than he obtained the unanimous ſuffrages of the conclave, and took the name of Leo XI. The intelligence of his election gave very general ſatisfaction, particularly to the Romans and Florentines, who were acquainted with his talents and virtues, and knew that to his zeal for the intereſts of the church, he united a liberal ſpirit, a love of learning and learned men, and an hereditary taſte for the polite arts. This ſatisfaction, however, was but of very ſhort continuance; for the pope, fatigued with the length of the ceremonies of inauguration, and overheated by the weather, and the weight of his robes, caught a violent cold, which brought on a fever, and proved fatal to him on the twenty-fifth day after his election, when he was in the ſeventieth year of his age. *Rycaut's Cont. of Platina.*

LE'O, the name of ſix Emperors of the Eaſt; for the connected hiſtory of whoſe reign, ſee the article Rome. In this place we have only to notice a few particulars of

LEO VI. ſurnamed the Philoſopher, the ſon of Baſil I. who had cauſed him to be crowned as his partner in the empire in 870. The treachery of a monk, whoſe great ſway at court the young prince had endeavoured to overthrow, produced his impriſonment, on the charge of a deſign againſt the life of his father; and he would have loſt his eyes and his inheritance, had not his friends zealouſly exerted themſelves to procure his releaſe and reſtoration to favour. At the death of Baſil in 886, Leo ſucceeded to the imperial throne; having a nominal partner in his brother Alexander, but himſelf poſſeſſing all the ſovereign power. He began his reign by puniſhing the monk who had cauſed his diſgrace, and baniſhing the patriarch Photius

tius, whoſe ambition had occaſioned various diſorders. The Bulgarians, in this reign, renewed their uſual hoſtilities againſt the eaſtern empire; and the ill ſucceſs of the generals of Leo obliged him to ſubmit to ſuch terms of peace as they were pleaſed to impoſe. Notwithſtanding his title of *philoſopher*, which he acquired from his literary reputation, his private conduct diſplayed an indolent and voluptuous character. On the death of his wife he married his concubine Zoe. She was ſucceeded in the imperial bed by a third wife; and, upon her deceaſe in childbed, Leo entered into a fourth marriage with another Zoe, who had already borne him a ſon. The emperor, in his theological zeal, had formerly iſſued an edict againſt even third marriages. His fourth nuptials were thought ſuch a ſcandalous infraction of the diſcipline of the Greek church, that the patriarch Nicholas refuſed to concur in them, and proceeded to excommunicate the emperor after their celebration. For this offence he was depoſed; but even the patriarch appointed in his room oppoſed an intended edict of Leo's, declaring fourth marriages lawful. As an excuſe for the emperor, it is to be obſerved that he had no remaining iſſue by his former wives. Leo was ſuperſtitious, and made pretenſions to the art of foretelling future events by divination; ſome oracles under his name were current among the credulous Greeks. A total defeat of his fleet by the Saracens a ſhort time preceded his death, which took place in 911, after he had poſſeſſed the throne above twenty-five years. He bequeathed the empire to his brother Alexander, as a kind of truſt for his young ſon Conſtantine Porphyrogenitus. Leo the Philoſopher was educated under the learned Photius, from whom he derived an attachment to various kinds of erudition. He wrote, or gave his name to, ſeveral works, among which were a collection of ſermons or homilies; a letter to the caliph Omar on the truth of the Chriſtian religion; a circular paſtoral epiſtle to his ſubjects; a treatiſe on military diſcipline, which was tranſlated into Latin; and a collection of laws begun by his father, and entitled *Opus Baſilicon*.

LE'O the GRAMMARIAN wrote in Greek a continuation of the Chronicle of Theophanes, compriſing the lives of ſeven emperors of the Eaſt, from the year 813 to 1013. It is annexed to father Combefis' edition of the Chronicle above-mentioned, Paris, 1655. Of the author, nothing perſonally is known. He probably wrote down to the age in which he lived. *Voſſi Hiſt. Græc.*

LE'O (John), named AFRICANUS, a traveller and geographer, was a native of Granada, of Mooriſh extraction. When that city was taken by the arms of Ferdinand and Iſabella in 1492, he retired into Africa, which circumſtance gave him his ſurname. He ſtudied the Arabic language at Fez; and, partly as an ambaſſador from the king of the country, partly for his own pleaſure, took ſeveral journeys in Europe, Aſia Minor, and Africa, of which he wrote a narrative in Arabic. Having fallen into the hands of pirates at the Iſle of Zerb, he was ſold to a maſter who preſented him to Leo X. That pontiff gave him a favourable reception, on account of his learning and knowledge; and, having perſuaded him to renounce Mahometiſm, gave him his own names of John and Leo at the baptiſmal font. He acquired the Italian language at Rome, and tranſlated into it his deſcription of Africa, dating his work in 1526. He is ſuppoſed to have died not long after; and one writer reports that before his death he returned to his original faith. The Deſcription of Africa, by Leo Africanus, is reckoned one of the moſt curious of the early voyages and travels, and is upon the whole in good credit for veracity. He deſcribes what he had himſelf ſeen, chiefly on the northen and weſtern coaſts of that peninſula, and ſupplies deficiencies from the relations of others; but, as a geographical work, it has much of the imperfection of the age. The original Arabic copy is ſaid to have been in the library of J. Vincent Pinelli. From the Italian an inaccurate verſion was made into Latin by Florian, and one into French by Temporal. Marmol has copied great part of the work without acknowledgment. Leo alſo wrote a treatiſe De Vitis Philoſophorum Arabum, printed by Hottinger at Zurich in 1664. *Voſſi Hiſt. Lat.*

LE'O of ORVIETO, whoſe ſurname was derived from the city or territory of Orvieto in Tuſcany, in which he was born, was either a Dominican or Franciſcan monk, and appears to have flouriſhed towards the commencement of the fourteenth century. He was the author of two Chronicles: one, of the popes, down to the year 1314; and the other of the emperors, terminating at the year 1308. Leo has in theſe works availed himſelf of the labours of Martin of Poland, whom he cloſely follows, adding at the ſame time numerous facts taken from various other writers. The ſtyle of theſe Chronicles is ſtrongly marked by the barbariſms of the age in which the author lived; and his narrative abounds in proofs of the ignorance and credulity of the times. But, notwithſtanding theſe defects, they will be found uſeful to civil and eccleſiaſtical hiſtorians. They had long been undiſturbed on the ſhelves of libraries, when father John Lamy drew them into notice by publiſhing them in his Deliciæ Eruditorum, printed at Florence. Both Chronicles appeared in 1737, in 2 vols. 8vo. This edition, however, is enriched with a number of remarks and hiſtorical monuments, which will be found uſeful in correcting the errors of the author, and in illuſtrating the hiſtory of the times of which he ſpeaks; ſuch as many letters of the biſhops of Rome which had not before ſeen the light, diplomas of emperors and princes, edicts, privileges, records, &c. The ſecond of theſe volumes contains alſo a conciſe ſketch of the hiſtory of France, written by John de l'Iſle, or Johannes ab Inſula, ſuppoſed to have been a monk of the abbey of St. Denis in France in the fifteenth century.

LE'O of MODENA, by which title he is more commonly known than by his Jewiſh name of *R. Jehudah Arie*, was a learned rabbi, born at Modena, and flouriſhed in the ſeventeenth century. For a conſiderable time he was chief of the ſynagogue, and reckoned a good poet, both in Hebrew and Italian. His enmity to Chriſtianity, however, led him to compoſe many diſhonourable anagrams, and numerical devices and puns not worthy of his learned pen. He was the author of a valuable little work in Italian, on the ceremonies and cuſtoms of the Jews, which is highly eſteemed by the learned of all nations, and entitled "Iſtoria de Riti Hebraïci, Vita et Oſſervanze de gli Hebreï di queſti Tempi," the beſt edition of which was printed at Venice in 1638. A French verſion of this piece was publiſhed at Paris in 1674, 12mo. by Richard Simon, with two curious ſupplements; one, on the ſect of the Karaïtes; and the other on that of the modern Samaritans. It was Leo's deſign to have publiſhed an Italian tranſlation of the Old Teſtament; but he was prohibited from purſuing it by the Inquiſition. He therefore turned his attention to the compilement of a Hebrew and Italian dictionary, entitled The Mouth of the Lion, in which he has judiciouſly collected and explained all the words uſed by the rabbis, which are neither quite Hebrew nor altogether Chaldee; and has endeavoured to fix the pronunciation of them ſo as to be underſtood by Jews of all nations. This work was publiſhed at Venice, in 1612, in 4to. and was afterwards reprinted in an enlarged form at Padua in 1640. The author died at Venice in 1654, about the age of eighty. *Mod. Univ. Hiſt.*

LEO de St. JOHN, a French carmelite monk and various writer, was a native of Rennes, and born in the year 1600. Before he embraced the religious profeſſion, his name was *John Macé*. He was ſucceſſively nominated to all the honourable and confidential poſts in his order, and acquired the eſteem of popes Leo XI. and Alexander VIII. and of ſeveral cardinals. He was alſo eminent for his pulpit talents, and preached with great approbation before Louis XIII. and XIV. He was the friend of cardinal Richelieu, and received the laſt breath of that miniſter. His

own death took place in 1671, when he was in the seventy-first year of his age. He was the author of numerous works, the principal of which are, 1. Studium Sapientiæ Universalis, 3 vols. folio. The first of these volumes appeared at Paris in 1657, and comprehends the profane sciences; the other two were printed at Lyons, in 1664, and comprise the different branches of sacred literature and divinity. 2. The History of the Carmelites of the Province of Tours, in Latin, 1640, 4to. 3. A Journal of what took Place during the last Sickness, and at the Death, of Cardinal Richelieu, 1642, 4to. 4. Sermons, in 4 vols. folio, 1671–1675.

LE'OBEN, or LEU'BEN, a town of Stiria, on the Muehr. At this town the preliminaries of peace between the emperor and the French republic were agreed to, on the 20th of April, 1797. It is ten miles west of Pruck, and sixty-eight south-west of Vienna. Lat. 47. 22. N. lon. 14. 55. E.

LEOB'SCHUZ, or LUB'SCHUTZ, a town of Silesia, and capital of a circle, in the principality of Jagerndorf. This town has suffered much by war, particularly in 1626, 1627, 1634, and 1642; and, in the year 1603, it was almost destroyed by fire. It is sixteen miles north-west of Ratibor, and thirty south of Oppeln. Lat. 50. 5. N. lon. 17. 44. E.

LEO'CHEL, a town of Scotland, in the county of Aberdeen: six miles north-west of Kincardine O'Neil.

LE'OCON, a man's name; a king of Pontus.

LEOCO'RION, a monument erected by the Athenians to Pasithea, Theope, and Eubule, daughters of Leos, who immolated themselves when an oracle had ordered that, to stop the raging pestilence, some of the blood of the citizens must be shed. *Ælian.*

LEOC'RATES, an Athenian general, who flourished B. C. 460.

LE'OD, *s.*—*Leod* signifies the people; or, rather, a nation, country, &c. Thus, *Leodgar* is one of great interest with the people or nation. *Gibson's Camden.*

LEOD'AMAS, a son of Eteocles, one of the seven Theban chiefs who defended the city against the Argives. He killed Ægialeus, and was himself killed by Alcmæon. —A son of Hector and Andromache.

LEOD'OCUS, one of the Argonauts. *Flaccus.*

LE'OF, *s.*—*Leof* denotes love; so *Leofwin* is a winner of love; *Leofstan*, best beloved: like these Agapetus, Erasmus, Philo, Amandus, &c. *Gibson.*

LEOGA'NE, a seaport town of the island of Hispaniola, on the north coast. This was once the seat of the French government. It is however not well situated; but the air is said to be good, and the soil of the environs fertile. In 1796, it was taken by the British. Lat. 28. 30. N. lon. 73. 25. W.

LE'OMINSTER, or LEM'STER, a borough and market-town in the county of Hereford, situated in a very rich and fertile vale abounding with orchards, hop-yards, fine meadows, and arable lands; 137 miles from London. Its immediate site is, as Leland describes, "sumwhat lowe, and all the ground very neere about it is farre lower." The river Lugg flows on its north and east sides; two smaller streams run through the town, and three other considerable rivulets pass it within half a mile. Its extent from north to south is nearly a mile; and from east to west about half a mile. "The towne of Leominster," Leland says, "is metely large, and hath good buildinges of tymbre. The towne, by reason of their principall wool, use great drapinge of clothe, and thereby it flourished. Syns of latter days it chanced that the cittyes of Hereford and Worcester complained of the frequency of people that came to Lemster, in prejudice of bothe their marketts; whereupon the Saturday markett was removed from Lemster, and a markett on Friday newly assigned to it; syns that time the towne of Lemster hath decayed."

This town is said to have been originally called *Monasterium Leonias*, from a monastery built by king Mulvald, after he had seen a lion in a vision; others, however, suppose its present name to be a corruption of Llan Lieni, which they say it received of the ancient Britons, in whose language it signifies *a church of nuns*. Others again derive Lemster from *linum*, the Latin name of flax, the country about it producing the best kind of that valuable plant. In the year 1055, Leominster was seized upon by the Welsh chieftains, who strengthened it by fortifications, the remains of which may be traced even at the present period. The town appears to have been a place of some consequence at the time of the Domesday survey; as that register records that the manor, with its appurtenances, consisting of sixteen dependent estates, had been assigned by Edward the Confessor to his queen Editha; and that it was governed by eight bailiffs, eight beadles, and eight free tenants. When the survey was made, the manor belonged to the king; great part of the customary rent was paid as composition for salt, fish, and eels. Here was also a wood six miles in length, and three broad; but part of it was even then begun to be cleared for tillage. About the time of William Rufus, the fortifications of Leominster were strengthened and enlarged, the better to secure it against the incursions of the Welsh. In the reign of king John, William de Braose, lord of Brecknock, a turbulent and high-spirited baron, plundered this town, and burned great part of it, together with the priory and church. In Henry IV's reign, Leominster was for some time in the possession of Owen Glendour, after he had defeated the earl of March. In the next century, the inhabitants of this town took a decisive part towards the establishment of queen Mary on the throne; for which service she granted them the first regular charter of incorporation, with many valuable privileges. An annual fair had been granted in 1170, by Henry II. two additional fairs, each of six days' continuance, were granted by Edward I. The fairs at present are six, viz. Feb. 13, Tuesday after Midlent-Sunday, May 2, July 10, September 4, and November 3; at each of which the bailiff holds a court of pie-powder.

The church was built in different centuries; the north side (or what is called the back aisle), with part of the tower, appears to have been built before the conquest; the body of the church, where service is performed, is very large, neat, and spacious; the roof is supported by four large Tuscan pillars; it is regularly and neatly pewed, has a fine large altar-piece, painted from Rubens, of the Lord's Supper; on the left side is a painting of Moses with his rod; and, on the right, Aaron, in his high priest's dress, with a pot of incense, &c. There is also a fine-toned organ, and a set of fingers; likewise a ring of eight tuneable bells. A great fire, near a century back, destroyed the roof, east end, and inside, of the church, with the stalls and monuments; one of the latter is described in Weaver's Monuments, to the memory of Kenelm, a Mercian prince, in Saxon characters. Here is a Baptist meeting-house; a handsome square brick-building, with a house for the minister, and two other dwellings for widows adjoining, built and endowed by Mrs. Mary Marlow, of this town. A Presbyterian meeting-house; a Quakers' ditto; and a Moravian chapel, with the minister's house adjoining, a neat plain building with a small organ. During the time of rebuilding the church, divine service was performed in a contiguous building, anciently called the Chapelle in the Forbury, erected by Peckham archbishop of Canterbury about the end of the thirteenth century. It was afterwards appropriated to the purpose of tuition, and thence called the *school-house*; but has lately been converted into a regular theatre; it is a plain building, with pointed windows.

The priory, situated to the north-east of the church, on the little river Pinsley, was originally a monastery, built by Merewald, son of Penda king of Mercia, A. D. 658, for religious virgins, and endowed with much land about the town. Henry I. annexed this monastery, with the lands, &c. as a priory, or cell of monks, to his own abbey at Reading; and so it continued till the dissolution in the reign of Henry VIII. In the last century it was a

manſion-houſe for the bailiff of the town; but at preſent it is the poor-houſe for the borough, and called the houſe of induſtry. The town-hall, or *butter-cloſe* as it is commonly termed, is a ſingular building, conſtructed of timber and plaſter about the year 1633. The architect was the celebrated John Abel, who burnt the ſhire-hall at Hereford in the year 1645. This fabric ſtands on twelve oak pillars, ſuſtained on ſtone pedeſtals; the brackets and ſpandrils above the arches, and the upper parts of the building, diſplay much carving. A new gaol was erected in year 1750; and a market-houſe in 1803. Queen Mary endowed a free-ſchool here, the building having been anciently a chapel dedicated to the Virgin Mary. Here is alſo a ſchool endowed by Mr. Pierpoint; and four almshouſes, founded by Mrs. Eſther Clarke, widow, in the year 1735, for four widows, with an annual income of five pounds to each, under the direction of five truſtees. The huſband of the foundreſs of theſe alms-houſes was remarkable for giving away the beſt part of his effects during his life-time; and in a niche over the entrance is his figure, holding up a hatchet, with theſe words underneath:

Let him, that gives his goods before he is dead,
Take this hatchet and cut off his head.

Beſides flax, Leominſter is equally noted for its wheat, barley, cider, and hops. The inhabitants drive a conſiderable trade, not only in wool, but in gloves, leather, hatmaking, &c. and there are ſeveral rivers in and about the town, in which they have mills, and other machines. The mayor walks with a long black rod, tipped with ſilver.

Leominſter is a borough by preſcription, and returned two members from the 23d of the reign of Edward I. but the charter was firſt granted by queen Mary. This borough, during the lifetime of Chaſe Price, of convivial memory, was entirely under his influence and management. After his deceaſe, lord Bateman became the patron and manager of this borough, in which character he continued until the duke of Norfolk firſt attempted the eſtabliſhment of an intereſt. Under his auſpices Richard Beckford, eſq. was introduced, but did not ſucceed. At the election for 1797, the independent intereſt called upon ſir Henry Tempeſt, bart. a gentleman of their own county, whoſe political principles and conduct they approved, to ſtand forward as their candidate in oppoſition to Mr. Taylor, (an entire ſtranger, and manager of the opera-houſe;) and, though unſucceſsful in the iſſue, the conteſt deſerves notice, as being an early inſtance, lately ſo well imitated in Weſtminſter, of a candidate ſupported in his expenſes by thoſe who brought him forward. The corporation conſiſts of a bailiff, chief ſteward, recorder, twenty-four capital burgeſſes, a chamberlain, and two ſerjeants at mace. The members are choſen by the corporation and inhabitants paying ſcot and lot; the number of voters being about 500. The duke of Norfolk is the patron; the preſent members are—John Lubbock, eſq. a London banker, and John Harcourt, eſq.

The borough is a diſtinct precinct from the county, holds quarter-ſeſſions, and has a gaol and bridewell. A court of record is held every Monday, to recover debts, &c. not exceeding one hundred pounds, where any two of the capital burgeſſes or aldermen preſide, with or without the bailiff. The town is divided into ſix wards, in each of which are two conſtables.

On a hill adjoining the town, called Eton-hill, formerly ſtood a caſtle, called Comfort Caſtle, belonging to one of the Mercian princes.—Hatfield, to the eaſt of the town, has two fairs, April 23 and October 18.—On the Brierly hills, about two miles ſouth-weſtward from Leominſter, is Ivinton camp, a ſtrong fortification, divided into two parts by an entrenchment more modern than the outer works. This is ſuppoſed, with great probability, to be the camp occupied by Owen Glendour.

On the Ludlow road, about three miles and a half from this town, is Berrington Houſe, a ſtone building, erected by the Hon. Thomas Harley.—Croft Caſtle, about five miles diſtant in a north-weſt direction, was formerly the ſeat of the ancient family of the Crofts; it is ſituated a little below the conflux of the Wadels and the Lug; there is a camp and two ditches in it, called the Ambry. This was long the family-ſeat of Thomas Johnes, eſq. but the eſtate was ſold in 1799 to Mr. Davis, for 40,000l.—Shobden Court, eight miles on the Preſteign road, is the ſeat of viſcount Bateman. The hall is remarkably lofty and ſpacious; the church has been rebuilt by his lordſhip, and has the appearance of an elegant chapel; the marble font is a beautiful antique bowl.—Brampton Bryan, twelve miles on the Knighton road, is the caſtle and ſeat of the earl of Oxford. Great part of the walls of the ancient caſtle are ſtill ſtanding, and the gatehouſe, which is entire, is a very curious ſtructure, and conveys ſome idea of its ancient grandeur. There is a fair for toys, June 22.

Five miles on the Hereford road is Hampton Court, built by king Henry IV. as appears by an old painting on wood of that monarch, which is ſaid to be the only original of that king; the inſcription on it runs thus: "Henry IV. king of England, who laid the firſt ſtone of this houſe, and left this picture in it when he gave it to Lenthall, who ſold it to Cornwall of Burford, who ſold it to the anceſtors of the lord Coningſby in the reign of Henry VI." This picture is to be ſeen here. There is likewiſe a room here called king Henry's room, in which, till lately, ſtood a bed, the hangings of which were ſaid to be thoſe belonging to the bed the king ſlept on, and were a very fine Scotch plaid. Above the preſent ceiling of the great hall is a wainſcot roof, done in pannels, on which are carved roſes and other decorations, which have been richly gilt and ornamented; at the lower end is likewiſe to be ſeen a coat of arms, painted on the wall, ſaid to be the arms of Henry IV. but much defaced. It afterwards became the manſion of the Coningſby family, the firſt of whom that was created a baron was John, by the title of John lord Coningſby, baron of Coningſby in Lincolnſhire. Coningſby Caſtle anciently belonged to that family, but was confiſcated in the baron's wars; the ſaid John was ſlain at the battle of Cheſterfield, in the reign of king John. A great part of the building was added by ſir Thomas and lady Philippa Coningſby, as appears by the letters T C P in ſeveral parts of the houſe. There are many fine paintings here, among which is one of the lord Abergavenny, drawn in the attitude of riſing out of his chair, finely coloured. Several are painted by ſir Peter Lely and Vandyck. There is likewiſe to be ſeen here a gun, which lord Coningſby had made of ſword-blades taken from the Iriſh rebels at the battle of the Boyne, on the barrel of which is the following inſcription in gold letters:

I in the tower became a gun
In ſeventeen hundred twenty-one;
Earl Coningſby, a priſoner there,
Beſpoke and took me to his care:
And fit I am for loyal lords,
Made of the blades of rebels' ſwords.
Traitors, beware when I'm enlarg'd,
When he or I ſhall be diſcharg'd.
For this, my firſt and true report,
Pray uſe me well at Hampton Court.

The battle of the Boyne was fought in the year 1690, between king William III. and king James II. and in a ſmall cabinet at Hampton Court is to be ſeen a handkerchief, which was applied by the earl of Coningſby to a wound which king William received on his right ſhoulder from a field-piece, as he was reconnoitring the ſituation of the enemy the day previous to the battle. In the pariſh-church of Hope-under-Dinmore, is a fine marble monument, erected to the late earl Coningſby, whoſe remains, with thoſe of Margaret his counteſs, and an infant ſon, are depoſited in a vault under the chancel; alſo the remains of the lady Philippa Coningſby, and others of the family. There was a curious manuſcript account

of

of the funeral proceſſion of the lady Coningſby, which, after reciting every particular relating to her funeral, concluded in theſe words: "And then, the next morning, hunting, hawking, and good chear, and ſo to continue two or three dayes; and ſuch is the end of all fleſh." Hampton Court is now the property of George Capel Coningſby, earl of Eſſex, lineally deſcended from the above lady Coningſby. His lordſhip has made great improvements in and about the houſe. Here is a fine park, eight miles in compaſs, with about twelve hundred head of deer, and a broad pool three quarters of a mile long, between two great woods. The dam which forms it, and is made over a valley, coſt 800l. and was finiſhed in a fortnight by two hundred hands. A new river is cut quite through the park, the channel of which, for a long way together, is hewn out of the rock. This enriches vaſt tracks of land, which before were barren. Here are alſo gardens, canals, and plantations of timber; which, with warrens, decoys, ſheep-walks, paſtures for cattle, &c. ſupply the houſe with all conveniences and neceſſaries; and there is a ſtore of water on all ſides of it, for the fountains, baſons, and canals.

At Sutton-Walleys, on the Lug, between Hampton and Hereford, there was a palace of king Offa.

LE'OMINSTER, a poſt-town of America, in Worceſter county and ſtate of Maſſachuſetts; forty-ſix miles weſt of Boſton. It has a printing office and ſeveral neat buildings. This townſhip was taken from Lancaſter, incorporated in 1740, and contains 1486 inhabitants. On the ſtreams that paſs through this town are ſeveral mills of different kinds. About 200,000 bricks are annually made here. The manufacture of combs is alſo carried on in great perfection and with conſiderable profit.

LE'ON, in ancient geography, a promontory of Greece, in the iſle of Eubœa.—A promontory of the iſle of Crete. —A river of Phœnicia. *Ptolemy*.

LE'ON, in modern geography, a province of Spain, called a *kingdom*, ſituated towards the north-weſt, and incloſed between Eſtramadura, Old Caſtile, Galicia, and Portugal. Its form is a kind of irregular long rectangular figure. Its mean length from north to ſouth is eſtimated at about fifty-two leagues, and its mean breadth from eaſt to weſt about thirty. This is the country which was formerly inhabited by the Vettones, mentioned by Strabo. It is bounded on the eaſt by Old Caſtile; on the ſouth-eaſt and ſouth by Eſtramadura; on the weſt by the provinces of Beira, Tra-los-Montes in Portugal, and Galicia; and on the north by the Aſturias. Its capital has given name to the country, which was for a long time a ſeparate monarchy; but its crown was united with that of Caſtile in 1069, yet without loſing the title of kingdom. Its territory is mountainous; nevertheleſs it contains many beautiful fields, good paſtures, and large fertile valleys, which produce a great quantity of grain, as wheat, barley, &c. wine, and excellent flax, both in ſmall quantities, vegetables, and good fruits. Its mountains are covered with different kinds of trees, and they afford iron and copper mines, mineral waters, &c. The mules bred in this country are of a ſuperior kind; and it furniſhes a good number of ſheep. The river Duero almoſt biſects the country. The kingdom of Leon contains ſix biſhoprics, viz. thoſe of Leon, Salamanca, Palencia, Zamora, Aſtorga, and Ciudad Rodrigo; ſix cathedral chapters, nine collegiate chapters, 2460 pariſhes, as well rectories as vicarages; 196 convents, 23 hoſpitals, five aſylums, two military governments, four intendencies of provinces, a celebrated univerſity, four ſuperior colleges, 25 colleges of all claſſes, ſix cities, 539 towns or boroughs, 2005 villages or ſettlements, of which 76, formerly inhabited, are now deſerted. Its mountains that are particularly diſtinguiſhed are thoſe that form part of the Sierras of Pico and Occa, formerly mount Idubeda: the former extends from the eaſt of the ſouthern point of the kingdom of Leon to the weſt of the ſouthern point of Old Caſtile; the latter comes from the north-by-eaſt point of Old Caſtile, and extends a little way into the kingdom of Leon, at the ſouth point of the eaſt. Amongſt its rivers, which are numerous, we may reckon the Sil, the Buroia, the Sabor, the Baeza, the Arago, the Xero, the Piſuerga, the Alagon, the Agueda, the Cea, the Exla, the Tuerta, the Obrega, and the Berneſga, almoſt all of which riſe in Leon or near its confines; the Duero, the Carrion, the Ereſma, Rio de Salamanca or Torme, &c. The principal towns of Leon are, on the north of the Duero, Leon, Aſtorga, Zamora, Toro, Palencia, Medina-del-Rio-Seco, Tor-de-Sillas, Villa Pando, Duenas, Marſilla, Villa Franca, and Benevente; and on the ſouth of the Duero, Salamanca, Ciudad Rodrigo, Alva-da-Tormes, Pena-Arande, Pena-de-Frania, Carpio, Medina-del-Campo, and Ledeſma, near Los Banos.

When the Gothic king Roderic was defeated by the Moors in the battle of Xeres de la Frontera, the fugitives diſperſed to Galicia, Aſturias, Lower Biſcay, and the country at the foot of the Pyrenees; but their courage revived, and they rallied their forces under prince Pelagius, who, in 717, obtained a ſignal victory over the Moors, and took poſſeſſion of Oviedo, of which he was acknowledged king. Having regulated this little ſtate, and gained new ſubjects, he again attacked the Moors, and retook from them the town of Leon, and ſome others. Thus was laid the foundation of this new kingdom, although Pelagius and his ſucceſſors only took the title of kings of Oviedo or the Aſturias, till Ordagno II. who in 915 aſſumed the title of king of Leon. The kingdom of Leon paſſed, in the year 1030, to Ferdinand, ſurnamed the Great, then king of Caſtile, by his wife. See CASTILE, vol. iii. p. 885. Thus the kingdoms of Caſtile and Leon became united; and continued ſo, under ſucceſſive kings, till, in the year 1479, Ferdinand V. ſurnamed the Catholic, ſucceeded to the crown of Arragon alſo, upon the death of his father John II. and thenceforth the kingdoms of Leon, Caſtile, and Arragon, which comprehended all Spain, except Granada, (ſtill held by the Moors,) became inſeparably connected and united. See the article SPAIN.

In the province of Leon there are 5598 ſecular prieſts, 2064 monks, 1570 nuns, 31,540 nobles, 25,218 ſervants, and near 600,000 other inhabitants of all profeſſions; which gives a total of about 665,000 perſons. The agriculture of this country might be much improved, if the inhabitants availed themſelves of the water which their rivers ſupply for the irrigation of the land. They are alſo negligent in the culture of fruit-trees; and, though they have fine rich paſtures, their flocks are removed from one part of the country to another. The commerce of this province conſiſts chiefly of importation; and it ſcarcely furniſhes any thing to the neighbouring provinces. It ſends to Galicia, part of the ſerges and baize manufactured at Rio Seco: but this is very trifling compared with the goods which it is obliged to import. It traffics in wines; ſome of which, of an excellent kind, are found in the country towards the ſouth-eaſt. Palencia had formerly conſiderable manufactories for cloth. At Zamora there is ſtill a manufactory for hats; and they make ſome houſehold-cloths in the country. The Engliſh, by way of Portugal, carry away the madder of the environs of Ciudad Rodrigo and of Medina-del-Campo.

In the province of Leon there are four ſprings of cold mineral waters: viz. at Amuſco, about three leagues and a half from Palencia; at Buron; at Bavila-Fuente, four leagues eaſt of Salamanca; and at Aſtudillo, nine leagues from Palencia. There are alſo four thermal ſprings: viz. near Almeyda; at Ledeſma, at Bonar or Bonab, ſix leagues from Leon; and at Barnos, near the frontiers of Eſtramadura and Caſtile. The inhabitants of this province are very grave, and addicted to taciturnity; thoſe who retain remains of the national manners of Spain, and who live in the mountains in the Mauregatos, near Aſtorga, wear pyramidal hats, a kind of ruff round the neck, a jacket or ſhirt, a cloſe coat, wide breeches, and ſpatterdaſhes. The women of Mauregatos wear large ear-rings, a kind of

of white turban, flat and widened like a hat, and their hair parted on the forehead. They have a chemiſe cloſed over the cheſt, and a brown corſet buttoned with large ſleeves, opening behind. Their petticoats and veils are alſo brown. Over all they wear immenſe coral necklaces, deſcending from the neck to the knee; twiſting them ſeveral times round the neck, paſſing them over the ſhoulders, where a row is faſtened that forms a kind of bandage over the boſom; another row is ſuſpended lower than this; and alſo a third and even a fourth row at ſome diſtance from each other; the laſt falls over the knee, with a large croſs on the right ſide. The necklaces or chaplets are ornamented with ſilver medals exhibiting the figures of ſaints. Theſe ornaments are chiefly worn on feſtivals. On the days of religious ſolemnities, particularly the Aſſumption, the fronts of the churches are illuminated, bonfires are made before them, muſicians attend, and the people dance all night; the women play the caſtanets, and are accompanied by an inſtrument called *pandero*, which is a kind of tambour de baſque.

LE'ON, the capital of the above province, or kingdom, is a very ancient town, founded before the reign of Galba: it was called by the Romans *Legio Septima Germanica*, from the legion that bore that name being ſtationed there. This city is ſituated between the two ſources of the Exla, which are called the rivers of Torio and Bernesja. It is one of the moſt famous and moſt ancient epiſcopal ſees in Spain; and poſſeſſed, in the time of the Gothic kings, the privilege of appealing immediately to Rome. The biſhop is ſuffragan to the archbiſhop of Compoſtella, without being in any reſpect dependent on his juriſdiction; this biſhopric poſſeſſes a revenue of 22,000 ducats. Its dioceſe contains 823 villages, 883 pariſhes, 26 convents of monks, 11 of nuns, collegiates, and hoſpitals. When the kings reſided here, till the 13th century, its population was conſiderable; but it is now much reduced. According to the ſtatement of 1788 there were within the juriſdiction of the intendant of Leon 250,134 inhabitants. A great part of its walls conſiſts of green marble. It contains thirteen pariſh-churches, one collegiate-church, four convents of monks, five of nuns, and a number of hoſpitals and hermitages. Here are the royal houſes of San Iſidoro and San Marios of the order of St. James; and a chapter of noble canoneſſes, not cloiſtered, but who take the vows. This town was the firſt of any importance which the Chriſtians retook from the Moors. Pelagius made himſelf maſter of it in 722, fortified it, and built a good caſtle, to defend the approaches to it. It had the honour of being the capital of the firſt catholic kingdom of Spain, and of being, for three centuries after the invaſion of the Arabs, the reſidence of the kings. The palace which duke Alphonſo built here at the end of the twelfth century is ſtill to be ſeen. Among its moſt ſplendid edifices we may reckon the cathedral-church, which in beauty ſurpaſſes the moſt admired in Spain, and is one of the moſt attractive monuments of Gothic architecture. The hotel of the counts of Luna is alſo large and handſome. The town-houſe has a good appearance, with a tolerably regular front. The palace of the Guzmans is magnificent, ornamented with a ſuperb portal, and ſecured by very ſtrong walls. Among the gates of the town, one was formerly a famous priſon; and at the bottom is the ſtatue of king Pelagius, with an inſcription. The Place Mayor has a beautiful appearance. There is a number of other ſquares and handſome fountains. Notwithſtanding the antiquity and importance of this city, it is very deficient in cleanlineſs. It is ſurrounded by trees, and the country about it is every where embelliſhed; it has beautiful promenades, as well as broad and noble avenues of handſome trees. In the environs of the town the corn-harveſts are not abundant; but this deficiency is ſupplied by many excellent vegetables, fruits, flax, and verdant meadows, which furniſh good paſtures. At Leon there are ſeveral manufactories for different woollen articles; ſtockings, hoſiery, leather, gloves, &c. are alſo made here. It is 150 miles north-weſt of Madrid. Lat. 42. 36. N. lon. 5. 37. W.

LE'ON, a town of Spain, in Catalonia: forty-three miles north-weſt of Urgel.

LE'ON, a town of Mexico, in the province of Guadalajara: forty miles eaſt of Guadalajara.

LE'ON, a river of Mexico, which runs into the bay of Honduras in lat. 15. 45. N. lon. 88. 5. W.

LE'ON, a town of France, in the department of the Stura: four miles north of Savigliano, and eleven weſt of Cheraſco.

LE'ON. See ISLA de LEON, vol. xi. p. 405.

LE'ON (New), one of the ſeven domains, called kingdoms, into which the Spaniſh dominions in North America are diſtributed. This name is reſtricted by the maps to a ſmall province round the town of Monterey, which muſt not be confounded with another of the ſame name, to the north of California. It is bounded on the north by the ſavage nations, on the eaſt by New Mexico Proper, on the ſouth by a part of Mexico, and on the weſt by New Biſcay. New Leon proper, a diſtrict ridiculouſly called a kingdom, is divided from Guadalcazar on the ſouth by the deſert of Jaumave, and mountains of Tamalipa. It is very mountainous, produces little except lead, and is very thinly peopled. The other provinces of the domain of New Leon, beſides New Leon proper, are Sootander and Coaguila, or New Eſtramadura.

LE'ON (Peter Cieca de), author of a hiſtory of Peru. He left Spain, his native country, at thirteen years of age in order to go into America, where he reſided ſeventeen years; and obſerved ſo many remarkable things, that he reſolved to commit them to writing. The firſt part of his hiſtory was printed at Seville in 1553. He began it in 1541, and ended it in 1550. He was at Lima, the capital of the kingdom of Peru, when he gave the finiſhing ſtroke to it; and was then thirty-two years of age.

LE'ON DE CARAC'CAS. See CARACCAS, vol iii. p. 784. and LA GUAYRA, p. 85 of this volume.

LE'ON FOR'TE, one of the largeſt and handſomeſt towns in Sicily, ten miles from Argiro: ſituated on an eminence. The number of inhabitants amounts to 12,000. The convent of Capuchins is as populous as the town.

LE'ON DE GUANU'CO. See GUANUCO, vol. ix. p. 65.

LE'ON DE NICARAGU'A, a town of North America, in New Spain, and in the province of Nicaragua; the reſidence of the governor, and a biſhop's ſee. It conſiſts of about 1200 houſes; and has four churches, with ſeveral monaſteries and nunneries. At one end of the town is a lake which ebbs and flows like the ſea. The town is ſeated at the foot of a volcano, which renders it ſubject to earthquakes. It was taken by the bucaneers in 1685, in ſight of a Spaniſh army who were ſix to one. Lat. 12. 25. N. lon. 86. 10. W.

LE'ONAN, a ſmall iſland in the Eaſtern Indian Sea, near the north-eaſt coaſt of Borneo. Lat. 6. 39. N. lon. 117. 48. E.

LEON'ARD, a man's name.

LEON'ARD OF PI'SA, an Italian mathematician who flouriſhed at the commencement of the thirteenth century, is entitled to have his name handed down with honour to poſterity, on account of his having been the firſt perſon who brought into Europe the knowledge of the Arabic ciphers and algebra. This fact we learn from the preface to a Latin treatiſe on arithmetic, in the Magliabecchi library at Florence, entitled, "Liber Abaci, compoſitus a Leonardo filio Bonacci, Piſano, in anno 1202." The author there ſays, that, being at Bugia, a town in Africa, where his father reſided as factor to the merchants of Piſa, he was inſtructed in the Arabic method of keeping accounts; and that, finding it more commodious, and greatly preferable to the European method, he had drawn up this treatiſe for the purpoſe of introducing it into Italy. From this country the knowledge of the Arabic ciphers and algebra was afterwards communicated to the

other countries of Europe. Hence Leonard of Piſa may almoſt claim the honour of being their inventor, as he firſt laid down, and brought to a conſiderable degree of perfection, the rules of thoſe ſciences. He was alſo the author of A Treatiſe on Surveying, preſerved in the above-mentioned library. *Nouv. Dict. Hiſt.*

LEON'ARD's TOWN, a poſt-town of America, in the ſtate of Maryland, and capital of St. Mary's county, ſituated on the eaſt ſide of Britton's Brook, where it falls into Britton's Bay, five miles from its mouth in the Patowmac. It contains about fifty houſes, a court-houſe, and gaol: 217 miles ſouth-weſt of Philadelphia. Lat. 38. 18. N.

LEONAR'DO (Leo), principal organiſt of the chapel royal at Naples, was not only admired and reſpected by his contemporaries, but his memory ſtill continues to be held in reverence by every profeſſor that is acquainted with his works. In his operas, the purity of his harmony, and elegant ſimplicity of his melody, are no leſs remarkable than the judicious arrangement of the parts. His maſſes and motets, which are carefully preſerved by the curious, and ſtill performed in the churches at Naples, have all the choral learning of the ſixteenth century. There are likewiſe extant, trios for two violins and a baſs, ſuperior in correctneſs of counterpoint and elegance of deſign to any ſimilar productions of the ſame period. This muſician is equally celebrated as an inſtructor and compoſer; and the *Solfeggi*, which he compoſed for the uſe of the vocal ſtudents, in the conſervatorio over which he preſided at Naples, are ſtill eagerly ſought and ſtudied, not only in Italy, but in every part of Europe, where ſinging is regularly taught. Leonardo died about the year 1742, at the age of fifty-three. His death was unhappily precipitated by an accident which at firſt was thought trivial; for having a tumour, commonly called a *bur*, on his right cheek, which growing, in proceſs of time, to a conſiderable magnitude, he was adviſed to have it taken off; but, whether from the unſkilfulneſs of the operator, or a bad habit of body, a mortification enſued, which coſt him his life.

LEONAR'DO DA VIN'CI. See VINCI.

LEONA'TUS, one of the generals of Alexander the Great. His father's name was Eunus. He diſtinguiſhed himſelf in Alexander's conqueſt of Aſia, and once ſaved the king's life in a dangerous battle. After the death of Alexander, at the general diviſion of the provinces, he received for his portion that part of Phrygia which borders on the Helleſpont. He was empowered by Perdiccas to aſſiſt Eumenes in making himſelf maſter of the province of Cappadocia, which had been allotted to him. Like the reſt of the generals of Alexander, he was ambitious of power and dominion. He aſpired to the ſovereignty of Macedonia, and ſecretly communicated to Eumenes the different plans he meant to purſue to execute his deſigns. He paſſed from Aſia into Europe to aſſiſt Antipater againſt the Athenians, and was killed in a battle which was fought ſoon after his arrival.

LE'ONBERG, or LEONSBERG, a town of Wurtemberg, on the Glems: ſix miles weſt of Stuttgart, and thirty-four north-north-eaſt Freudenſtadt. Lat. 48. 51. N. lon. 9. 7. E.

LEONCLA'VIUS (John), one of the moſt learned men of the 16th century, was a native of Weſtphalia. He travelled into Turkey, and collected excellent materials for compoſing The Ottoman Hiſtory; and it is to him the public is indebted for the beſt account we have of that empire. To his knowledge in the learned languages he had added that of the civil law; whereby he was very well qualified to tranſlate the *Baſilica*. He died in 1593, aged ſixty.

LEO'NE, one of the Navigators' Iſlands, about five miles in circumference, eaſt of Fanfoué, from which it is ſeparated by a narrow channel.

LEO'NE. See SIERRA LEONE.

LEO'NES, a ſmall iſland in the Atlantic, near the coaſt of Patagonia. Lat. 50. 2. S.

LEONES'SA, a town of Naples, in Abruzzo Ultra: nineteen miles north-weſt of Aquila.

LEO'NI, a town of Naples, in Principato Ultra: twelve miles weſt of Conza.

LEO'NI, a Jew, a celebrated ſinger on the London ſtage about the year 1780. He was ſeveral years the favourite of the town; and afterwards became principal reader in the Jewiſh ſynagogue at Kingſton in Jamaica, an appointment from which he derived full 700l. per annum. There he died in Oct. 1796.

LEONICE'NO (Nicholas), a learned phyſician and philoſopher, was born in 1428 at Lonigo in the Vicentine. At an early age he acquired an extraordinary knowledge of the beſt Greek and Latin poets and orators, and of the ancient philoſophers. He ſtudied phyſic at Padua, where he took his doctor's degree. In 1464 he removed to Ferrara, where, for a long courſe of years, he occupied a chair, firſt of mathematics, then of moral philoſophy. He probably alſo practiſed as a phyſician, though he ſeems rather to have been a man of ſtudy than of experience. He was truly a philoſopher in his character and principles, deſpiſing wealth and honours, and living in habits of temperance and ſimplicity, which carried him to a very advanced age in the poſſeſſion of all his faculties, and his natural cheerfulneſs. He was greatly eſteemed by the learned of his time, with many of whom he correſponded, and who have ſpoken of him with encomium. He died in 1524, at the age of ninety-ſix. Leoniceno tranſlated into Latin the aphoriſms of Hippocrates, and ſeveral pieces of Galen; and, into Italian, the hiſtory of Dio Caſſius, and the dialogues of Lucian. He was one of the firſt of the phyſicians and philoſophers who diſcarded the barbariſm of the ſchools, and explained ſcientific topics with elegance and clearneſs. He was alſo the firſt who for many centuries had ventured to apply critical reſearch to the works of the ancients, and to mark their errors. This diſpoſition he ſhowed in his work entitled "Plinii et aliorum plurum Auctorum, qui de ſimplicibus Medicaminibus ſcripſerunt, Errores notati," &c. printed in 1491. This work involved him in controverſy with Hermolaus Barbarus, Politian, and others, to whoſe animadverſions he wrote anſwers. He was one of the firſt who wrote on the diſeaſe which had then juſt made its appearance in Europe, and which he terms "Epidemia, quam Itali Morbum Gallicum, Galli vero Neapolitanum, vocant." His treatiſe on this ſubject was printed by Aldus in 1497. He propoſes a method of cure on Galenic principles, merely theoretical, ſo that he is thought never to have ſeen any practice in it. Leoniceno had a ready talent at improviſation, and alſo compoſed poems with elegance and facility. *Tiraboſchi.*

LEON'ICO, in geography. See LONIGO.

LEON'ICO TO'MEO (Nicholas), one of the revivers of literature in Italy, was born in Venice of an Albanian family, in 1456. He ſtudied Greek at Florence under Demetrius Chalcondylas, and made ſuch a progreſs, that he became able to explain Ariſtotle in the original. For this purpoſe he was invited to Padua in 1497. He was an eccleſiaſtic by profeſſion; and obtained, in 1502, a collegiate in the dioceſe of Trevigio. He taught Greek and Latin for a time at Venice; but returned to Padua, where, in 1520, he gave inſtructions to cardinal Pole. He was much attached to the Platonic philoſophy, and paſſed his time like a true philoſopher, remote from worldly purſuits, and ſolely intent upon his ſtudies. Bembo, Sadolet, Giovio, and others, ſpeak of him with great eſteem; and Eraſmus mentions him with honour in his Ciceronianus, as a man equally reſpectable for the purity of his morals and the profundity of his erudition. He died in 1531, and was buried in the church of St. Francis at Padua, cardinal Bembo compoſing his epitaph. Leonico tranſlated with fidelity and elegance ſeveral works of Ariſtotle,

totle, Proclus's commentary on the Timæus of Plato, and other treatiſes of the ancient philoſophers. He alſo wrote ten dialogues on ſubjects philoſophical and moral; and a work *De Varia Hiſtoria*. He was the author of ſome Italian poems. *Tiraboſchi.*

LEON'IDAS I. king of Sparta, a renowned warrior, ſlain in defending the ſtraits of Thermopylæ againſt Xerxes, 480 B. C. See the article GREECE, vol. viii. p. 857–860.

LEON'IDAS II. king of Sparta after Arcus II. 257 years before Chriſt. He was driven from his kingdom by Cleombrotus, his ſon-in-law; but afterwards re-eſtabliſhed.

LE'ONINE, *adj.* [*leoninus*, Lat.] Belonging to a lion; having the nature of a lion.

LEONINE, in poetry, is applied to a kind of verſes which rhyme at every hemiſtich, the middle always chiming to the end. In this kind of verſe we find ſeveral ancient hymns, epigrams, prophecies, &c. For inſtance; Muretus, ſpeaking of the poetry of Lorenzo Gambara of Breſſe, ſays,

Brixia veſtr*ates*, quæ condunt carmina v*ates*,
Non ſunt noſtr*ates* tergere digna n*ates*.

The origin of the word is ſomewhat obſcure: Paſquier derives it from one Leoninus, or Leonius, who excelled in this way, and dedicated ſeveral pieces to pope Alexander III. others derive it from pope Leo; and others from the beaſt called *lion*, calling it the loftieſt of all verſes, which it certainly is not. M. Fauchet makes the leonine rhyme the ſame with what the French call the *rich*, and we the *double rhyme*, i. e. where two ſyllables have the ſame orthography, accentuation, and pronunciation, with two others.

LE'ONINE, *ſ.* A kind of gold coin.

LEONI'TIS, *ſ.* in botany. See PHLOMIS.

LE'ONSPERG, a caſtle of Bavaria: five miles north of Dingelfingen, and thirteen ſouth of Straubing.

LEONTA'RI, a town of Morea: twenty miles north-weſt of Miſitra.

LEONTEV'KA, a town of Ruſſia, in the government of Novgorod: forty miles ſouth-eaſt of Valdai.

LEONTI'ASIS, *ſ.* in pathology, a name given by the ancients to the *elephantiaſis*, improperly called the Arabian leproſy, from a ſuppoſed reſemblance of the tuberculated countenance of the patient, in ſome inſtances, to the viſage of the lion. See LEPROSY.

LEON'TICA, *ſ.* Feaſts or ſacrifices celebrated among the ancients in honour of the ſun. They were called *leontica*, and the prieſt who officiated at them *leones*, becauſe they repreſented the ſun under a figure of a lion radiant, bearing a tiara, and griping in his two fore paws the horns of a bull, who ſtruggled with him in vain to diſengage himſelf. Critics are extremely divided about this feaſt. Some will have it anniverſary, and to have made its return not in a ſolar but in a lunar year; but others hold its return more frequent, and give inſtances where the period was not above two hundred and twenty days. The ceremony was ſometimes alſo called *Mithriaca*, Mithras being the name of the ſun among the ancient Perſians. There was always a man ſacrificed at theſe feaſts till the time of Adrian, who prohibited it by a law: Commodus introduced the cuſtom afreſh; after whoſe time it was again exploded.

LEON'TICE, *ſ.* [an abbreviation, by Linnæus, of the *Leontopetalon* of Tournefort.] In botany, a genus of the claſs hexandria, order monogynia, natural order of corydales, (berberides, *Juſſ.*) The generic characters are—Calyx: perianthium ſix-leaved, caducous; leaflets linear, expanding; the alternate ones ſmaller. Corolla: petals ſix, ovate, twice the length of the calyx. Nectary of ſix ſcales, which are ſemi-ovate, ſpreading, foot-ſtalked, inſerted into the claws of the petals, equal. Stamina: filaments ſix, filiform, very ſhort; antheræ upright, two-celled, two-valved, gaping at the baſe. Piſtillum: germ oblong-ovate; ſtyle ſhort, ſomewhat columnar, obliquely inſerted into the germ; ſtigma ſimple. Pericarpium: berry hollow, globoſe, acuminate, inflated, one-celled, ſubſucculent. Seeds: few, globoſe.—*Eſſential Character.* Calyx ſix-leaved, deciduous; corolla ſix-petalled; nectary ſix-leaved, placed on the claws of the corolla, ſpreading.

Species. 1. Leontice chryſogonum, or oak-leaved leontice: leaves pinnate, common petiole ſimple. 2. Leontice leontopetalum, or decompound-leaved leontice, or lion's-leaf. Leaves decompound, common petiole trifid. Theſe two plants have large tuberous roots about the ſize of thoſe of Cyclamen, or ſow-bread, covered with a dark brown bark. Leaves on ſlender petioles from the roots, about ſix inches long. Thoſe of the firſt are ſingle, having many leaflets ranged along the midrib; but the petioles of the ſecond are branched into three ſmaller; upon each of theſe are ranged ſeveral leaflets, in the ſame form as pinnate leaves. The flowers are on naked peduncles; in the firſt ſort they are yellow; in the ſecond they are ſmaller and paler. Natives of the iſlands of the Archipelago, and of the corn-fields about Aleppo, flowering at Chriſtmas. Here they do not flower till the beginning of April; and they do not produce ſeeds. The ſecond ſpecies was cultivated, before 1597, by lord Zouch, as appears from Gerard's Herbal. Rauwolf obſerved it about Aleppo; it has been found in ſeveral parts of the Levant; and Matthiolus ſays, that he remarked it in the fields of Tuſcany, &c. and that it is common in Apulia.

3. Leontice thalictroides, or columbine-leaved leontice: ſtem-leaf triternate; floral leaf biternate. Native of North America; introduced, in 1784, by Mr. William Young.

4. Leontice leontopetaloides. See TACCA.

Propagation and Culture. When ſeeds are procured from abroad (which ſhould be ſent in ſand), ſow them as ſoon as they arrive, and cover them with glaſſes in the winter. In ſpring, when the plants begin to appear, admit free air to them whenever the weather is mild. If they are not too cloſe, let them remain unremoved till the ſecond year; but, where they are very cloſe, take up a part of the roots in October, and plant them cloſe to a warm wall; and in November lay ſome old tanners' bark over the ſurface, three or four inches thick. Take this off again in March, before the roots begin to puſh, leaving a thin covering to prevent the ſpring-winds from drying the ground. Theſe roots ſhould have a dry looſe ſoil, and muſt be ſeldom removed. October is the beſt time for removing them. The plants are very difficult to preſerve in England; for the roots will not thrive in pots, and in the full ground the froſt moſt frequently deſtroys them in winter, eſpecially when the roots are young. Before the ſevere winter of 1740, Mr. Miller had ſome of the roots in a ſouth-weſt border, that flowered ſeveral years without any ſhelter.

LEONTI'NI, or LEONTIUM, in ancient geography, a town of Sicily on the ſouth ſide of the river Terias, twenty miles north-weſt of Syracuſe. The territory, called Campi Leontini, was extremely fertile: theſe were the Campi Læſtrigonii, anciently ſo called; the ſeat of the Læſtrigons, according to the commentators on the poets. The name *Leontini* is from *leo*, the impreſſion on their coins being a lion. Now called LENTINI, which ſee, p. 482.

LEONTIUM, one of the twelve towns of Achaia, whether on, or more diſtant from, the bay of Corinth, is uncertain.

LEON'TIUM, a celebrated courtezan of Athens, who ſtudied philoſophy under Epicurus, and became one of his moſt renowned pupils. She proſtituted herſelf to the philoſopher's ſcholars, and even to Epicurus himſelf, if we believe the reports which were raiſed by ſome of his enemies. Metrodotus ſhared her favours in the moſt unbounded manner; and by him ſhe had a ſon, to whom Epicurus was ſo partial, that he recommended him to his executors on his dying bed. Leontium not only profeſſed herſelf a warm admirer and follower of the doctrines of Epicurus, but ſhe even wrote a book in ſupport of them againſt Theophraſtus. This book was valuable, if we believe the teſtimony and criticiſm of Cicero, who praiſed

the purity and elegance of its ſtyle, and the truly Attic turn of the expreſſions. Leontium had alſo a daughter who married Sophron. *Cic. de Nat. D.* c. 33.

LEON'TIUS, a man's name; a famous engraver.

LEON'TIUS PILA'TUS. See PILATUS.

LEON'TIUS SCHOLAS'TICUS, an eccleſiaſtical hiſtorian and controverſial writer in the ſixth century, was a native of Conſtantinople, educated an advocate, and afterwards became a monk in the laura of St. Sabas in Paleſtine. He lived till about the end of the century; for he reckons Eulogius among the biſhops of Alexandria, who held that ſee from the year 581 to the year 604. Though frequently confounded with Leontius Byzacenus, who is mentioned in the life of St. Sabas and St. Quiriacus, it is demonſtrable that they muſt have been two different perſons, from the circumſtance of the latter's having been an Origenian, and defending the doctrines of Theodore of Mopſueſtia; while the ſubject of the preſent article, on the contrary, declared openly againſt Origen and Theodore. Voſſius is of opinion, that he is the ſame perſon with Leontius, a biſhop of Cyprus, author of "An Apology for the Chriſtians againſt the Jews," and other pieces mentioned by Cave; which is not entirely deſtitute of probability. The principal work of Leontius is "A Treatiſe on the Sects of Heretics," divided into ten actions, or diſcourſes. It was publiſhed in Greek and Latin at Baſil, in 1578, 8vo. and is inſerted in the firſt volume of the Auctuar. Bibl. Patr. He was alſo the author of various treatiſes againſt the Eutychians, Neſtorians, Apollinariſts, &c. which may be ſeen in the ninth volume of the Bibl. Patr. and in the fourth volume of the Antiquæ Lectiones of Caniſius; a diſcourſe on the feſtival celebrated between Eaſter and Whitſunday, printed in Greek and Latin, with notes, in the firſt volume of Combefi's Auctuar. Nov. and ſome Orations, Homilies, &c. aſcribed to him, are preſerved in the Bodleian and Vienna libraries. *Fabricii Bibl. Græc. Cave's Hiſt. Lit.*

LEONTO'DON, *ſ.* [Gr. lion's-tooth; ſo called from the toothing of the leaves.] DANDELION; in botany, a genus of the claſs ſyngeneſia, order polygamia æqualis, natural order of compoſitæ ſemiflоſculoſi, (cichoraceæ, *Juſſ.*) The generic characters are—Calyx: common imbricate, oblong; ſcales, interior linear, parallel, equal; exterior fewer, often reflex at the baſe. Corolla: compound imbricate, uniform; corollets hermaphrodite, numerous, equal. Proper one-petalled, ſtrap-ſhaped, linear, truncated, five-toothed. Stamina: filaments five, capillary, very ſhort; antheræ cylindric, tubular. Piſtillum: germ ſubovate; ſtyle filiform, length of the corollet; ſtigmas two, revolute. Pericarpium: none; calyx oblong, ſtraight, at length reflex. Seeds: ſolitary, oblong, rough; down capillary, foot-ſtalked. Receptaculum: naked, dotted.—*Eſſential Character.* Calyx imbricate, with looſiſh ſcales; down capillary; receptaculum naked, dotted.

Moſt of the ſpecies that were ranged by Linnæus under this genus have been ſeparated by ſubſequent authors, on account of a difference in the calyx, down, and receptacle. Leontodon hiſpidum, hirtum, danubiale, haſtile, tuberoſum, autumnale, pyrenaicum, alpinum, may be found under APARGIA; vol. i. p. 786. and Leontodon tomentoſum is the ſame with Tuſſilago albicans. Perhaps none of the ſpecies but the firſt ought to have remained under this genus. The following are the eſſential characters of the three genera into which this has been ſeparated.

APARGIA. Calyx ſubimbricate with linear parallel unequal ſcales. Down plumoſe, ſubſeſſile. Receptaculum naked, ſubvilloſe.

HEDYPNOIS. Calyx calycled with ſhort ſcales. Down none to the outer ſeeds; the inner have five, almoſt erect, awned chaffs. Receptaculum naked.

LEONTODON. Calyx imbricate with looſiſh ſcales. Down capillary. Receptaculum naked, dotted.

Species. 1. Leontodon taraxacum, or common dandelion: lower calycine ſcales reflex; leaves runcinate, toothletted, even. See BOTANY Plate V. fig. 82. vol. iii. p. 244. Root perennial, tapering, milky, pale brown. Leaves varying from pinnatifid or deeply runcinate in a very dry ſituation, to nearly entire in a very moiſt one, generally ſmooth, but ſometimes a little rough. A ſingle large yellow flower is ſupported on a hollow milky ſcape, covered with a kind of down towards the top; calyx ſmooth, glaucous; the ſcales perfectly ſmooth, the loweſt turning back; the flowers ſometimes contain more than a hundred and forty florets. Seeds a little crooked, flattiſh, ſomewhat four-cornered, ſtriated or grooved, prickly at top, of a pale olive colour. Down on a long ſtipe or foot-ſtalk, ſimple not feathered, ſhorter than the ſtipe. Receptacle naked, full of little holes. Dandelion is common all over Europe in meadows, on walls, dry banks, &c. it is a common weed in gardens, and flowers from April to September; the flowers expand about five or ſix in the morning, and cloſe early in the afternoon. As the flower advances, the calyx is gradually preſſed out at top; when the flowering is paſt, it contracts again into a conical form; and finally, when the ſeeds are mature, the calyx is again puſhed back, and the aggregate of down aſſumes a ſpherical form, till the whole is looſened and diſſipated by the wind. Early in the ſpring, whilſt the leaves are hardly unfolded, they are no bad ingredient in ſalads. The French eat the roots, and the leaves blanched, with bread and butter. Its diuretic effects have given it a vulgar name, not only in England, but other European nations. The expreſſed juice has been given to the quantity of four ounces, three or four times a-day; and Boerhaave had a great opinion of the utility of this and other milky plants in viſceral obſtructions. When a ſwarm of locuſts had deſtroyed the harveſt in the iſland of Minorca, many of the inhabitants ſubſiſted upon this plant. Goats eat it; ſwine devour it greedily; ſheep and kine are not fond of it; horſes refuſe it; ſmall birds are fond of the ſeeds.

Our common name of dandelion is corrupted from the French *dent de lion*, which was given it from the toothing of the leaves.

2. Leontodon bulboſum, or bulbous dandelion: leaves oblong-ovate, ſomewhat toothed, ſmooth; calyx even; ſcape rough-haired at top. Root tuberous. Leaves attenuate-petioled, ſub-ſpatulate. Native of Montpellier and Italy.

3. Leontodon aureum, or golden dandelion: leaves runcinate; ſtem one-leafed; calyx hiſpid. Root perennial, end-bitten, the thickneſs of a reed or of the human finger, with long white fibres, white on the inſide, but uſually blackiſh without. Leaves all radical, ſometimes very few, ſometimes more, oblong, narrowing gradually towards the baſe, bright green, ſmooth on both ſides, unequally ſinuate-toothed, blunt, ſometimes with a ſmall point. The flower is elegant, each floret being yellow on the inſide, but ſaffron-coloured on the outſide, both colours turning deeper. Linnæus remarks, that it has the leaves of L. taraxacum, but ſmaller and blunter; the ſcape naked and ſtriated, with a linear leaflet in the middle; the calyx brown, upright, rough-haired at the baſe, with the keels of the leaflets ciliate; the corolla tawny, red underneath; the receptacle villoſe. This plant, having a ſimple down, cannot be an Apargia; and, having the down ſeſſile, the ſcales of the calyx erect, and the receptacle villoſe, it is not properly a Leontodon. Native of Swiſſerland, Auſtria, and Italy: introduced in 1769, by Monſ. Richard.

4. Leontodon muricatum, or prickly dandelion: leaves runcinate, rugged; calyxes muricated, imbricate, looſe, ſomewhat reclining. The whole plant is rugged and milky. Root perennial, fuſiform, almoſt ſimple. Stems diffuſed, a foot and a half high, branched, round, flexuoſe, ſomewhat ſtriated, muricated, milky, red. Branches alternate, reſembling the ſtem. Root-leaves proſtrate, petioled, longer; ſtem-leaves half-embracing, alternate, ſpreading;

ſpreading; both having a red rib, villoſe-muricate, very rugged, from ſix to nine inches long, and two inches broad. Peduncles one, two, or three, one-flowered, almoſt upright, the length of half the plant, round, muricated, bracted. Flowers yellow, two inches in diameter. Seeds narrow-oblong, ſharp at both ends, ſtriated, rufous. The flowers are not radical, as in Leontodon; it has leaves like it, but the whole plant is muricated. It has the calyx of Scorzonera tingitana and picroides; but the down is ſtiped. It differs from Crepis in having an imbricate calyx. It has the ſtiped down of Leontodon; but it is feathered or plumoſe, as in Apargia. Native of the coaſt of the Mediterranean near Tunis and Algiers, where it was firſt obſerved by René Louiche Desfontaines. See APARGIA, CREPIS, HEDYPNOIS, HIERACIUM, TRAGOPOGON, and TUSSILAGO.

LEONTODONTOI'DES. See HYOSERIS.

LEONTOPET'ALO AFFI'NIS. See LEONTICE.

LEONTOPETALOI'DES. See TACCA.

LEONTOPET'ALON, or LEONTOPETALUM. See LEONTICE.

LEONTOPO'DIUM. See FILAGO and PLANTAGO.

LEONTOP'OLIS, or LEONTON, in ancient geography, a town of Egypt, and capital of a nome, which took the name of Leontopolites Nomos. *Ptolemy.*

LEONU'RUS, *ſ.* [Gr. lion's tail.] MOTHERWORT; in botany, a genus of the claſs didynamia, order gymnoſpermia, natural order of verticillatæ, (labiatæ, *Juſſ.*) The generic characters are—Calyx: perianthium one-leafed, tubular, cylindric-cornered, pentagonal, five-toothed, permanent. Corolla: one-petalled, ringent; tube narrow; border gaping; mouth long; upper lip longeſt, ſemicylindric, concave, gibboſe, rounded-obtuſe at the tip, entire, villoſe; lower lip reflex, three-parted; diviſions lanceolate, about equal. Stamina: filaments four, covered beneath the upper lip, of which two are ſhorter; antheræ oblong, compreſſed, bifid in the middle, incumbent, ſprinkled with very ſmall, elevated, globoſe, gloſſy, ſolid points. Piſtillum: germs four; ſtyle filiform, of the length and ſituation of the ſtamens; ſtigma bifid, acute. Pericarpium: none; calyx unchanged, containing the ſeeds, which are ſhorter than it. Seeds: four, oblong, convex on one ſide, cornered on the other. The lips of the corolla differ in the different ſpecies.—*Eſſential Character.* Antheræ having ſhining dots ſprinkled over them.

Species. 1. Leonurus cardiaca, or common motherwort: ſtem-leaves lanceolate, trifid. The root ſeems to be perennial, though moſt authors mark it as biennial. Stem upright, hard, from two to three feet in height; grooved, pubeſcent at the angles and joints, branched, frequently purple. Leaves lanceolate and acutely three-lobed, with ſome notches beſides; uppermoſt undivided; loweſt very much and obtuſely lobed and broad, ſomewhat like thoſe of the gooſeberry. Whorls of flowers numerous: corolla whitiſh on the outſide, elegantly ſtained with paler and darker purple within; calyx ſtreaked with five green lines, and every outer one ſubtended by a ſetaceous bracte; filaments hairy; antheræ brown, before they burſt ſprinkled with white globular points, looking like enamel. Linnæus chiefly diſtinguiſhes the genus from Phlomis by this minute circumſtance. The herb is bitter and tonic, with no very pleaſant though pungent ſmell. It was formerly uſed in the cardialgia, whence its old name, *cardiaca*; but it is now become wholly obſolete, except perhaps among cow-leeches and farriers. Bees are fond of the flowers. Native of many parts of Europe on banks or under hedges, in a gravelly or calcareous ſoil: near Combe-wood, Surrey; Oxfordſhire, Cambridgeſhire, Norfolk, and Suffolk; Monmouthſhire. Motherwort in German is called *herzgeſpaun*, or *herzkraut*; in Daniſh, *hierteſpan*; in Swediſh, *bonaſſla*; in French, *agripaume cordiaque*, *cordiale*; in Italian, Spaniſh, and Portugueſe, *agripalma* and *cardiaca*.

2. Leonurus criſpus, or curled motherwort: all the leaves acutely ſerrate, very much wrinkled; unequally reflex at the edge; ſtem-leaves five-lobed. This is a biennial plant. Stems ſeveral, from two to three feet in height, upright, deeply hollowed on each of the four ſides, ſmooth, except at the joints, where they are hairy; branches ſcarcely any at bottom, but decuſſately oppoſite at top, ſlender, the length of a foot and more. Leaves very much wrinkled, tomentoſe, ſoft, pale-green, reflex, unequally ſerrate with ſharp ſerratures, but entire at the baſe of the leaf and the origin of the lobes, acuminate, oppoſite; whorls very numerous, terminating, diſtant, compoſed of many axillary flowers heaped together in four diviſions; flowers ſeſſile, white. It is very nearly allied to the preceding; but that is of a darker green and more hirſute; the ſtems are not only hairy at the angles, but over the whole ſurface; the ſides are flatter; the branches more ſpreading, and of a duſky purple colour; leaves narrower, the margin of the whole leaf and of the lobes ſtraighter, perfectly flat and not reflex at the edge; the uppermoſt trifid, not at all ſerrate, and the reſt leſs ſerrate, with the ſerratures ruder and more equal: the lobes alſo of the ſub-axillary leaves ſo narrow as not to cover each other, and blunter. Whorls more numerous, and nearer, with larger and diſtant bractes; flowers ſmaller; calyx duſky red; corolla pale red, ſeldom white; with the upper lip narrower, leſs tomentoſe. The upper end of the ſeeds obtruncated, ſmooth or ſubtomentoſe, not hirſute. Native of Swiſſerland and the ſouth of France. Ray had it from London before the year 1686. Mr. Miller aſſerted, before 1759, that, having frequently raiſed it from ſeed, it was a diſtinct ſpecies from the common one. In the Kew Catalogue it is ſaid to be a native of Siberia; and to have been introduced in 1784, by William Pitcairn, M. D.

3. Leonurus marrubiaſtrum, or ſmall-flowered motherwort: leaves ovate and lanceolate, ſerrate; calyxes ſeſſile, ſpiny. This is an annual or biennial plant, with ſomething of the ſame ſmell with Lamium. From a branched, fibrous, whitiſh root, a ſtem riſes three feet in height, (and even almoſt twice as high in gardens,) upright, leafy, branched. The ſtem, branches, calyx, corolla, and back of the leaves, are ſoft, with villoſe hairs, ſcarcely viſible without a glaſs. There are about twenty flowers in a whorl; they are ſmall, and are ſupported by a many-leaved involucre of ſetaceous-ſpiny bractes; corolla fleſh-coloured; antheræ ſubovate, dirty green, twin, cylindric, without any of thoſe ſhining dots which Linnæus gives for the eſſential character. Linnæus adds, that the calyx is five-cleft and awned, that there are awns alſo under the whorls; that the corolla is ſcarcely longer than the calyx, like that of Nepeta, with the helmet or upper lip entire, and the middle ſegment of the beard or lower lip not crenate. Loureiro ſays that the flowers are ſaffron-coloured, and that he remarked the little ſhining raiſed ſubglobular dots ſcattered over the antheræ, which he found to be the veſicular conglobate pollen, ſeparately or in ſmall particles jointly ſhining on the germ, the filaments, and the inſide of the tube of the corolla, on which it fell. Native of Auſtria, and in Hungary more abundant; in Bohemia, the Ukraine, Germany, and even Java; in Piedmont; on the eaſtern coaſt of Africa in Zanguebar. It was cultivated in Chelſea garden in 1713; flowers from June to Auguſt.

4. Leonurus Tataricus, or Tartarian motherwort: leaves three-parted, jagged; calyxes villoſe. This is a biennial plant. It differs from the common ſort in having the leaves divided to the petiole, and the ſegments of the leaves under the whorls commonly ſerrate and gaſhed. Native of Ruſſia; Gmelin ſays it grows all over Siberia; Miller received the ſeeds from Dr. Amman of Peterſburgh, and cultivated this plant in 1756. He ſays, there are two diſtinct varieties; one with ſmooth ſtalks and leaves, and the other very hairy. Linnæus alſo remarks that the plant from the Eaſt Indies is more ſmooth.

5. Leonurus Sibiricus, or Siberian motherwort: leaves three-parted, multifid, linear, bluntiſh. This alſo is a biennial plant. Stems ſeveral, from eighteen inches to a yard in height, tinged with purple; branches ſeldom more than two or three pairs. Flowers in cloſe whorls; the lower three

1. *Leotia truncorum.* 2. *Narrow-leaved Pepperwort.* 3. 4. *Lepisma saccharinum.*
5. *The Leptocephalus, or Small-headed fish.* 6. *The Noon Wood-Beetle.*

J. Ross sc.

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three or four inches from each other, the upper much closer; corolla red, the outside paler and hairy; filaments red. Gmelin affirms that it is a mere variety of the preceding, with much larger flowers, and the upper lip almost equal to the lower. Native of Siberia and China. Mr. Miller cultivated it in 1759. Probably intending in the eighth edition of his Dictionary to remove these plants from Cardiaca, under which name the first, fourth, and fifth, stand in the seventh edition, to Leonurus, he has there omitted them wholly. He says, that the seeds of L. Sibiricus were sent him from Venice by the chevalier Rathgeb, who received them from Istria. The two species, under the name of Leonurus in the eighth edition of the Dictionary, belong to the genus Phlomis.

Propagation and Culture. The two first species, when once planted in a garden, will soon multiply, especially if the seeds be permitted to scatter; and the roots will continue many years. The other three rise easily from seeds sown in the spring upon a bed of common earth; and require no other care, but to keep them clean from weeds, and thin them where they are too close. In autumn they may be transplanted where they are designed to flower and seed, and require no farther culture. See GALEOPSIS and PHLOMIS.

LEOP'ARD, *s.* [*leo* and *pardus*, Lat.] A spotted beast of prey. See FELIS, vol. vii. p. 296.—A *leopard* is every way, in shape and actions, like a cat; his head, teeth, tongue, feet, claws, tail, all like a cat's: he boxes with his fore-feet, as a cat doth her kittens; leaps at the prey, as a cat at a mouse; and will also spit much after the same manner: so that they seem to differ just as a kite doth from an eagle. *Grew.*

Before the king tame *leopards* led the way,
And troops of lions innocently play. *Dryden.*

LEOP'ARD's BANE. See DORONICUM, vol. v. p. 27.

LEOP'ARD's BANE (Mountain). See ARNICA, vol. ii. p. 206.

LE'OPOLD, a man's name.

LE'OPOLD I. and II. Emperors of GERMANY. See that article, vol. viii. p. 496–501, and 508.

LE'OPOLD, in geography. See LEMBERG, p. 467.

LE'OPOLDSCHLAG, a town of Austria: seven miles north-north-east of Freinstatt.

LE'OPOLDSTADT, one of the suburbs of Vienna, on the north side of the Danube, communicating with the city by a bridge. It is large and populous.

LE'OPOLDSTADT, a town of Hungary, on the river Waag. It is fortified; and was built by the emperor Leopold in the year 1665, two years after Neuheusel was taken by the Turks: fifty-six miles east of Vienna, and 116 north-east of Gratz. Lat. 48. 28. N. lon. 17. 54. E.

LE'OS, a son of Orpheus, who immolated his three daughters for the good of Athens. See LEOCORION.

LEOSTE'NIUS SI'NUS, in ancient geography, a gulf of Thrace, upon the Thracian Bosphorus, towards the northern part of the Hermæan promontory.

LEOS'THENES, an Athenian general, who, after Alexander's death, drove Antipater to Thessaly, where he besieged him in the town of Lamia. The success which for a while attended his arms was soon changed by a fatal blow which he received from a stone thrown by the besieged, B. C. 323. The death of Leosthenes was followed by a total defeat of the Athenian forces. The funeral oration over his body was pronounced at Athens by Hyperides, in the absence of Demosthenes, who had been lately banished for taking a bribe from Harpalus.

LEOTAU'D (Vincent), a French Jesuit and able mathematician, was born at Laval-Louyse, in the diocese of Embrun; and died in the year 1672. In the year 1654, he published, in quarto, *Examen Circuli Quadraturæ*, in which much learning is employed in endeavouring to prove the impossibility of solving a problem which has engaged the ingenuity of mathematicians in all ages without success. In 1660, he published, in Latin, Arithmetical Institutions, in four books; in 1663, a treatise On Cyclometry, in three books; in 1668, a work On Magnetology; and he was also author of a treatise On the Primum Mobile. *Moreri.*

LEO'TIA, *s.* [perhaps from λεως, or λαος, the people, or vulgar; yet it does not appear to be either a common genus of fungi, or vulgarly used as food, like many others. Its aspect indeed is ordinary enough, being that of a small agaric without gills.] In botany, a genus of the class cryptogamia, order fungi. Generic essential character—Head roundish, reflexed at the margin and closely embracing the stalk, bearing seeds in its exposed surface.

Species. I. Head conical or ovate. 1. Leotia mitrula, or mitred leotia: the Helvella cucullata of Batsch, and probably the Clavaria ferruginea of Sowerby's Fungi. Found in autumn growing copiously on decayed leaves of Scotch fir. Stalk near an inch high. Head of a pale cinnamon colour; white and spongy within.

β. L. strobilina, a large variety, head more rounded; colour uniform; height an inch and a half.

γ. L. pusilla, a small variety, only two or three lines long; head dark blue, oval; stem the same colour, whiter at the bottom, very tender. It is seldom seen, on account of its minuteness.

2. Leotia Ludwigii, or Ludwig's leotia. This fungus varies much in different places and atmospheres. Stem hollow, sometimes short and straight; sometimes about three or four inches long, loose, nodding, and somewhat crooked. Colour sometimes white, sometimes reddish; either uniform in colour, or at the base (perhaps from a mixture of watery filth) blackish; the cap is either plaited or smooth, often hollow within; shines like gold; but, when it has been long immersed in water, of a delicate red. Cuticle extremely tender; the whole fungus smooth. It is commonly found in marshes and rivulets, often half immersed in water; mostly perennial.

II. Head orbicular. 3. Leotia truncorum, or trunk-leotia: gregarious, small, fleshy; cap hemispherical, shining; stem white, scaly; scales varying from blue to black. This elegant species was added by Albertini. Cuticle fleshy, rather tender. Height half an inch; cap two lines broad, one high; orbicular, above convex, hemispherical, when wet of a dark gold colour, when dry of a bright red; beneath even, white or yellowish. Stem commonly four lines high, firm, varying from white to blue. If gathered when the stem is withered, the whole becomes black. This rare species may be found on putrid moist woody trunks of trees near shady rivulets, in May and June. Fig. 1 of the annexed engraving exhibits this species of the natural size; *b* is a vertical section of the same magnified.

4. Leotia circinans, or encircling leotia: plaits or folds running from the upper part of the stem quite to the margin of the cap; in which it resembles the genus Merulius. Stem not more than two lines high; sometimes moist, sometimes dry. Grows near shady fir-trees; but is a rare species: it is found from August to October, but chiefly in the middle of August.

5. Leotia lubrica, or slippery leotia: a doubtful species, probably the Helvella gelatinosa of Bulliard. Not unfrequent, after much rain, in beech-woods. It is of a light greenish buff colour, and tender substance. Stalk two or three inches high, hollow, tumid in the lower part; and the cavity is continued into the head, which is rounded, depressed, undulated, and obscurely lobed, about an inch in diameter, composed as it were of two coats, with a hollow space between. *Albertini & Schweinitz Conspectus Fungorum.*

LEOTYCH'IDES, a king of Sparta, son of Menares, of the family of the Proclidæ. He was set over the Grecian fleet; and, by his courage and valour, he put an end to the Persian war at the famous battle of Mycale. It is said that he cheered the spirits of his fellow-soldiers at Mycale, who were anxious for their countrymen in Greece, by raising a report that a battle had been fought at Platæa, in which the barbarians had been defeated. This succeeded;

ſucceeded; and, though the information was falſe, yet a battle was fought at Platæa, in which the Greeks obtained the victory the ſame day that the Perſian fleet was deſtroyed at Mycale. Leotychides was afterwards accuſed of a capital crime by the ephori; and, to avoid puniſhment, he fled to the temple of Minerva at Tegea, where he periſhed, B.C. 469, after a reign of twenty-two years.

LEOTYCH'IDES, a ſon of Agis, king of Sparta, by Timæa. The legitimacy of his birth was diſputed by ſome; and it was generally believed that he was the ſon of Alcibiades. He was prevented from aſcending the throne of Sparta by Lyſander, though Agis had declared him upon his death-bed his lawful ſon and heir; and Ageſilaus was appointed in his place.

LE'OVILLE, a town of France, in the department of the Lower Charente: eight miles north of Montlieu, and thirteen ſouth-ſouth-eaſt of Pons.

LE'OWITZ (Cyprian), a celebrated aſtronomer in the ſixteenth century, was a native of Bohemia, and obtained the appointment of mathematician to Otho-Henry, elector-palatine. He acquired high reputation by his aſtronomical productions, the principal of which were, 1. Ephemerides ab anno 1556 ad 1606, folio. 2. Expedita ratio conſtituendi Thematis cæleſtis. 3. Loca Stellarum fixarum, ab anno 2549 uſque ad 2029, diligenter annotata, folio. 4. De Eclipſibus, folio. His fame led Tycho Brahe to pay him a viſit in the year 1569, when they had ſeveral intereſting converſations on aſtronomical ſubjects. But, with all his ſcience, Leowitz was ſo weak as to become a dupe to the ſtudy of judicial aſtrology, and expoſe himſelf to deſerved ridicule, by ſpending much of his time in calculating nativities, and in predicting future events. He ventured to foretel that the emperor Maximilian would certainly become monarch of all Europe, and puniſh the tyranny of the other princes, which did not come to paſs; and for which he was ſeverely cenſured by Bodin, who pointedly obſerves, that he could not foretel what did come to paſs a year after this prophecy, when ſultan Solyman beſieged and took Sigeth, the ſtrongeſt place in his empire, in the preſence of the emperor and the imperial army, without moleſtation. He alſo preciſely fixed the end of the world at the year 1584; but died at Lawingen in Swabia, in 1574. It was not forgotten, however, at the approach of that period; but was circulated in the almanacs of aſtrological mathematicians throughout Chriſtendom, and many curates and preachers announced it to their congregations. The conſequence was, that a dreadful alarm prevailed in many places, and multitudes were ſeized with ſuch terror, that they received the ſacrament, having firſt faſted and confeſſed their ſins. Louis Gyon inſinuates, that this terror was artfully kept up the prieſts, by whoſe influence the poor ignorant people were led to obſerve ſolemn faſts, month after month, and to give a conſiderable part of their property to the church, in order to procraſtinate the time of the laſt and great judgment. *Teiſſier's Eloges des Hommes Savans.*

LEP AND LACE, a cuſtom in the manor of Writtle, in Eſſex, that every cart which goes over Greenbury, within that manor, (except it be the cart of a nobleman,) ſhall pay 4d. to the lord.

LE'PA, *ſ.* A meaſure which contained the third part of two buſhels; whence we derive a *feed-leap. Du Cange.*

LEPAN'TO, a ſeaport town of European Turkey, in the province of Livadia. It is ſituated in a bay, formerly called the Gulf of Corinth, now the Gulf of Lepanto. It is fortified, and defended with a caſtle, built on an eminence. Being ceded by the emperor to the Venetians, it was fortified by them; and, in the year 1475, ſtood a ſiege of four months againſt the Turks, who loſt 30,000 men before it. In the year 1498, it was taken by Bajazet; it was retaken by the Venetians in 1687; but ſurrendered to the Turks in the year 1699, on the peace of Carlowitz. Near this town Don John of Auſtria obtained a celebrated victory over the Turkiſh fleet, in the year 1572. The produce of the adjacent country is wine, oil, corn, and rice. Turkey leather is alſo manufactured here. The wine would be exceeding good if they did not pitch their veſſels on the inſide; but this renders the taſte very diſagreeable to thoſe who are not accuſtomed to it. The Turks have ſix or ſeven moſques here, and the Greeks two churches. Lat. 38. 34. N. lon. 22. 13. E.

LE'PAS, *ſ.* in helminthology, a genus of gelatinous worms. Generic characters—Animal a triton; ſhell conſiſting of many unequal erect valves, and fixed at the baſe. But the manner in which the ſhell is fixed in the different ſpecies has cauſed ſome to divide this genus into two families, (though ſuch diviſion is not noted by Gmelin,) namely, the *balani*, or acorn-ſhells; and the *anatiferæ*, or barnacles. See the article HELMINTHOLOGY, vol. ix. p. 355.

Species. 1. Lepas balanus, the acorn-ſhell. Specific character, ſhell conic, grooved; operculum or lid ſharp-pointed. Inhabits the European and Mediterranean Seas, adhering in the greateſt abundance to rocks, ſhells, &c. generally whitiſh; with about ſix outer valves, three of which are elevated and ſtriate, and three excavated and ſmoother; the pieces compoſing the lid are finely crenate with tranſverſe wrinkles, two leſs, and two larger and pointed.

2. Lepas balanoides, the ſmaller acorn: ſhell conic, truncate, ſmooth; operculum or lid obtuſe. Inhabits the European, American, and Indian, Seas, on rocks, ſtones, ſhells, &c. Leſs than the preceding; whitiſh, cinereous, or variegated.

3. Lepas intertexta, the imbricated acorn: ſomewhat depreſſed; valves imbricate and obliquely ſtriate. Inhabits the Britiſh coaſts, adhering to oyſters, &c.

4. Lepas Cornubienſis, the Corniſh acorn: ſhell with a dilated baſe and rather narrow aperture: valves grooved near the lower edges. Inhabits the coaſt of Cornwall; reſembles a limpet.

5. Lepas tintinnabulum, the bell-acorn: ſhell conic, obtuſe, bell-ſhaped, rugged and fixed. Inhabits the European, Indian, and American, Seas, and is frequently found adhering to the bottoms of ſhips and pieces of wreck; ſhell purple, varied with white and red, or bluiſh; ſometimes cylindrical, or a little thicker; the elevated valves are perpendicularly ſtriate, the depreſſed ones tranſverſely; pieces of the lid nearly equal.

6. Lepas diadema, the crown-acorn: ſhell roundiſh, ſix-lobed; the valves grooved longitudinally. This ſpecies is ſhown on the CONCHOLOGY Plate XVI. fig. 5. vol. v. p. 35. The ſame engraving contains ſeveral other ſpecies of this genus. The diadema inhabits the European and Indian ſeas. Colour dirty white, nearly an inch high, narrower on the upper part, the upper aperture funnel-ſhaped, and about half the width of the other part of the ſhell; valves twelve, triangular, ſix of which are excavated or deeper than the others, and marked with fine tranſverſe ſtriæ; the other ſix are elevated, and conſiſt of four, five, or ſix, prominent ridges placed cloſe to each other, and tranſverſely marked with crenate ſtriæ.

7. Lepas balænaris, the whale-acorn: ſhell ſubconic, with ſix elevated wrinkled four-parted lobes; the lid membranaceous and two-toothed. Found adhering to the pectoral wrinkles and fins of the Balæna boops, or pike-headed whale. It is about fifteen lines high and ten broad at the baſe; thick, lamellous, and a little narrower at the top; above truncate and very obtuſe; the mouth cloſed with a lax yellowiſh membrane; valves twelve, triangular, ſix of which are elevated, nearly equal, marked with tranſverſe wrinkled granulations, and furrowed with three longitudinal four-parted grooves; ſix are lower and marked with fine tranſverſe ſtriæ. Theſe two laſt ſo nearly reſemble each other, that they might without much impropriety conſtitute one ſpecies.

8. Lepas coſtata, the ribbed acorn: ſhell ſomewhat conic, with equidiſtant ribs divergent from the aperture; lid

lid pointed. Found adhering to rocks on the Pembrokeſhire coaſt.

9. Lepas conoides, the conic acorn: ſhell, conic, ſmooth; valves pointed; aperture very ſmall. Found at Weymouth, adhering to the L. anatifera. Shell ſmall, reddiſh; valves finely teſſellate.

10. Lepas teſtudinaria, the tortoiſe-acorn: ſhell plano-convex, with ſix excavated ſtriate rays. This inhabits the Ocean, and is found commonly adhering to ſhells; ſomewhat reſembles a globe cut off in the middle; white, ſmoothiſh, the lower aperture hexagonal and twice as broad as the upper; lid compoſed of four triangular pieces inſerted on a membrane.

11. Lepas galeata, the helmeted acorn: ſhell helmet-form, with a lateral aperture. Found adhering to the Gorgonia verrucoſa and ventilabrum; ſhell boat-ſhaped, ſmooth, with a rhombic aperture.

12. Lepas palmipes, the palmated acorn: ſhell erect, conic; the valves palmate at the baſe. Shell white, a little depreſſed, ſize of a large pea, ſmooth; valves four to ſix, divided as far as the middle into five or ſix ſegments; lid four-valved, oblique. Inhabits the Ocean.

13. Lepas tulipa, the tulip-acorn: ſhell ſubcubic, ſmooth; lid acute and tranſverſely ſtriate. Inhabits the Northern Ocean.

14. Lepas borealis, the northern acorn: ſhell erect, ſubconic, aperture quadrangular, operculum acute and tranſverſely ſtriated. A new ſpecies, recorded by Donovan. A few ſmall cluſters, with ſome detached ſpecimens of this curious ſpecies, were diſcovered about the year 1800, attached to the bottom of the Warſpight ſhip-of-war, when taken into dock to be repaired, after lying in the harbour of Portſmouth for a great length of time. Mr. J. Hay, of Portſmouth, ſoon after found two or three ſhells of the ſame kind, by dredging in Portſmouth harbour. This ſpecies appears to be very rare.

15. Lepas mitella, the mitred acorn: ſhell compreſſed, erect, and irregularly ſtriate. Inhabits the Indian Ocean. White, covered with a dirty yellow ſkin; valves numerous, generally triangular, unequal, acute, ſeated on a common black peduncle, which is coriaceous, ſcaly, and hollow within.

16. Lepas ſcalpellum, the lancet-acorn: ſhell compreſſed, thirteen-valved, ſmoothiſh, and ſeated on a ſcaly peduncle. Inhabits the North Seas. Leſs than L. anatifera; valves reſembling ſcales, ſix each ſide, the longer one curved and incloſing the others; peduncle very ſhort, with annular wrinkles. See the HELMINTHOLOGY Plate IV. fig. 4, 5.

17. Lepas anſerifera, the barnacle-ſhell: ſhell compreſſed, five-valved, ſtriate, ſeated on a peduncle. Inhabits the American and Atlantic ſeas, and is ſometimes found in a foſſile ſtate. Peduncle pale ſaffron colour; firſt valve curved, ſmooth and carinate on the back, the reſt with diſtant ſtriæ, each of the larger ones turgid towards the peduncle, with a wedged divergent end; the ſmaller ones narrower and more pointed.

18. Lepas anatifera, the duck-barnacle: ſhell compreſſed, five-valved, ſmooth, ſeated on a peduncle. Inhabits moſt ſeas, and is generally found fixed in cluſters to the bottoms of veſſels and old pieces of floating timber; generally whitiſh with a blue caſt, the margins of the valves yellow; ſometimes marked with a ray or two dotted with black; peduncle long, coriaceous, black, and very much wrinkled towards the ſhell, and growing paler and pellucid towards the baſe, extenſile; ſometimes, though rarely, red; valves finely ſtriate; the two larger ones triangular; the two top ones nearly triangular and about half the ſize; the other narrow, long, curved, rounded at the back, a little protuberant at the baſe, and incloſing the others. See the CONCHOLOGY Plate XVI. fig. 10.

The tentacula of theſe animals are long, and pectinated like a feather, for which they were in fact miſtaken in the ſixteenth century; and hence aroſe the whimſical belief that the barnacle-ſhell was the parent of the barnacle duck or gooſe! Nor was this the vulgar opinion only; it was ſanctioned by the grave details of learned naturaliſts of that time, and particularly by Gerard, whoſe obſervations are generally noticed by authors in deſcribing this ſingular marine production. His words are theſe: "What our eyes have ſeen, and hands have touched, we ſhall declare. There is a ſmall iſland in Lancaſhire called the Pile of Foulders, wherein are found broken pieces of old and bruiſed ſhips, ſome whereof have been caſt thither by ſhipwracke, and alſo the trunks and bodies with the branches of old and rotten trees, caſt up there likewiſe; whereon is found a certain ſpume or froth that in time breedeth unto certain ſhells, in ſhape like thoſe of the muſkle, but ſharper-pointed, and of a whitiſh colour, wherein is contained a thing in form like a lace of ſilke finely woven as it were together, of a whitiſh colour; one end whereof is faſtened unto the inſide of the ſhell, even as the fiſh of oyſters and muſkles are; the other end is made faſt unto the belly of a rude maſſe or lumpe, which in time cometh to the ſhape and form of a bird; when it is perfectly formed, the ſhell gapeth open, and the firſt thing that appeareth is the aforeſaid lace or ſtring; next come the legs of the bird hanging out, and as it groweth greater it openeth the ſhell by degrees, till at length it has all come forth, and hangeth only by the bill; in ſhort ſpace after it cometh to full maturitie, and falleth into the ſea, where it gathereth feathers, and groweth to a fowle bigger than a mallard and leſſer than a gooſe, having black legs and bill or beake, and feathers black and white, ſpotted in ſuch manner as our mag-pye, called in ſome places *pie-annet*, which the people of Lancaſhire call by no other name than *tree-gooſe*; which place aforeſaid, and all thoſe places adjoining, do ſo much abound therewith, that one of the beſt is bought for three-pence. For the truth hereof, if any doubt, may it pleaſe them to repaire to me, and I ſhall ſatisfy them by the teſtimony of good witneſſes." *Gerarde's Herbal*, p. 1587, 8. For a full confutation of this abſurd notion, ſee vol. i. p. 519. It will hardly be credited, that in the year 1808, a piece of wood picked up at ſea encruſted with theſe worms was exhibited in London as a duck or gooſe-tree. The ſhells of the worms are affirmed to be duck-eggs; and the exhibitor pretended to ſhow the fooliſh multitude (at one ſhilling a-head) the bills and feathers of the fowls emerging from them!

19. Lepas dilata, the dilated barnacle: ſhell compreſſed, five-valved, and thin; dorſal valve dilated at the baſe with an acute angle, and ſeated on a peduncle. The firſt account we have of this ſpecies was given by the late Mr. Ellis, from whom we merely learn that it is from St. George's Channel. The ſpecimen appears to have been ſent by Mr. Ellis to the late ducheſs of Portland, from whence it paſſed through the hands of the late Dr. Fordyce, and at his death came into the poſſeſſion of Mr. Donovan, under the title of Lepas ſigillatum of Solander. Unlike the anatifera or anſerifera, though larger than either, the valves of this ſhell are uncommonly thin and brittle, in a certain degree corneous, with the largeſt lateral valve rather crumpled in the uſual courſe of the ſtriæ, and marked tranſverſely with obſolete rays. The ſhell is likewiſe covered with a fine pale brown ſkin, or epidermis.

20. Lepas aurita, the eared barnacle: ſhell membranaceous, ventricoſe, ſeated on a tube, and eared; mouth eight-valved, toothed. Inhabits the North Seas. Peduncle long.

21. Lepas pſittaccus, the parrot-barnacle: ſhell hooked behind, ſix-valved, wrinkled. Inhabits the coaſt of Chili; hardly an inch long. The two larger valves reſemble a parrot's bill. Fleſh white, tender, and very palatable.

22. Lepas minor, the ſmall barnacle: ſhell reddiſh, ſix-valved, unequal; lid pointed. Inhabits India. Shell marked with tranſverſe curved lines dotted with white.

23. Lepas verruca, the warted barnacle: ſhell hemiſpherical,

ſpherical, ſerrate, ſix-valved; the four outer valves and lid plaited. Inhabits the North Seas; fixed to the Oſtrea Iſlandica and others; a ſmall ſpecies.

24. Lepas anguſtata, the narrow barnacle: ſhell elongated, ſmooth, ſix-valved; the aperture narrow; lid very minute. Valves with a groove at the point of conjunction; ſometimes ſtriate with red and white.

25. Lepas poroſa, the porous barnacle: ſhell granulate, ſtriate, conic, tubular; lid obtuſe. Inhabits India; when freſh it is green on the outſide, but afterwards becomes black above and white beneath.

26. Lepas elongata, the long barnacle: ſhell cylindrical, ſnowy pellucid, ſix-valved, and cleft above; lid obtuſe, grooved, and tranſverſely ſtriate. Inhabits Iceland; a very rare ſpecies. Hardly five lines broad and above three inches long; tranſverſely annulate, and knotty here and there beneath.

27. Lepas patellaris, the limpet-barnacle: ſhell ſix-valved; outwardly violet mixed with white, and marked with fine longitudinal ſtriæ; within falcate; valves denticulate at the margin. Inhabits Coromandel; a very rare ſpecies. Teeth of the valves alternately inſerted in each other.

28. Lepas ſpinoſa, the prickly barnacle: ſhell conic, with twelve triangular valves; ſix of them more depreſſed, leſs, and whitiſh, tranſverſely ſtriate; ſix purple, and longitudinally ſtriate; all armed with tubular recurved ſpines. Inhabits India.

29. Lepas violacea, the violet-barnacle: ſhell thick, glabrous, ſix-valved, white with violet rays. Inhabits India.

30. Lepas pollicipes, the beaked barnacle: ſhell compreſſed, erect, many-valved, ſmooth; ſeated on a ſhort hard ſcaly coriaceous peduncle. Inhabits the Mediterranean. The four larger valves turned towards each other like the beak of a bird; ſmall ones more than twenty.

31. Lepas cylindrica, the cylindrical barnacle: ſhell cylindrical, ſlightly curved, with a very large oblique orifice; lip horned. Inhabits the ſhores of Africa, under the torrid zone.

32. Lepas criſpata, the wreathed barnacle: ſhell oval-truncate, conic, with ſix bluiſh valves ſhaded with white, and ſix elevated reddiſh ones ſpinous and perpendicularly ſtriate. This ſpecies is frequently found perforated by the Teredo; about an inch high.

33. Lepas carioſa, the worm-eaten barnacle: ſhell ſolid, white, depreſſed with carious grooves, within unequally ſmooth. Inhabits the Kurile Iſlands.

34. Lepas ſtrœmia, the Daniſh barnacle: conico-convex, with four ſerrate-ſtriate valves; lid two-valved. Inhabits the North Seas.

LE'PE, a town of Spain, in the province of Seville, celebrated for its grapes, figs, and wine: ten miles eaſt of Ayamonte.

LEPECHIN'IA, *ſ.* [ſo named by Willdenow, in his Hortus Berolinenſis, as a tribute of reſpect to the labours of *John Lepechin*, of the Academy of Sciences at St. Peterſburg, who publiſhed various tracts upon natural hiſtory in the Tranſactions of that Society. He appears to have been an able chemiſt as well as naturaliſt, and to have travelled through various provinces of the Ruſſian empire in the years 1768 and 1769. We are unable to diſcover either the time of his birth or of his death, though from the date of his Travels he muſt have lived about the middle of the laſt century.] In botany, a genus of the claſs didynamia, order gymnoſpermia, natural order verticillatæ, *Linn.* (labiatæ, *Juſſ.*) Generic eſſential character—Calyx two-lipped; upper lip of the corolla cloven, lower one deeply divided into three nearly equal ſegments. Stamens ſpreading.

Lepechinia ſpicata, the only ſpecies deſcribed: ſpikes of flowers on bracteated footſtalks; leaves ovate, crenate, truncated at the baſe. The native country of this hardy perennial plant is unknown. The ſpecies in queſtion was introduced into the royal garden at Kew in the year 1800, by Mr. John Hunneman, who received it from his friend Willdenow in Germany. By the above ſpecific character, we preſume there are other ſpecies.

LEPEI'GA, a town of Hindooſtan, in the circar of Gangpour: thirty miles ſouth-ſouth-weſt of Gangpour.

LEPEL', a town of Ruſſian Lithuania: fifty-five miles ſouth eaſt of Polotſk.

LEP'ER, *ſ.* [*lepra*, *leproſus*, Lat.] One infected with a leproſy.—The *leper* in whom the plague is, his clothes ſhall be rent. *Lev.* xiii. 45.

LEP'ER's I'SLAND, one of the New Hebrides, in the South Pacific Ocean, ſo called by the Monſ. Bougainville, who viſited it in 1768, and found the inhabitants in general devoured with the leproſy. Lat. 15. 21. N. lon. 168. 4. E.

LEPE'ROUS, *adj.* [for *leprous*, to make out a verſe.] Cauſing leproſy; infected with leproſy; leprous:

Upon my ſecure hour thy uncle ſtole,
With juice of curſed hebenon in a vial,
And in the porches of mine ears did pour
The *leperous* diſtilment. *Shakeſpeare's Hamlet.*

LEP'ID, *adj.* [from the Lat. *lepidus*, pleaſant.] Pleaſant, jocund, witty. *Phillips.*

LEP'IDA (Domitia), a daughter of Druſus and Antonia, great niece to Auguſtus, and aunt to the emperor Nero. She is deſcribed by Tacitus as a common proſtitute, infamous in her manners, violent in her temper, but celebrated for her beauty. She was put to death by means of her rival Agrippina, Nero's mother.

LEPIDAG'ATHIS, *ſ.* in botany, a genus of the claſs didynamia, order angioſpermia. Generic eſſential characters—Calyx many-leaved, imbricate; corolla two-lipped; the upper lip very ſmall, lower lip three-parted: capſule two-celled, two-valved.

Lepidagathis criſtata, a ſingle ſpecies. Stems woody, diffuſe, branched; leaves oppoſite, ſeſſile, linear, obtuſe, entire, glabrous, rough at the edge: flowers in heads: ſcales of the calyx mucronate; the inner-ones pubeſcent. Native of the Eaſt Indies.

LEPID'ITY, *ſ.* Pleaſantry. *Cole.*

LEPID'IUM, *ſ.* [from λεπις, Gr. a ſcale.] PEPPERWORT, DITTANDER, &c. in botany, a genus of the claſs tetradynamia, order ſiliculoſa, natural order of ſiliquoſæ or cruciformes, (cruciferæ, *Juſſ.*) The generic characters are—Calyx: perianthium four-leaved; leaflets ovate, concave, deciduous. Corolla: four-petalled, croſs-ſhaped; petals obovate, twice the length of the calyx: with narrow claws. Stamina: filaments ſix, awl-ſhaped, length of the calyx, the two oppoſite ones ſhorter; antheræ ſimple. Piſtillum: germ heart-ſhaped; ſtyle ſimple, length of the ſtamens; ſtigma obtuſe. Pericarpium: ſilicle heart-ſhaped, emarginate, compreſſed, ſharp on the margin, two-celled; valves navicular, keeled, oppoſite the lanceolate diſſepiment. Seeds: ſome ovate-acuminate, narrower at the baſe, nodding.—*Eſſential Character.* Silicle emarginate, cordate, many-ſeeded: valves keeled, contrary.

Species. 1. Lepidium perfoliatum, or various-leaved pepperwort: ſtem-leaves pinnate-multifid; branch-leaves cordate, embracing, entire. Root annual; ſtem about a foot high, round, upright, ſmooth, tinged with purple, dividing into many ſlender branches. Root-leaves and lower ſtem-leaves, and ſometimes the loweſt on the branches, bipinnatifid, with narrow, acuminate, flat, ſegments; the next to theſe, leſs divided, have an entire embracing baſe; the upper ones are all quite entire, heart-ſhaped, embracing, ſome ſharp, others blunt; all glaucous, ſomewhat thick; ſome very ſmooth, others having hairs at the edge and on the upper ſurface, viſible only with a glaſs. Flowers in corymbs, or long looſe ſpikes from the ends of the branches; they are ſmall and compreſſed: calycine leaflets blunt, upright, yellowiſh-green, two oblong, the other two twice as broad and ovate: petals ſpatulate, narrow, yellow, flat, blunt, a little longer

than the calyx. Silicles orbiculate, compreſſed, ſcarcely emarginate, and the terminating ſtyle ſo ſhort as to be ſcarcely obſervable; they are ſmooth, and there is a ſingle ſeed of a bay-colour in each cell. Native of Auſtria and the Levant; cultivated in 1640, according to Parkinſon; flowers in July.

2. Lepidium veſicarium, or bladdery pepperwort: joints of the ſtem inflated. Leaves like thoſe of Iberis vulgaris; flowers white. It is an annual plant, native of Iberia and Media, in dry places; flowers there in July and Auguſt.

3. Lepidium nudicaule, or naked pepperwort: ſcape naked, quite ſimple; flowers four-ſtamened, leaves pinnatifid. This is a ſmall annual plant, with many linear root-leaves, pinnatifid or toothed at the top, tender, ſmooth, ſpreading on the ground. Among theſe riſes a naked ſtalk, two or three inches high, terminated by five or ſix ſmall white flowers, with equal petals. Silicles flatted, emarginate, incloſing four or five roundiſh ſeeds. Native of Spain and the ſouth of France; cultivated by Mr. Miller in 1768.

4. Lepidium procumbens, or proſtrate pepperwort: leaves ſinuate-pinnatifid, the outmoſt larger; ſcape naked, ſtems proſtrate, racemiferous. This alſo is an annual plant. Some of the leaves are ovate and entire, others three-lobed, five-lobed, lyrate. Allione remarks, that the ſtems are not really naked, but leafy; and that the miſtake has ariſen from the leaves falling off very eaſily. Native of the ſouth of France and the county of Nice.

5. Lepidium alpinum, or alpine pepperwort: leaves pinnate, quite entire; ſcape ſubradicate, ſilicles lanceolate, mucronate. Root perennial, ſlender. The whole plant is ſmooth, and has the ſame taſte with L. ſativum, or creſs. Stems very ſhort, clothed with alternate leaves, putting out round upright ſcapes, from one to two inches long, with flowers in a corymbed raceme. Native of the Alps of Germany, Swiſſerland, and Italy; introduced in 1775 by Drs. Pitcairn and Fothergill. It flowers from April to June; in the Alps from May to Auguſt.

6. Lepidium petræum, or rock-pepperwort: leaves pinnate, quite entire; petals emarginate, ſmaller than the calyx. Root biennial, (annual, *Linn.* and *Jacqu.*) taper and fibrous. Stem much and alternately branched from near the root, ſpreading. Leaves dark green, elegantly pinnate, or rather very deeply pinnatifid, with an odd lobe; flowers in a cloſe corymb, gradually lengthening out into a ſpike, very minute, erect. Silicle exactly oval, flat, with the remains of the ſtyle in a minute notch at the tip, ſmooth; valves with a ſharp but not dilated keel. Seeds two in each cell, on ſlender footſtalks. This has the proper ſilicle of a Lepidium; in ſome of the foreign ſpecies it approaches ſo to that of Thlaſpi, that it is ſcarcely poſſible to define the limits of the two genera. It is a native of ſeveral parts of Europe, as Oeland, Auſtria, Swiſſerland, Dauphiny, Sileſia, England; and, according to Loureiro, of China. With us it is found on St. Vincent's rocks, and walls, near Briſtol; at Uphill in Somerſetſhire; near Pembroke, &c. flowering in March and April.

7. Lepidium cardamines, or cardamine-pepperwort: root-leaves, pinnate; ſtem-leaves, lyrate. This is a biennial plant. The root-leaves bear a great reſemblance to thoſe of Cardamine, whence the trivial name. Stems a ſpan high, branched, terminated by a raceme of white flowers. Native of Spain, by way-ſides, in a dry clay ſoil.

8. Lepidium ſpinoſum, or prickly pepperwort: leaves pinnate, leaflets lunate; the outer, elongated; branches mucronate. This is annual. Stem a ſpan high, ſtiffiſh, thickiſh awl-ſhaped, branched at bottom; branches awl-ſhaped, quite ſimple, ſtiff, ſpiny at the end. Flowers ſcattered, white, on a very ſhort ſtiff peduncle. Native of the Levant.

9. Lepidium ſativum, garden or common creſs: flowers tetradynamous; leaves oblong, multifid. Root annual, white, fuſiform, ſlender. Stem upright, round, ſmooth, from a foot to two feet in height, branched at top; both ſtem and branches terminated by looſe narrow ſpikes of ſmall flowers. Silicle roundiſh, without any ſtyle; the valves winged, whence Crantz makes it a Thlaſpi.

Of the garden-creſs, ſo much uſed in winter and ſpring ſalads, there are ſeveral varieties; one with broad leaves, another with curled leaves, and the common ſort. Linnæus remarks, that in the common ſort the leaves are multifid; that there is one variety in which they are lanceolate, entire and gaſh-ſerrate; and another in which they are pinnate and curled; but that no one can doubt their being of the ſame ſpecies who conſiders the fructification, ſtructure, taſte, and appearance, of the plants. The native place of this commonly-cultivated plant being unknown, Linnæus ſuſpects it to have had its origin from L. ruderale, but this notion has not obtained credit. It is inſerted by Linnæus, Krocker, and Villars, in their local floras. The young plant has the ſmell and taſte of this natural order, but in a far inferior degree to ſcurvy-graſs; it may be however of ſome uſe as a diuretic and antiſcorbutic, if taken largely.

10. Lepidium lyratum, or curled-leaved creſs: leaves lyrate, curled. This is a biennial plant. The lower leaves, which ſpread on the ground, are near two inches long, and about half an inch broad. Stalks a foot high, dividing into a great number of ſlender branches, having ſmall oblong leaves on them, which are cut on their ſides, and a little curled on their edges. The flowers are produced in cluſters at the end of the branches; they are very ſmall, and white; appear in July, and are ſucceeded by roundiſh bordered ſeed-veſſels, which are compreſſed, and have one ſmall oblong ſeed in each cell, ripening in the autumn. Native of the Levant, and Spain. Cultivated by Mr. Miller in 1759.

11. Lepidium latifolium, broad-leaved pepperwort, or dittander: leaves ovate-lanceolate, entire, ſerrate. Root perennial, long, branching, ſpreading very far. Stems erect, a yard high and more; alternately branched, leafy, round, ſmooth, frequently flexuoſe, panicled at top, with numerous branches of ſmall white flowers, in little corymbs. Leaves alternate, acute, broad-lanceolate, lengthened out at the baſe and tip, ſerrate in the middle, glaucous, eſpecially beneath. The young leaves are eaten ſometimes in ſalads: they have a pungent acrid taſte. This plant is one of the acrid antiſcorbutics, and was formerly uſed in the place of horſe-radiſh. An infuſion of it vomits. Having a hot biting taſte like pepper, and the leaves having been often uſed by the country people to give a reliſh to their viands inſtead of pepper, it had the appellation of *poor-man's pepper*. Native of ſeveral parts of Europe: with us, at Hythe near Colcheſter, Heybridge, near Malden, in marſhes near Grays, and other places in Eſſex; below Sheringham cliffs in Norfolk; between Beningborough and Mitton in the North Riding of Yorkſhire; near Seaton, plentifully: about the caſtle of Weems, in Fifeſhire, &c. It flowers in July.

12. Lepidium oleraceum, or notch-leaved pepperwort: leaves elliptic-oblong, acute, ſerrate; flowers four ſtamened. Stem perennial, herbaceous, round, from a foot to a yard in height. Flowers white, two lines in diameter. Native of New Zealand, eſpecially at Charlotte Sound. This plant, with Apium, or ſmallage, and Tetragonia halimifolia, was of conſiderable ſervice to the ſhips' crews under captain Cook, when they lay in Charlotte Sound. Introduced in 1779, by Jonas Dryander, M. A.

13. Lepidium ſubulatum, or awl-leaved pepperwort: leaves awl-ſhaped, undivided, ſcattered; ſtem ſuffruticoſe. Native of Spain; cultivated by Mr. Miller in 1768.

14. Lepidium graminifolium, or graſs-leaved pepperwort: leaves linear, the upper ones quite entire; ſtem panicled, wandlike; flowers ſix-ſtamened. It reſembles Iberis graminifolia, but is diſtinct from it. When adult, it caſts the leaves. Native of the ſouth of Europe.

15. Lepidium ſuffruticoſum, or ſhrubby pepperwort: leaves

leaves lanceolate-linear, ſlender, quite entire; ſtem ſuffruticoſe. It differs from the preceding in being two feet high, with flat leaves. Native of Spain.

16. Lepidium didymum, or procumbent pepperwort: flowers two-ſtamened; leaves pinnatifid; fruits twin. Root annual, ſmall, fibrous. Stems procumbent, hairy, alternately branched, leafy. Linnæus ſays they are a foot long, and even. Leaves alternate, ſmooth, pinnatifid; the lobes notched, eſpecially on the fore ſide. Flowers very ſmall, with two or four ſtamens, ſcarcely more. Silicle very diſtinctly two-lobed, rugged, very much reſembling that of Cochlearia coronopus, to which this plant is very nearly related as to generic character; and indeed Linnæus ſays, it is an intermediate ſpecies between the two genera. This plant eſcaped Ray and Dillenius. Hudſon mentions it as a native of Devonſhire and Cornwall, among rubbiſh; about Exeter, Truro, and Penryn; at Dale, near the entrance of Milford Haven. It flowers in July.

17. Lepidium ruderale, or narrow-leaved pepperwort: flowers two-ſtamened, apetalous; root-leaves tooth-pinnate, branch-leaves linear, quite entire. Root long, fibrous. Stem a foot high, uſually crooked, woody, ſtiff, branched. Leaves fleſhy, ſmooth; peduncles ſlender. Flowers white, very ſmall, in cluſtered ſpikes or racemes; calyxes pale yellow. This ſpecies is repreſented on the preceding Plate, at fig. 2. Linnæus aſſigns two ſtamens only to the flowers; which ſeems generally to be the caſe; but there are ſometimes four, though Gouan could never diſcern that number. Scopoli affirms that the flowers are never diandrous in Carniola. Silicles numerous, ſmall, much compreſſed, containing one ſeed in each cell. The plant has a pungent taſte, and fetid ſmell like a fox. Native of moſt parts of Europe, in waſte places, eſpecially near the ſea-coaſt: with us at Malden, Eſſex; Wiſbeach, Cambridgeſhire; Yarmouth, Lynn, and Clay, Norfolk; by the Severn, above Worceſter; near King's Weſton, below Briſtol; Truro, Cornwall; and on the coaſt of Scotland. It flowers in June and July.

18. Lepidium Virginicum, or Virginian pepperwort: flowers tetrapetalous; ſtem-leaves lanceolate-linear, ſerrate, pinnatifid; lower ones pinnate. Root annual, ſingle, white, an inch long; root-leaves an inch in length, half of them being footſtalk and reddiſh, with three or four deep jags, at the beginning oval, half an inch broad, indented about the edges, ſmooth, dark green. Stalk round, whitiſh green, a foot and a half high, having longer, narrower, deeper-cut, leaves, ſet thick about it without any order; the branches alſo come out frequently on all ſides, and round them many flowers, ſmall, white, four-petalled, on peduncles the eighth part of an inch in length. Silicle round, emarginate, containing one oblong reddiſh ſeed in each cell. Native of all the Caribbee Iſlands, and Virginia. Cultivated in the Chelſea garden in 1713. It flowers in June and July. In the Weſt Indies the inhabitants eat the leaves in their ſalads, as we do thoſe of L. ſativum, or garden-creſs.

19. Lepidium divaricatum, or divaricated pepperwort: leaves pinnatifid, ſtem very much branched; ſilicles ovate ſubemarginate. Native of the Cape of Good Hope, where it flowers from May to Auguſt.

20. Lepidium iberis, or buſhy pepperwort: flowers two-ſtamened, four-petalled; lower leaves lanceolate, ſerrate; upper leaves linear, quite entire. This has a long fleſhy root, which runs deep into the ground, and ſends out many oblong leaves ſpreading flat on the ground. Stalks ſlender, ſtiff, branching out horizontally on every ſide, about two feet high. The flowers come out in ſmall cloſe cluſters at the ends of the branches; they are white, and appear in June and July; the ſeeds ripen in autumn. The plant is recommended as having the ſame qualities with L. latifolium, and is ſometimes called ſciatica-creſs. Native of the ſouth of France, Italy, Sicily, Germany, Spain, and Siberia.

21. Lepidium Bonarienſe, or Buenos Ayres pepperwort: flowers two-ſtamened; four-petalled; petals minute, all the leaves pinnate-multifid. Leaves and ſtalks much like thoſe of garden-creſs, but more divided, and of a different taſte and ſmell. Petals ſo ſmall as to be almoſt imperceptible; and only two ſtamens to each flower. Murray affirms that it has ſix ſtamens; Dillenius obſerved only two. The number certainly varies much in this genus. Dillenius deſcribes this plant as two feet high and more, with many branches very full of leaves in bundles, reſembling thoſe of tanſey, but leſs cut, and having ſmall hairs on the back and along the edges. Flowers ſo ſmall as not to be ſeen with the naked eye. Native of Buenos Ayres, Braſil and other parts of America. Cultivated before 1732 in the Eltham garden; Miller ſays that the ſeeds came up in the earth from ſeveral parts of America. It has alſo been found at the ſouthern end of Africa.

22. Lepidium chalepenſe, or eaſtern pepperwort: leaves ſagittate, ſeſſile, toothed. This has creeping roots. Leaves longer and narrower than thoſe of Cochlearia draba, and leſs hoary. Flowers in looſe bunches at the end of the branches, ſmall and white. Linnæus remarks, that it has the appearance of Thlaſpi campeſtre, inſomuch that it can ſcarcely be diſtinguiſhed but by the ſilicles. Native of the Levant, about Aleppo.

23. Lepidium piſcidium, or piſcatory pepperwort: leaves elliptic-oblong, acute, quite entire; flowers tetradynamous. Stem herbaceous, two feet high, with the branches ſpreading at bottom, and thence aſcending, round and even. Leaves alternate, ſpreading, looſe, two inches long, the lower ones of the ſtem attenuated at the baſe. Flowers ſmall, white. Native of the iſlands in the South Sea; Botany iſland, Teautea, and Huaheine. It is uſed by the inhabitants for taking fiſhes by inebriating them. It is very acrid, and was uſed by our circumnavigators in their ſalads with L. oleraceum, which it reſembles, but differs in many eſſential marks.

Propagation and Culture. If the ſeeds of the annual ſorts be ſown in the autumn, the plants will flower in April, May, or June, and the ſeeds will ripen in May, June, or July. If theſe be permitted to ſcatter, the plants will come up in autumn, and require no other care but to thin them when they are too cloſe, and to weed them. The ſeeds of common garden-creſs are ſown in drills pretty cloſe, in winter on moderate hot-beds, in ſpring and autumn on borders, and are ſoon fit for uſe. It ſhould be cut young, otherwiſe it will be too rank. The perennial ſorts are eaſily propagated; for every piece of the root will grow and multiply wherever it is planted, and will become difficult to root out in a garden, when it is once eſtabliſhed.

LEPIDOCARPODEN'DRON, *ſ.* in botany. See PROTEA.

LEPIDOCI'DES, or LEPIDOI'DES, *ſ.* [from the Gr. λεπις, a ſcale, and ειδος, a ſhape.] In anatomy, the ſcaly future of the ſkull. *Scott.*

LEPID'OLITE, *ſ.* in mineralogy. See MICA lepidolithus.

LEPIDOP'TERA, *ſ.* in zoology, the third order of inſects. See the article ENTOMOLOGY, vol. vi. p. 833.

LEPIDOP'TEROUS, *adj.* Belonging to the above order; as, A *lepidopterous* inſect.

LEPIDOSAR'COMA, *ſ.* [from the Gr. λεπις, a ſcale, and σαρξ, the fleſh.] In ſurgery, the lepis, a ſcaly kind of tumour.

LEPIDOSPER'MA, *ſ.* [ſo called by Labillardiere, from λεπις, λεπιδος, a ſcale, and σπερμα, ſeed; becauſe of the ſix permanent ſcales which inveſt the baſe of that part.] In botany, a genus of the claſs triandria, order monogynia, natural order calamariæ, *Linn.* (cyperoideæ, *Juſſ.* cyperaceæ, *Brown.*) The generic characters are—Calyx: ſpikelet imbricated every way, of one or two flowers, and one ſeed; ſcales ſeveral, ovate, concave, acute, for the moſt part empty. Corolla: none, except we ſo call the ſix flat membranous thickiſh ſcales, united

at their baſe, which inveſt the bottom of the germen. Stamina: filaments three, capillary, projecting; antheræ terminal, oblong, acute, pendulous. Piſtillum: germen ſuperior, very ſmall; ſtyle cylindrical, erect, as long as the ſtamens, deciduous; ſtigmas three, equal, recurved, ſlender, downy, acute. Pericarpium: none. Nut roundiſh, obtuſe, hard, not burſting, accompanied by the above-mentioned ſix ſcales, of one cell, with a ſingle roundiſh kernel.—*Eſſential Character.* Spikelet of one or two flowers, and one ſeed; glumes chaffy, imbricated every way, moſt of them barren; ſix flat combined permanent ſcales at the baſe of the germen; ſtyle deciduous; nut ſolitary, bald, obtuſe.

This genus is allied to the Cladium of Browne's Jamaica, (which is included with Schoenus by Linnæus,) but is diſtinguiſhed by the ſix ſcales that accompany the germen. From the Scleria of Bergius it differs in the number of its glumes, and in having always androgynous ſpikelets, of which the upper flower is only male. Labillardiere deſcribes and figures ſeven ſpecies; Brown defines nineteen, all from the colder parts of New Holland, or from Van Diemen's Land. They are harſh rigid ruſhy plants, one or two feet high, with ſtrong perennial roots, ſimple leafleſs ſtems, encompaſſed at the bottom with ſeveral long, narrow, moſtly-equitant, leaves, which are more or leſs compreſſed and acute, their edges either ſmooth or minutely ſerrated. The panicle or ſpike is terminal, moſtly branched or divided.

It will be ſufficient to notice two ſpecies. 1. Lepidoſperma gladiata, or ſword-ſhaped lepidoſperma: panicle denſe, repeatedly compound; ſtem compreſſed, with an elevated rib at each ſide; its edges ſmooth, like thoſe of the leaves; glumes rather ſharp. Gathered by Mr. Brown at Port Jackſon, as well as in Van Diemen's Land, and the ſouth part of New Holland. The ſtem is ſtout and rigid, from eighteen to twenty-four inches high; leaves half an inch broad, ſmooth; panicle upright, large, of numerous acute, oblong, ſcaly ſpikelets.

2. Lepidoſperma tetragona, or four-cornered lepidoſperma: panicle denſe, ſomewhat compound; leaves quadrangular; ſtem bluntly angular. Gathered by Brown in Van Diemen's Land. The ſquare leaves are very remarkable. It is a much ſmaller plant than the foregoing. The ſcales of each ſpikelet are from four to ſix only; the nut is elevated on a more conſpicuous ſpongy baſe than in moſt of the other ſpecies.

Nothing can give a more unfavourable idea of the fertility, comfort, or beauty, of a country, than the prevalence of ſuch plants as theſe; ſlight examples of which may be ſeen in our Schoenus nigricans, Nardus ſtricta, and a few others, found on the moſt dreary and barren inland ſands. Such of them as inhabit the ſea-ſhore anſwer the moſt valuable purpoſe poſſible, in forming a natural barrier againſt the encroachments of the ocean.

LEP'IDUS (M. Emilius), one of the triumvirs with Octavius and Antony. He was of an illuſtrious family, and remarkable for ambition; but to this was added a narrowneſs of mind, and a great deficiency of military abilities. When his influence and power among the ſoldiers had made him one of the triumvirs, he ſhowed his cruelty, like his colleagues, by his proſcriptions; and even ſuffered his own brother to be ſacrificed to the dagger of the triumvirate. He received Africa as his portion in the diviſion of the empire; but his indolence ſoon rendered him deſpicable in the eyes of his ſoldiers and of his colleagues; and Octavius, who was well acquainted with the unpopularity of Lepidus, went to his camp and obliged him to reſign the power to which he was entitled as being a triumvir. After this degrading event, he ſunk into obſcurity; and retired, by order of Auguſtus, to Cerceii, a ſmall town on the coaſt of Latium, where he ended his days in peace, B. C. 13, and where he was forgotten as ſoon as out of power. See the article ROME.

LE'PIS, *ſ.* [Greek.] A ſcale; the ſcum of ſilver; the fleſh that riſes between the ſound and dead part of a bone.

LEPIS'MA, *ſ.* in entomology, a genus of apterous inſects. The generic characters are—Six feet formed for running; a mouth furniſhed with four palpi, two of which are ſetaceous, and two capitated; body covered with imbricated ſcales; tail terminated by three briſtly appendages; antennæ ſetaceous. The reſidence of the lepiſma is commonly in gardens and damp houſes. In the former, they retreat under mouldy boards or flag-ſtones; and, in the latter, they are ſeen about window-ſaſhes, and old boxes that have remained for ſome time in a humid ſituation. When their haunts are diſturbed, they make off with ſuch velocity, that they are ſeldom caught; and, when that happens, they are often deſtroyed, being, from their ſoftneſs, eaſily cruſhed.

Species. 1. Lepiſma ſaccharinum, the ſugar-eater. Specific character, ſcaly, ſilvery lead-colour; tail triple. This has been ſometimes called *wood-liſh*, from its peculiar colour, ſcales, and tapering form. It is an inſect of great elegance. Its general length, excluſive of the caudal briſtles, is about half an inch, and its colour a bright ſilvery grey reſembling that of pearls; this colour is owing to a covering of extremely-minute oval ſcales, which are ſemi-tranſparent, and very eaſily detached from the animal by a ſlight touch; the head and thorax together form a rounded outline, the remainder of the body gradually leſſening to the tail, which terminates in three long briſtles, of ſimilar appearance with the antennæ. The motions of this animal are remarkably quick; and it is often obſerved among various domeſtic articles, particularly ſugar. It alſo occurs not unfrequently among old books and papers, which it is ſuppoſed often to injure. It is ſaid to be originally an American animal, and to have been imported into Europe among ſugars, &c. Dr. Browne, in his Hiſtory of Jamaica, repreſents it as "extremely deſtructive to books and all manner of woollen clothes." But Dr. Shaw obſerves, that, though this inſect may occaſionally injure books and papers, yet it is certain that the principal ravages committed on thoſe articles are owing to inſects of the genera of Dermeſtes and Ptinus, and particularly to the Ptinus pectinicornis, which, in the courſe of a few days, during very hot weather, and in places where it happens to abound, will nearly deſtroy a book by innumerable perforations. The L. ſaccharinum is ſhown on the preceding Plate, of the natural ſize at fig. 3. magnified and lying on its back, at fig. 4.

2. Lepiſma polypodus, the jumping lepiſma: tail triple; ſegments of the abdomen villous on each ſide beneath. Of a duſky or browniſh caſt; found about the ſea-coaſt of many northern regions, under ſtones, &c. By means of the ſprings under its tail, its takes prodigious leaps, thus approaching the nature of the genus Podura. There is a variety with five briſtles in the tail.

3. Lepiſma lineata, the lineated lepiſma: tail triple; body brown, with two white fillets. Antennæ as long as the body; thorax covered with three ſcales, which are emarginate behind; body above brown, with cinereous ſpecks; tail villoſe, the middle ſpine longer, with a few ſhorter ones under it; legs ſhort, thighs compreſſed. Inhabits Helvetia, in old walls.

4. Lepiſma villoſa, the hairy lepiſma: brown, with a triple villoſe tail. Head villous, whitiſh; body beneath whitiſh; middle ſpine of the tail long, beneath two ſhort ones; legs ſhort, white. Inhabits China; ſhorter and thicker than L. ſaccharinum.

5. Lepiſma collaris, the collared lepiſma: black, with a ſnowy band on the neck and end of the abdomen; tail triple, villous. Antennæ as long as the body, brown, with a pale baſe; head whitiſh; under the tail two ſhort briſtles; legs pale. Inhabits the South American iſlands.

6. Lepiſma terreſtris, the earthy lepiſma: naked, white; with a triple tail: antennæ obtuſe, half as long as the body. An indiſtinct ſpecies, and probably is rather a Podura. Inhabits Europe.

7. Lepiſma polypus, the many-footed lepiſma: ſcutate; tail triple. Native of Denmark.

8. Lepiſma

8. Lepiſma minutus, the ſmall lepiſma: yellow; tail of three briſtles. Inhabits the ſame country as the preceding; the appendages of the tail are ſometimes wanting.

LEPI'TA, in Hindoo mythology, a name of Sarafwati, ſpouſe of Brahma, and goddeſs of literature, harmony, rhetoric, and the fine arts. See SARASWATI.

LEPO'IS (Nicholas), a phyſician of celerity, was born at Nancy in 1527. He ſtudied medicine at Paris under Sylvius, together with his elder brother, Anthony Lepois, who was afterwards firſt phyſician to Charles III. duke of Lorraine. In this office Nicholas ſucceeded his brother in 1578. He ſpent his whole time in ſick-chambers, or in his cloſet, peruſing the ancient authors from Hippocrates downwards. He drew up the reſult of his reading, corrected and corroborated by his perſonal obſervation, in an aphoriſtic form, chiefly with the view of being ſerviceable to his ſons, Chriſtian and Charles, whom he deſtined for the medical profeſſion; but his friend the celebrated Foëſius, and ſeveral other perſons, having ſeen his manuſcript, prevailed upon him to publiſh it. It was firſt printed at Frankfort in 1580, in folio, under the title of "De Cognoſcendis et Curandis præcipuè internis humani Corporis Morbis, Libri tres, ex clariſſimorum Medicorum, tum veterum, tum recentiorum, Monumentis non ita pridem collecti." Boerhaave had ſo high an opinion of this author, that he edited this work, adding a preface to it, at Leyden, 1736, in two vols. 4to.

LEPO'IS (Charles), more generally known by his Latin name, *Carolus Piſo*, was ſon of the preceding, and born at Nancy in 1563. He was ſent at the age of thirteen to the college of Navarre, at Paris, where he remained five years, and diſtinguiſhed himſelf by his rapid advancement in the knowledge of the languages, belles lettres, and philoſophy. He received the degree of M. A. in the univerſity of Paris in 1581, and immediately commenced his career in the ſchools of medicine. After four years ſpent in the faculty at Paris, he went to Padua in 1585, and viſited the other ſchools and the learned men of Italy before he quitted that country. He returned to Paris in the beginning of 1588, and took his bachelor's degree in medicine, and two years afterwards became a licentiate; but he left Paris without having taken the degree of doctor, from inability to defray the expenſes of that ceremony, in conſequence of the ſmall income left him by his father. He therefore returned to his native city, where duke Charles III. of Lorraine appointed him his conſulting phyſician, and retained him near his perſon both at home and in his travels. Duke Henry II. likewiſe held him in the ſame eſtimation; and, among many other marks of his eſteem for Lepois, he inſtituted a faculty of medicine at Pont-à-Mouſſon, and nominated him dean and firſt profeſſor. In order to undertake theſe offices, he repaired to Paris, where he received the degree of M.D. which gave him the power of conferring the ſame degree upon others; and commenced the duties of his profeſſorſhip in November 1598. He had now an opportunity of diſplaying the ſtores of knowledge, which his acquaintance with the Greek and Latin, Arabic, Hebrew, Italian, and Spaniſh, languages, had enabled him to obtain; he was indefatigable in his obſervation of diſeaſes, and omitted no opportunity of examining by diſſection the bodies of thoſe who died; from which he juſtly anticipated the moſt important improvements would accrue to medicine. His reputation was elevated to the higheſt degree, ſo that he was the phyſician of all the honourable perſons in Lorraine. His zeal in the practice of his profeſſion continued unabated, and ultimately occaſioned his death at the age of ſeventy; for he died of the plague at Nancy, whither he had gone to adminiſter relief to thoſe afflicted by the peſtilence, in the year 1633. He left the following works, which have tranſmitted his reputation to poſterity; particularly the firſt, entitled Selectiorum Obſervationum et Conſiliorum de præteritis hactenus morbis, affectibuſque præter naturam ab aquâ, ſeu ſcrofâ colluvie ortis; Pont-à-Mouſſon, 1618, in 4to. This work paſſed through ſeveral ſubſequent editions, one of which (that of Leyden 1733) was publiſhed with a preface by the celebrated Boerhaave. A ſelection from, or an abridgement of, it was alſo printed in 1639, with the title of Piſo enucleatus, in 12mo. His other works were: 2. Phyſicum Cometæ Speculum, 1619, 8vo. 3. Diſcours de la Nature, Cauſes, et Remedes, tant curatifs que preſervatifs, des Maladies populaires, accompagnées de Dyſenterie et autres Flux de Ventre, 1623, 12mo. 4. He tranſlated from the Spaniſh into Latin, Ludovici Mercati Inſtitutiones ad uſum et examen eorum qui artem luxatoriam exercent; Frankfort, 1625, folio. 5. He likewiſe publiſhed the following eulogy of his firſt patron: Caroli III. Sereniſſimi Potentiſſimique Ducis Lotharingiæ, &c. Macariſmos, ſeu felicitatis et virtutum egregio Principe dignarum coronæ, 1690. *Eloy Dict. de la Med.*

LEPOME'RO, a town of New Mexico, in the province of Hiagui: 130 miles eaſt-north-eaſt of Riochico.

LEPORA'RIA, *ſ.* [from *lepus*, Lat. a hare.] A diſtemper of the eyes which will not ſuffer the eye-lids to cloſe.

LEPORA'RIUS, *ſ.* A grey-hound. *Cole.*

LEPORE'AN, *adj.* See LEPORINE.

LEP'ORINE, *adj.* [*leporinus*, Lat.] Belonging to a hare; having the nature of a hare.

LEPO'TI, a town of the principality of Georgia, in the province of Kaket: twenty-two miles ſouth-eaſt of Kaket, and ſixty north-eaſt of Teflis.

LEP'PE, a river of Germany, which runs into the Aggar in the county of Mark.

LEPPOWIR'TA, a town of Sweden, in the government of Kuopio: twenty-four miles ſouth of Kuopio.

LE'PRA, *ſ.* See LEPROSY.

LE'PRA LAN'KENG, a town of Thibet: ſixty-eight miles ſouth-eaſt of Toudſong.

LEPRA'RIA, *ſ.* in botany, a genus of the claſs cryptogamia, order algæ. Generic eſſential characters—Fructification in a powdery or floccular ſubſtance, moſtly clothing a thin cruſtaceous frond.

I. *Continued, without viſible frond.* Pulveraria.

Species. 1. Lepraria chlorina: thick, effuſe, deep yellow.
2. Lepraria latebrarum: thick, effuſe, grey.

II. *Continued, frond cruſtaceous.* Lepraria.

3. Lepraria alba: cruſt and fructification pure white.
4. Lepraria incana: cruſt thin, ſomewhat membranaceous, grey-glaucous; fructification hoary.
5. Lepraria lepiphæma: thin, milk-white; fructification very minute, mealy, paliſh-white.
6. Lepraria luteſcens: leprous, a little cracked, rugged, yellowiſh; fructification globular, of the ſame colour.
7. Lepraria flava: thin, mealy, bright golden yellow.
8. Lepraria baſſiæ: thin, ſaffron; fructification globular, ſcattered, orange-colour.
9. Lepraria rubens: cruſt and fructification pale red. β. L. putredinis: very thin, purpliſh. γ. L. variegata: variegated white and fleſh-colour.
10. Lepraria botryoides: cruſt and fruit deep green.
11. Lepraria cobaltiginea: very broad, roſy.
12. Lepraria antiquitatis: very thin, deep black.
13. Lepraria ſegeſtria: thin, grey.
14. Lepraria iolithus: thin, mealy, ſaffron red, becoming greyiſh. β. L. odoratus; cruſt and fructification carmine.

III. *In floccular rigid maſſes; frond cruſtaceous.* Spiloma.

15. Lepraria melanopa: thin, effuſe, blackiſh; maſſes of the fructification flat, broader, deformed, ſomewhat confluent, deep black.
16. Lepraria microclona: very thin, hoary; maſſes minute, ſcattered and ſomewhat confluent and branched, black.
17. Lepraria fallax: greyiſh, very thin; maſſes deformed, minute, flat, ſcattered, blackiſh-brown.

18. Lepraria

18. Lepraria vitiligo: whitiſh, very thin, membranaceous; maſſes roundiſh, a little convex, variegated grey and black.

19. Lepraria timidula: leprous, ſmooth, cracked, whitiſh; maſſes minute, crowded, oblong-deformed, tumid, rufous-brown.

IV. *In diſtinct or cluſtered white globular mealy ſpots, generally margined; frond cruſtaceous.* Variolaria.

20. Lepraria faginea: cruſt leprous, thin, glabrous, rugged, cracked, greyiſh-white; tubercles hemiſphærical, ſcattered, pure white.

21. Lepraria orbiculata: leprous, thin, granular, orbicular, bordered, greyiſh-white; tubercles central, minute, flattiſh, margined, of the ſame colour. *β.* Blackiſh; tubercles pure white.

22. Lepraria aſpergilla: tartareous, thin, rather ſolid, determined, with a ſmooth circumference, thinly cracked, grey; tubercles ſcattered, rather obſcure, ſuperficial, whiter. *β.* Effuſe, greyiſh white, ſlightly cracked, ſmoothiſh; tubercles appreſſed, ſomewhat margined, round, deformed, rather confluent, of the ſame colour.

23. Lepraria ercina: tartareous, ſomewhat determined, whitiſh, broken into patches, mealy, with a ſmooth cracked border; tubercles cluſtered, irregular, pure white.

24. Lepraria lactea: tartareous, determined, with a warty area, ſmooth, white, with a ſomewhat-radiate crenate-lobed border; tubercles nearly marginal, pure white.

25. Lepraria diſcoidea: leprous, mealy, white; tubercles becoming concave, deformed, margined, of the ſame colour.

26. Lepraria thelena: irregular, very thin, with a warty area, ſomewhat mealy, pure white; tubercles becoming conoid, bearing the fructification at top, which is very minute and of the ſame colour.

27. Lepraria leucoſtigma: blackiſh-brown, effuſe; tubercles ſcattered, concave, minute, white.

28. Lepraria viridula: thin, mealy, greeniſh-grey; tubercles hemiſpherical, green.

LEPRE'OS, in fabulous hiſtory, a ſon of Pyrgeus, who built a town in Elis, which he called after his own name. He laid a wager that he would eat as much as Hercules; upon which he killed an ox and ate it up. He afterwards challenged Hercules to a trial of ſtrength; and was killed.

LE'PRIA, an iſland on the coaſt of Ionia, mentioned by Pliny.

LEPRO'SE, *adj.* See LEPROUS.

LEPROS'ITY, *ſ.* [from *leprous.*] Squamous diſeaſe.—If the crudities, impurities, and *leproſities*, of metals were cured, they would become gold. *Bacon's Nat. Hiſt.*

LEPRO'SO AMOVEN'DO, *ſ.* in law, an ancient writ that lay to remove a leper, or lazar, who thruſt himſelf into the company of his neighbours in any pariſh, either in the church or at other public meetings, to their annoyance.

LEP'ROSY, *ſ.* [from λεπις, Gr. a ſcale.] A loathſome diſtemper, which covers the body with a kind of white ſcales.—Between the malice of my enemies and other men's miſtakes, I put as great a difference as between the itch of novelty and the *leproſy* of diſloyalty. *King Charles.*—Authors, upon the firſt entrance of the pox, looked upon it ſo highly infectious, that they ran away from it as much as the Jews did from the *leproſy*. *Wiſeman's Surgery.*

Itches, blains,
Sow all the Athenian boſoms; and their crop
Be general *leproſy*. *Shakeſp. Timon. of Athens.*

The Jewiſh law excluded lepers from communion with mankind, baniſhing them into the country or uninhabited places, without excepting even their kings. When a leper was cleanſed, he came to the city-gate, and was there examined by the prieſts; after this he took two live birds to the temple, and faſtened one of them to a wiſp of cedar and hyſſop tied together with a ſcarlet ribbon; the ſecond bird was killed by the leper, and the blood of it received into a veſſel of water; with this water the prieſt ſprinkled the leper, dipping the wiſp and the live bird into it; this done, the live bird was let go; and the leper, having undergone this ceremony, was again admitted into ſociety and to the uſe of things ſacred. *Lev.* xiii. 46, 47. xiv. 1, 2, &c.

This naturally leads us to inquire into the nature of the *Leproſy of the Hebrews*, which appears, from the writings of Moſes, to have prevailed extenſively among that people after they quitted Egypt under his guidance. Some have conſidered it as a diſeaſe peculiar to the Hebrew people, differing from every malady with which other nations have been afflicted, and ſent by Providence upon them as a ſupernatural puniſhment. Many of the ancient hiſtorians aſſert, that the Hebrews were expelled the Egyptian territories, in conſequence of the general, or even univerſal, prevalence of the leproſy among them. Manetho, an Egyptian, who wrote a hiſtory of the religion of his anceſtors, makes this aſſertion; and a ſimilar account is given by Lyſimachus, Plutarch, Juſtin, Tacitus, and others. The learned Jewiſh writer, Joſephus, however, treats theſe accounts as altogether fabulous; and ſtates ſome ſubſtantial arguments in proof of their abſurdity and falſehood. *Antiq. Jud.* lib. iii. and *Contra Apion*, lib. i. The concurrent teſtimony of the hiſtorians, phyſicians, and poets, of antiquity, indeed, goes to prove, that the inhabitants of Egypt, for many ages, were ſubject to *elephantiaſis*, and that, in fact, the diſeaſe originated on the borders of the Nile; and modern obſervation has aſcertained its more recent prevalence in the ſame countries. This circumſtance ſeems to have led ſome writers to conclude, that the Hebrew leproſy was the elephantiaſis, or *lepra Arabum*, as it has been called. But a conſideration of the ſymptoms, enumerated by the divine lawgiver, ſanctions the concluſion, which the majority of writers have drawn upon the ſubject, that it was neither the elephantiaſis, in its ordinary tubercular form, on the one hand, nor the ſcaly lepra of the Greeks (which, however, it more nearly reſembled in its external appearance) on the other; but that it was the *leucè* of the Greek writers, the *vitiligo* of Celſus, and the *white albaras* of Avicenna, and the other Arabian phyſicians. It will be ſufficient to compare the obſervations of Avicenna, when pointing out the diſtinction between the *white albaras* and the *alguada* (*morphæa* of the tranſlators), with the marks of diſcrimination detailed in the book of Leviticus, reſpecting the *unclean* leproſy, and thoſe forms of it which were not deemed unclean, in order to be convinced that the ſame diſeaſe is, in both caſes, under the view of the writer. Avicenna ſtates, that "both ſpecies of *alguada* (viz. *alphos* and *melas* of the Greeks) are confined to the ſkin, and merely ſuperficial; but the *albaras* affects both the ſkin and the fleſh, even to the bones." And, again; "There is this difference between the white alguada and the white albaras, that hairs grow upon the ſkin affected with the former, and they are of a *black* or *brown* colour; but thoſe which grow in the *albaras* are always *white*; and at the ſame time the ſkin is more depreſſed or ſunk than the reſt of the ſurface of the body. Some depreſſion may, perhaps, occur in the *guada*, but it is very ſlight. Moreover, a puncture of the ſkin with a needle draws blood in the *guada*; but no blood follows it in the *baras*, only a watery humidity; and this is incurable." *Canon. Med.* lib. iv.

In the five or ſix ſpecies of leproſy deſcribed by Moſes, namely, as commencing with a ſcab or bright ſpot, a ſwelling, a rawneſs of the fleſh, a boil or ulcer, and a burning or inflammation, as well as the leproſy in the head, and that connected with baldneſs, it will be obſerved, that the two characteriſtic ſymptoms are, the *whiteneſs of the hair* and the *depreſſion of the ſkin* conjoined, as in the quotation from Avicenna. The whiteneſs of the ſurface alone, without change of colour in the hair, or any depreſſion (as it occurs in the *alphos*, *morphæa*, or *lepra Græcorum*), is expreſsly aſſerted not to conſtitute an unclean

unclean leproſy: "When a man ſhall have in the ſkin of his fleſh a riſing, a ſcab, or bright ſpot, and it be in the ſkin of his fleſh like the plague of leproſy, then ſhall he be brought unto Aaron the prieſt, or unto one of his ſons the prieſts; and the prieſt ſhall look upon the plague in the ſkin of the fleſh. And, if the *hair* of the plague is *turned white*, and the plague in ſight be *deeper than the ſkin* of his fleſh, it is a plague of leproſy, and the prieſt ſhall look upon him, and pronounce him unclean." But, "if the bright *ſpot be white* in the ſkin of his fleſh, and in ſight be *not deeper* than the ſkin, and the *hair* thereof be *not* turned *white*; then the prieſt ſhall ſhut him up that hath the plague ſeven days," in order to aſcertain the nature of the diſeaſe by future inſpection. "And the prieſt ſhall look on him the ſeventh day; and behold, if the plague in his ſight be at a ſtay, and the plague ſpread not in the ſkin, then the prieſt ſhall ſhut him up ſeven days more; and the prieſt ſhall look on him again on the ſeventh day; and behold, if the plague be ſomewhat dark, and the plague ſpread not in the ſkin, the prieſt ſhall pronounce him *clean*; *it is but a ſcab*; and he ſhall waſh his clothes, and be clean." *Lev.* xiii.

Nay, it appears that the whiteneſs of the ſkin, even when extending over the whole body, was not conſidered as conſtituting of itſelf the true leproſy, unleſs ſome excoriation, or appearance of *raw fleſh*, was conjoined with it, or the hair was changed to white, or the depreſſion of ſurface was obſerved; and, even after excoriation had occurred, if it were ſcaled over, or became white, nevertheleſs the perſon was declared clean: "And, if a leproſy break out abroad in the ſkin, and the leproſy cover all the ſkin of him that hath the plague, from his head even to his foot, whereſoever the prieſt looketh; then the prieſt ſhall conſider; and, behold, if the leproſy have covered all his fleſh, he ſhall pronounce him clean that hath the plague; it is *all turned white*; *he is clean*. But, when *raw fleſh* appeareth in him, he ſhall be unclean. And the prieſt ſhall ſee the raw fleſh, and pronounce him to be unclean; for the raw fleſh is unclean; it is a leproſy. Or, if the raw fleſh turn again, and be changed into white, he ſhall come unto the prieſt, and the prieſt ſhall ſee him; and, behold, if the plague be turned into white, then the prieſt ſhall pronounce him clean that hath the plague; he is clean." And, in like manner, when the cutaneous diſeaſe originates from a *boil*, or from a *hot burning*, in either caſe, if, in the place of the boil or burning, there be "a white riſing, or a bright ſpot, white, and ſomewhat reddiſh, and it be ſhewed to the prieſt; and if, when the prieſt ſeeth it, behold, it be in ſight *lower* than the ſkin, and the *hair* thereof be turned *white*, the prieſt ſhall pronounce him unclean; it is a plague of leproſy broken out of the boil. But, if the prieſt look on it, and, behold there be *no white hairs* therein, and if it be *not lower* than the ſkin, but be *ſomewhat dark*; then the prieſt ſhall ſhut him up ſeven days, &c." and if, in the mean time, it remains ſtationary, "it is a burning *boil*, and the prieſt ſhall pronounce him clean." And, farther, when the hairy ſcalp, or the beard, is affected with leproſy, "if it be in ſight *deeper* than the ſkin, and there be in it a *yellow thin* hair," the perſon is pronounced unclean; "it is a dry ſcall, even a leproſy upon the head or beard." But, even if there ſhould be no depreſſion of the ſurface, yet if there be likewiſe no *black* and thick hair, (*i.e.* hair of the natural appearance,) it is ſtill to be conſidered as "the plague of the ſcall," and the perſon is to be ſhut up for ſeven days, and to be ſhaven, for the purpoſe of more accurate inveſtigation. Laſtly, when after theſe ſucceſſive ſeclusions and examinations, at intervals of ſeven days, in any of the caſes, the unclean leproſy is confirmed; then "the leper in whom the plague is, his clothes ſhall be rent, and his head bare, and he ſhall put a covering upon his upper lip, and ſhall cry, Unclean, unclean. All the days wherein the plague ſhall be in him, he ſhall be defiled; he is unclean; he ſhall dwell alone; without the camp ſhall his habitation be."

It is to be inferred, from the preceding quotations, that the Hebrews, during their migration from Egypt to the land of Canaan, were ſubject to a variety of diſeaſes of the ſkin and muſcular ſolids, to which the appellation of leproſy was applied, as a general term; but that the moſt incurable and loathſome ſpecies, which was called the *leproſy* by way of eminence, was that malady, which has been ſubſequently known in the countries which they traverſed and inhabited, and on all the eaſtern ſhores of the Mediterranean, under the various denominations above-mentioned, of *leuce*, *vitiligo*, *albaras alba*, and *elephantia alba*. That it was not the elephantiaſis of Aretæus, in which the face was deformed with tubercles, the lips thickened, the noſe dilated, the ears enlarged and tuberous, and the countenance diſtorted, with a reddiſh-brown complexion tending to black, and ultimately with an ulceration of the rugous and tuberculated parts, is obvious from a peruſal of the foregoing deſcription. The extreme *whiteneſs*, indeed, is mentioned in various parts of ſcripture, as characteriſtic of the leproſy, and is ſeveral times compared to that of ſnow. This *colour* is the only circumſtance that is ſtated in reſpect to the miraculous leproſy of the hand in Moſes himſelf, as well as in that of Miriam and Gehazi: (ſee Exod. iv. 6. alſo 2 Kings vi. 27. Num. xii. 10.) and the bright and ſmooth ſurface and depreſſion of the ſpots alſo afford a contraſt to the prominent and rough tubercles of elephantiaſis.

It is by no means clear that this leproſy was contagious, or was even deemed contagious; although ſo much care was enjoined by the law in the examination of the ſymptoms, and the expulſion of the diſeaſed from the camp was ſtrictly commanded, in caſe the exiſtence of the true leproſy were aſcertained. For, in the firſt place, no apprehenſion of the communication of the diſeaſe by infection is any-where expreſſed; the leprous perſon is ſaid to be *unclean*. But other circumſtances, where no contagion or communication of diſeaſe could be ſuſpected, were ſaid, in like manner, to render a perſon unclean; and the law enjoined, in theſe caſes alſo, a temporary ſeparation of the perſon from ſociety, and ſimilar rites, offerings, and ablutions, at the time of being declared clean before the prieſt. *Lev.* xv. Thus any iſſue or diſcharge from the body, the occurrence of the catamenia in women, child-bearing, &c. all rendered a perſon *unclean*, and equally ſubject to ſeparation and the ſubſequent ceremonies. It would ſeem, therefore, that the loathſome and foul nature of the diſeaſe, which inſpired this people with a ſimilar horror and diſguſt to that which is felt towards a corpſe, was the principal reaſon for the ſeverity of the law of excluſion, which was ordained againſt lepers. For we are informed by Joſephus himſelf, that, ſo far from being ſuppoſed to be capable of infecting thoſe about them with their diſeaſe, "lepers, in many countries, not only mix in ſociety, but are even held in high eſtimation; ſo far from being baniſhed, or looked upon with contempt, they are honoured, in warlike expeditions, with military dignities, and with offices of truſt in the adminiſtration of public affairs; neither are they excluded from the places of public devotion." *Antiq.* iii. 10. The ſcriptures, indeed, furniſh us with an example of the high ſtation of a leper, in the perſon of the Syrian general, Naaman, who was in great favour with his king. And even among the Iſraelites themſelves, it would ſeem that the excluſion of the leprous was not very rigidly enforced. For we find Gehazi, the ſervant of Eliſha, ſtill in the employment of the prophet, and converſing even with the king, after the leproſy had been inflicted on him "and his ſeed for ever;" (ſee 2 Kings, v. vi. and viii.) to ſay nothing of the four lepers ſitting at the gate of Samaria, who afterwards returned to communicate the news of the deſertion of the Syrian camp; (chap. vii.) And in after-times the leprous had free acceſs to Chriſt, and joined in the crowds that followed him. (Matth. viii.) They were alſo inhabitants of the towns and villages; for Jeſus was "*in the houſe* of Simon the leper, *in Bethany*." Ibid. xxvi. 6.

Little

Little can be ſaid, that ſhall poſſeſs any intereſt, reſpecting the treatment of the *leuce*, or Jewiſh leproſy. It was generally deemed an incurable diſeaſe in ancient times; and is almoſt unknown, we believe, at preſent in Europe. It ſtill perhaps appears occaſionally in Iceland, and other northern regions, as a precurſor, or as a modification, of the elephantiaſis, according to the obſervation of a late intelligent traveller in the iſland juſt mentioned. He ſtates, that he ſaw a woman affected with a horrible diſeaſe, which is there called *likthrau*, by which her face was ſo corroded as to preſent a moſt diſguſting ſpectacle. "Her legs and hands," he adds, "were ſwollen to an enormous ſize, theſe latter being alſo covered with a *thick* and *almoſt white* ſkin lying in *great wrinkles*." (Hooker's Journal of a Tour in Iceland, p. 186.) The thickened and rugous ſkin, with the ulcerations of the face, belong to elephantiaſis; while the morbid *whiteneſs* is characteriſtic of leuce. Mr. Hooker alſo expreſſes his opinion, that this diſeaſe was not contagious. Profeſſor Henſler mentions a caſe, which he once ſaw for a few minutes, and which appears to have reſembled that mentioned by Mr. Hooker: "The whole countenance was puffed up; the cuticle was of a dirty white or whitiſh-grey colour, dry and ſhrivelled; but ſoft to the touch, as if diſtended with a watery fluid; with fiſſures here and there, from which ſome exudation took place." The cuticle alſo exhibited ſome furfuraceous and powdery exfoliations. Henſler remarks, that the compariſon applied by Aaron to his ſiſter Miriam, in Numbers xii. 12. of ſuch a perſon to a dead and macerated fœtus, is a moſt happy illuſtration of the appearance: "Let her not be as one dead, of whom the fleſh is half conſumed, when he cometh out of his mother's womb." The phyſician who attended the patient, ſeen but once by Henſler, compared the appearance of the ſkin to that of thick, ſtiff, dried leather; it was ſo thick, that an experienced ſurgeon made ſeveral attempts to open a vein, without ſucceſs, in various parts of the body. There was great ſwelling, ſtiffneſs, and tenſion, of the eyelids, with a frequent ophthalmia, and great ſenſibility to light. A thick and fœtid cruſt covered the ſcalp. She was twice ſo nearly cleared of the leproſy, ſo as to go out of doors again; the firſt time by large doſes of conium with ſublimate of mercury; the ſecond, by tincture of cantharides, after antimonials and mercurials had increaſed the ſymptoms. A third time ſhe was improving much, under the uſe of ſmall doſes of arſenic, which, however, was neceſſarily omitted; and ſhe ultimately died. It is worthy of remark, that the leproſy, in this caſe, ſuſpended a pulmonary conſumption, the ſymptoms of which never afterwards returned.

With reſpect to the *leproſy of houſes* and *of clothes*, mentioned in the Moſaic code, it is probable that the expreſſion was merely analogical, the ſpots and diſcolorations which appeared upon the walls and articles of apparel being looked upon as reſembling the leprous ſpots; while, at the ſame time, as they were moſt probably the conſequence of humidity, the appearance of them might either actually accompany, or precede and prognoſticate, diſeaſes in the inhabitants of the houſes and wearers of the garments. See Lev. xiii. xiv. It is no-where ſaid that the diſeaſe, called leproſy, is capable of being communicated to the inhabitants or wearers, in theſe caſes; but that it is unclean. The garments were ordered to be burnt, and the ſtones to be taken away, and replaced by others, or the houſe ultimately to be deſtroyed, when, after certain inſpections by the prieſt, the greeniſh or reddiſh ſpots in them continued.

The *Leproſy of the Greeks* is principally characterized, as the term imports, by the formation of *ſcales* on the ſurface of the ſkin, which conſiſt of morbid laminæ of the cuticle, hard, thickened, opaque, and of a whitiſh colour, and appear in patches of different ſizes, having always nearly a circular figure. Such is the deſcription of the diſeaſe which has been left us by the Greek writers, and which is given as the character of the *lepra* by the beſt writer of the ſubject in our own time; we mean Dr. Willan. Hippocrates has not left any circumſtantial detail of the ſymptoms of lepra, but ſpeaks of it, together with the *alphos*, *pſora*, *lichenes*, &c. as an external blemiſh, rather than a diſeaſe. The later Greek writers, however, although brief in their deſcription of *lepra*, have pointed out the diſtinctions between it and thoſe ſimilar affections, with which it was conjoined by their predeceſſors. Aëtius ſtates, that it differs from the *leuce*, or Hebrew leproſy, in not penetrating deeper than the ſkin, and leaving the ſubjacent fleſh ſound; from the *alphos*, which, though ſcaly, is more ſuperficial; and from the *pſora*, in having large ſcales, like thoſe of fiſh; whereas, in the latter, only ſcurf, or branny exfoliations, appear. It muſt be here obſerved that the *pſora*, ſimply, ſignifies a ſlight ſcaly diſeaſe; and not the *ſcabies*, or itch, which is deſignated, together with the moiſt tetter, by the epithet *ulcerating pſora*. Paulus Ægineta, in a chapter On Lepra and Pſora, obſerves, that "both theſe diſeaſes are characterized by roughneſs and itching, and a ſeparation of a melancholic humour; but *lepra* affects the ſkin deeply, in circular patches, at the ſame time throwing off ſcales like thoſe of large fiſhes; whereas *pſora* is more ſuperficial, variouſly figured, and throws off little bran-like ſubſtances." *Lib.* iii. *cap.* 2.

In the treatment of lepra, the Greek phyſicians always premiſed bleeding and ſtrong purgative medicines; but they ſeem to have depended chiefly on external applications, ſuch as alum, ſulphur, nitre, lupines, cabbage-leaves, elm-bark, the dung of goats, mice, and foxes, human urine, and the gall of bears. They likewiſe uſed ſeveral vegetable and mineral ſubſtances, which had a corroſive or veſicating quality; as hellebore, colophonia, the roots of white lily, onion, bryony, aſphodel, ranunculus, and anemone, the ſeeds of muſtard, and horſe-raddiſh, quicklime, vitriol, &c. Remedies of this kind, or even bliſters, are, however, found to have only a temporary effect, their operation being ſoon ſucceeded by a re-production of the ſcaly cruſts. Liniments, compoſed of tar, or of ſome mercurial preparations, have been much employed, both in ancient and modern practice, with ſomewhat more beneficial effect.

Leproſy of the Middle Ages.—The hiſtory of Europe, from the ſixth to the fifteenth century, is ſcarcely leſs full of the deſcriptions of the phyſical diſtreſſes of the people, occaſioned by famine, peſtilence, and diſeaſes of the moſt loathſome and fatal kind, than of the political and moral evils which beſet them. Among the maladies of thoſe times, *leproſy*, under all the forms to which the term has been applied, appears to have exiſted ſo generally and unceaſingly, as to have claimed a more univerſal attention than even the plague itſelf. It was one of the firſt ſubjects, on which the active benevolence of the early Chriſtians exerted itſelf, and ultimately it abſorbed a very large proportion of the wealth of Chriſtendom, which was appropriated by the donations of the pious to the maintenance and relief of thoſe who were afflicted with it.

The general opinion, which was prevalent among the Greeks and Romans, that leprous diſeaſes originated in Egypt, is in ſome meaſure confirmed by the particular conſideration given to them in the firſt hiſtory of man; and the more copious and diſtinct deſcription of theſe diſeaſes, ſubſequently given by the Arabian phyſicians, as well as the accounts publiſhed by travellers in more recent times, (ſee thoſe of Proſper Alpinus, Tournefort, Niebuhr, Bruce, &c.) who witneſſed their frequent occurrence in that and the neighbouring countries, have led to a common belief, that the infection was brought into Europe, in the eleventh century, by the armies that returned from the cruſade. But, independently of the doubts which may be entertained, in reſpect to the contagious nature of *elephantiaſis* and *leuce*, there is ſufficient evidence recorded, eſpecially among the tranſactions of the ſaints, in proof of the prevalence of leproſy in the weſt, at a much earlier period. Lepers are mentioned in many

public acts, according to Muratori, in the sixth century; and Gregory of Tours speaks of a place, where these unfortunate persons were accustomed to wash themselves, as well as of an hospital appropriated for them. Gregory the Great, in the same century, likewise alludes to the subject, and particularly mentions one leper, *quem densis vulneribus morbus elephantinus defædaverat.* In the following century, Rhotaris king of the Lombards published an edict against lepers, by which they were considered as dead in the law, and enjoined not to come near to sound persons, but to appriſe them of their approach, by making a noise with a wooden clapper. There was a river near Asti in Lombardy, famous in those times for the cure of leprosy; whence, in the eighth century, the Lombards were considered as a filthy leprous people; and pope Sylvester, upon the plea of leprosy, dissuaded the king of France from marrying a Lombard princess. So early as the eighth century, St. Othmar in Germany, and St. Nicholas de Corbie in France, instituted leprous houses, which had been already numerously established in Italy. King Pepin in 757, and Charles the Great in 789, issued ordinances, by which the marriages of lepers were dissolved, and their association with the healthy prohibited. In the life of St. Athanasius, in the ninth century, lepers are also mentioned; and indeed, in general, the Acts of the Saints, compiled by the Bollandists, are replete with examples of the malady, throughout Europe, in the middle ages; even in the life of St. Antoninus, so early as the fourth century, a case of leprosy, *horrendissima elephantiæ lepra,* is mentioned. These facts imply the general prevalence of leprosy in Europe, long antecedent to the Crusades. It is clear, however, that many severe diseases afflicted Europe to a much greater extent, and with augmented virulence, about the period when those fanatical expeditions were executed, or rather from the tenth to the sixteenth centuries, than before; and, among the rest, the leprosy appears to have been every-where prevalent. Every country abounded with its hospitals, established for the exclusive relief of lepers, although the number of these institutions has been probably exaggerated. Several authors have, by an error in translation, quoted Matthew Paris for an assertion, that *nineteen thousand* lazarettos existed in Christendom; but that author only states, that the hospitalers were, at that period, possessed of 19,000 *manors:* "Habent *hospitalarii* novem decem millia *maneriorum* in Christianitate." It is affirmed, however, that Louis VIII. king of France, made bequests, in the year 1227, to two thousand *leproseries* within his own kingdom. In this country, there were a great number of these establishments. It is affirmed, that the city of Norwich alone contained five. The most extensive institution of this kind was in Leicestershire, at a place thence called Burton-Lazars; it was founded in the reign of king Stephen, and dedicated to the Virgin and St. Lazarus, and became possessed of immense riches; so that all the inferior lazar-houses in England were in some measure subject to the master of it, as he himself was to the master of the lazars at Jerusalem. (See Nichols's Hist. of Leicestershire.) In London there were six, according to Becket; the largest of which was that of St. Giles, without Temple Bar.

In all the towns where lazarettos were established, medical officers were appointed by the police, to examine all persons, who were supposed to be affected with leprosy, previous to their seclusion in those receptacles; indeed, where no such establishments existed, huts were erected a little way out of the towns (where also the hospitals were generally placed) for each individual leper. The rules and edicts, with regard to the conduct of the lepers, were, as far as the circumstances admitted of it, nearly copied from the Mosaic laws. It is obvious, however, from the writings of those physicians who held the office of examiners after the revival of learning, and indeed it was avowed by them, that the tubercular leprosy, or *elephantiasis,* was the disease, to the detection of which their inquiries were particularly directed. Gregory Horst, who was one of the appointed examiners at Ulm in Bavaria, at the end of the sixteenth century, has left us the particulars of the examination usually practised by himself and his colleagues, when summoned by the magistrates for that purpose. After the preliminary questions relative to the age and family of the person brought before them, they examined him respecting the existence of the disease in his parents and progenitors; his habits of life and his associates, with a view to the probability of contagion; his peculiar temperament, and previous state of health, and particularly as to the suppression of customary evacuations; and then as to the climate, soil, habitation, and diet, to which he had previously been accustomed. They then questioned him as the state of all the functions, mental and corporeal; and lastly, *denudatis partibus omnibus,* they examined the whole body, with a view to ascertain the presence or absence of the following external symptoms: First they inspected the head, to see whether the hair was beginning to fall off; whether that of the beard was becoming softer and thinner, and that of the eye-brows and eye-lashes was disappearing; and whether, when the hairs were pulled up by the roots, a part of the skin was brought away with them; whether the eyes were round and *grim,* the ears acuminated, the lips thick, the nose tumefied externally, the nostrils internally stuffed and ulcerated, the face unequally swelled with tubercles, and of a livid red hue? Whether the veins under the tongue were enlarged with tubercles, as if varicose? Whether the skin was unctuous, so that water ran off of it, or there were under it tubercles nearly without sensibility, especially behind the ears, and on the extremities? Whether the skin was rough, like that of an unfeathered goose, or affected with horrid fissures, and rugæ, resembling the hide of an elephant, or covered with warts, like the *grandines* of swine, or affected with *morphæa, impetigo,* or a dry and incurable *scabies?* Whether there were any nodes about the joints? Whether the muscles of the extremities, especially about the thumbs, were emaciated? Whether the nails were incurvated? Whether the skin was sensible to the puncture of the surgeon's needle? Whether there were offensive ulcers, with a bad habit of body, especially ulcerations and fissures in the fingers and toes? and whether the voice was hoarse and obtuse? They then drew some blood, for the purpose of examining it. "These symptoms being present," says the author, "we deem the disease *elephantiasis,* and decree that the patient, inasmuch as he is affected with an incurable and contagious leprosy, is to be separated from all communion with the healthy." *Obs. Med.* lib. vii.

It is obvious, however, from the acknowledgment of Horst himself, as well as from the concurring observations of several physicians before his time, that the elephantiasis was by no means the only disease of the kind admitted into the lazarettos. He goes on to observe, that, where the tubercles of the face, the thick lips, acuminated ears, flattened nose, round eyes, (the essential symptoms of elephantiasis,) are absent; yet, where the patients are affected only with a dry and foul scabies, with pustular eruptions, fissures, and branny exfoliations, which constitute the *psora* of the Greeks; or even with great itching, emaciation, ulceration, and exfoliations of thicker scales, affecting also the head and face, which are the *lepra* of the Greeks; nevertheless they are sent to the lazarettos, if they are poor, for the means of subsistence. "Hence it happens," he adds, "that here, and elsewhere, *very few* instances of real elephantiasis are found in the lazarettos, whilst *many* are there, affected only with an obstinate *psora* or *lepra Græcorum.*" We have also the direct testimony of an able observer, Van Foreest, (better known by his Latin appellation, Forestus,) who practised at Alcmaer and Delft, in the middle of the sixteenth century, and who has also left an account of the mode of examination of lepers, adopted by himself, that a very small proportion of the persons, who wandered about the Low Countries as lepers and beggars, were true lepers; but were merely affected

fected with ſcabies, or ſome external defædation of the ſkin. "Nay," he ſays, "*not one in ten* of them is truly a leper, or afflicted with the legitimate elephantiaſis." And he adds the authority of a phyſician at the Hague, who had, with him, lamented the careleſſneſs or ignorance of the public examiner at Haerlem, by whom a great number, who were the ſubjects of ſome ordinary cutaneous eruption, were declared leprous. But, above all, Reidlin, who was phyſician to the leper-houſe at Augſburg, affirms that, out of *fifty-nine* caſes, he ſaw but *one* which was elephantiaſis, and that in a ſlight degree; all the reſt were inſtances of the *pſora* and *lepra* of the Greeks. It is probable, moreover, that, in addition to all the ordinary cutaneous diſeaſes, which were thus denominated leproſy, the *ſcurvy* itſelf (we mean the true *ſcorbutus*, which was formerly ſo well known in our fleets, and which appears to have been not unfrequent in the middle ages, during periods of ſcarcity and famine) was confounded with the ſame diſeaſe. This idea was thrown out by Hoffman. Profeſſor Sprengel alſo ſuſpects that thoſe forms of leproſy, which have been called *mal de la roſa* in Aſturia, and *pellagra* in Lombardy, were ſcorbutic; and many analogies between the two diſeaſes are pointed out by Raymond.

Theſe leprous complaints began to decline in number and violence, in Italy, about the end of the fifteenth century, and in France, and Europe in general, in the ſixteenth. In the middle of the fifteenth century, indeed, the tubercular diſeaſe, elephantiaſis, was almoſt unknown in Italy; for Ant. Beniveni, who died very old at the beginning of the ſixteenth, obſerves, that he once ſaw at Florence a ſtranger affected with elephantiaſis; a diſeaſe, he ſays, ſcarcely ever ſeen (in his time) in Italy, and almoſt unknown to phyſicians. At the beginning of the ſixteenth century, Alex. Benedetti and Joh. de Vego omit the tubercular leproſy from the liſt of diſeaſes, mentioning it only curſorily, and not from experience; but the latter ſpeaks fully of *morphæa*, *impetigo*, *baras*, *alopecia*, *mal morto*, and other diſeaſes that have been claſſed with leproſy. About the middle of the ſixteenth century, Francis I. ordered the number of lepers in each maladrérie, or lazaretto, to be reported; and, after appropriating a ſufficient ſum for their ſupport, ordered the remainder of their revenues to be given to the grand almoner, for general uſe. In the ſeventeenth century, leper-houſes were ſtill continued, (though ſimilar meaſures had been generally adopted ſince the decline of the diſeaſe throughout Europe,) and were greatly abuſed by the admiſſion of beggars, and idle vagrants of all deſcriptions, who employed every ſpecies of trick to imitate leproſy, or to produce appearances of cutaneous diſeaſe. The elephantiaſis itſelf, however, ſtill occaſionally appeared, of which ſeveral recorded caſes are referred to by Henſler. Some writers, indeed, have ſuppoſed, that the changes, which took place from the cloſe of the fifteenth century downwards, were rather changes of names than an actual diſappearance or diminution of leproſy; and that the *venereal diſeaſe*, which was firſt noticed at that period, was in fact the *leproſy* with a new appellation. Indeed, ſome authors actually denominated the *morbus Gallicus*, or ſyphilis, a leproſy; as Campanella, who treats of it among other leprous diſeaſes, under the title of *lepra Gallica*. But, although the ſecondary ſymptoms of ſyphilis might be miſtaken for leproſy, or called leprous, in common with other ulcerations and cutaneous affections, in a conſiderable number of inſtances, and for ſome time; yet, as the learned and able Aſtruc, after Leonicenus and others, has ſhown, there were ſo many points of obvious and decided difference, in the ſymptoms and progreſs of the two diſeaſes, as rendered ſuch a confuſion to any great extent improbable. Nevertheleſs, when we reflect upon the unvarying adherence to ancient authority, which characterized the profeſſion for centuries after the revival of learning; and when we conſider, that the meaſles and ſmall-pox, for inſtance, were deemed the ſame diſeaſe, including alſo ſcarlet fever, ſo late as the time of Diemerbroeck; we ſhall readily conceive how ſlow the early phyſicians would be in acknowledging a new diſeaſe which had not been mentioned by the Arabians; and with what facility they might confound it with the old, under a denomination ſo vaguely interpreted as that of leproſy.

At all events, we are entitled to infer, from the preceding view of the ſubject, that, during the middle ages, moſt erroneous notions prevailed reſpecting the leproſy; and that the terrors of the ancients, reſpecting the contagious and unclean nature of *lèuce* and *elephantiaſis*, were transferred almoſt indiſcriminately to every chronic cutaneous diſeaſe, whether ſcaly, ſcabby, puſtular, or ulcerous, contagious or non-contagious, which then occurred. And, as we are now well acquainted with the latter claſſes of diſeaſe, and know that all the forms of ſcaly diſeaſe are void of any infectious quality, we muſt be ſatisfied, on the one hand, how miſtaken was the charity, which erected thouſands of hoſpitals, and appropriated immenſe treaſures, for the maintenance of thoſe who were affected by theſe diſorders, and for the fancied ſecurity of the healthy; while, on the other, we ſee the cruelty and abſurdity of the regulations and ceremonies, which were inſtituted in regard to ſuch patients, ſomewhat after the manner of thoſe enjoined in the thirteenth chapter of Leviticus, for the Jewiſh lepers. In fact, a perſon affected with the real or ſuppoſed leproſy was treated like a dead body; funeral obſequies were performed, and maſſes ſaid for the benefit of his ſoul. The whole is thus deſcribed by a French writer: "A prieſt, clothed in a ſurplice and ſtole, repaired with the croſs to the leper, who was prepared for the ceremony. The holy miniſter began by exhorting him to bear patiently, and in a ſpirit of reſignation and penitence, the incurable affliction with which God had ſtricken him: he then beſprinkled the ſufferer with holy water, and conducted him to the church. Here the leper put off his ordinary clothes; and, having put on a black habit prepared for the purpoſe, fell on his knees before the altar, between two treſtles, and heard maſs; after which he was again ſprinkled with holy water. This ceremony, it will be remarked, differed very little from that which is uſually performed at funerals. While the leper was conducted to the church, the ſame verſes were ſung as at burials; and after the maſs, which was alſo the ſame as that which was performed for the dead, the *Libera* was ſung, and the leper was then conducted to the houſe deſtined for him. When he had arrived, the prieſt again exhorted and conſoled him, and threw a ſhovel-full of earth on his feet. The hut (where there was no lazaretto) was ſmall, and was furniſhed with a bed and bedding, a veſſel for water, a cheſt, a table, a chair, a lamp, a towel, and other neceſſaries. He was preſented with a cowl, two ſhirts, a tunic, and a robe called *houſſe*, a little caſk, a funnel, a rattle *(des eliquettes)*, a knife, a ſtick, and a girdle of copper. Before the prieſt quitted him, he interdicted him from appearing in public without his leper's habit and naked feet; from going into churches, mills, or where bread was cooking; from waſhing his hands and clothes, &c. in the wells and brooks; from touching any commodities that he deſired to purchaſe at market, except with a ſtick, in order to point out the article wanted; and from entering houſes, or taverns, for the purpoſe of purchaſing wine, as he had only the privilege of remaining at the door, of aſking for what he required, and receiving it in his little caſk. He was farther enjoined not to draw water but with a proper veſſel; never to reply to the queſtions of any one who met him on the road, unleſs he was to *leeward*, in order that the inquirer might not be infected by his breath, and the contagious odour exhaling from his body; never to place himſelf in narrow roads; never to touch children, nor to give them any thing which he had touched; never to appear in public meetings; and never to eat or drink with any but lepers. In ſhort, theſe wretched people were regarded as dead among the living: their children were not baptized at the fonts; and the water employed at their baptiſm was thrown into lonely places.

When a leper was ſick, the prieſt adminiſtered the ſacrament to him, and extreme unction; and when he died he was buried in his hovel, or in the place of interment appropriated for the leprous." *Ogée, Abregé de l'Hiſt. de Bretagne*, prefixed to the *Dict. de Bretagne*.

In moſt places theſe miſerable outcaſts were allowed to enter the towns, near which their hovels or lazarettos ſtood, at certain times of the year, eſpecially about Eaſter and Chriſtmas. When they walked, or came into a town, they made a noiſe with their rattles, to warn paſſengers of their preſence. In ſhort, their ſituation was truly melancholy. The ties of marriage were diſſolved, where one of the parties only was affected; but they were allowed to marry when they could find a leprous companion. They were, indeed, allowed the uſufruct of property; but they could neither transfer nor inherit it; they were deemed to have ſuffered a civil death, and to be *hors de la loi mondaine*.

Yet not only were theſe laws executed againſt multitudes who were affected with cutaneous diſeaſes, neither properly leprous nor contagious; but it is even very queſtionable whether the true tubercular elephantiaſis itſelf, any more than the leſs formidable *baras alba*, or *leuce*, were actually contagious. We have already ſtated the reaſons which tend to diſprove the infectious nature of the latter. The evidence againſt the probability of contagion, in the caſe of *elephantiaſis*, reſts partly upon the facts which are caſually mentioned in more ancient times, and partly upon thoſe which have been more carefully and correctly aſcertained nearer to our own. When we deſcend to the early ages of Chriſtianity, we find theſe terrors perpetuated by the laws reſpecting lepers, which were at once the effect and the cauſe of a continuation of the popular opinions; but, at the ſame time, we find kings and biſhops mixing familiarly and frequently with theſe very objects of legal proſcription, and condeſcending to offices which require the cloſeſt contact with their perſons, not only without any expreſſions of apprehenſion, but without any one recorded inſtance of the diſeaſe being ſo communicated; we find, too, that for a term of ſeveral days, during certain faſts and feſtivals, theſe infected people were actually allowed to mix in the towns; facts which ſtand in direct contradiction to the traditional prejudices and laws upon the ſubject. Deſcending ſtill farther, to the period when learning and obſervation had again enlightened the minds of men, we find theſe very prejudices and laws extending equally to a numerous tribe of cutaneous diſorders which we know are not contagious, as to the elephantiaſis; an error which muſt render the accuracy of the opinion, as to the contagious quality of the latter, exceedingly queſtionable. At the ſame time we diſcover the contention between obſervation and pre-conceived opinion in the minds of the learned, which almoſt breaks forth in the admiſſion of the truth. Thus Fernel, who adopted the common notion of its contagious quality, admits nevertheleſs, that, from all the obſervations he has been able to make, he has never diſcovered a caſe which proved its exiſtence; and Foreſtus, Fabricius, Plater, &c, who ſtill held the popular opinion, expreſs their aſtoniſhment at ſeeing the daily commerce between the leprous and the healthy, even in married perſons, without any communication of the diſeaſe; ſo that they are compelled to aſcribe its origin to certain qualities of the air and the diet.

When we come to the evidence of our own times, we have ſtill more convincing teſtimony of the non-contagious nature of the tubercular leproſy. Dr. Thomas Heberden, ſtill retaining ſomewhat of the prejudices of education, when ſpeaking of the caſes of the diſeaſe which he ſaw at Madeira, ſays, "Notwithſtanding the juſt abhorrence which every one entertains of this loathſome diſeaſe, it certainly is not *ſo* contagious as is commonly imagined; and then he relates his obſervations, which prove that it is *not at all* contagious. "For I have never *heard* of any one," he adds, "who has contracted the diſtemper by contact of a leper; and, on the contrary, I not only am a daily *witneſs* of communication between lepers and other people, without the leaſt ill conſequences, but *know* ſeveral inſtances where a leprous huſband, married to a ſound wife, has cohabited with her for a long ſeries of years, and had ſeveral children by her, without her having contracted the leaſt ſymptom of the diſorder, although the children have inherited it; and *vice verſâ* between a leprous wife and ſound huſband. *Med. Tranſ. of the Col. of Phyſ.* vol. i. Still more recently, Dr. Adams has inveſtigated the nature of elephantiaſis, in the ſame iſland, where there is ſtill a lazaretto, near Funchal; and his obſervations not only confirm thoſe of Dr. Heberden, as to the non-contagious nature of the diſeaſe; but they alſo detect other miſtakes, which originated probably in the terrors of the imagination, when the diſeaſe had acquired the appellation of *ſatyriaſis* (from the acuminated ears, flattened noſe, and rugous front); namely, that ſo far from being poſſeſſed with a *libido inexplebilis*, the procreative appetite and power are gradually deſtroyed if the diſeaſe ariſe in the age of manhood, and never developed if it commence before that of puberty. See Adams on Morbid Poiſons, 2d edit. chap. 18.

It is true, that, about the middle of the 18th century, Dr. Hillary had deſcribed the elephantiaſis as occurring in the Weſt Indies, with all the characteriſtics attributed to it by the ancients. But the deſcription of that learned phyſician is but too obviouſly a tranſcript of the account given by Aretæus, uncorrected by his perſonal obſervation. In this the learned writer affords but one example, among a long ſeries of medical ſcholars, in whom authority but too often dimmed the eye of obſervation, or diſtorted its views.

If the leproſy of the middle ages, then, were not contagious, whence did it originate and ſpread ſo widely? Probably the hint thrown out by Foreſtus, Plater, and others, and more fully developed in the excellent treatiſe of Raymond, already often quoted, may afford an adequate explanation of the fact; to wit, that the uncultivated and marſhy condition of the ſoil; the conſequent humid and miaſmatous condition of the atmoſphere; the ſalt, putrid, indigeſtible aliment, and the frequent ſcarcity even of that which the phyſical and political diſorders of the times produced; the inſalubrious condition of the towns and habitations, both in reſpect to bad ſituation, want of cleanlineſs, and other pernicious circumſtances; in ſhort, theſe combined evils, which appear to have exiſted in thoſe times and countries where the leproſy, among other frequent and diſtreſſing maladies, prevailed, were, in all probability, the ſources from which theſe cachectic diſeaſes ſprung.

It appears from the account of Proſper Alpinus, a profeſſor of Pavia, who viſited Egypt late in the ſixteenth century, that both the lepra and elephantiaſis of the Greeks were common among *the poor* at that period; and he attributes them to the cauſes above mentioned: "They are compelled through poverty," he ſays, "to drink muddy and ſemi-putrid water; they eat the fleſh of camels and beef, and fiſh ſalted and half putrid, caught in the marſhes and lakes; but they principally live upon a ſort of cheeſe, immoderately ſalted and ſemi-putrid, which is ſold at a very low price:" a diet very much reſembling that formerly uſed on ſhip-board in long voyages; when, as we have been informed, the ſalted proviſion, which had been ſometimes two years in caſk, emitted an almoſt intolerable ſtench during its maceration, before being cooked.

From the fifth century, when the empire at length fell under the repeated aſſaults of the northern invaders, to the tenth, the fineſt parts of Europe lay in a ſtate of devaſtation; little cultivation was practiſed, all the arts were neglected or loſt, and clothing, habitations, and food, were alike inſufficient and unwholeſome; and for three centuries more this deſolation was increaſed, if poſſible, by the inceſſant wars that were waged. There were fourteen plagues in the fourteenth century, with intervals of but ſix years between each; and frequent famines. The food conſiſted, even in England, at a later period, of much ſalted proviſion,

proviſion, eſpecially in the winter, and of a hard and black bread, chiefly of rye, to the ſcarcity of which corn, rather than to its *ergoted* or diſeaſed condition, the ignis ſacer, malades ardens, and other ſimilar maladies, ſhould doubtleſs be attributed. So little were vegetables cultivated, indeed, or gardening underſtood, even in the ſixteenth century, in this country, that, in the year 1509, queen Catharine could not procure a ſalad, till Henry ſent to the Netherlands, and engaged a gardener to come over to raiſe the proper articles here. How totally deſtitute of ſuch diet muſt the people in general have been at a much later period!

In ſhort, in whatever country an uncultivated ſoil, a marſhy ſurface, and a humid atmoſphere, have been found, together with a diet generally conſiſting of a ſalted, ſemiputrid, inſufficient, or indigeſtible, aliment, and compoſed chiefly of animal fleſh or fiſh, with a ſmall proportion of nutritious vegetable matter; there, from the earlieſt times, human life has been ſhortened by the multiplication of peſtilential fevers and cachexies of a leprous and ſcorbutic nature. Therefore, as Raymond obſerves, even if the eccleſiaſtical writers of the middle ages had left us no records of the hiſtory of ſuch maladies; the hiſtory of the ſoil, of the circumſtances of the times, and of the food generally uſed, would afford an inconteſtible monument of the exiſtence of leproſy.

For the ſpecies or varieties of Lepra, as diſtinguiſhed by ſyſtematic writers on medicine at preſent, and their cure, ſee the article PATHOLOGY.

LE'PROUS, *adj.* Infected with a leproſy:

The ſilly amorous ſucks his death,
By drawing in a *leprous* harlot's breath. *Donne.*

LEP'SIA, in ancient geography, an iſland in the ſea of Rhodes, near the coaſt of Caria. *Pliny.*

LEPSI'NA, a town of European Turkey, in Livadia, anciently called *Eleuſis*; celebrated for the temple of Ceres, and the myſteries of her worſhip: conſiderable ruins remain. It is twelve miles north-weſt of Athens.

LEP'SIS, *ſ.* in the Greek muſic, is a name given to one of the rules of the ancient melopœia, called alſo ſometimes, *euthia*; by which the compoſer diſcerns in which of the three ſyſtems of ſounds he ſhould place his melody.

LEP'STI, a town of European Turkey, in the province of Macedonia, on the gulf of Saloniki: twelve miles ſouth of Jenitza.

LEP'TA, a man's name; the name of ſeveral Romans.

LEP'TA, *ſ.* [ſo called from λεπτος, Gr. ſlender, or minute; from the remarkable diminutiveneſs of its flowers.] In botany, a genus of the claſs tetrandria, order monogynia, natural order hederaceæ, *Linn.* (vites, *Juſſ.*) The generic characters are—Calyx: perianthium inferior, ſpreading, ſmall, divided into four ovate ſegments. Corolla: petals four, ſomewhat triangular, furrowed, inflexed, twice as long as the calyx. Stamina: filaments four, awl-ſhaped, inflexed, inſerted into the receptacle at the angle of the baſe of the petals; antheræ ovate, two-celled. Piſtillum: germen ſuperior, roundiſh, four-furrowed; ſtyle ſcarcely any; ſtigma obtuſe. Pericarpium: berry four-lobed, lobes ovate, ſlightly confluent towards the centre, ſingle-ſeeded. Seeds: roundiſh.—*Eſſential Character.* Calyx four-cleft, inferior; corolla of four triangular petals; berry four-lobed, four-celled, each cell containing a ſeed.

Lepta triphylla, or triple-leaved lepta; a ſingle ſpecies. A native of woods in Cochinchina, and called by the natives *cay mat.* This tree is about ten feet high, and exceedingly branched; leaves ternate, lanceolate, entire, waved, ſmooth; flowers white, very ſmall, in compound, ſmall, axillary cluſters. The habit of this genus very much reſembles that of CISSUS; but the character of its fruit appears to be eſſentially different.

LEPTADE'NIA, *ſ.* [from the Gr. λεπτος, ſlender or ſharp, and αδην, αδενος, a gland; expreſſive of the contracted acute termination of the maſſes of pollen, which makes a very peculiar part of the generic character.] In botany, a genus of the claſs pentandria, order digynia, natural order contortæ, *Linn.* (apocineæ, *Juſſ.* aſclepiadeæ, *Brown.*) Generic eſſential character—Corolla ſomewhat wheel-ſhaped; tube ſhort; orifice crowned with five ſcales, ſtanding between the ſegments; limb bearded. Crown of the ſtamens wanting. Antheræ unconnected, ſimple at the top. Maſſes of pollen erect, attached by their baſe, contracted and pellucid at the ſummit. Stigma pointleſs.

Mr. Brown has examined three ſpecies, reducible to this genus, in the Bankſian Herbarium, none of which are yet deſcribed, nor has he named or defined them ſpecifically. One was gathered by Forſkali. They are all natives either of the Eaſt Indies or of Africa. They appear to be perennial, herbaceous, climbing plants, clothed with a greyiſh impalpable powdery down. Leaves flat, oppoſite; umbels between the footſtalks, ſometimes cymoſe; ſtigma minute.

LEPTAN'THUS, *ſ.* [from the Gr. λεπτος, ſlender, and ανθος, a flower.] In botany, a genus of the claſs triandria, order monogynia, natural order junci, *Juſſ.* The generic characters are—Calyx: ſpathe inferior, of one leaf, convoluted, containing one or more flowers. Corolla: of one petal, inferior; tube thread-ſhaped, very long; limb regular, in ſix deep, nearly equal, oblong, ſegments. Stamina: filaments three, inſerted into the baſe of the limb, linear, ſhorter than the limb, one of them often longer than the reſt; antheræ vertical, roundiſh or oblong. Piſtillum: germen ſuperior, cloſely inveſted with the baſe of the tube, oblong; ſtyle thread-ſhaped, the length of the tube; ſtigma a little dilated, downy, ſomewhat concave. Pericarpium: capſule inveſted with the tube and the calyx, oblong, obſcurely triangular, of three cells and three valves, burſting at the angles, the partitions very narrow, from the centre of each valve. Seeds: numerous, in a double ſeries in each cell, ovate, longitudinally ſtriated.—*Eſſential Character.* Spathe of one valve; corolla of one petal; its limb in ſix deep ſegments, nearly equal; ſtigma ſimple; capſule ſuperior, of three cells and three valves. Seeds many.

None of the ſpecies of this genus have been brought alive to England, nor are they ſcarcely to be met with in herbariums. They all ſeem to be aquatics. Their flowers are inconſpicuous, and probably very tranſitory.

Species. 1. Leptanthus acutus, or ſharp-leaved leptanthus: leaves roundiſh-kidney-ſhaped, acute; ſpathe ſmooth, containing about three flowers. Gathered by Louis Boſe in Pennſylvania and Virginia. Stem creeping, taking root at the joints, leafy. Leaves ſtalked, the earlier ones floating, an inch or more in length and breadth, ſomewhat heart-ſhaped at the baſe, ſmooth like the reſt of the plant. Flowers from near the baſe of the footſtalks. Spathe an inch long. Corolla in two principal diviſions, each in three ſhorter ones, of which the middle one is broadeſt in the upper half, narroweſt in the lower. Two ſtamens bear round antheræ; the third, which is longeſt, an oblong one.

2. Leptanthus reniformis, or kidney-leptanthus: leaves roundiſh-kidney-ſhaped; ſpathe oblong, pointed, many-flowered. Native of marſhes and pools at Lima. Stem branched, ſtriated. Flowers three or four, of a pale green, their longer filament bearing a long arrow-ſhaped anther.

3. Leptanthus pubeſcens, or downy leptanthus: leaves heart-ſhaped, acute, the radical ones downy: ſpathe linear, many-flowered. Gathered by Lœfling in marſhes near Barcelona in South America. Stem a ſpan high. Flowers from a ſlit in the uppermoſt footſtalk, pale purpliſh blue.

4. Leptanthus cordatus, or cordate leptanthus: leaves cordate-oval, very blunt; ſpathe oblong, very obtuſe, about three-flowered. Found in South America by Von Rohr. Stem a ſpan high; leaves riſing above it, ſcarcely more than half an inch in length, on long ſtalks.

5. Leptanthus limoſus, or muddy leptanthus: leaves ovate-oblong; ſpathe lanceolate, ſingle-flowered. Native

of the muddy banks of rivers in Jamaica, Hiſpaniola, and the country of the Illinois in Canada; flowering in Auguſt. Stems ſeveral, very ſhort, each bearing only one or two ovate, ſmooth, erect, leaves, on long, thick, fiſtulous, ſtalks, from whoſe lower part ſprings a ſhort flower-ſtalk, with a ſingle-flowered, oblong, pointed, ſpathe; corolla blue. Stigmas ſix, according to Swartz, which is remarkable, and requires examination.

6. Leptanthus diverſifolius, or varying leptanthus: leaves partly ovate, inclining to heart-ſhaped, ſtalked; partly linear and ſeſſile. Spathe ſaid by Richard to conſiſt of two valves. Gathered by him in Guiana.

7. Leptanthus gramineus, or graſſy leptanthus: all the leaves linear. Gathered by Richard in the river Ohio; has the aſpect of Potamogeton gramineum.

LEPTAS'PIS, *ſ.* [from the Gr. λεπτος, ſlender, and ασπις, a ſhield.] In botany, a genus of graſſes, ſeparated from PHARUS by Mr. Brown, in his Prodr. Nov. Holl. 211, on account of the peculiar ovate concave outer valve of the corolla; but its habit and inflorescence are ſo like Pharus latifolia, that the author himſelf candidly expreſſes his doubts of the propriety of this meaſure.—One ſpecies was found by ſir Joſeph Banks in the tropical part of New Holland; another comes from the Molucca Iſles.

LEPTAURE'A, *ſ.* in botany. See ZOEGIA.

LEP'TINES, a ſon of Hermocrates of Syracuſe, brother to Dionyſius. He was ſent by his brother againſt the Carthaginians, and ſunk fifty of their ſhips. He was afterwards defeated by Mago, and baniſhed by Dionyſius. He continued faithful to the intereſts of his brother, though naturally an avowed enemy to tyranny and oppreſſion. He was at length killed in a battle with the Carthaginians.

LEP'TIS, the name of two cities of Africa; one of which, called *Major*, now LEBIDA, was near the Syrtes, and had been built by a Tyrian or Sidonian colony. The other, called *Minor*, now LEMTA, was about eighteen Roman miles from Adrumetum.

LEPTOCAR'PUS, *ſ.* [from the Gr. λεπτος, ſlender or ſharp, and καρπος, fruit; the minute ſeed or nut being pointed with the permanent baſe of the ſtyle.] A genus of hard ruſhy plants, inſtituted by Brown, (Prodr. Nov. Holl.) of nearly the ſame deſcription as Lepidoſperma; but more akin to the Linnæan Reſtio, from which it differs in having a ſimple ſingle-ſeeded nut, inſtead of a capſule with two or three cells and as many valves. The ſtems are generally quite ſimple, leafleſs, but clothed with ſheaths ſplit at one ſide. Flowers either in tufts, or in ſpike-like catkins. Examples of Leptocarpus, are Reſtio diſtachyos of Rottboll's Icones, and Schoenodum tenax of Labillardiere; (Nov. Holl. v. 2. t. 229.) Seven ſpecies are defined as natives of New Holland, and there are ſuppoſed to be ſeveral at the Cape of Good Hope, beſides the above, and the RESTIO imbricatus of Thunberg. See that article.

LEPTOCEPH'ALUS, *ſ.* [from the Gr. λεπτος, ſlender, and κεφαλος, head.] The SMALL HEAD; in ichthyology, a genus of apodal fiſhes introduced by Gmelin in his improved edition of Linnæus. The generic characters are —A ſmall narrow head, thin compreſſed body, and no pectoral fins. There is but one ſpecies known at preſent,

Leptocephalus Morriſii, Morris's leptocephalus; of which, in caſe other ſpecies ſhould be diſcovered, the character may be taken to be, the want of a tail-fin, and the aperture of the gills wide, and lying partly underneath the head. It was in the Britiſh Zoology of Mr. Pennant that this ſmall fiſh made its firſt public appearance under the name of the *Morris*, having been firſt diſcovered on the coaſt of the Angleſea by a gentleman of that name. Gronovius, to whom Mr. Pennant had communicated it, diſtinguiſhed it by the title of Leptocephalus. The deſcription given by Pennant is as follows: The length was four inches; the head very ſmall; the body compreſſed ſideways; extremely thin, and almoſt tranſparent; about the tenth of an inch thick, and in the deepeſt part about one third of an inch. Towards the tail it grew more ſlender, and ended in a point; towards the head it ſloped down, the head lying far beneath the level of the back. The eyes large; the teeth in both jaws very ſmall; the lateral line ſtraight; the ſides marked with oblique ſtrokes that met at the lateral edge; the aperture of the gills large. It wanted the pectoral, ventral, and caudal, fins: the dorſal fin was extremely low and thin, extending the whole length of the back very near the tail; the anal fin was of the ſame delicacy, and extended to the ſame diſtance from the vent. Gronovius obſerves, that, on account of the extreme tenuity of the body, the joints of the vertebræ appear to project ſo diſtinctly along the ſides, that it might almoſt paſs, on a curſory view, for a ſpecies of Tænia, or tape-worm; the vertebral joints, in ſome meaſure, expreſſing the papillary foramina on the bodies of thoſe animals. See the preceding Plate, fig. 5.

LEPTOLO'GY, *ſ.* in rhetoric, a minute deſcription of worthleſs things. *Phillips.*

LEPTOME'RIA, *ſ.* [named by Mr. R. Brown in alluſion to its ſlender habit; from the Gr. λεπτος, ſlender, and μερις, a portion or ſhare.] In botany, a genus of the claſs pentandria, order monogynia, natural order calycifloræ, *Linn.* (elæagni, *Juſſ.* ſantalaceæ, *Brown.*)

Eight ſpecies are defined by Mr. Brown, as natives of New Holland. They are ſlender branched ſhrubs, with ſcattered minute leaves, or none at all. Flowers minute, white, reddiſh, or green; generally ſpiked, with a ſmall deciduous bracte to each; ſometimes axillary, without bractes. The genus is akin to thoſe ſpecies of Theſium which grow at the Cape of Good Hope; but differs in its glandular nectary, which is either of one piece, lobed, crowning the germen, or compoſed of glands, each of which ſtands at the baſe of one of the ſegments of the calyx. Three of the ſpecies have a ſtarry five-rayed acute ſtigma, and five-cleft, ſpiked, bracteated flowers; the remaining four have a drier drupe, a notched blunt ſtigma, and five-cleft flowers: and all grow on the ſouth coaſt of New Holland. See THESIUM.

LEP'TON, a townſhip of the Weſt Riding of Yorkſhire, with 2180 inhabitants, including 478 employed in trade and manufactures: ſeven miles weſt of Wakefield.

LEPTOSPER'MUM, *ſ.* in botany. See MELALEUCA.

LEPTOSTACHY'A. See PHRYMA.

LEPTOSTO'MUM, *ſ.* [from the Gr. λεπτος, ſlender or narrow, and στομα, the mouth; expreſſive of the narrow orifice of the capſule.] In botany, a genus of the claſs cryptogamia, order muſci. Generic eſſential characters—Capſule oblong, without furrows, terminal. Lid hemiſpherical, without a beak; fringe a ſimple, flat, annular, undivided, membrane, from the inner coat.

The four known ſpecies of this genus are natives of the ſouthern hemiſphere. They are moſſes of a denſely-tufted mode of growth, with upright, branched, perennial, ſtems; leaves moderately ſpreading in every direction, broadiſh, entire, revolute, with a ſtrong midrib, and a terminal hair, which is ſuſpected by Mr. Brown to be ſometimes branched. Fruit-ſtalk terminal. Capſule either erect or drooping; tapering at the baſe into an inverſely conical apophyſis; much contracted at the mouth. Veil ſmooth and naked, deciduous.

1. Leptoſtomum inclinans, or flat leptoſtomum: leaves obovate, obtuſe; capſule drooping, obovate-oblong. Found by Mr. Brown in Van Diemen's Land, upon rocks and ſtones at the eaſt ſide of Table Mountain, near the ſummit, in 43° ſouth latitude, and from 3000 to 3500 feet perpendicular above the ſea. This moſs is two or three inches high. Stems but little branched, leafy in the upper part, denſely cloſed with ruſty down below. Leaves rather concave, very minutely dotted or reticulated, tipped with a twiſted hair one-fourth the length of each leaf.

2. Leptoſtomum erectum, or upright leptoſtomum: leaves oblong-parabolic, obtuſe; capſules oblong, erect. Found on the eaſt coaſt of New Holland, in a mountainous part of the country, growing on rocks near the banks of the

the rivers Hawkeſbury and Groſe. Stems ſimple or branched, clothed with ruſty down in their lower part, leafy above.

3. Leptoſtomum gracile, or ſlender leptoſtomum: leaves ovate-oblong, rather pointed; terminal hair half their length; capſule oblong, ſtraight, drooping. Gathered by Mr. Archibald Menzies, at Duſky bay in New Zealand. Stems denſely tufted, ſomewhat branched, about an inch high, thickly clothed with ruſty down in their lower part. Leaves yellowiſh-green, dotted, cloſe-preſſed when dry, pellucid, ſtrongly revolute, with a very thick rib, and a ſmooth terminal hair. Fruit-ſtalk near two inches high, ſlender, tawny, with a ſheath at the bottom, the ſummit very ſlender and drooping.

4. Leptoſtomum Menzieſii, or Menzies' leptoſtomum: leaves oblong-lanceolate, acute; terminal hair a quarter their length; capſule cylindrical, drooping recurved. Diſcovered by Mr. Menzies at Statenland in 1787. Stems half an inch or more in height, moſtly ſimple, with denſe ruſty fibres and roots. Fruit-ſtalk about an inch high, ſolitary, erect.

Mr. Brown with good reaſon ſuſpects that the Bryum macrocarpum of Hedwig may belong to this genus. If ſo, there is an error in the delineation of its fringe; and it will prove the only known ſpecies whoſe leaves are tipped with a branched hair. *Linn. Tranſ.* vol. x. p. 320.

LEP'TUM, *ſ.* in antiquity, a ſmall piece of money, which, according to ſome, was only the eighth part of an obolus; but others will have it to be a ſilver or braſs drachm.

LEPTUN'TICA, *ſ.* With phyſicians, attenuating medicines.

LEPTU'RA, *ſ.* [from the Gr. λεπτὸς, ſlender, and οὐρὰ, tail.] The WOOD BEETLE; in entomology, a genus of coleopterous inſects. Generic characters—Antennæ ſetaceous; palpi four, filiform; wing-caſes tapering towards the tip; thorax ſlender and rounded. Thoſe of the Lepturæ which have the lip entire, conſtitute the genus Donacia of Fabricius; and ſuch as have the lip bifid form a part of the Lepturæ of that author; for the latter do not excluſively conſiſt of thoſe inſects which, according to the Linnæan character, belong to Leptura; Leptura abbreviata of Fabricius, for example, is Necydalis major of Linnæus, and Leptura variegata the Gmelinian Necydalis variegata. The Leptura tribe is allied to the Cerambyx, and contains 128 ſpecies, ſome of which are of conſiderable beauty. The larvæ of the wood-beetles are found, like thoſe of the Cerambyx, in the perforated trunks of trees; and, like them, they devour the pulveriſed wood when digging their retreat.

Species. I. Lip entire. 1. Leptura aquatica, the water leptura. So named from its being particularly found in the neighbourhood of water, frequenting the plants which grow near the water's edge. It is about half an inch in length, and of a golden-green colour, ſometimes varying into copper-colour, purple, or blue; and is diſtinguiſhed by having a tooth or proceſs on the thighs of the hind-legs, and five ſuch ſerratures on the legs themſelves. Lip entire. Inhabits Europe.

2. Leptura faſciata, the banded leptura: golden; wing-caſes with a purple longitudinal band. The Leptura aquatica faſciata of Degeer. Inhabits watery places in Europe. The thighs ſometimes armed with teeth.

3. Leptura micans, the gloſſy leptura: hind thighs two-toothed; all the ſhanks ſimple; ſhells gloſſy. Antennæ blackiſh, the joints pale teſtaceous at the tip; head with a line down the middle; thorax green channelled, ſmooth; ſhells ſtriate, punctured; body beneath downy; legs teſtaceous; hind-thighs thickened. Inhabits Europe.

4. Leptura feſtucæ: hind-thighs toothed, thickened; body black-blue. Shells ſtriate, punctured; hind-thighs ſhort. Inhabits Germany, on the Feſtuca aquatica.

5. Leptura dentipes: hind-thighs one-toothed; ſhells green with a purple ſtripe down the middle; abdomen and legs golden. Antennæ blackiſh; head punctured, with a line down the middle; thorax channelled, punctured; ſhells rounded, with an impreſſed gold dot near the margin. Inhabits Germany, on aquatic plants.

6. Leptura marginata: hind-thighs one-toothed; ſhells golden, the edge and ſpot at the baſe rufous; abdomen and legs ſilvery. Antennæ black, the joints ſilvery at the tip; head punctured, lined; thorax wrinkled channelled; ſhells minutely punctured, truncate. Inhabits with the former ones.

7. Leptura nymphææ: hind-thighs toothed; thorax and ſhells coppery; body cinereous downy. Head coppery; antennæ and mouth black; thorax channelled, with a gibbous dot each ſide; ſhells with crenate ſtriæ; body beneath covered with ſilvery down. Found frequently on the leaves of the Nymphæa alba.

8. Leptura ſagittariæ: hind-thighs one-toothed; ſhells green-gold, minutely punctured, truncate; abdomen and legs golden. Antennæ blackiſh; head braſſy, channelled; thorax wrinkled, channelled; ſhells ſtriate, punctured. Inhabits Germany.

9. Leptura ænea: hind-thighs one-toothed; ſhells braſſy, equal, rounded; abdomen and legs braſſy. Head ſmooth, with a line down the middle; thorax channelled, ſmooth, with a tubercle each ſide; ſhells finely ſtriate, punctured; tarſi black. Inhabits Germany.

10. Leptura violacea: hind-thighs one-toothed; ſhells violet, rounded; abdomen covered with ſilvery down. Antennæ black; head and thorax channelled; legs black. Inhabits Germany.

11. Leptura diſcolor: hind-thighs one-toothed; ſhells braſſy or black, rounded; legs red-teſtaceous. Antennæ red-teſtaceous; thorax tuberculate; ſhells obſcurely ſtriate, punctured; hind-thighs clavate. Male; head, thorax, and ſhells, black; female, braſſy. Inhabits Germany.

12. Leptura holoſericea: hind-thighs toothed; body blackiſh-violet; antennæ and legs black-brown. Inhabits Germany.

13. Leptura paluſtris: hind-thighs toothed; body blackiſh-violet; antennæ and legs cheſnut. Inhabits Germany.

14. Leptura bicolor: hind-thighs toothed; body gold; thorax and ſhells green, the latter ſtriate punctured, with ſcattered impreſſed dots. Inhabits Europe.

15. Leptura fuſca: hind-thighs one-toothed; body brown; ſhells ſtriate, punctured; mouth, antennæ, and legs, rufous. Inhabits Europe.

16. Leptura rufeſcens: hind-thighs toothed; body reddiſh bronzed, beneath cinereous bronzed; ſhells ſtriate, punctured with crenate wrinkles. Inhabits Europe.

17. Leptura nitida: hind-thighs toothed; body ſhining, green-gold; ſhells ſtriate punctured, with crenate wrinkles, and a broad common purple-green fillet; abdomen, antennæ, and legs, gold. Inhabits Europe.

18. Leptura cœrulea: hind-thighs toothed; body blue; ſhells ſtriate, punctured, with crenate wrinkles; antennæ braſſy. Inhabits Europe.

19. Leptura clavipes: hind-thighs unarmed; body braſſy; abdomen covered with ſilvery down; antennæ black, rufous at the tip; thorax and ſhells ſtriate and punctured; legs rufous; hind-thighs clavate. Inhabits Germany, on aquatic plants.

20. Leptura faſciculata; hind-thighs unarmed; body black; hind legs long, the ſhanks with a tuft of long hairs at the tip. Inhabits Cayenne; body very ſlender, with a ſilvery gloſs beneath.

21. Leptura ſimplex: hind-thighs unarmed; body ſhining, braſſy. Inhabits Europe, on aquatic plants; ſhells ſtriate, punctured.

22. Leptura linearis: hind-thighs unarmed; ſhells linear, truncate, ſhining-braſſy; legs ſubteſtaceous. Antennæ blackiſh; head punctured, lined; thorax rugged, channelled; ſhells finely ſtriate, punctured; abdomen cinereous. Inhabits Germany.

23. Leptura hydrocharis: hind-thighs unarmed; ſhells cinereous gloſſy, rounded at the end; body and legs cinereous. Antennæ cinereous; head lined; ſhells obſcurely

ſcurely ſtriate, punctured; body beneath and legs cinereous. Inhabits Germany.

24. Leptura mucronata: hind-thighs unarmed; body above livid; beneath, head, and antennæ, black; thorax with two divergent lines; ſhells ſpinous at the end. Mouth yellow; lines on the thorax black; ſhells ſtriate, punctured, the punctures black; ſcutel black; legs livid, the joints black. Inhabits Germany.

25. Leptura cinerea: hind-thighs unarmed; body cinereous with coppery ſpecks. Inhabits Pomerania.

26. Leptura craſſipes: hind-thighs unarmed; body green bronzed, beneath cinereous bronzed; ſhells ſtriate, punctured with tranſverſe ſmall lines; mouth, antennæ, and legs, rufous. Inhabits Europe.

27. Leptura vulgaris: hind-thighs unarmed; body ſilvery-green; ſhells ſtriate, punctured, with crenate wrinkles, and a broad common purple-green fillet; head, abdomen, and legs, ſilvery-aſh. Inhabits Europe.

II. Lip bifid. 28. Leptura unipunctata; black; ſhells rufous with a black dot in the middle. Inhabits Dreſden.

29. Leptura haſtata: black; ſhells red, the tip and future in the middle black. Segments of the abdomen with ſilvery down at the edge. Inhabits Southern Europe.

30. Leptura bipunctata: black, villous; ſhells livid with a black dot in the middle, future and tip. Shells rounded at the tip. Inhabits Siberia.

31. Leptura tomentoſa: thorax villous golden; ſhells teſtaceous, tipt with black. Head and antennæ black; ſhells ſmooth, ſlightly notched at the tip; abdomen covered with ſilvery down; tail emarginate; legs black. Inhabits France.

32. Leptura melanura: black, ſhells reddiſh or livid, the future and tip black. Inhabits Europe, on flowers.

33. Leptura futuralis: black; ſhells and legs livid; future and tip of the ſhells black. Antennæ black, the firſt joint livid at the tip; head and thorax black villous; body clothed with ſilvery down. Inhabits Keil.

34. Leptura livida: black; ſhells teſtaceous immaculate; legs black. Shells rounded at the tip, and hardly emarginate. Inhabits Germany.

35. Leptura ſtrigilata: black; ſhells teſtaceous with a blackiſh fillet. Inhabits Sweden; ſmall; ſhells ſlightly emarginate.

36. Leptura emarginata: black; ſhells purple, the tip emarginate black. Abdomen two-toothed at the end, the ſegments ſhining ſilvery at the baſe. Inhabits Cayenne.

37. Leptura ſanguinolenta: black; ſhells ſanguineous. Male; ſhells teſtaceous tipt with black. Varies in having the ſhells edged with black. Inhabits Europe.

38. Leptura meridiana, the noon wood-beetle: thorax ſubſpinous; ſhells faſtigate; breaſt ſhining. This is one of the larger European ſpecies, often meaſuring an inch in length, and is a very common inſect during the decline of ſummer in fields and woods, generally appearing in the hotteſt parts of the day. It is of a dull brown colour above, ſometimes yellowiſh-cheſnut; and beneath is of a brilliant tawny yellow, ſhining with the luſtre of ſatin. Lip bifid. It has very much the general appearance of a Cerambyx; and might perhaps with equal propriety be referred to either genus. It is ſhown on the preceding Plate, at fig. 6.

39. Leptura villa: ferruginous; antennæ, ſhells, and breaſt, brown. Antennæ dark brown, the firſt joint rufous; head rufous; eyes black; hind angles of the thorax acute. Inhabits England.

40. Leptura rubra: black; thorax, ſhells, and ſhanks, purple-red. Inhabits Europe.

41. Leptura teſtacea: black; ſhells teſtaceous; ſhanks rufous; thorax rounded behind. This is ſuppoſed to be only the male of the laſt. Inhabits Europe.

42. Leptura pubeſcens: black, with cinereous down; rib of the wings teſtaceous at the baſe. Inhabits Sweden; reſembles L. teſtacea.

43. Leptura virens: ſilky-greeniſh; antennæ varied with brown and green. Inhabits Europe.

44. Leptura ſmaragdula: ſilky-greeniſh; antennæ and legs black. Inhabits Sweden; half the ſize of the preceding.

45. Leptura atra; body entirely deep black. Abdomen with white ſilky down; legs ſometimes teſtaceous. Inhabits Europe.

46. Leptura humeralis: black; ſhoulders and abdomen ferruginous. Inhabits Germany.

47. Leptura exclamationis: black; ſhells with a yellow line down the middle, and a dot at the baſe. Shells truncate; abdomen covered with ſilvery down. Inhabits Sweden; ſmall.

48. Leptura futurata: cinereous; ſhells teſtaceous, with a black future. Antennæ teſtaceous, tipt with black; head, thorax, and abdomen, with cinereous down; ſhells ſmooth; legs rufous, the joints black. Inhabits Germany.

49. Leptura ſcutellata: black; ſcutel white. Shells emarginate; abdomen ſilky-white. Inhabits Italy.

50. Leptura lurida: ferruginous; ſhells teſtaceous. Inhabits the deſerts of Hircania.

51. Leptura femorata: black; thighs rufous at the baſe. Fore-ſhanks rufous. Inhabits Saxony.

52. Leptura ruficornis: body, antennæ, and legs, rufous. Body covered with yellowiſh down. Inhabits Italy.

53. Leptura marginata: black; edge of the ſhells and hind-ſhanks rufous. Body duſky. Inhabits Norway.

54. Leptura nigra: ſhells tapering; body black, poliſhed; abdomen red. Inhabits Europe.

55. Leptura præuſta: body covered with golden pubeſcence; head and tip of the ſhells black. Firſt joint of the antennæ ferruginous; legs red. Inhabits Europe.

56. Leptura quadri-guttata: brown; ſhells black, with two ferruginous dots at the baſe. Thorax with cinereous down; thighs ferruginous at the baſe. Inhabits Saxony.

57. Leptura roſtrata: dull braſſy; legs yellow. Antennæ yellowiſh at the baſe, thorax and ſhells ſmooth. Inhabits Africa, on the Ammi majus.

58. Leptura luteicornis: yellow; thorax with two black lines; ſhells with four black bands. Head and antennæ yellow; thorax tapering before; legs yellow; hind thighs with a black ring. Inhabits Carolina.

59. Leptura quadri-maculata: black; ſhells teſtaceous with a black ring. Inhabits Germany.

60. Leptura quadri-puſtulata: black; ſhells with two remote ferruginous ſpots. Abdomen with golden down. Inhabits Sweden.

61. Leptura octo-maculata: black; ſhells livid with four black ſpots. Inhabits Europe.

62. Leptura interrogationis: black; ſhells yellow, with a longitudinal curved black line, and four marginal ſpots. Spots one to three, ſometimes connected with the line. Inhabits Sweden.

63. Leptura marginella: blackiſh; future of the ſhells, two marginal ſpots, and tip, yellow. Shells with a black dot at the tip. Inhabits Italy.

64. Leptura ſex-maculata: black; ſhells teſtaceous with three indented black bands, the anterior one a little interrupted. Inhabits Europe.

65. Leptura ſeptem-punctata: black; thorax teſtaceous, with a black dot; ſhells teſtaceous, with ſeven black dots. Head with a large frontal teſtaceous ſpot; abdomen teſtaceous; legs black. Inhabits Hungary; ſmall, ſlender.

66. Leptura duodecima-maculata: black; ſhells yellow, with ſix black ſpots. Inhabits Siberia; larger than L. ſex-maculata.

67. Leptura attenuata: ſhells tapering, yellow, with four black bands; legs teſtaceous. Abdomen rufous tipt with black, ſometimes wholly black. Inhabits Europe.

68. Leptura calcarata: black; ſhells tapering, yellow, with four black bands, the firſt punctured, ſecond interrupted; hind-ſhanks two-toothed. Antennæ black, the joints yellow at the baſe; thorax ſubſpinous. Inhabits Germany.

69. Leptura ſubſpinoſa: black; ſhells teſtaceous, with four black bands, the firſt punctured; antennæ and legs

yellow. Head black with a fulvous frontal band; ſhells emarginate; three ſegments of the abdomen yellow. Inhabits Germany; probably the female of the laſt.

70. Leptura ſinuata: black; ſhells with two yellow ſpots, and two dots. Antennæ black, the joints yellow at the baſe; three ſegments of the abdomen yellow; legs yellow; hind-thighs tipt with back. Inhabits Keil; ſize of the laſt.

71. Leptura quadri-faſciata: black; ſhells teſtaceous with four indented black bands. Inhabits Europe.

72. Leptura aurulenta: black; fore and hind margin of the thorax golden; ſhells teſtaceous with four ſimple black bands. Shells emarginate; ſegments of the abdomen edged with white. Inhabits Germany; leſs than the preceding.

73. Leptura dubia: black, ſubvillous; ſhells teſtaceous, dotted with black; legs black. Body clothed with fulvous down. Inhabits Siberia.

74. Leptura ſex-guttata: black; ſhells with three yellow ſpots. Inhabits Germany.

75. Leptura tri-faſciata: black; ſhells with three yellow bands, the firſt interrupted. Antennæ pale aſh, black at the baſe; firſt band on the ſhells compoſed of two dots, ſecond with a ſmall tooth, third lunate. Inhabits Sweden.

76. Leptura reticulata: black; ſhells teſtaceous at the baſe, tipt with black and reticulate with yellow. Antennæ black, the joints yellow at the baſe; legs rufous, the joints black. Inhabits Italy.

77. Leptura ſericea: green-blue; ſhells ſubfaſtigate. Inhabits Europe.

78. Leptura morio: thorax orbicular; body totally black, poliſhed. Size of L. collaris. Inhabits Sweden.

79. Leptura collaris: thorax globular, and with the abdomen red; ſhells black. Inhabits Europe.

80. Leptura virginea: thorax globular, black; ſhells violet; abdomen rufous. Inhabits Europe.

81. Leptura carbonaria: black; ſhells teſtaceous tipt with brown. Inhabits Europe.

82. Leptura nigella: black; ſhells teſtaceous; fore-ſhanks rufous. Inhabits Europe.

83. Leptura erythropus: black; legs red; baſe of the thighs, tips of the ſhanks, and ends of the legs, black. Inhabits Europe.

84. Leptura quinque-maculata: black; antennæ annulate with black; legs and ſhells teſtaceous, the latter with five black ſpots and three bands. Inhabits Europe.

85. Leptura fuſca: brown, with golden down; baſe of the antennæ teſtaceous; fore-thighs and ſhanks teſtaceous, the former with four teſtaceous bands, the latter teſtaceous at the baſe. Inhabits Europe.

86. Leptura reveſtita: teſtaceous; ſhells, breaſt, and antennæ, black. Inhabits Germany; ſize of L. teſtacea.

87. Leptura cerambyciformis: black; ſhells yellow, with three black bands, the firſt compoſed of dots. Inhabits Hungary and Auſtria.

88. Leptura Ruſſica: black with whitiſh down; ſhells yellowiſh, with five black ſpots and a line in the middle. Inhabits Ruſſia.

89. Leptura lævis: black, beneath ſilky; antennæ yellowiſh-brown; fore-legs ferruginous. Inhabits Pomerania.

90. Leptura ſolſtitialis: black; antennæ ferruginous at the baſe; legs and ſhells yellow, the latter edged with black. Inhabits Berlin.

91. Leptura ſplendida: black with yellow down; ſhells glabrous at the tip; legs fulvous; antennæ brown, ferruginous at the baſe. Inhabits Germany.

92. Leptura quadri-notata: black with yellowiſh down; beneath with whitiſh; antennæ brown at the baſe; thighs ferruginous at the baſe; ſhells punctured with two orange ſpots. Inhabits Berlin.

93. Leptura plumipes: brown, punctured; thighs ſubclavate; hind-legs very long, the ſhanks tufted at the tip.

94. Leptura rufipes: black; legs rufous, the thighs black at the baſe. Inhabits Germany.

95. Leptura octo-notata: black; ſhells teſtaceous, with ſix black ſpots and tip. Inhabits Saxony.

96. Leptura ſchalleri: brown; baſe of the ſhells with four rufous ſpots. Inhabits Germany.

97. Leptura uſtulata: black; thorax and ſhells teſtaceous, tipt with black; legs teſtaceous. Inhabits Germany.

98. Leptura pumili: brown; fore-legs teſtaceous, the thighs black above. Inhabits Saxony.

99. Leptura pariſina: black; baſe of the antennæ and thighs reddiſh. Inhabits Germany.

100. Leptura bipuſtulata: ſhells black, ſtriate punctured, with two teſtaceous ſpots. Inhabits Upſal.

101. Leptura verna: black; fore-ſhanks fulvous. Inhabits Denmark.

102. Leptura Scopolii: abdomen and thorax at the poſterior margin red; wing-caſes teſtaceous, pellucid, and attenuated; tip and margin below the middle black.

103. Leptura nigripes: black; ſhells dull yellow-teſtaceous; legs black.

104. Leptura maculoſa: black; ſhells livid, teſtaceous; antennæ ſpotted with black.

105. Leptura lunatula: black; thorax with a narrow yellow band behind; ſhells with two ferruginous lunules. Inhabits the Cape of Good Hope.

106. Leptura bicolorata: pale ferruginous; eyes, ſhells, wings, and tail above, black. Inhabits America.

107. Leptura vittata: pale teſtaceous; antennæ annulated with fuſcous; wing-caſes dotted with black, with four yellow ſtripes. Inhabits America.

108. Leptura decem-punctata: black; thorax ſubglobular; ſhells with ten dots. Inhabits Ural.

109. Leptura varia: villous, hoary; thorax ſubglobular; ſhells black with white dots and four interrupted bands. Inhabits Ural.

110. Leptura viridis: greeniſh; thorax ſubovate with two darker lines, the back black. Inhabits Siberia.

111. Leptura piloſa: black, with cinereous down; thorax globular; ſhells faſtigate.

112. Leptura nitens: thorax globular, and with the abdomen black; with yellowiſh ſhining down; ſhells black with four broad yellow bands; legs ferruginous. Inhabits North America.

113. Leptura bilineata: blackiſh-brown; thorax with two yellowiſh lines, ſhells with ſcattered dots. Inhabits Carolina.

114. Leptura cærulea: blue; fore-ſhanks rufous. Inhabits Italy.

115. Leptura ſqualida: black; ſhells teſtaceous at the baſe and inner margin. Inhabits Italy.

116. Leptura bipartita: black; thorax ferruginous with a black line; ſhells with a common ferruginous ſpot. Inhabits Germany.

117. Leptura ferruginea: black; ſhells ferruginous with a broad patch of black. Inhabits Germany.

118. Leptura lambda: black; ſhells with three white bands. Inhabits Germany.

119. Leptura aurea: green-gold; thorax ſpinous; ſhells with two black ſtripes; thighs rufous.

120. Leptura genii: black; ſhells brown-teſtaceous tipt with black; legs yellow. Inhabits Europe.

121. Leptura maculata: black with yellow downy ſpots; thorax globular; antennæ half as long as the body. Inhabits France.

122. Leptura nævia: black with yellow down; ſhells with two black glabrous ſpots. Inhabits France.

123. Leptura punctulata: blackiſh; head and thorax red dotted with black. Inhabits France.

124. Leptura ſtrigoſa: yellow, downy; ſhells with three narrow black bands. Inhabits France.

125. Leptura Gallica: blue; ſhanks rufous; thorax ſubglobular. Inhabits France.

126. Leptura

126. Leptura craſſipes: black; thighs thick, rufous. Inhabits France.

127. Leptura duo-maculata: rufous; thorax cylindrical; ſhells punctured, with a white ſpot and undulate ſtreak. Inhabits Europe.

128. Leptura villoſa: black villous; thorax cylindrical, with a pale ſtripe. Inhabits Denmark.

LEPTU'RUS, *ſ.* [from the Gr. λεπτος, ſlender, and ουρα, the tail of an animal.] A genus of graſſes, eſtabliſhed by Mr. Brown, (Prodr. Nov. Holl. 207.) and ſo called from its long ſlender cylindrical ſpike. The chief difference between Lepturus and Rottbollia ſeems to lie in the joints of the ſpike being ſingle-flowered in the former, two-flowered in the latter; for in the detail of the florets, reſpecting the preſence or imperfection of the parts of impregnation, this tribe of graſſes, and indeed all graſſes, are to be truſted with great caution. See ROTTBOLLIA.

LE'PUS, *ſ.* The HARE and RABBIT; a genus of quadrupeds of the claſs mammalia, order glires, the characters of which are—Two fore-teeth in each jaw; in the upper jaw a ſecond inner row of fore-teeth, conſiderably ſmaller than the outer or primaries; the fore-feet have each five, and the hind feet four, toes. Theſe animals are very timid; they live on vegetable food; they uſe the hind-feet in walking as far as the heel, running by a kind of leaps, or repeated bounds. They have either exceedingly ſhort tails, named *ſcuts*, or none at all.

Species. I. With Tails. 1. Lepus viſcaccia, the Peruvian hare. Specific character, tail longiſh, beſet with briſtles. Hares of this ſpecies inhabit the plains and baſes of mountains in the colder parts of Peru and Chili. The fur is of a mouſe-colour, and ſo fine and ſoft, that, in the time of the incas, it was woven into cloth for the Peruvian nobles, and is now employed for bonnets by the Chileſe. In habit and manner, this reſembles the rabbit, and digs holes under ground, in which are two contiguous chambers; one in which it ſleeps; and the other, which is lower, is uſed for eating; its proviſions are collected in the night. The tail is buſhy, and much longer than that of any other ſpecies; and in general it turns up, and is uſed as a weapon of defence.

2. Lepus timidus, the common hare: tail ſhort, ears longer than the head, and black at the ends.

The hare is a well-known animal. Its eyes are very large and prominent, its chin is white, and it has long white whiſkers; the hair or fur on its face, back, and ſides, is white at the bottom, black in the middle, and tipt with tawny red; its throat and breaſt are red, its belly white; its tail black above, and white beneath; its feet are covered with hair even at the bottom. See the annexed Plate, fig. 1. A large hare weighs eight pounds and a half; it is ſaid, in the Iſle of Man ſome have been known to weigh twelve. The length of a common hare, from the noſe to the tail, is two feet. It inhabits all parts of Europe, moſt parts of Aſia, Japan, Ceylon, Egypt, and Barbary. It is a watchful timid animal, always lean, and runs ſwifter up hill than on even ground; hence, when ſtarted, it endeavours to run up hill. It frequently eſcapes the hounds by various artful doublings. It keeps all day in its ſeat, and feeds by night; it returns to its form by the ſame road that it left it; it does not pair. The rutting ſeaſon is February or March, when the male purſues the female by the ſagacity of its noſe; they breed often in the year, go with young only thirty or thirty-one days, and bring three or four at a time; they admit the male during the time of their geſtation, and have frequently ſuperfetations. The male and female are liable to be miſtaken the one for the other. The mother ſuckles her young about twenty days. Their fur is of great uſe in the manufacture of hats. They are very ſubject to fleas; yet the Dalecarlians make a cloth of the fur, which, it is ſaid, preſerves the wearer from fleas. Hares feed on vegetables, and are very fond of the bark of young trees, except that of the alder and the lime, which, it is ſaid, they never touch; they are great lovers of birch, parſley, and pinks. Their fleſh was a forbidden food among the ancient Britons; the Romans, on the contrary, held it in great eſteem: *Inter quadrupedes gloria prima lepus*, was the opinion of Martial; and Horace, who was likewiſe a *bon vivant*, ſays, that every man of taſte muſt prefer the wing: *Fecundi leporis ſapiens ſectabitur armos.* Even at preſent the fleſh of the female is preferred to that of the male; and that of thoſe bred on dry hilly ground to that of thoſe that reſide in marſhy or wet places.

Hares have neither eye-lids nor eye-laſhes, but a nictating membrane, which remains open while the animal ſleeps; their ſight appears to be imperfect; but they have an acute ſenſe of hearing, and enormous ears in proportion to the ſize of their bodies. Theſe long ears they move with great facility, and employ them as a rudder to direct their courſe, which is ſo rapid that they outſtrip all other animals. The period of their natural life is ſaid to be about ſeven years; but, it is ſaid, the males live longer than the females; they paſs their days in ſolitude and ſilence, frequently in fear and trembling, as a falling leaf is ſufficient to alarm them; their voice is never heard but when they are ſeized or wounded; it is a ſharp loud cry, and has ſome reſemblance to the human voice. They are eaſily tamed, but never acquire that degree of attachment which is neceſſary to make them domeſtic; they always take the firſt opportunity of regaining their liberty; they have been trained to beat a drum, to perform geſtures in cadence, &c. They want not inſtinct ſufficient for their own preſervation, nor ſagacity for eſcaping their enemies. The ſportſman has frequent opportunities of obſervation, and can recount many inſtances of their ſurpriſing ſagacity, though they have not all equal experience and cunning. They turn more or leſs white with age. They are thought to be larger and ſtronger, in proportion to the coldneſs of the climate. A perpetual enmity is carried on againſt them, not only by men and dogs, but alſo by cats, foxes, wolves, and birds of prey, ſuch as owls, buzzards, vultures, and eagles; ſo that it is almoſt a miracle that any of them eſcape deſtruction.

Sportſmen diſtinguiſh four ſorts of this animal: the one lives in the mountains; the ſecond kind in open fields; a third kind in marſhy grounds; and the fourth is a rambler, having no particular fixed ſpot of reſidence. It is eaſy to ſee that theſe are no diſtinctions in the eye of the naturaliſt; but they have their ſeveral properties, according to theſe differences of place, which are of conſequence to the ſportſmen. Thus the mountain-hares are the ſwifteſt of all, and the marſh-hares the ſloweſt; the field-hares have a middle degree of ſwiftneſs between theſe; and the rambling hares are the moſt difficult of all others to hunt, for they are not only conſiderably ſwift, but they generally know all the coverts and thickets, and have the art to make a thouſand doublings and eſcapes that the others would not think of. Once more we forbear to enlarge upon hare-hunting. See HUNTING, vol. x. p. 483.

Hares and rabbits are very miſchievous to new-planted orchards, by peeling off the bark of the tender and young trees for their food. They do alſo the ſame ſort of miſchief to nurſeries; for the prevention of which, ſome bind ropes about the trees up to ſuch a height as they are able to reach; ſome daub them with tar; but, though this keeps off the hares, it is itſelf miſchievous to the trees; but this hurtful property is in ſome degree taken off by mixing any kind of fat or greaſe with it, and incorporating them well over the fire. This mixture is to be rubbed over the lower part of the trees in November, and will preſerve them till that time the next year, without any danger from theſe animals. It is only in the hard weather in the winter ſeaſon, when other food is ſcarce, that theſe creatures feed on the bark of trees.

People who have the care of warrens pretend to an odd way of making hares fat when they get them there. This is the ſtopping up their ears with wax, and rendering them deaf. The hare is ſo timorous a creature, that ſhe is continually liſtening after every noiſe, and will run

a long

a long way on the leaſt ſuſpicion of danger; ſo that ſhe always eats in terror, and runs herſelf out of fleſh continually. Theſe are both prevented by her feeding in a ſafe place, and that without apprehenſion; and they ſay ſhe will always readily be fattened in this way.

Naturaliſts reckon two varieties of this ſpecies: β, L. timidus cornutus, the horned common hare; having ſlightly-branched horns; an animal probably fabulous. γ, L. timidus melinus, the yellow common hare; of a ſtraw-colour, ſize of the European hare, and running like it; ſeen by Capt. Cook in New Holland.

3. Lepus variabilis, the varying hare: tail ſhort; body white in the winter, except the tips of the ears which remain black. The varying hare has a ſoft down upon it, which is grey in ſummer, with a ſlight mixture of black and tawny; its ears are ſhorter, and whole form more ſlender than the common hare; its tail is entirely white, even in ſummer; its feet are moſt cloſely and warmly covered with fur. In winter, the whole animal changes to a ſnowy whiteneſs, except the tips and edges of the ears, which remain black; as do alſo the ſoles of the feet, on which, in Siberia, the fur is doubly thick. It is leſs than the common ſpecies. It inhabits the higheſt Scottiſh Alps, Norway, Lapland, Ruſſia, Siberia, Kamſchatka, the banks of the Wolga, and Hudſon's Bay. In Scotland, it keeps on the tops of the higheſt hills, and never deſcends into the vales, nor mixes with the common hares. It does not run faſt, but takes ſhelter in the clefts of rocks; it is eaſily tamed, is full of frolic, and fond of honey and carraway-comfits; it eats its own dung before a ſtorm; it changes its colour in September, and reſumes its grey coat in April; and this it does, not only in the open air and in a ſtate of liberty, but, as has been proved by experiment, even when kept tame, and preſerved in apartments kept warm with ſtoves. They aſſemble, and are ſeen in troops of five or ſix hundred, migrating in ſpring, and returning in autumn. Compelled by the want of ſubſiſtence, they quit in winter the lofty hills, and ſeek the plains and wooded parts, where vegetables abound. Towards ſpring they return to their mountain-quarters. Staunton noticed this animal in China, near the Great Wall.

Of this ſpecies alſo there are two varieties. β, L. variabilis niger, the black hare, made a ſeparate ſpecies by Dr. Turton. It varies leſs than the former, and is larger. Muller ſays, he once ſaw two black hares in Siberia, of a wonderful fine gloſs, and as black as jet. Another of the ſame kind was taken near Caſan in the winter of 1768. Theſe ſpecimens were much larger than the common kind. In the ſouthern and weſtern parts of Ruſſia, there is a mixed breed of hares, between this and the common ſpecies, which forms the ſecond variety, γ, L. variabilis hybridus, the ſpurious varying hare, which ſuſtains, during winter only, a partial loſs of colour. The ſides, and more expoſed parts of the ears and legs, in that ſeaſon become white; the other parts retain their colour. This variety is unknown beyond the Urallian Chain. It is called by the Ruſſians *ruſſack*; they take them in great numbers in ſnares, and export their ſkins to England, and other places, for the manufacture of hats. The Ruſſians and Tartars, like the ancient Britons, hold the fleſh of hares in deteſtation, eſteeming it impure; that of the variable hare, in its white ſtate, is exceſſively inſipid.

4. Lepus Americanus, the American hare: tail ſhort; hind legs long; ears and tail tipt with grey; the upper part of the tail black, the lower white; the neck and body mixed with aſh, ruſt-colour, and black; the legs are of a pale ferruginous colour, the belly white; their fore-legs are ſhorter, and their hind ones longer, in proportion, than thoſe of the common hare; they meaſure eighteen inches in length, and weigh from three to four pounds and a half. They inhabit all parts of North America. In New Jerſey, and the colonies to the ſouth of that province, they retain their colour during the whole year; but to the northward, on the approach of winter, they change their ſhort ſummer-fur, for one very long, ſilky and ſilvery, even to the roots, the edges of the ears only preſerving their colour. At that time it is in the higheſt ſeaſon for the table; and is of vaſt uſe to thoſe who winter in Hudſon's Bay, where they are taken in great abundance in ſpringes made of braſs wire, placed in hedges, conſtructed on purpoſe, with holes before the ſnares for the hares or rabbits to paſs through. They breed once or twice a-year, and have from five to ſeven at a time; they do not migrate, like the preceding, but always haunt the ſame places; they do not burrow, but lodge under fallen timber, and in hollow trees; they breed in the graſs, but, in the ſpring, ſhelter their young in hollow trees, to which they alſo run when purſued. The hunters force them out of thoſe retreats, by means of a hooked ſtick, or by making a fire, and driving them out by the ſmoke.

5. Lepus tolai, the Baikal hare: tail ſhort; edges of the ears black. The tail of the Baikal hare, though ſhort, is longer than that of the rabbit; in the male, the ears are longer in proportion than thoſe of the varying hare; its fur is of the ſame colour with that of the common hare. It is red about the neck and feet; its tail is black above, and white beneath; its ſize is between that of the common and that of the varying hare. The name here given it marks its country. It extends from the lake Baikal as far as Thibet. The Tanguts call it *rangwo*, and conſecrate it to the ſpots of the moon. It agrees with the common rabbit in the colour of its fleſh, but does not burrow. When purſued, it runs for ſhelter ſtraight to the hole of the rocks, without any circuitous doublings, like thoſe of the common hare; ſo that it agrees in nature neither with the hare nor the rabbit. The Mongols call it *tolai*. Its fur is bad, and of no uſe in commerce.

6. Lepus minimus, the cuy, or Chileſe hare: tail ſhort, ears of one colour. This has a conoid body; ears ſmall, pointed, and covered with hair; noſe long; tail ſo ſhort as ſcarcely to be ſeen; is domeſticated, and varies in colour to white, brown, and ſpotted with divers colours; fur very fine; ſize of a field-mouſe. Inhabits Chili; breeds every month, and brings from ſix to eight young; is delicate eating.

7. Lepus Capenſis, the Cape hare: tail buſhy, as long as the head; feet red. The long ears of the Cape hare are dilated in the middle; on the outſide they are naked, and of a roſe colour; the inſide and edges are covered with ſhort grey hair. Crown and back duſky, mixed with tawny; cheeks and ſides aſh-coloured; breaſt, belly, and legs, ruſt-coloured; tail of a pale ferruginous colour. It is of the ſize of a rabbit, and inhabits the country for three days' march north of the Cape of Good Hope. It is there called the *mountain-hare*; for it lives only in the rocky mountains, and does not burrow. It is difficult to ſhoot, as, on the ſight of any one, it inſtantly runs into the fiſſures of the rocks. The ſame ſpecies probably extends as high as Senegal.

8. Lepus cuniculus, the rabbit: tail ſhort, nearly the colour of the body; ears black at the tip; hind legs ſhorter than the body. This ſpecies inhabits naturally the temperate and the warm parts of Europe, and even the hotteſt parts of Aſia and of Africa. It is not originally Britiſh, but ſucceeds here admirably well. It will not live in Sweden, and the northern countries, except it be kept in houſes. Strabo tells us, that they were imported into Italy from Spain. They are not natives of the weſtern hemiſphere, but have been carried thither, and increaſe greatly in South America. They are exceedingly prolific; they breed ſeven times in a year, and produce eight young at a time. If we ſuppoſe this to happen regularly, one pair may produce in four years the amazing number of one million two hundred and ſeventy-four thouſand eight hundred and forty. They occupy principally dry ſandy ſoils, forming long winding

burrows; they confine themſelves to theſe holes in the middle of the day, and wander in the evening, night, and morning, in ſearch of food. They feed on all kinds of green vegetables and grain. Their fleſh is white, and much eſteemed. Rabbits are preyed upon by hawks, badgers, and polecats; and are caught by means of terriers, nets, and ferrets. Numbers of them are bred in a wild ſtate in places ſet apart for the purpoſe, called *warrens*; and many are bred in houſes in a domeſtic ſtate. They pair, and are ſaid to be faithful to their mates; but will never mix with the hare, ſo as to produce a croſs breed. Another remarkable difference between hares and rabbits is, that the former live above ground, the latter underneath. Rabbits, in a domeſtic ſtate, are very variable in colour, as black, pied, or quite white. (The common rabbit is ſhown on the Plate at fig. 2.) They acquire their full ſize in ſix months, and live to the age of eight or nine years. A French gentleman, who amuſed himſelf long with rearing rabbits, and obſerving their manners, remarked, that the offspring paid great deference to their firſt father. Upon a call, which they were accuſtomed to obey, he always put himſelf at their head, and arrived firſt. He then ſtood at the mouth of their hole till they had all got in. Another French writer has favoured us with the following very ingenious method of catching rabbits, which he denominates *chaſſe du lapin à l'écreviſſe*. This chaſe is conducted by perſons who neither employ ferrets nor fire-arms. Over the openings of the burrows are placed nets, (as is uſual in catching the animals by means of ferrets,) and into one of theſe is put a *lobſter*. By little and little, the lobſter arrives at the bottom of the hole. Here it fixes itſelf ſo firmly to the rabbit, that it is compelled to attempt its eſcape, dragging, at the ſame time, its enemy along with it, into ſome one of the nets. This chaſe (the writer obſerves) requires much patience, ſince the operations of the lobſter are very ſlow.

Varieties of the L. cuniculus domeſticus, or common domeſtic rabbit. β, Cuniculus ferus, or wild rabbit; of a brown aſh colour; the upper part of the tail black, the under part white. *a*, C. domeſticus niger, of an uniform black colour. *b*, C. domeſticus albus; of an uniform white colour, with eyes fiery red. *c*, C. dom. variegatus, the pied tame rabbit; of a mottled black-and-white colour. *d*, C. dom. argenteus, the ſilvery tame rabbit; ſilvery grey or aſh-colour, with tawny feet; fur valuable. The varieties γ and δ are by later naturaliſts made ſeparate ſpecies, as follows.

9. Lepus Angorenſis, the Angora rabbit: covered with long, waved, ſilky hair. Inhabits Angora in Aſia Minor; and is exceedingly beautiful, on account of its fine, white, ſilky, fur which is a valuable article in commerce.

10. Lepus Ruſſicus, the hooded rabbit, a ſingular ſpecies: it has a double ſkin over its back, into which it can withdraw its head; and another under its throat, into which it can withdraw its fore-feet; there are ſmall holes in the looſe ſkin on the back, to admit light to the eyes when the head is covered. The body is aſh-coloured; head and ears brown. It is preſerved in the Britiſh Muſeum, inſcribed "A Ruſſian rabbit;" though Mr. Pennant ſays it is unknown in that empire. See fig. 3 of the annexed Plate, where this animal is repreſented with the hood drawn over its head.

II. Without Tails. 11. Lepus Braſilienſis, the Braſilian hare: ears large, a white ring round the neck. The face is of a reddiſh colour, the chin white, eyes black; body-colour like that of the common hare, only a little darker; belly whitiſh. It has no tail, and ſome want the ring round the neck. They live in the woods, are very prolific, and are reckoned very good food; they do not burrow. They are found both in Braſil and in Mexico, where they are called *citli*, but at Braſil *tapeti*.

12. Lepus puſillus, the calling hare: body brown mixed with grey; ears triangular, edged with white. This ſpecies, called by the Tartars *ittſitſhan*, or the barking mouſe, has the head thickly covered with fur almoſt to the tip of the noſe; it has large whiſkers. Its legs are very ſhort, the ſoles are furred beneath. Its whole-coat is very long, ſoft, and ſmooth, with a thick long fine down beneath, of a browniſh-lead colour; the hair is of the ſame colour, of a light grey towards the ends, and tipt with black; the lower parts of the body are hoary; the ſides and ends of the fur are yellowiſh. Length about ſix inches; weight from three ounces and a quarter to four and a half; but in winter ſcarcely two and a half. See fig. 4. They inhabit the ſouth-eaſt parts of Ruſſia; but are found no-where, in the eaſt, beyond the river Oby; they delight in ſunny valleys, and hills covered with herbs, eſpecially thoſe near the edges of woods, to which they run on any alarm; they live ſo concealed a life, as very rarely to be ſeen; but are often taken in winter in ſnares laid for the ermines; they chooſe, for their burrows, a dry ſpot, amidſt buſhes, covered with a firm ſod, preferring the weſtern ſides of the hills; their places would ſcarcely be known, but for their excrements; and even thoſe they drop, by a wiſe inſtinct, under ſome buſh, leſt their dwellings ſhould be diſcovered by their enemies among the animal creation. It is their voice alone that betrays their abode; their cry is like the piping of a quail, but deeper; and ſo loud as to be heard at the diſtance of half a German mile; it is repeated, by juſt intervals, thrice, four times, and often ſix; this cry is emitted at night, and in the morning; but ſeldom in the day, except in rainy or cloudy weather; it is common to both ſexes; but the female is ſilent for ſome time after parturition, which happens about the beginning of May. She brings forth ſix at a time, blind and naked; ſhe ſuckles them often, and covers them carefully with the materials of her neſt. Theſe moſt harmleſs and inoffenſive creatures never go far from their holes; they feed and make their little excurſions by night; drink often, ſleep little, and are eaſily made tame; they will ſcarcely bite when handled; yet the males have been obſerved, when in confinement, to attack each other, and to expreſs their anger by a grunting noiſe.

13. Lepus alpinus, the alpine or mountain hare: body bright tawny; ears ſhort, brown, and rounded; feet brown. This ſpecies has a long head, and very long whiſkers, with two very long hairs above each eye. See fig. 5. Its fur is ferruginous, tipt with white, and intermixed with ſeveral long duſky hairs; but, at the firſt look, the whole animal ſeems of a bright bay. It is only about nine inches long. They are firſt ſeen on the Altaic Chain, and extend to lake Baikal in Tartary, and from thence to Kamtſchatka and the Fox Iſles. They inhabit always the middle region of the ſnowy mountains, in the roughest places, wooded, and abounding with herbs and moiſture. They ſometimes burrow; but are more frequently found in crevices between the rocks, in pairs, or more, according to conveniency. In cloudy weather they aſſemble and lie on the rocks, and emit a ſound ſo like that of ſparrows as to deceive the hearer. On the report of a gun, they run into their holes; but ſoon come out again, ſuppoſing it to be thunder, to which they are ſo much uſed in their lofty habitations. By wonderful inſtinct, they make a proviſion againſt the rigorous ſeaſon in their inclement ſeats. Towards autumn a company of them collect vaſt heaps of choice herbs and graſſes, nicely dried, which they place either beneath the over-hanging rocks, or in the chaſms, or round the trunk of ſome tree; the way to theſe heaps is marked by a worn path; the heaps are formed like conoid ricks of hay, and are of various ſizes, according to the number of the ſociety employed in forming them; they are ſometimes of a man's height, and many feet in diameter, but uſually about three feet. Thus, they wiſely provide their winter's ſtock, otherwiſe they muſt periſh, being prevented by the depth of ſnow from quitting their retreats in queſt of food. They ſelect the beſt of vegetables, and crop them when in the fulleſt vigour; theſe they make into the beſt and greeneſt hay, by the judicious manner in which they dry them; theſe ricks

too

too are the origin of fertility amidſt the rocks; for their remains, mixed with the dung of the animals, rotting, in the otherwiſe-barren chaſms, create a ſoil productive of vegetables. Theſe ricks are alſo of great ſervice to thoſe men who devote themſelves to the laborious employment of ſable-hunting. Being obliged to go far from home, their horſes would often periſh for want, if not ſupported by the proviſions of theſe induſtrious little animals. The people of Jakutz are ſaid to feed both their horſes and cattle with the relics of the winter-ſtock of theſe hares. Such ſupply may be ſerviceable to ſome in the ſpring, when their own ſtock is exhauſted; but, ſhould they depend ſolely on theſe feeble mountaineers, they would deſerve to loſe both horſes and cattle every hard winter. Theſe hares are neglected as food by man; but they are the prey of ſables, and of the Siberian weaſel, which are joint inhabitants of the ſame mountains. They are likewiſe greatly infeſted by the Oeſtrus leporinus, a ſpecies of gad-fly, which, in Auguſt and September, lodges its eggs in their ſkin, and often proves fatal to theſe feeble and defenceleſs, though induſtrious, creatures.

14. Lepus ogotona, the ogotona hare: body and ears pale grey, ears oval, a little rounded. This has ſhorter whiſkers than the former ſpecies; fur long and ſmooth, light grey in the middle, white at the ends, intermixed with a few duſky hairs, with a yellowiſh ſpot on the noſe and a ſpace about the rump of the ſame colour; its limbs alſo are yellowiſh on the outſides, and its belly white. It is only about ſix inches long. The male weighs from ſix ounces and a half to ſeven and a quarter; the female, from four to four and three quarters. It inhabits the ſame countries as the Alpine hare, lives in the open valleys, and on gravelly or rocky naked mountains, under heaps of ſtones; but in a ſandy ſoil they burrow, leaving two or three entrances. Their holes run obliquely; in theſe they make their neſts of ſhort graſs; they wander out chiefly in the night; their voice is exceſſively ſhrill, in a note like that of a ſparrow, twice or thrice repeated, but very eaſily to be diſtinguiſhed from that of the alpine hare; they are fond of the bark of the ſervice-tree, and of the dwarf elm. Before the approach of ſevere cold, they collect great quantities of herbs, and fill their holes with them; directed by the ſame inſtinct as the former ſpecies, they form, in autumn, their ricks of hay, of a hemiſpherical form, about a foot high and wide; in the ſpring, theſe elegant heaps diſappear. They copulate in the ſpring. About the end of June, their young are obſerved to be full grown. They are the prey of hawks, magpies, and owls; but the cat manul makes the greateſt havoc among them: the ermine and fitchet are equally their enemies.

LE'PUS, the HARE, a conſtellation of the ſouthern hemiſphere, and one of the 48 old conſtellations. The Greeks fabled, that this animal was placed in the heavens near Orion, as being one of the animals which he hunted. But it is probable their maſters, the Egyptians, had ſome other meaning in this hieroglyphic. The ſtars in the conſtellation Lepus, in Ptolemy's Catalogue are 12, in Tycho's 13, and in Flamſteed's 19.

LEPYRO'DIA, *ſ.* [λεπυρωδης, Gr. ſcaly, ſo called on account of the inner ſcales at the baſe of each flower.] In botany, a genus of the claſs dioecia, order triandria, natural order tripetaloideæ, *Linn.* (junci, *Juſſ.* reſtiaceæ, *Brown.*) Generic eſſential character—Flowers either dioecious or hermaphrodite. Petals ſix, nearly equal, prominent, with one or two ſcales at their baſe, within the proper ſcale of the ſpike, or catkin. Male; ſtamens three; antheræ ſimple, peltate; a rudiment of a piſtil. Female; ſtyles three; capſules of three cells, three-lobed, burſting at the prominent angles; ſeeds ſolitary.

This genus in another addition to our botany from Mr. Brown's Prodr. Nov. Holl. It is very near ELEGIA, (vol. vi. p. 449.) but differs in the preſence of inner ſcales to the flowers, and in the male flowers being like the female, with nearly equal petals, as well as in having the ſheaths of the ſtem permanent, not ſeparating juſt above their baſe, and in the ſmaller ſize of the ſpathas. The Calorophus of Labillardiere nearly anſwers to the above character, but is a totally different plant.

Species. 1. Lepyrodia gracilis: ſtems ſomewhat branched; ſheaths tight; ſpike compound; its lower branches rather diſtant; three outer petals ſhorteſt. Gathered by Mr. Brown at Port Jackſon, New South Wales.

2. Lepyrodia ſtricta: ſtems perfectly ſimple; ſheaths tight; ſpike compound; its branches rather crowded; petals all nearly equal. Native of the ſouth coaſt of New Holland.

3. Lepyrodia ſcarioſa: ſtems perfectly ſimple; ſheaths lax; ſpike compound; its branches imbricated, divided; three inner petals ſmalleſt. Found at Port Jackſon.

4. Lepyrodia hermaphrodita: ſtems perfectly ſimple; ſheaths lax; ſpikes nearly ſimple; flowers hermaphodite. Found on the ſouth coaſt of New Holland.

LEQUE'SE, a cluſter of iſlands near the coaſt of China, or between that and Japan. Earl Macartney did not viſit them in the courſe of his embaſſy, in the year 1792, 3; therefore ſir G. Staunton could not deſcribe them particularly. He merely obſerves, that, "from the geographical poſition of thoſe iſlands, they ſhould, if dependent, naturally belong to the Chineſe or the Japaneſe. The latter were indifferent about them; but the former firſt ſent an embaſſy to them to explore their ſtrength and ſituation, and afterwards an expedition againſt them, which reduced them to a tributary ſtate. Upon the deceaſe of the prince, his ſucceſſor receives a ſort of inveſtiture or confirmation from the emperor of China." If theſe (as we ſuppoſe) are the ſame iſlands that are called in his table of contents the *Licu-kieu* iſlands, and on his map the *Quee-ſan*, the moſt ſouthern of them lies in lat. 29. 22. N. lon. 120. 52. E.

During the progreſs of the embaſſy along the Han-choo-foo river, earl Macartney had a viſit from two genteel young men who called themſelves ambaſſadors from the king of theſe iſlands. Their dreſs was a very fine ſort of ſhawl, manufactured in their own country, dyed of a beautiful brown colour, and lined with the fur of ſquirrels; the faſhion was nearly Chineſe. They wore turbans, one of yellow, the other of purple, ſilk, neatly folded round their heads. They had neither linen nor cotton in any part of their dreſs that could be perceived. Theſe young men were well-looking, though of a dark complexion, well-bred, converſible, and communicative. They had juſt arrived at Han-choo-foo in their way to Pekin, where their chief ſends delegates regularly every two years, charged to offer the tribute, and pay homage from their maſter, to the emperor. They landed at the port of Emouy in the province of Fo-chen, which alone was open to thoſe ſtrangers. They underſtood Chineſe; but had alſo a proper language of their own. They ſaid, that no European veſſel had, to their recollection, ever touched at any of their iſlands; but that, ſhould they come, they would be well received; that there was no prohibition againſt any foreign intercourſe; that they had a fine harbour capable of admitting the largeſt veſſels, at a little diſtance from their capital, which was conſiderable in extent and population; that they raiſed a coarſe kind of tea, but far inferior to that of the Chineſe; and had many mines of copper and iron, but none of gold or ſilver had been diſcovered.

LERANG' POI'NT, a cape on the north coaſt of the iſland of Java. Lat. 6. 37. S. lon. 111. 27. E.

LERAY', a town of France, in the department of the Cher: eight miles north of Sancerre, and ſeventeen eaſt of Aubigny.

LER'BA. See LORBUS.

L'ER'BA. See TEZZOUTI.

LERCHE'A, *ſ.* [ſo named by Linnæus, as a tribute of reſpect to *John James Lerche*, principal phyſician to the Ruſſian armies, who was born at Potſdam in the year 1703, and died at St. Peterſburg in 1780. He publiſhed a deſcription

ſcription of certain plants growing at Aſtrachan, and in the provinces of Perſia which border on the Caſpian Sea; printed in the 5th vol. of the New Tranſactions of the Acad. Nat. Curioſorum; he alſo furniſhed an account of the Nymphæa nelumbo of the Caſpian Sea. Haller mentions that Lerche made many curious obſervations on the agriculture and botany of the countries through which he travelled.] In botany, a genus of the claſs monadelphia, order pentandria. The generic characters are—Calyx: perianthium one-leafed, tubular, five-toothed, permanent. Corolla: one-petalled, funnel-form; tube longer than the calyx; border five-parted, rather erect. Stamina: filaments ſcarcely any, but the tube of the germ: antheræ five, oblong, ſeated on the tube of the germ. Piſtillum: germ ſubovate, ſuperior, terminated (within the corolla) by an obtuſe tube; ſtyle within the tube of the germ, filiform, length of the ſtamens; ſtigmas two or three, rather obtuſe. Pericarpium: capſule ſubgloboſe, toruloſe, three-celled, ſometimes two-celled. Seeds: very many. —*Eſſential Character.* Calyx five-toothed; corolla funnel-form, five-cleft: antheræ five, placed on the tube of the germ; ſtyle one; capſule three-celled, many-ſeeded.

Lerchea longicauda, a ſingle ſpecies. It is an irregular-growing ſhrub, with jointed branches; leaves oppoſite, lanceolate, petioled, even, quite entire, a foot long. Spike terminating, filiform, a foot in length; with remote, ſcattered, minute, flowers. Native of the Eaſt Indies. The above deſcription is entirely taken from the works of Linnæus, the only perſon who ever ſaw the plant. No trace of it was found in his Herbarium by the gentleman who purchaſed his collection, (ſee the article LINNÆUS;) yet it is to be preſumed the ſpecimen exiſts ſomewhere in his collection, probably without a name.

LERE, *ſ.* [læpe, Sax. *leere*, Dut.] A leſſon; lore; doctrine. *Obſolete*, but ſtill retained in Scotland.:

The kid, pitying his heavineſs,
Aſked the cauſe of his great diſtreſs;
And alſo who, and whence, that he were,
Though he that had well ycond his *lere*,
Thus melled his talk with many a teare. *Spenſer.*

LERE, *adj.* [from leopan, Sax.] Kept ready for occaſion.—He had rather have words bear two ſenſes impertinently, than one to the purpoſe; and never ſpeaks without a *lere* ſenſe. *Butler's Characters.*—A led horſe was formerly called a *lere* horſe. *Thyer's Note to the foregoing.*

LEREN'ZA, a town of New Grenada: twenty-five miles north of Tunja.

LER'GE, a town of Sweden, in Weſt Gothland: four miles north of Gothenburg.

LE'RI (John de), a French proteſtant miniſter in the ſixteenth century, was born at la Margelle, a village in Burgundy, and proſecuted his academical ſtudies at Geneva. In the year 1556, when Charles Durand de Villegagnon, vice-admiral of Bretagne, applied to the church of Geneva for ſome paſtors, to join an intended colony of the reformed religion in Braſil, under the protection of admiral de Coligny, he was ſelected to accompany two miniſters on that miſſion. They arrived at the Iſland de Coligny, under the tropic of Capricorn, in March 1557; but, finding that the eſtabliſhment of the colony met with inſurmountable obſtacles, Leri returned to France in the following year, after ſuffering aſtoniſhing hardſhips during his voyage. Afterwards he was admitted to the office of the miniſtry, and exerciſed it at La Charité, according to De Thou, at the time of the maſſacre of St. Bartholomew, when he was obliged to fly for his life, and took refuge in Sancerre. He was in that town during the memorable ſiege of it, and when it was taken in 1573; and, having been favoured with a paſs from the marſhal de la Châtre, before the capitulation was ſigned, permitting him to retire wherever he pleaſed, he went to Bern in Switzerland, where he was received in the kindeſt manner by M. de Coligny, ſon of the admiral. In the year 1574, he publiſhed his very intereſting Hiſtoria de Sancerri Obſidione, 8vo. giving an account of the tranſactions of that ſiege, and of the cruel famine to which the proteſtants ſubmitted in defence of their religion, and all that was dear to them; which was widely diſperſed, and underwent repeated impreſſions. In 1577, he publiſhed an Account of his Voyage to Braſil, in 8vo. containing, beſides other curious matter, obſervations on the ſtate of religion in that country; which has been frequently reprinted. Leri died at Bern in 1611, greatly eſteemed and regretted by all who knew him.

LE'RIA, in ancient geography, an iſland of the Ægean ſea; one of the Sporades, according to *Strabo.*—Alſo, a town of Spain, in the Tarragonenſis, and in the interior of the country of the Edetani. *Ptolemy.*

LE'RIA, or LEI'RIA, a ſtrong town of Portugal, in Eſtremadura, with a caſtle and biſhop's ſee. It contains about 3500 inhabitants; and was formerly the reſidence of the kings of Portugal. Lat. 39. 40. N. lon. 7. 50. W.

LER'ICI, a town of Genoa: four miles ſouth-weſt of Sarſana.

LER'IDA, a town of Spain, celebrated in hiſtory, under its ancient name *Ilerda*, as the ſcene of the maſterly operations carried on by Cæſar againſt Petreius and Afranius, who commanded an army in the intereſt of Pompey, during the civil wars of Rome; is ſituated in the weſtern part of Catalonia near to the borders of Arragon, upon the great road from Madrid into France, about twenty-two Spaniſh leagues, or above eighty Engliſh miles, to the eaſtward of Saragoſſa, and 110 miles to the weſtward of Barcelona. It ſtands on the ſlope and along the foot of a ſmall inſulated hill, waſhed on the eaſt ſide by the river Segre, the ancient *Sicoris*, over which is a ſtone bridge, in length four hundred feet, conſiſting of ſeven unequal arches, having been repaired at various periods. The ſummit of the hill, which, although affording very little room, was probably the whole ſpace occupied by the ancient Ilerda, is ſtill covered with the old cathedral and other buildings, with fortifications of different ages and modes of conſtruction; and correſponds perfectly with the deſcription given of it by Lucan:

Colle tumet modico, lenique excrevit in altum
Pingue ſolum tumulo; ſuper hunc fundata vetuſta
Surgit Ilerda manu; placidis prælabitur undis
Heſperios inter Sicoris non ultimus amnes,
Saxeus ingenti quem pons amplectitur arcu,
Hibernas paſſurus aquas. Pharſalia, iv.

Where riſing grounds the fruitful champaign end,
And unperceiv'd by ſoft degrees aſcend,
An ancient race their city choſe to found,
And with Ilerda's walls the ſummit crown'd.
The Sicoris, of no ignoble name,
Faſt by the mountain pours his gentle ſtream.
A ſtable bridge runs croſs from ſide to ſide,
Whoſe ſpacious arch tranſmits the paſſing tide,
And jutting piers the wint'ry floods abide. *Rowe.*

In another paſſage of the ſame book, the poet ſtyles Ilerda as lofty in its ſituation; and ſo it is, if conſidered with reſpect to the plain extending to the ſouth, weſt, and north, on its own ſide of the river, as well as to the eaſt on the oppoſite ſide; for, although the ſummit of the hill may not be elevated more than three hundred and fifty feet above the river, yet for ſeveral miles in all directions there is no ground of an equal elevation. The ſides of this hill are on all parts ſteep, and on the northern parts inacceſſible; but on the ſouth ſide the ſlope is the moſt gentle, ſo that it is occupied by part of the preſent town; and from the middle of the weſt ſide a ſpur projects into the plain, narrow towards the ſummit of the hill, but widening as it goes down, and of eaſier acceſs than the neighbouring parts on either hand. This ſpur of the hill is a characteriſtic feature of Ilerda, as will appear from a conſideration of the account of Cæſar's operations at this place, contained in the Commentaries of the Civil Wars, beginning at cap. 37.

Although

Although the Segre in the neighbourhood of Lerida flows in general, as Lucan ſays, with a *gentle ſtream*, becauſe there it has extricated itſelf from the mountains, and has ſpace to enlarge its channel through the plain, yet it is ſubject to ſudden riſings, either after rains or the melting of the ſnows in the Pyrenees, where it has its ſources. Both above and below Lerida, the river is divided into ſeveral channels encloſing ſandy iſlands, of which ſome are bare, and others are covered with graſs and buſhes, but none of them ſafe from occaſional inundation. The body of water is much diminiſhed in the preſent times by drains opened for the purpoſes of irrigation on each ſide, from the river itſelf, as well as from ſome tributary ſtreams, particularly from one which falls into the Segre two leagues above Lerida. The drain or canal from this ſtream, the Noguera, is taken up ſix leagues from the town, and carried along the ſide of the hills which bound the plain to the weſtward, and which are waſhed on the oppoſite ſide by the Cinca. The canal diſcharges itſelf into the Segre, four leagues to the ſouthward of Lerida; having at different points of its courſe collateral cuts to allow the water to go off, in order to be conducted round the fields and gardens with which the plain of Lerida is covered. This plain, or as it is called the *huerta* or garden of Lerida, is in general elevated one hundred feet above the Segre, but varied by ſome flat eminences to the ſouthward of Lerida. One of theſe eminences is ſituated about five hundred yards from the foot of the hill of Lerida, its eaſtern baſe having probably once been waſhed by the Segre, although at preſent they are ſeparated by a narrow ſlip of low land, at times covered by the river. This eminence is much lower than the ſummit of the hill, being level and of a triangular ſhape, bounded by ſteep ſides on the eaſt and ſouth; but the ſide facing the north-weſt ſinks down with a gradual ſlope to the plain. About midway between this eminence and the hill of Lerida is a ſemicircular promontory of the great plain, advancing towards the Segre, but in fact more elevated than the contiguous parts of the plain. When this is ſeen from the weſtward, its projection gives it the appearance of an elevation; and the ſame effect is produced to the obſerver on the banks of the river below it.

We are told in the Commentaries, that Cæſar, on his arrival in the plain of Lerida, joining his forces under C. Fabius, offered battle to the troops under Petreius and Afranius, who were poſted on the eminence juſt deſcribed; but, the enemy declining to come down to the plain, he withdrew, and fortified a camp about ſix hundred paces from their poſition. The level ground between this eminence and the town of Lerida, Cæſar ſays, was about three hundred paces, a diſtance correſponding very accurately with that of five hundred yards, which a late traveller recently eſtimated on the ſpot. In the midſt of this level ground was a gentle ſwelling, *(tumulus paullo editior,)* which Cæſar wiſhed to occupy; by which ſtep, he would cut off the communication between the enemy and the town. It has been already obſerved, that the round promontory on the edge of the plain would, to an obſerver on the weſt ſide, particularly if viewed from an elevation, preſent the appearance of an eminence. Cæſar might therefore naturally term it a *tumulus*, although it is, in fact, level with the reſt of the plain. In attempting to ſeize this poſt, an action commenced with the enemy, who, obſerving his motions, and being nearer to the ſpot, took poſſeſſion of it before Cæſar's men could get to it. A long conteſt with various ſucceſs took place, which ended in that party of the enemy being forced to retire under the walls of Lerida, whither they were followed by Cæſar's troops, who mounted by a part of the hill which ran out to a conſiderable length, but was narrow on the ridge; and the ſides were ſo abrupt, that neither infantry nor cavalry could be brought up to cover their flanks. This projecting and ſloping ridge was moſt probably that part of the hill of Lerida already deſcribed as running out like a ſpur or counterfort into the plain on the weſt ſide. Upon this ſpot, therefore, a very obſtinate conteſt happened, which ended in both parties withdrawing within their works; the enemy not a little elated becauſe they had been able to withſtand all Cæſar's aſſaults, whilſt his troops conſidered it little leſs than a victory to have maintained for five hours together a cloſe engagement with an enemy who had the advantage of the ground, and even to have driven them within the cover of the town.

Owing to the high ſtate of cultivation which prevails all over the plain of Lerida, no veſtiges of the entrenchments of the rival armies are now to be ſeen; and the eaſt banks of the Segre, although now in general in paſturage, have in former times been cultivated for ſome leagues below Lerida, ſo that it would require ſome time and care to trace the operations of Cæſar and his opponents in that tract.

The preſent town of Lerida conſiſts of one narrow irregular ſtreet confined between the river and the hill, up the ſlopes of which run a few other ſtreets. The ſummit of the hill is occupied by the remains of a palace of the kings of Arragon, who were alſo maſters of Catalonia. It paſſed into the hands of the Knights Templars; and part of it is now uſed as a powder-magazine. On a level ſpot a little lower down ſtands the old cathedral, with its tower, cloiſters, &c. of Gothic architecture, erected by one of the Jameſes, kings of Arragon, of whom the firſt died in 1276, and the other in 1327. In the cloiſters is a ſpacious well, ſunk it is ſaid three hundred feet to the level of the Segre. This ancient edifice will, while it remains, be a formidable rival to the new cathedral in the lower town, erected before that attention to purity in architectural deſign, which diſtinguiſhes moſt of the late buildings in Spain, had been generally introduced.

From the many revolutions undergone by Lerida, no traces of the ancient Ilerda can now be diſcovered; ſome monumental inſcriptions however are ſtill to be ſeen, and coins are frequently met with; this being one of the cities of Spain endowed by the Romans with the privilege of coining money. Some of the coins of Ilerda are of that very ancient ſort which ſeem peculiar to Spain, having on them characters hitherto unintelligible, although bearing a ſtrong reſemblance to the Phœnician or Carthaginian.

Lerida at preſent is the ſee of a biſhop, ſuffragan of Tarragona. Here are a court of inquiſition, an univerſity, ſix pariſhes, eleven convents, and an hoſpital. Lerida was taken from the Moors in 1149. In 1643, it was taken by the French; in 1646 it was attacked by the ſame enemy, but without ſucceſs. It declared for king Charles after the reduction of Barcelona in 1705; but it was taken by the duke of Orleans, for king Philip, in 1707, after the battle of Almanza. Lat. 41. 31. N. lon. 0. 35. E.

LERI'KA, a town of Swediſh Lapland: one hundred miles north-weſt of Tornea.

LERILLO'N, a ſmall iſland in the Grecian Archipelago, near the north coaſt of the iſland of Lero.

LE'RIN, a town of Spain, in Navarre: fifteen miles eaſt of Eſtella.

LERI'NA, in ancient geography, an iſland of the Mediterranean, upon the coaſt of Gallia Narbonnenſis, ſouth-weſt of Nicæa. Strabo, who calls it *Planaſia* from its form and ſituation, ſays that it had a garriſon.

LE'RINS, the name of two iſlands in the Mediterranean ſea, lying on the coaſt of Provence in France, five miles from Antibes. That near the coaſt, called *St. Margaret*, is guarded by invalids, ſtate-priſoners being ſent here: it was taken by the Engliſh in 1746, but marſhal Belleiſle retook it in 1747. The other is called *St. Honorat*; it is leſs than the former, but has a benedictine abbey. There are ſome other very ſmall iſlands near.

LER'MA, a town of Spain, in Old Caſtile, on the Arlanza, diſmantled in 1336, for ſiding with ſome nobles againſt the king of Caſtile. It is twenty-three miles ſouth of Burgos.

LER'MA, a town of Mexico, in the province of Yucatan: twelve miles ſouth of Campeachy.

LER'MOSZ, a village of the county of Tyrol, where,

it is ſaid, the emperor Lotharius II. died in a peaſant's hut. It is twelve miles ſouth-ſouth-weſt of Reite.

LER'NA, in ancient geography, not far from Argos, on the confines of Laconia; ſuppoſed to be a town of Laconia, but on the borders of Argolis; the poſition Pauſanias allots to it, near Temenium, on the ſea; without adding whether it is a town, river, or lake. According to Strabo, it is a *lake*, ſituated between the territories of Argos and Mycene, in contradiction to Pauſanias. If there was a town of this name, it ſeems to have ſtood towards the ſea, but the lake to have been more inland. Mela calls it a *well-known town* on the Sinus Argolicus; and Statius by Lerna ſeems to mean ſomething more than a lake. This, however, is the place rendered famous by the fable of the defeat of the hydra with many heads, which retired hither and was killed by Hercules. Here alſo, according to the poets, the Danaides threw the heads of their murdered huſbands. The people of the country pretend that near this lake Neptune ran away with Proſerpine; in memory of which event were annually celebrated the myſteries conſecrated to Ceres; and hence theſe myſteries were denominated the Lernæan myſteries. Near the lake was a wood conſecrated to this goddeſs, which commenced at Mount Pontinus. *Pauſan. Corinth.* l. ii. c. 36.

LERNÆ'A, *ſ.* in helminthology, the FISH-BITER; a genus of gelatinous worms, the characters of which are—An oblong, ſomewhat-cylindrical, and naked, body; head deſtitute of eyes, but furniſhed with ſtrong branched tentacula or horns, (two or three on each ſide,) by which it inſinuates itſelf between the gills of fiſh, and there ſucks its nouriſhment; its ovaries are external, projecting like two tails from the lower extremity, which it glues on the fins and gills of the fiſh whereto it adheres, and there the young are hatched. There are fifteen ſpecies, which infeſt as many kinds of fiſh.

1. Lernæa branchialis, the cod-biter. Specific characters, body round, flexuous; mouth lateral and ſeated between three ſlightly-branched horns. This inhabits the North Seas, on the gills of cod-fiſh, and is eaten by the Greenlanders; it is about two inches long. See the article HELMINTHOLOGY, vol. ix. p. 350. and Plate III. fig. 6.

There is a variety, β, Lernæa minor, which is ſmaller in every dimenſion.

2. Lernæa cyprinacea, the carp-biter: body cylindrical, clavate behind; thorax forked, tentacula lunate at the tip. Body about half an inch long, and not thicker than a ſtraw; round, pale and ſomewhat pellucid; tentacula four, two of them lunate at the tips. Inhabits ponds, fixed to the ſides of carp and roach.

3. Lernæa ſalmonea, the ſalmon-louſe: body obovate; thorax inverſely heart-ſhaped; arms two, approximate, linear. Body pale, ſoft; head ſmall, oblong, rather convex, with two horizontal lips, the upper armed with two rigid moveable hooks, the lower ſhort, bifid; abdomen inverſely ovate; ovaries round, granulate within, and as large as the whole body. Inhabits the gills of ſalmon; ſix lines long.

4. Lernæa aſellina, the ling-biter: body lunate; thorax heart-ſhaped. Found in the gills of cod and ling.

5. Lernæa huchonis, the trout-biter: body knotty; tentacula or arms two; ovary double, and united behind. Body clear white, and ſomewhat cartilaginous. Found in the gills of the Salmo hucho, or German trout.

6. Lernæa clavata, the perch-biter: body cylindrical, ſubſinuate, and tripled beneath the tip of the ſnout. Body pellucid, white, with red lines; neck narrow, yelloviſh, pointed at the top, incurved and knotty; ovaries tubular, the eggs adhering on the outſide. Found in the fins, gills, mouth, and eyes, of the Perca norwegica.

7. Lernæa uncinata, the Greenland lernæa: body ſomewhat heart-ſhaped; ſnout ſimple, curved; mouth terminal. Body ſoft, pale, with a longitudinal groove down the middle of the back; ovaries rounded and thickened towards the tip. Inhabits Greenland, on the fins and gills of cod-fiſh.

8. Lernæa gobina, the bull-head lernæa: body rhomboid; arms two before and as many behind, all nodoſe; head with two curved horns. Body bluiſh-white; head roundiſh; mouth placed between the horns, and furniſhed with three lips; arms angular, curved, knotty; inteſtines tranſlucent above; tail bifid; ovaries ſpiral, round, ſubulate. Inhabits the gills of the Cottus gobio; ſeven lines long.

9. Lernæa radiata, the coryphæna-biter: body ſquare, depreſſed; with three pair of arms, and four horns. Body about eleven lines long, dirty white or cinereous, and rough with hardiſh tubercles; the ſides a little crenate; head depreſſed, rounded, a little more convex beneath, and covered with numerous papillæ; ovaries large, oboval. Found about the mouth of the Coryphæna rupeſtris.

10. Lernæa nodoſa, the knotted lernæa: body ſquare, tuberculate; with two very ſhort arms beneath on each ſide. Body ſoft, pale cinereous, above convex, beneath concave, with four hard white tubercles in the middle of the back, and five white teeth each ſide; head rounded, and divided by a white ſtreak in the middle. Inhabits about the mouth of the Perca norwegica.

11. Lernæa cornuta, the horned lernæa: body oblong, with four ſtraight emarginate arms; head ſubovate, with two horns. Found on the plaiſe and linguatula.

12. Lernæa pectoralis, the breaſt-biter: head orbicular, hemiſpherical; abdomen obcordate, with a terminal truncate papilla. Body white, diaphanous, covered with blackiſh dots; crown with two falciform projections; ſnout conic, truncate, with four minute horns, two very ſhort ſpines and two feelers near a third conic ſpine; arms two, not curved; ovaries two, rather narrow, ſubannulate, and of equal diameter. Found on the gills and pectoral-fins of flounders, &c.

13. Lernæa lotæ, the barbot-biter: with four unequal ovaries. Mouth with two hooks; appendages four, cruciate. On the gills of the Gadus lota.

14. Lernæa cyclopterorum, the lump-biter: body round, flexuous, with a double orifice in the middle of the ſnout; ſnout terminated by three three-parted horns. Body reſembling L. branchialis; but the horn is ſlender, turned up, and entire at the tip; tail narrow, with two convex lobes each ſide; ovaries ſimple, ſpiral, and nearly five inches long when extended. Found on the Cyclopterus ſpinoſus.

β. Body leſs; ovaries greeniſh. Infeſts the Cyclopterus liparis.

15. Lernæa pinnarum, the fin-biter: rufous; head cylindrical and roſtrate on the fore-part; tentacula two, lunate, and bifid at the tip; arm only one. Body depreſſed, fleſhy, grooved on the back, with a cylindrical arm placed on the fore-part of the back, and concealed in a groove; ovaries long, cylindrical. Found on the dorſal-fins of the Gadus barbatus.

On the annexed Plate, fig. 1 repreſents the Lernæa clavata of the natural ſize; fig. 2, the ſame magnified. Fig. 3, L. uncinata; fig. 4, L. gobina; fig. 5, L. radiata; fig. 6, L. nodoſa; fig. 7, L. cornuta; fig. 8, a part of the ovaries of the ſame magnified; fig. 9, L. pectoralis, of the natural ſize.

LERNE'AN, *adj.* [from *Lerna.*] Belonging to the water-ſerpent; belonging to the lake where Hercules was ſuppoſed to have ſlain the hydra.

LERNEB', a town of Algiers: twenty miles ſouth of Tipſa.

LER'NICA, formerly a large city in the iſland of Cyprus, as appears from its ruins; but now no more than a village, ſeated on the ſouthern coaſt of that iſland, where there is a good road, and a ſmall fort for its defence.

LE'RO, anciently LEROS, an iſland of the Grecian Archipelago. Strabo ſays that it was formerly inhabited by a colony of Mileſians. It is about eight miles long, and two broad. It has a good harbour and a few coves, and alſo high mountains,

mountains, in whoſe boſoms mines and quarries of marble might be worked; but its ſoil is ungrateful, and its inhabitants are under the neceſſity of ſeeking ſuccours abroad by navigation and traffic. Lat. 37. 12. N. lon. 26. 35. E.

LERO'NA, a town of Italy, in the Orvietan: ſeven miles north-weſt of Orvieto.

LERRADIL'LA, a town of Spain, in the province of Leon: twelve miles ſouth-eaſt of Ciudad Rodrigo.

LERS, a river of France, which runs into the Garonne near Toulouſe.

LERS, a river of France, which runs into the Rhône near Beaucaire.

LER'WICK, a ſea-port town, ſituated in a pariſh of the ſame name, on the eaſt ſide of the Mainland of the Shetland Iſles. It is diſtinguiſhed as the ſeat of the courts held by the ſheriff-depute of the ſtewartry, and as the general rendezvous of all the veſſels employed in the whale-fiſhery. The harbour is one of the ſafeſt and largeſt in Great Britain. It is formed by the iſland of Breſſay, and is particularly commodious from the circumſtance of having two entries, one from the ſouth, and another from the north. On the outſide of the north entrance is a ſunk rock, which is called the Unicorn. It derived its name from the Unicorn man-of-war, which was ſent in purſuit of the earl of Bothwell, when that nobleman fled to Shetland. As this veſſel appeared at the mouth of the ſouth entry, before her approach was diſcovered by the earl, he with difficulty eſcaped by the north paſſage. The Unicorn eagerly purſued; but, having no pilot on-board, ſhe ſtruck upon this rock, and was wrecked. The town of Lerwick is about half a mile in length, and is irregularly built, but contains ſeveral excellent houſes. Near the north end is a ſmall fortification, called Fort Charlotte. It is uſually garriſoned by a party of invalids, and ſerves to protect the north entry of the harbour. About a mile and a half from the town are the remains of two ancient Daniſh caſtles. The pariſh extends about ſix miles along the coaſt, but at no point is more than one in breadth. The ſurface of the ground is for the moſt part rocky and mountainous. Immediately upon the ſhore, however, there are many very fine arable fields, the ſoil of which, though light and ſandy, poſſeſſes conſiderable fertility.

Proviſions of every kind, the finer vegetables and fruit excepted, are very abundant here, and extremely reaſonable. The price of a good fowl was, in the year 1780, threepence, of a dozen of new-laid eggs one penny; and as much excellent fiſh, cod, haddock, halibut, mackerel, &c. could be bought for one ſhilling, as would coſt at leaſt ten pounds at Billingſgate. Potatoes, turnips, &c. are not common: wheat-flour is alſo a rare article, but the inhabitants in general prefer bread made of oatmeal. The town conſiſts of about 200 houſes, of one, or at moſt of two, ſtories, which form a narrow crooked lane on the ſea-ſide, badly paved with flat ſtones. All the houſes are built of quarry-ſtone: thoſe of the rich are roomy, ſtrong, convenient, and well furniſhed; thoſe of the poor are ſmall, and very ſmoky, for want of a proper arrangement of the chimneys. Though the place lies in 60° north latitude, the winters are not ſevere; they are, however, wet and ſtormy. The harbour is very capacious and ſafe, and the anchoring-ground good. *Phil. Mag.* July 1799.

LE'RY, a river of Wales, in the county of Cardigan, which runs into the Iriſh Sea five miles north of Aberyſtwith.

LES, a river of France, which runs into the Mediterranean in lat. 43. 31. N. lon. 4. E.

LE'SA, a river of Naples, which runs into the Nero five miles weſt of Cerenza.

LESA'RA, a ſmall iſland in the Baltic, eaſt of Aland. Lat. 60. 18. N. lon. 20. 19. E.

LES'BIAN, *adj.* [from *Leſbos.*] Belonging to Leſbos.

LES'BIAN, *ſ.* A native of Leſbos, an inhabitant of Leſbos.

LESBO'NAX, a Greek philoſopher, who flouriſhed in the firſt century of the Chriſtian era, was a native of Mitylene. He had been a diſciple of Timocrates; but corrected what was moſt auſtere and forbidding in the principles and manners of his maſter. He taught philoſophy in his native city, with great applauſe, and to a crowded ſchool. So ſenſible were the magiſtrates of Mitylene of his merits, and of the utility of his labours, that they cauſed a medal to be ſtruck in his honour. This piece eſcaped the reſearches of antiquaries till towards the middle of the eighteenth century, when one was diſcovered in the ſouth of France, of which an engraving was publiſhed in 1744, by M. Cary, of the Academy of Marſeilles, accompanied with a learned diſſertation on Leſbonax. He is of opinion, that the rhetorician of the ſame name, who is ſpoken of by ancient writers, was no other than our philoſopher. Suidas informs us that he was the author of many books of philoſophy; and Photius ſays, that he had read ſixteen orations written by Leſbonax. Two of theſe, or at leaſt two orations aſcribed to Leſbonax, have reached modern times, and were firſt publiſhed by Aldus, in his edition of the Ancient Orators printed in 1513. Henry Stephens afterwards publiſhed them in 1575, with the orations of Æſchines, Lyſias, and others, in folio. In 1619, Janus Gruter publiſhed an edition of them in Greek and Latin, at Hanover, in 8vo. together with the orations of Dinarchus, Lycurgus, Herodes, and Demades. Leſbonax is alſo ſaid to have been the author of a treatiſe *de Figuris Grammaticis*, publiſhed with Ammonius at Leyden, in 1739, 4to. Our philoſopher had a ſon, named Potamon, who was an eminent rhetorician at Rome, under the reign of the emperor Tiberius. *Fabricii Bibl. Græc.* vol. iv.

LES'BOS, a large iſland in the Ægean ſea, on the coaſt of Ætolia, about 168 miles in circumference. It has been ſeverally called *Palaſgia*, from the Pelaſgi by whom it was firſt peopled; *Macaria*, from Macareus who ſettled in it; and *Leſbos*, from the ſon-in-law and ſucceſſor of Macareus who bore that name. The wine produced here was greatly eſteemed by the ancients, and is ſtill in repute among the moderns. The Leſbians were ſo debauched and diſſipated, that the epithet of *Leſbian* was often uſed to ſignify debauchery and extravagance. Euſtathius, in his commentary on the third book of the Odyſſey, ſays, that this iſland contained five towns, viz. Leſbos, Antiſſa or Iſſa, Pyrrha, Methymna, and Mitylene, whence the iſland has been ſince called Mitylene, now *Metelin*. This laſt town was the capital.

Leſbos, originally governed by rulers choſen among its own inhabitants, became afterwards ſubject to the dominion of foreign tyrants. It ſucceſſively paſſed under the domination of the Perſians, and then under that of the Greeks, till its liberty was reſtored by Alexander the Great. This liberty it preſerved till the time of Pompey, who reduced it to the ſtate of a Roman province; continuing, however, for ſome time to Mitylene its ancient privileges. The Cruſaders next eſtabliſhed themſelves for a certain period; and the Genoeſe were maſters of it when the empire of the Eaſt fell into the hands of the Turks. It was on this occaſion that Mahomet II. ten years after the capture of Conſtantinople, equipped a conſiderable fleet in order to ſubdue it. Mitylene, Methymna, and moſt of the places of this iſland, had been well fortified; the knights of Rhodes ſuccoured it; and the inhabitants, who knew the cruelties committed by the Turks at the capture of Conſtantinople, were all diſpoſed to defend their lives. The Ottoman forces, although very conſiderable, would undoubtedly have miſcarried againſt thouſands of heroes, if theſe heroes had not been betrayed by the treachery of Lucco Gattiluſio, who thought of obtaining the ſovereignty of the iſland by delivering it up to Mahomet. Accordingly, he perſuaded his couſin Gattiluſio to ſign a ſhameful capitulation. However, as a recompence for the treachery of the one and for the weakneſs of the other, Mahomet cauſed both to be cruelly put to death a ſhort time after.

Leſbos has given birth to ſeveral perſons of diſtinction;

among whom we may reckon Alcæus, and Sappho, Arion and Terpander, Theophraſtus, Pittacus, and Potamon; for the hiſtory of whom, ſee thoſe articles; and, for an account of the preſent ſtate of Leſbos, ſee METELIN.

LES'BUS, or LESBOS, a ſon of Lapithas, grandſon of Æolus, who married Methymna daughter of Macareus. He ſucceeded his father-in-law, and gave his name to the iſland over which he reigned. See LESBOS.

LESCA'ILLE (James), a Dutch printer and poet, born in 1610, was deſcended from a family of diſtinction at Geneva, which took refuge in Holland on account of ſome perſecution. In his profeſſion of a printer and bookſeller, he gained reputation by the beauty and accuracy of various editions of books which he publiſhed. As a poet in the Dutch language, he was reckoned to have given an example of the politeneſs and elevation of which it is ſuſceptible. The emperor Leopold, in 1663, honoured him with the poetical laurel. He died in 1677.

LESCA'ILLE (Catharine), daughter of the preceding, born in 1649, diſtinguiſhed herſelf ſo much by her poetical talents, that ſhe was called the *Dutch Sappho*. She ſurpaſſed her father in the beauty of her verſe, and obtained the applauſes of Vondel and other celebrated poets of her country. Her brother-in-law, the bookſeller Ranck, publiſhed in 1728 a volume of her works, which contains ſeven tragedies, beſides other pieces. She died in 1711. *Moreri.*

LESCA'NO, a town of Spain, in the province of Guipuſcoa: nine miles ſouth-ſouth-weſt of Toloſa.

LESCA'R, a town of France, in the department of the Lower Pyrenées; before the revolution, the ſee of a biſhop, ſuffragan of Auch. It contains about 6000 inhabitants. It is three miles north-weſt of Pau, and eighteen ſouth-eaſt of Orthez.

LESCARBO'T (Mark), a native of Vervins, and an advocate in parliament, reſided for ſome time in New France, or Canada, and publiſhed an account of that country, containing "The Voyages, Diſcoveries, and Settlements, of the French in the Weſt Indies and New France, under the Authority of our Moſt Chriſtian Kings," &c. of which the ſecond edition, 8vo. is dated Paris, 1612. He afterwards attended Peter de Caſtille, the ambaſſador of Louis XIII. to Switzerland; and publiſhed a deſcription of the thirteen cantons in French heroic verſe, Par. 1618.

LESCHASSIE'R (James), a learned French lawyer, was born at Paris in 1550. He early diſtinguiſhed himſelf at the bar; but, finding his health injured by his application, he accompanied M. Pibrac in his embaſſy to Poland. Upon his return, he was appointed one of the ſubſtitutes to the procurer-general. During the diſturbances of the league, he adhered to the royal party, and obtained the eſteem of Henry IV. whom he followed till his reſtoration to lawful ſovereignty. He was conſulted in 1605 by the republic of Venice concerning their diſpute with pope Paul V. and received a valuable gold chain in return for his reply, which was printed in Latin the next year. He entertained a literary correſpondence with many of the moſt eminent ſcholars of his time; and wrote ſeveral treatiſes upon legal ſubjects, which, though conciſe, were greatly valued for their learning and ſolidity. Among theſe, his "Treatiſe on the ancient and canonical Liberty of the Gallican Church" is conſidered as throwing much light upon French hiſtory. This eſtimable perſon died in 1620. All his writings were publiſhed collectively in one volume 4to. Paris, 1649 and 1652.

LES'CHE, a river of France, which runs into the Meuſe near Dinant.

LESCHE'RES, a town of France, in the department of the Upper Marne: nine miles ſouth of Joinville.

LES'CHES, a Greek poet of Leſbos, who flouriſhed B. C. 600. Some ſuppoſe him to be the author of the Little Iliad, of which only few verſes remain, quoted by Pauſanias, c. 25.

LES'CIVER, a town of Perſia, in the province of Irak: 101 miles weſt of Hamadan.

LESC'ZYN, a town of Poland, in Volhynia: twenty-four miles north of Berdiczow.

LE'SER, or LES'SER, a river of France, which riſes near Kerpen, in the department of the Roer, and runs into the Moſelle three miles above Berncaſtle.

LES'EWITZ, a town of Pruſſia, in Pomerelia: five miles north-north-eaſt of Marienburg.

LESQUISTAN'. See DAGESTAN.

LE'SHEM, [Hebrew.] The name of a place.

LESI'GNA, a town of France, in the department of the Aude: eleven miles weſt of Narbonne, and ſeventeen eaſt of Carcaſſonne.

LESIGNY' SUR CREU'SE, a town of France, in the department of the Vienne: nine miles eaſt of Châtellerault, and three ſouth-ſouth-eaſt of Guerche.

LESI'NA, an iſland in the Adriatic, forty-eight miles long, and eight wide, anciently called *Pharos*, or *Pharia*. It was once a republic, afterwards ſubject to Narenta, from which it came under the dominion of particular lords, who ceded it to Venice in the year 1424. Great quantities of different kinds of marble are found on the iſland. The high parts are in general rocky and barren; others are fertile, and feed a great number of ſheep. The principal productions are wine, oil, figs, almonds, ſaffron, honey, aloes, oranges, wool, cheeſe, and ſalt. Salt-fiſh is the principal article of commerce. Leſina is the capital. Lat 43. 0. N. lon. 17. E.

LESI'NA, a town on the above iſland, the ſee of a biſhop, and reſidence of a governor: it is ſurrounded with walls, and has a large and ſecure harbour; but little frequented. The number of inhabitants is above 1200. It is twenty miles ſouth of Spalatro. Lat. 43. 5. N. lon. 16. 50. E.

LESI'NA, a town of Naples, in Capitanata, the ſee of a biſhop, ſuffragan of Benevento, on a lake which communicates with the Adriatic. In the year 1627, it was almoſt totally deſtroyed by an earthquake. It is twenty-ſix miles north-weſt of Manfredonia, and eighty-four north-north-eaſt of Naples. Lat. 41. 59. N. lon. 14. 30. E.

LESI'NA, a lake of Naples, in Capitanata, near the Adriatic: twenty miles north-weſt of St. Angelo.

LESI'NA, *ſ.* [Latin.] A cobler's awl.

LES'INAGE, *ſ.* [from *leſina.*] Thriftineſs; good huſbandry. *Phillips.*

LES'KARD. See LISKEARD.

LESKAU', a town of Bohemia, in the circle of Pilſen: ſeven miles eaſt of Plau.

LES'KEN, a town of Pruſſia, in Pomerelia: ſix miles north-north-weſt of Marienburg.

LES'KIA, *ſ.* [ſo named by Hedwig, from *Nath. Godofr. Leſke*, profeſſor of natural hiſtory and œconomy in the univerſity of Leipſic, and afterwards at Marburgh. He died in 1786, at the age of 35.] In botany, a genus of the claſs cryptogamia, order muſci, or moſſes. The generic characters are—Capſules oblong; periſtome double; the exterior with ſixteen teeth, which are acute; the interior membranaceous, divided into equal ſegments. Males gemmaceous in different individuals. This genus is by Britiſh botaniſts united to Hypnum, as agreeing therewith entirely in habit, and differing only in a very minute and uncertain character of the inner fringe, which is furniſhed with ſixteen ſimple teeth, inſtead of double or compound ones. See HYPNUM.

LES'KIRCH, a town of Tranſylvania: fourteen miles weſt of Fogaras.

LESK'NITZ, or LES'NITZ, a town of Sileſia, in the principality of Oppeln: eighteen miles ſouth-eaſt of Oppeln, and twenty north of Ratibor. Lat. 50. 25. N. lon. 13. 6. E.

LES'KO, a town of Auſtrian Poland, in Galicia: forty-eight miles ſouth of Lemberg.

LESKOVATZ', a town of European Turkey, in Bulgaria: eighty-four miles weſt-north-weſt of Sophia.

LES'LEY (John), biſhop of Roſs, an eminent politician and writer of hiſtory, deſcended from an ancient family in the northern part of Scotland, was born in 1527.

He

He was educated in the univerſity of Aberdeen, and obtained a canonry in the cathedral of that city in 1547. For further improvement he ſpent ſome years at the French univerſities, and took the degree of doctor of laws at Paris. In 1554, at the command of the queen-regent, he returned to Scotland, and, taking orders, was appointed official and vicar-general of the dioceſe of Aberdeen. He was a zealous oppugner of the reformation, which was then beginning to ſpread in Scotland; and appeared as a principal champion of the Roman-catholic party in a diſputation held between them and the reformers at Edinburgh, in 1560. When the public diſturbances produced an invitation to the young queen Mary to return and aſſume the reins of government, he was ſent over by the catholics to infuſe into her mind ſuſpicions of her proteſtant ſubjects, and perſuade her to throw herſelf into the arms of the popiſh party. He embarked with her at Calais in 1561; and ſoon after her arrival was created one of the ſenators of the college of juſtice, and a privy-counſellor. The abbacy of Lindores was afterwards conferred upon him; and, upon a vacancy in the ſee of Roſs, he was nominated to fill it. His attention was by no means confined to his eccleſiaſtical duties, but comprehended various objects of public utility. It was chiefly at his inſtigation that the queen appointed a commiſſion to collect and reviſe the ſubſiſting laws of the realm; and the collection printed at Edinburgh in 1566, commonly called the black acts of parliament, from being in the black letter, was the reſult of its labours. When the unfortunate queen had taken refuge in England from the fury of the covenanters, and commiſſioners were appointed by queen Elizabeth in 1568 to examine the mutual accuſations between her and her ſubjects, the biſhop of Roſs was one of thoſe whom Mary choſe for the defence of her cauſe. He engaged in this ſervice with great zeal and ability; and afterwards reſided at the Engliſh court as her ambaſſador, and vigorouſly remonſtrated againſt the unjuſt treatment ſhe received. Finding theſe repreſentations ineffectual, he was led by the warmth of his temper, and the fervour of his attachment to his miſtreſs, to join in conſpiracies for her deliverance dangerous to the perſon and government of Elizabeth. He urged the duke of Norfolk to thoſe deſigns which proved his ruin; and upon their diſcovery in 1571, he was committed to the Tower, and threatened with capital puniſhment; but, after a long confinement, was ſet at liberty, on condition that he ſhould leave the kingdom. He retired to the Netherlands, and employed himſelf in earneſt ſolicitations to the kings of France and Spain, the German princes, and at length to the pope, in order to obtain Mary's liberation. He alſo publiſhed various writings in her defence, as well as a vindication of her right and title to the crown of England; in which laſt he certainly diſplayed more zeal than judgment, ſince nothing could more aggravate the jealouſy and averſion of queen Elizabeth towards her. In 1579, probably through the intereſt of the Guiſes, he was appointed ſuffragan and vicar-general of the archbiſhopric of Rouen; but ſuch was the turbulence of the times, that, on making his viſitation of the dioceſe, he was ſeized, impriſoned, and made to pay a large ranſom. A ſimilar accident happened to him in 1590, when Henry IV. was engaged in war with the leaguers. In 1593 he was nominated to the biſhopric of Conſtance, but it does not appear that he ever took poſſeſſion of that ſee. Perceiving that his hopes of returning to his own country were terminated by the eſtabliſhment of the reformation, he retired to a monaſtery near Bruſſels, where he died in 1596.

The character of this prelate, as a man of learning, an able ſtateſman, and a moſt faithful ſervant to his ſovereign, has obtained the applauſe of many of his contemporaries. Of his writings, beſides thoſe already alluded to, the principal are, his hiſtory, entitled "De Origine, Moribus, & Rebus geſtis, Scotorum," in ten books, Rom. 1578, 4to. this is brought down to queen Mary's return to Scotland in 1561; and the three laſt books are particularly dedicated to her, to whom they were preſented in Engliſh before their publication in Latin; the former books are chiefly an abſtract of Boece, with corrections: and his geographical work, entitled "Regionum & Inſularum Scotiæ Deſcriptio." *Nicholſon's Hiſt. Libr. Robertſon's Hiſt. Scot.*

LES'LIE, a town of Scotland, in Fifeſhire, on the Leven. In 1801, the number of inhabitants was 1609. It is conſiderable for its manufactures. It is four miles ſouth of Falkland.

LES'LIE (John), an Iriſh prelate in the ſeventeenth century, was deſcended from an ancient family, and born at Balquhaine in the north of Scotland. The early part of his education he received at Aberdeen; whence he was ſent to the univerſity of Oxford. For further improvement he viſited Spain, Italy, Germany, and France; in which laſt country he reſided a conſiderable time, and made a great proficiency in polite literature, as well as in the abſtruſe branches of learning. The French, Spaniſh, and Italian, languages, he ſpoke with the ſame fluency and propriety as the natives; and he was ſo great a maſter of the Latin, that it was ſaid of him, when in Spain, "Solus Leſſius Latine loquitur." He continued abroad twenty-two years; during which time he was continually converſant in courts, where he acquired that addreſs, which gave a peculiar grace to all his manners, and even to his preaching. Theſe accompliſhments procured him the favour of many foreign princes; and at home he was honoured with that of king Charles I. who admitted him into his privy-council both in Scotland and Ireland; in which ſtations he was continued by Charles II. after the reſtoration. In the church of Scotland he was preferred to the biſhopric of Orkney, or of the Iſles; from which he was tranſlated, in 1633, to Raphoe in Ireland. Here he built a ſtately palace, in the form of a caſtle, and judiciouſly contrived for ſtrength as well as beauty; which was found to be an important poſt in the civil war of 1641, and was the means of keeping in ſubjection a good part of that country. The biſhop exerted himſelf to the utmoſt in defence of the royal cauſe; and endured a ſiege in his palace of Raphoe, before he would ſurrender it to Oliver Cromwell, being the laſt perſon who maintained the ſtruggle in thoſe parts. He then retired to Dublin, where he conſtantly uſed the liturgy in his family, and had even frequent confirmations and ordinations. After the reſtoration he came over to England; and in 1661 was tranſlated to the ſee of Clogher. It is ſaid that he was offered a better biſhopric, which he refuſed, from the moſt diſintereſted and praiſe-worthy motives; being reſolved to finiſh his labours among thoſe with whom he had been a ſufferer, and where his influence was moſt beneficial. He died in 1671, when he was upwards of an hundred years of age, having worn the mitre more than fifty years, and being then reputed the oldeſt biſhop in the world. To this longevity his regular manner of living, and uncommon temperance, greatly contributed. He had been admitted to the degrees of doctor of divinity, and, according to the information of his ſon Charles, doctor of laws, by the univerſity of Oxford; and he wrote ſeveral curious and learned works, which he deſigned for publication, but which were all deſtroyed (together with his great library of many years collection, and ſeveral valuable manuſcripts which he had brought from foreign countries) in the civil wars. *Wood's Athen. Oxon.* vol. ii.

LES'LIE (Charles), a learned Iriſh divine, and voluminous writer, was the ſecond ſon of the preceding, and born in Ireland; but in what place, and in what year, we are not informed. He was educated in grammar-learning at Inniſkilling, in the county of Fermanagh; and in 1664 was admitted a fellow-commoner of Trinity-college, Dublin, where he continued till he commenced M. A. Upon the death of his father in 1671, he came over to England, and entered himſelf in the Temple, at London. Having ſtudied the law for ſome years, he conceived a

ſtrong diſlike to it as a profeſſion, and therefore relinquiſhed it, applying himſelf cloſely to the ſtudy of divinity. In 1680, he was admitted into holy orders; and, in 1687, was made chancellor of the dioceſe of Connor. About this time he rendered himſelf extremely obnoxious to the popiſh party in Ireland, by his zealous oppoſition to their doctrines, and to the indefatigable induſtry with which they propagated them; which was particularly called forth by the following circumſtances. On the death of Robert Boyle, biſhop of Clogher, in the year laſt mentioned, Patrick Tyrrel was made titular popiſh biſhop, and had the revenues of the ſee aſſigned him by king James. Upon this, he eſtabliſhed a convent of friars in Monaghan; and, making that the place of his reſidence, held a public viſitation of his clergy, with great ſolemnity. As he was attended in this viſitation by ſome ſubtle logicians, he had the boldneſs to challenge the proteſtant clergy to a public diſputation. The gauntlet was immediately taken up by Mr. Leſlie, who defended the proteſtant cauſe with ſuch ability and ſpirit as afforded the higheſt ſatisfaction to its friends; though it happened, as is generally the caſe in ſuch conteſts, that both ſides claimed the victory. Afterwards he held another public diſputation with two celebrated popiſh divines, in the church of Tynan, in the dioceſe of Armagh; in which he argued ſo ſucceſsfully againſt the tenets of popery, that he induced Mr. John Stewart, a popiſh gentleman, ſolemnly to renounce the errors of the church of Rome. Encouraged by the partiality of the reigning prince, the papiſts now aimed at engroſſing civil as well as ſpiritual offices, and a popiſh high-ſheriff was appointed for the county of Monaghan. This proceeding alarmed all the gentlemen in that county; and, as Mr. Leſlie's knowledge of the law, and of his duty as a juſtice of peace, was held in high eſteem, they applied to him upon the occaſion. In anſwer to their application he informed them, "that it would be as illegal in them to permit the ſheriff to act, as it would be in him to attempt it." The gentlemen being of opinion, that Mr. Leſlie's preſence on the bench at the approaching quarter-ſeſſions was very deſirable, and promiſing to be guided in their conduct by him, he was carried thither, though not without great difficulty, and in much pain, as he was now ſuffering under a ſevere attack of the gout. At this ſeſſions the enquiry was made, whether the pretended ſheriff was legally qualified? when he pertly obſerved, "that he was of the king's own religion, and that it was his majeſty's will that he ſhould be ſheriff." Upon this Mr. Leſlie replied to him, "that they were not enquiring into his majeſty's religion, but whether he had qualified himſelf according to law for acting as a proper officer. That the king's ſubjects had no other way of knowing his will but as it is revealed to them in his laws; and it muſt always be thought to continue ſo, till the contrary is notified to them in the ſame authentic manner." To this ſound doctrine the court aſſented, and unanimouſly agreed to commit the pretended ſheriff for his intruſion and arrogant contempt of the court. Mr. Leſlie alſo committed ſome officers of that tumultuous army which lord Tyrconnel raiſed for robbing the country.

Hitherto Mr. Leſlie had acted in a manner becoming a proteſtant divine, and a conſtitutional magiſtrate; and it would have been happy for himſelf, and beneficial to ſociety, if he had perſevered in a conduct ſo commendable. It was his misfortune, however, to imbibe the abſurd and pernicious doctrines of paſſive obedience and non-reſiſtance; which ſo biaſſed his judgment, that at the revolution he refuſed to take the oaths to king William and queen Mary. We are far from throwing out the moſt diſtant inſinuation againſt the purity of the motives on which he acted on this occaſion; and the ſacrifices which he made, indeed, bear ample teſtimony to his integrity; for, in conſequence of his refuſal, he was deprived of all his preferments; and in 1689, when the troubles began to ariſe in Ireland, he withdrew with his family into England. Here he employed his pen in ſupport of the cauſe and party which he had embraced; and, as he poſſeſſed conſiderable learning, and no ſmall ſhare of acuteneſs and wit, he was eſteemed one of their ableſt champions by the nonjurors. Among other things, he wrote a paper called The Rehearſal, which was at firſt publiſhed once a-week, and afterwards twice, in a folio half-ſheet, by way of dialogue on the affairs of the times. It was begun in 1704, and continned for ſix or ſeven years. Theſe papers were afterwards collected together, and publiſhed in ſeveral volumes. Biſhop Burnet obſerves, that he purſues a thread of argument in them all, againſt the lawfulneſs of reſiſtance in any caſe whatſoever; deriving government wholly from God, denying all right in the people, either to confer or to coerce it. But Mr. Leſlie's attention was not confined to political ſubjects. He became alſo a ſtrenuous champion for the church of England, againſt the quakers, and other diſſenters. Of the former he made many converts from their peculiar principles; but, as they were all inclinable to return to preſbytery, which was their original profeſſion, he found himſelf obliged to treat on the ſubject of church-government; and in different publications maintained the cauſe of epiſcopacy, and the divine right of tithes. He alſo wrote ſome treatiſes againſt the Deiſts, the Jews, the Papiſts, and the Socinians; and ſome ſmaller pieces on different ſubjects, particularly in the diſpute concerning the rights of convocations, and the authority of Chriſtian princes over the church. All theſe theological and eccleſiaſtical works, excepting one illiberal piece againſt the excellent Dr. Tillotſon, Mr. Leſlie collected together, and publiſhed in two volumes folio, in the year 1721.

In the mean time, Mr. Leſlie's writings, and the frequent viſits which he paid to the courts of St. Germain and Bar le Duc, had rendered him obnoxious to the government. But he became much more ſo upon the publication of "The hereditary Right of the Crown of England aſſerted;" of which he was the reputed author. And it has been related by his different biographers, that, in conſequence of his being thus obnoxious, he found himſelf under the neceſſity of leaving the kingdom; when he repaired to the pretender, at Bar le Duc. At that place he was permitted to officiate in a private chapel according to the rites of the church of England; and he was not ſparing in his endeavours to convert the pretender to the proteſtant religion; but without ſucceſs. According to lord Bolingbroke, he was ill uſed by the pretender, who had ſent for him, and had promiſed to hear what he ſhould repreſent to him on the ſubject of religion; but was far from keeping the word which he had given, and on the faith of which Mr. Leſlie had gone over to him; for he not only refuſed to hear him himſelf, but ſheltered the ignorance of his prieſts, or the badneſs of his cauſe, or both, behind his authority, and abſolutely forbade all diſcourſe concerning religion. Notwithſtanding this, when towards the cloſe of queen Anne's reign the partiſans of the pretender were active in promoting his intereſts in England, Mr. Leſlie wrote a letter from Bar le Duc, which was printed and diſperſed by the Jacobites, and opens with a flattering picture of the pretender. It dwells on "his graceful mien, magnanimity of ſpirit, devotion free from bigotry, application to buſineſs, ready apprehenſion, ſound judgment, and affability; ſo that none converſed with him, but what were charmed with his good ſenſe and temper." Then, after mentioning the proceedings of parliament againſt him, and diſcuſſing the ſubject of his birth, it offers, in the name of the pretender, ſome romantic propoſals for the ſecurity of the church of England as by law eſtabliſhed, on condition of his being reſtored to his crown. Many other propoſals, of a like nature, were made ſoon afterwards, and various projects were concerted in England for ſecuring the acceſſion of the pretender; and, in the year 1715, an inſurrection in his favour actually took place in Scotland, and the northern parts of England. This raſh and ill-digeſted enter-

priſe, however, terminated in the ruin and diſperſion of the rebels, and led to thoſe negociations between the courts of France and England, by which the pretender was compelled to quit the French dominions. In this emergency he retired to Italy, whither he was attended by Mr. Leſlie, who continued in that country till the year 1721. During this interval he underwent ſo many difficulties, and met with ſuch repeated diſappointments and mortifications, that he could no longer ſuſtain the preſſure; and he reſolved, at all hazards, to return and die in his native country. Some of his friends, acquainting lord Sunderland with his purpoſe, implored his protection for him; which his lordſhip readily and generouſly promiſed. No ſooner had Mr. Leſlie arrived in London, than he proceeded to Ireland, where he died in April 1722, at his own houſe at Glaſlough, in the county of Monaghan.

LESMAHA'GOE, a town of Scotland, in the county of Lanerk. Near it are the ruins of Craignethan, or Draffin Caſtle, anciently a ſeat of the Hamiltons, where the beautiful queen Mary found a ſhort aſylum after her eſcape from Loch Leven: ſix miles ſouth-weſt of Lanerk, and twelve ſouth of Hamilton.

LES'MONT, a town of France, in the department of the Aube: fifteen miles north-eaſt of Troyes, and ſeventeen north-weſt of Bar ſur Aube.

LESNEV'EN, a town of France, and principal place of a diſtrict, in the department of the Finiſterre: eight miles north of Landernau, and thirteen north-eaſt of Breſt. Lat. 48. 34. N. lon. 4. 14. W.

LES'NEY, a town of France, in the department of the Jura: ſix miles north of Arbois, and five north-weſt of Salins.

LES'NICA, a town of Lithuania, in the palatinate of Minſk: forty-eight miles north-eaſt of Minſk.

LESNIC'ZY-PIERAW'OZ, a town of Lithuania, in the palatinate of Minſk: fifty-ſix miles eaſt of Minſk.

LES'NIOW, a town of Poland, in Volhynia, where John Caſimir king of Poland, in the year 1651, defeated an army of Coſacs and Tartars: eighteen miles ſouth of Lucko.

LES'NO, a town of the duchy of Warſaw: thirty-five miles ſouth of Poſen.

LESOAN'DELOR, a town of Aſiatic Turkey, in Caramania: forty miles ſouth-ſouth-weſt of Cogni.

LE'SON, a river of France, which runs into the Meuſe oppoſite Wiſeppe.

LESPAR'RE, a town of France, and principal place of a diſtrict, in the department of the Gironde: eleven miles north-north-weſt of Bourdeaux, and five north-weſt of Blaye. Lat. 45. 19. N. lon. 0. 50. W.

LESPAU'D, a town of France, in the department of the Creuſe: ſix miles north-weſt of Evaux.

LESPEDE'ZA, *ſ.* [ſo named by Michaux, in compliment to his friend and patron *Leſpedez*, governor of Florida, who was very favourable to his botanical expedition through that country, though it does not appear that the governor himſelf was a botaniſt.] In botany, a genus inſtituted by Michaux (Boreali-Amer. ii. 70.) It differs from Hedyſarum in its legume, which is elliptical and turgid, ſmooth, of one cell, with a ſolitary ſeed. The ſtigma moreover is ſaid to be capitate and ſomewhat conical. The leaves are moſtly ternate, rarely ſimple. Among the ſpecies we find the HEDYSARUM hirtum and the MEDICAGO Virginica. See thoſe articles.

LESPINE'TA, a town of Naples, in the county of Moliſe: five miles ſouth of Moliſe.

LESS, a negative or privative termination: [leaſ, Sax. *loos*, Dut.] Joined to a ſubſtantive, it implies the abſence or privation of the thing expreſſed by that ſubſtantive: as, a *witleſs* man, a man without wit; *childleſs*, without children; *fatherleſs*, deprived of a father; *pennyleſs*, wanting money. *Johnſon.*

LESS, *adj.* [leaſ, Sax.] The comparative of little: oppoſed to *greater*, or to *ſo great*; not ſo much; not equal.—Mary, the mother of James the *leſs*. *Mark* xv. 40.—He that thinks he has a poſitive idea of infinite ſpace will find, that he can no more have a poſitive idea of the greateſt than he has of the leaſt ſpace; for in this latter we are capable only of a comparative idea of ſmallneſs, which will always be *leſs* than any one whereof we have the poſitive idea. *Locke.*

'Tis *leſs* to conquer than to make wars ceaſe,
And, without fighting, awe the world to peace. *Hallifax.*

LESS, *ſ.* Not ſo much; oppoſed to *more*, or to *as much*.—They gathered ſome more, ſome *leſs*. *Exod.* xvi. 17.—Thy ſervant knew nothing of this, *leſs* or more. 1 *Sam.*

Yet could he not his cloſing eyes withdraw,
Though *leſs* and *leſs* of Emily he ſaw. *Dryden.*

LESS, *adv.* In a ſmaller degree; in a lower degree.—The *leſs* ſpace there is betwixt us and the object, and the more pure the air is, by ſo much the more the ſpecies are preſerved and diſtinguiſhed; and, on the contrary, the more ſpace of air there is, and the *leſs* it is pure, ſo much the more the object is confuſed and embroiled. *Dryden.*—The *leſs* they themſelves want from others, they will be *leſs* careful to ſupply the neceſſities of the indigent. *Smalridge.*

Happy, and happy ſtill, ſhe might have prov'd,
Were ſhe *leſs* beautiful, or *leſs* belov'd. *Pope.*

LES'SA, a fortreſs of Portugal, on the ſea coaſt: ſix miles north-weſt of Oporto.

LESSAN'. See LASSAN, p. 259.

LESSANI'TZ, a town of Bohemia, in the circle of Kaurzim: eight miles ſouth-eaſt of Prague.

LESSAR'D, a town of France, in the department of the Saône: nine miles eaſt of Châlons ſur Saône, and ſeven north-weſt of Louhans.

LESSAY', a town of France, in the department of the Channel: twelve miles weſt-ſouth-weſt of Carentan, and eleven north of Coutances.

LESSAU', a town of Germany, in the principality of Bayreuth: ſix miles eaſt-ſouth-eaſt of Bayreuth.

LESSE'E, *ſ.* The perſon to whom a leaſe is given.

LES'SEL, *ſ.* With hunters, the dung of a wolf, bear, or wild boar; a buſh; a hovel. *Chaucer.*

To LESS'EN, *v. a.* To make leſs; to diminiſh in bulk. To diminiſh the degree of any ſtate or quality; to make leſs intenſe.—Nor are the pleaſures which the brutal part of the creation enjoy, ſubject to be *leſſened* by the uneaſineſs which ariſes from fancy. *Atterbury.*

Kings may give
To beggars, and not *leſſen* their own greatneſs. *Denham.*

To degrade; to deprive of power or dignity.—St. Paul choſe to magnify his office, when ill men conſpired to *leſſen* it. *Atterbury's Sermons.*

Who ſeeks
To *leſſen* thee, againſt his purpoſe ſerves
To manifeſt the more thy might. *Milton.*

To LESS'EN, *v. n.* To grow leſs; to ſhrink; to be diminiſhed.—All government may be eſteemed to grow ſtrong or weak, as the general opinion in thoſe that govern is ſeen to *leſſen* or increaſe. *Temple.*

LESS'EN, or LASCHEN, a town of Pruſſia, in the territory of Culm: twenty-ſix miles north-eaſt of Culm.

LESS'ENING, *ſ.* [from the verb.] The act of making leſs; the ſtate of growing leſs; a degradation.

LESS'ER, *adj.* A barbarous corruption of *leſs*, formed by the vulgar from the habit of terminating comparatives in *er*; afterwards adopted by poets, and then by writers of proſe, till it has all the authority which a mode originally erroneous can derive from cuſtom. *Johnſon.*—The mountains, and higher parts of the earth, grow *leſſer* and *leſſer* from age to age: ſometimes the roots of them are weakened by ſubterraneous fires, and ſometimes tumbled by earthquakes into caverns that are under them. *Burnett.*—Any heat promotes the aſcent of mineral matter, but more

more eſpecially of that which is ſubtile, and is conſequently moveable more eaſily, and with a *leſſer* power. *Woodward.*

The larger here, and there the *leſſer* lambs,
The new-fall'n young herd bleating for their dams. *Pope.*

LESS'ER, *adv.* [formed by corruption from *leſs.*] Not ſo much:

Some ſay he's mad; others, that *leſſer* hate him,
Do call it valiant fury. *Shakeſpeare's Macbeth.*

LESS'ES, *ſ.* [*laiſſées*, Fr.] The dung of beaſts left on the ground.

LESSI'NES, a town of France, in the department of the Gemappe, on the river Dender, celebrated for its linen-manufacture: thirteen miles ſouth-eaſt of Oudenarde, and twenty-three weſt-ſouth-weſt of Bruſſels.

LES'SING (Gotthold-Ephraim), an eminent German writer, was born at Kamenz in Pomerania in 1729. His father, John-Godfrey, was a voluminous writer in theology, and was the proteſtant miniſter of Kamenz, having ſucceeded his wife's father in that office. Gotthold-Ephraim, his eldeſt ſon, after a ſucceſsful early education, partly at home, and partly at a boarding-ſchool, was admitted at the age of twelve to the free-ſchool of Meiſſen; his extraordinary progreſs in learning having obtained him the privilege of anticipating by a year the legal age of reception at that ſeminary. He remained at Meiſſen five years, and laid in a ſtock of Greek and Latin which proved an excellent foundation for his after-purſuits; ſome odes of Anacreon which he tranſlated at this ſchool were afterwards publiſhed in his works. His removal to the univerſity of Leipſic opened a new ſcene to him; and his paſſion for excelling in the ſocieties to which he belonged induced him to acquire the ornamental accompliſhments, and to imitate that licentious freedom of manners, which there, as in other places of advanced education, uſually mark the ſuperior order of ſtudents. One of his intimates was Mylius, a kind of head of the free-thinkers in that univerſity, with whom he was fond of walking in public, though the philoſopher's appearance often indicated the ſcantineſs of his finances. Another acquaintance was Weiſſe, the dramatiſt, then a ſtudent at Leipſic; and their converſation mutually inflamed each other's paſſion for the theatre. Leſſing was not only a conſtant attendant on the playhouſe, but contracted a familiarity with the actors and actreſſes. He was particularly in the good graces of Mad. Neuberin, a fine woman and applauded performer, and then directreſs of the Leipſic theatre. He had completed three ſeſſions at the univerſity in 1749, when his father, who had with difficulty ſupplied his expenſes ſo long, urged him either to take orders, or a medical degree, to which laſt profeſſion he had ſhown ſome inclination. He declined both, and was left to provide for himſelf. His port-folio furniſhed him with ſome pieces, chiefly poetical tranſlations, for a periodical work undertaken by his friend Mylius. He altered ſome French theatrical pieces for the German ſtage; and, following Mad. Neuberin to Hamburg, ſet up a weekly publication of his own, containing critical remarks on the drama. His firſt original play was brought on the ſtage with ſucceſs through the exertions of his fair friend, and was to be repreſented for his benefit, when he received a ſummons to viſit his mother, who was ſaid to be dying. Filial duty led him inſtantly to obey the call, which ſeems to have been planned for the purpoſe of reclaiming him to a regular courſe of life. The remonſtrances of his pious parents ſo far ſucceeded, that he conſented to take another ſeſſion at Leipſic with a view to a profeſſion; but one of his firſt exploits when returned thither was to form a connexion with a young actreſs, with whom he made an excurſion to Vienna. The details of his wanderings and diſtreſſes would be tedious in the narration; and it is enough to obſerve, that parental admonitions had no laſting influence upon him; and that a literary profeſſion, with a particular reference to the theatre, and a frequent change of ſituation and object, was his decided choice. At Berlin, which was often his reſidence, he became acquainted with one Richier, a kind of ſubaltern in literature occaſionally employed by Voltaire. By his means Leſſing was introduced to that great genius; but his ſpirit was too independent to ſubmit to the ſubſervience expected from him, and their connexion was of ſhort duration. An untoward circumſtance reſpecting a copy of the Siecle de Louis XIV. which Leſſing had obtained from Richier, and ſuffered to be read by a lady before the public appearance of that work, excited the indignation of the irritable French bard, who injured him in the opinion of the king of Pruſſia, and thereby fruſtrated his hopes of procuring a ſettlement under him. He removed to Wittenberg, where he took the degree of maſter of arts, with a view to a profeſſorſhip at Gottingen; for ſome ſubſequent years, however, his literary employment conſiſted in a great variety of writings, originals, tranſlations, and compilations, proſe and verſe. In theſe he ſhowed equal ingenuity, copiouſneſs, and verſatility; but the number of his projects prevented him from executing any great performance. Leſſing's proficiency in the game of cheſs introduced him to the diſtinguiſhed Jewiſh philoſopher, Moſes Mendelſohn; and the printer Nicolai made the third of a literary trio, who mutually ſharpened each other's intellectual faculties, and influenced each other's opinions.

Dramatic compoſition was ſtill the favourite exertion of Leſſing's talents, and he produced a tragedy in common life, entitled "Miſs Sara Samſon." It was acted in various towns of Germany with applauſe, and was tranſlated into Italian, French, and Daniſh. In 1755 he was introduced at Leipſic to Mr. Winkler, a man of fortune, who engaged him to be his companion on a tour through Europe. Before he ſet out, Leſſing viſited his father, and was received with cordiality by every member of his family; but, as neither his principles nor private life were altered, it muſt have been to his growing reputation that he was indebted for this change of ſentiment in his favour. His tour was not prolonged beyond Amſterdam; for, Mr. Winkler having received intelligence there of the irruption of the Pruſſians into Saxony, and the occupation of his houſe by their commander, thought proper to return. But he endeavoured, unbecomingly, to be rid of Leſſing without any indemnity. The diſmiſſal was abrupt: the pretext, that Leſſing aſſociated with Kleiſt and other Pruſſian officers, and took part againſt the inhabitants. Leſſing demanded his due, and appealed to his contract; he pleaded, (for he was obliged to plead in a court of juſtice,) that he had put himſelf to many expenſes for travelling equipments; that he had diſſolved contracts with editors and bookſellers, which interrupted his ſources of maintenance; that he had ſpent in neceſſary unprofitableneſs the months paſſed with Mr. Winkler, without the equivalent he expected in the knowledge of foreign nations; and that he could not afford this gratuitous loſs of time. In 1765 the lawſuit terminated in Leſſing's favour, to whom the 800 dollars for his four years' ſalary were adjudged. Leſſing owed to this journey, ſhort as it was, the inſpection of many private as well as public cabinets of art, and had begun to collect materials for a hiſtory of engraving.

In 1754 Leſſing tranſlated, at Mendelſohn's inſtigation, Hutcheſon's Moral Philoſophy into German; and at his bookſeller's requeſt, Richardſon's Selection from Æſop's Fables. This laſt went through four editions; and gave occaſion to the compoſition of that elegant little volume of original fables, which Mr. Richardſon tranſlated into Engliſh, and printed at York. Another piece of beſpoken work which he began, but which a friend completed, was a verſion of Law's Exhortation. In conjunction with Mendelſohn and Nicolai, he undertook a periodical work entitled the Library of Belles Lettres, which was a kind of review of works in polite literature, with original correſpondence. In 1760 he was elected a member

ber of the Academy of Berlin; and ſoon after was appointed ſecretary to general Tauenzier, whom he accompanied to Breſlau. His appointments were conſiderable, and he ſpent them liberally upon his relations and friends. His military aſſociates gave him a taſte for high play, which he found arguments to juſtify.

In 1762 Leſſing accompanied his general to the ſiege of Schweidnitz. After the peace he was introduced to the king of Pruſſia, who was, however, a ſparing favourer of the German muſes. He reſumed his literary occupation at Berlin, and produced in 1767 his comedy of "Minna von Barnheim," which has been given to the Engliſh public under the title of Love and Honour. His *Laocoon*, a diſſertation on the limits of poetry and painting, appeared in the preceding year. An invitation from a ſociety of lovers of the drama at Hamburg, who wiſhed for his aſſiſtance in eſtabliſhing a claſſical theatre in that city, drew him thither in 1767; and, upon his removal, he ſold the greateſt part of a voluminous library which he had accumulated. He aſſumed the critical office in a weekly paper entitled the Hamburg Dramaturgy, which was continued till April 1768; they were afterwards publiſhed in two volumes, and form a maſs of valuable dramatic criticiſm. The circumſtances of Leſſing continued to be narrow; and in 1769 he was obliged to ſell the ſelect remains of his library. It was at this juncture that he met with a generous patron in Leopold, heir-apparent to the duke of Brunſwick, through whoſe means he was appointed librarian at Wolfenbuttle. This ſituation could not fail of being agreeable to a man of letters, on account of the great collection of curious books and manuſcripts to which it gave him acceſs. One of its fruits was a periodical publication entitled "Contributions to Literary Hiſtory," containing notices and extracts of the moſt remarkable manuſcripts. In 1771 he gave a new edition of his miſcellaneous works; and, in 1772, his popular play of Emilia Galotti appeared on the ſtage. His "Contributions" were made the vehicle of "Fragments of an anonymous Writer diſcovered in the Library at Wolfenbuttle," which conſiſted of direct attacks upon the Chriſtian revelation and the goſpel hiſtory. Whether they were Leſſing's own, or the compoſition of ſome of his aſſociates, is not aſcertained. They occaſioned a great commotion among the German theologians, and could not have been printed without the influence of prince Leopold over the licenſers of the preſs. At length, but not till 1778, the interference of the conſiſtory produced the ſuppreſſion of the work in which they appeared.

In 1775 Leſſing married a widow-lady at Vienna. Not long after, he ſet out on a tour through Italy with prince Leopold, and during his abſence his wife died of a miſcarriage. He was now ſo diſtinguiſhed a character among the German literati, that ſeveral potentates of that country made him offers of an advantageous ſettlement. He could not, however, be prevailed upon to break his connexions with his liberal patron the prince of Brunſwick, who, by his acceſſion in 1780 to the ſovereignty, was enabled to augment his favours towards him. His publication of "Nathan the Wiſe" might be regarded as diſplaying his final ſentiments concerning the difference of religions. It is by ſome accounted his dramatic maſterpiece, though calculated more for the cloſet than the ſtage; by means of Schiller's curtailments, it has, however, been frequently acted with ſucceſs. A ſecond part of this drama, entitled "The Monk of Lebanon," and a "Diſſertation on the Education of the Human Race," were the chief productions of the laſt years of his life, in which his health was rapidly declining. Lethargic ſymptoms announced an approaching end, which took place at Hamburg in February 1781. *Monthly Mag.* vol. xix. xx.

LES'SIUS (Leonard), a learned Flemiſh Jeſuit, was born at Brechtan, near Antwerp, in the year 1554. Having entered into the order, and completed his courſe of academical ſtudies, he exhibited ſuch proofs of talents and learning, as induced his ſuperiors to appoint him, at firſt profeſſor of philoſophy, and afterwards of divinity, in their college at Louvain. In both theſe capacities he acquitted himſelf with very high reputation. He boldly oppoſed the doctrine of Aquinas concerning grace, notwithſtanding that it was recommended to the Jeſuits by their founder; and, in the year 1586, ably controverted it in ſeveral public theſes. This alarmed the faculty of divinity at Louvain, who cenſured thirty-four propoſitions ſelected from Leſſius's theſes, and charged the author with ſemi-pelagianiſm. In this cenſure the faculty was joined by the univerſity of Douay, and by a conſiderable part of the eccleſiaſtics in the Low Countries; while, on the other hand, he was ſupported by the univerſities of Mentz, Treves, and Ingoldſtadt. Leſſius died in 1623, at the age of ſixty-nine, regarded by his ſociety as the vanquiſher of the Thomiſts. It is ſaid, that his fraternity incloſed in a ſhrine, as a ſacred relic, one of the fingers with which he had written his treatiſes on grace. Leſſius was intimately acquainted with divinity, law, mathematics, medicine, and hiſtory, as his works abundantly teſtify. The principal of them are, 1. De Juſtitia et Jure, folio, which was proſcribed by the parliaments of France. 2. De Poteſtate Summi Pontificis, maintaining the higheſt pretenſions of the papal ſee, which was condemned like the former; and a variety of treatiſes, which were collected together in two volumes folio. The author had adopted the opinions of Cornaro on health; and he drew up a work illuſtrating the advantages of regularity and temperance, which was printed at Antwerp in 1563, under the title of *Hygiaſticon*, ſeu Vera Ratio Valetudinis Bonæ. *Moreri.*

LESS'OE, an iſland of Denmark, in the Scaggerac, nine miles long, and from one to four wide. It contains a few villages, and round about the coaſt are ſeveral iſlets. It is about twelve miles from the coaſt of Jutland, and twenty-five from Norway. Lat. 57. 17. N. lon. 11. E.

LESS'OE, a town of Norway, in the province of Aggerhuus: 145 miles north north-weſt of Chriſtiania.

LESS'ON, *ſ.* [*leçon*, Fr. *lectio*, Lat.] Any thing read or repeated to a teacher, in order to improvement:

I but repeat that *leſſon*
Which I have learn'd from thee. *Denham's Sophy.*

Precept; notion inculcated.—Be not jealous over the wife of thy boſom, and teach her not an evil *leſſon* againſt thyſelf. *Eccluſ.* ix. 1.

This day's enſample hath this *leſſon* dear
Deep written in my heart with iron pen,
That bliſs may not abide in ſtate of mortal men. *Fairy Queen.*

Tune pricked for an inſtrument.—Thoſe good laws were like good *leſſons* ſet for a flute out of tune; of which *leſſons* little uſe can be made, till the flute be made fit to be played on. *Davies on Ireland.*—A rating lecture.—She would give her a *leſſon* for walking ſo late, that ſhould make her keep within doors for one fortnight. *Sidney.*—Portions of Scripture read in divine ſervice.—Notwithſtanding ſo eminent properties, whereof *leſſons* are happily deſtitute; yet, *leſſons* being free from ſome inconveniencies whereunto ſermons are moſt ſubject, they may, in this reſpect, no leſs take, than in other they muſt give, the hand which betokeneth pre-eminence. *Hooker.*

In our church-ſervice, the firſt leſſon is introduced immediately after the Pſalms; ſo that, having diſcharged the firſt part of our duty, the *praiſe of God*, we proceed to the ſecond object of worſhip, to hear *God's holy word*, agreeable to the Exhortation. And by this change, an agreeable reſpite, or intermiſſion, is given to the bent of the mind; for, as the thoughts were required to be active in the Pſalms, it is ſufficient in the Leſſons if they hold themſelves attentive. The firſt leſſon is taken out of the Old Teſtament, the ſecond out of the New, to ſhow the harmony between the Law and the Goſpel; for what is the Law, but the Goſpel foreſhowed? what the Goſpel, but the Law fulfilled? things there prefigured are here performed. Thus the minds of the hearers are gradually led from darker revelations to clearer views; and prepared by the veils of the Law, to bear the light breaking forth in the Goſpel.

Joining thus the reading of Scripture with the public devotions of the church, is a very ancient uſage, not only among Chriſtians, but Jews. We are told, Acts xv. 21. that *Moſes was read in the ſynagogues every ſabbath-day*; and again, that the *Prophets were read at Jeruſalem every ſabbath-day*. We learn from Juſtin Martyr, that in his time it was the cuſtom to read Leſſons out of the Prophets and Apoſtles in the aſſembly of the faithful. 1 *Apol.* ch. lxxxvii.

The church has more than one method of chooſing theſe leſſons, and preſcribing their order. For the leſſons on ordinary week-days, the method is, to begin with the firſt chapter of Geneſis on the firſt day of January, and ſo continue till all the books of the Old Teſtament are read through, with the exception of certain omiſſions. Thus, the Books of Chronicles are omitted, becauſe they are for the moſt part the ſame with the Books of Samuel and Kings. The Song of Solomon is wholly omitted, becauſe it ſhould be read with a diſpoſition to underſtand it ſpiritually, and therefore it is not thought a proper piece of writing for a mixed congregation: the Jews, for this reaſon, are forbidden by their doctors to read it till they are thirty years of age; and there ſeems the like reaſon for a ſimilar forbearance amongſt us. Iſaiah is not read in order, but poſtponed to be read at the time of Advent; this evangelical prophet being the beſt admonitor to prepare us for a true faith in the myſtery of Chriſt's incarnation and birth. Several chapters in Ezekiel are omitted on account of the myſtical viſions which they contain. There are omiſſions of particular chapters, for reaſons that do not always appear, but no doubt were good ones in the minds of our reformers. After all the canonical books of the Old Teſtament are in this manner read through, the remaining part of the year is ſupplied from ſeveral books of the Apocrypha, which, though not canonical, have yet been allowed by the judgment of the church, for many ages paſt, to be eccleſiaſtical and good. For this reaſon, the books of Wiſdom, Eccleſiaſticus, Tobit, Judith, and the Maccabees, were recommended by the council of Carthage to be publicly read in the church. They are read by our church, according to the expreſſion of our 6th Article, *for example of life, and inſtruction of manners*, but *not to eſtabliſh any doctrine*. Conformably with this diſtinction, there is no *Sunday* in the year that has any leſſon from the Apocrypha.

The method of chooſing leſſons for Sundays is different from that of the ordinary week-days. From Advent to Septuageſima Sunday, ſome particular chapters out of Iſaiah are appointed, for the reaſons before mentioned. But on Septuageſima Sunday, Geneſis is begun, becauſe then begins the time of penance and mortification, to which the beginning of Geneſis is deemed to ſuit beſt, as it relates the original of our miſery by the fall of Adam, and God's ſevere judgment on the world for ſin. We find, that, for the ſame reaſon, this book was, in the primitive ages, appointed for reading in Lent. After Geneſis, follow the other books as they lie in order; but ſuch chapters only are ſelected as were judged moſt edifying to a large congregation, like that which attends public worſhip on Sundays.

Upon Saints' days another method is obſerved. On them the church appoints leſſons out of the moral books, ſuch as Proverbs, Eccleſiaſtes, Eccleſiaſticus, and Wiſdom; which, being full of excellent inſtruction, are fit to be read on the days of ſaints, whoſe exemplary lives and deaths are the cauſes of the church commemorating them, and commending them to our imitation.

Other holy-days, ſuch as Chriſtmas Day, Circumciſion, Epiphany, &c. have proper leſſons of their own, ſuited to the occaſion. It may here be obſerved, that there have been proper leſſons on all holy-days appointed, even ſo early as the time of St. Auguſtine; in which appointments, however, changes were made in ſubſequent times.

With reſpect to the Second Leſſons, there is no difference made between Sundays and week-days: the method is to read the Goſpels and Acts of the Apoſtles in the morning, and the Epiſtles in the evening, both in the order in which they ſtand in the New Teſtament, with the exception of Proper Leſſons, that are read on Saints' Days and Holy-days. The Revelations are wholly omitted, with the exception of the firſt and laſt chapters, which are read on the day of their author, St. John the Evangeliſt; and part of the 19th chapter, which is very properly appointed for All-Saints' day.

By this method, the Old Teſtament, with few exceptions, is read through once, and the New Teſtament thrice, in the year, which is conformable with the practice laid down by the ancient fathers, for the exerciſe of Chriſtians in a knowledge of Scripture.

The Scriptures being the word of God, the reading of them is an act of authority; and therefore the miniſter is to read them *ſtanding*. In former times the people ſtood; *And Ezra opened the book in the ſight of all the people; and when he opened it all the people ſtood up*. Neh. viii. 5. Among the primitive Chriſtians, thoſe only who were infirm were permitted to ſit during the reading of the Scriptures. In our Rubric there is no poſture preſcribed for the Congregation; and therefore they ſit. *Cookſon's Notes and Reeves's Introd. to the Comm. Prayer.*

To LESS'ON, *v. a.* To teach; to inſtruct.—Children ſhould be ſeaſoned betimes, and *leſſoned* into a contempt and deteſtation of this vice. *L'Eſtrange's Fables.*

Even in kind love, I do conjure thee
To *leſſon* me. *Shakeſp. Two Gentlemen of Verona.*

LESS'ONITZ, a town of Bohemia, in the circle of Kaurzim: eight miles ſouth-eaſt of Prague.

LES'SOR, *ſ.* One who lets any thing to farm, or otherwiſe, by leaſe.—If he demiſes the glebe to a layman, the tenant muſt pay the ſmall tithes to the vicar, and the great tithes to the *leſſor*. *Alyffe's Parergon.*

Lords of the world have but for life their leaſe;
And that too, if the *leſſor* pleaſe, muſt ceaſe. *Denham.*

LEST, *conj.* [from the adjective *leaſt*.] This particle may be ſometimes reſolved into *that not*, meaning prevention or care leſt a thing ſhould happen.—Forty ſtripes he may give him, and not exceed, *leſt*, if he ſhould exceed, then thy brother ſhould ſeem vile. *Deut.* xxv.

My labour will ſuſtain me; and, *leſt* cold
Or heat ſhould injure us, his timely care
Hath unbeſought provided. *Milton.*

It ſometimes means only *that*, with a kind of emphaſis:

One doubt
Purſues me ſtill, *leſt* all I cannot die;
Leſt that pure breath of life, the ſpirit of man,
Which God inſpir'd, cannot together periſh
With this corporeal clod. *Milton.*

To LEST, *v. n.* [uſed by *Spenſer* for] To liſten:

Though looking up unto the cry to *leſt*,
They ſaw that carle from farre with hand unbleſt
Hayling that mayden by the yellow heare. *Fairy Queen.*

LES'TERCOCK, *ſ.*—They have a device of two ſticks filled with corks, and croſſed flatlong, out of whoſe midſt there riſeth a thread, and at the ſame hangeth a ſail; to this engine, termed a *leſtercock*, they tie one end of their boulter, ſo as the wind coming from the ſhore filleth the ſail, and the ſail carrieth the boulter into the ſea, which, after the reſpite of ſome hours, is drawn in again by a cord faſtened at the nearer end. *Carew.*

LES'TALL. See LAYSTALL.

LES'TERP, a town of France, in the department of the Charente: five miles eaſt of Confolent, and eight north-north-weſt of St. Junien.

LESTA'NO, a town of Italy, in the Friuli: fifteen miles weſt of Udina.

LES'TI, a town of Sweden, in the government of Waſa: fifty-four miles eaſt of Jacobſtadt.

LESTIBUDE'SIA, *ſ.* [named in honour of *M. Leſtiboudois*, a French naturaliſt.] In botany, a genus is ſeparated from Celoſia (by Aub. du Petit Thouars, Plant. Afric.) only

only on account of its ſtigmas, which are three or four, ſlender and recurved, inſtead of being capitate or two-lobed. It includes Celoſia paniculata and trigyna, (ſee vol. iv. p. 16.) with ſome others; but Mr. Brown hints that it is probably not a natural genus, nor eſtabliſhed on ſufficient grounds. His *arboreſcens*, the only ſpecies mentioned as found in New Holland, was gathered by ſir Joſeph Banks in the tropical part of that country. It has a ſhrubby twining ſtem; elliptic-oblong, ſomewhat pointed, ſmooth, leaves; terminal as well as axillary panicles; and three ſtigmas, which, according to Dr. Solander's remarks, are deeply emarginate. The manner in which the fruit burſts has not been obſerved. *Brown Prodr. Nov. Holl.*

LES'TINGHAM. See vol. xi. p. 760.

LESTIGNA'NO, a town of Etruria: ſeventeen miles ſouth of Volterra.

LES'TOFF. See LOWESTOFF.

L'ESTRA'NGE (Sir Roger), a conſiderable writer, deſcended from an ancient family, ſeated at Hunſtanton-hall in the county of Norfolk, where he was born in 1616, being the youngeſt ſon of ſir Hammond L'Eſtrange, bart. a zealous royaliſt. Having in 1644 obtained a commiſſion from king Charles I. for reducing Lynn in Norfolk, then in poſſeſſion of the parliament, the deſign was diſcovered, and his perſon ſeized. He was tried by a court-martial at Guildhall in London, and condemned to die as a ſpy; but was reprieved, and continued in Newgate for ſome time. He afterwards went beyond ſea; and in Auguſt 1653 returned to England, where he got introduced to the protector Cromwell; and, having once played before him on the baſs viol, he was by ſome nicknamed *Oliver's fiddler*. Being a man of parts, but withal in narrow circumſtances, he ſet up a newſpaper, under the title of The Public Intelligencer, in 1663; but which he laid down, upon the publication of the firſt London Gazette in 1665, having been allowed, however, a conſideration by government. Some time after the popiſh plot, when the tories began to gain the aſcendant over the whigs, he, in a paper called the Obſervator, became a zealous champion for the former. He was afterwards knighted, and ſerved in the parliament called by James II. in 1685. But, things taking a different turn in that prince's reign, in point of liberty of conſcience, from what moſt people expected, our author's Obſervators were diſuſed, as not ſuiting the times. However, he continued *licenſer of the preſs* till king William's acceſſion, in whoſe reign he met with ſome trouble as a diſaffected perſon; but at length he went to his grave in peace, after he had in a manner ſurvived his intellectuals. He publiſhed a great many political tracts; and tranſlated ſeveral works from the Greek, Latin, and Spaniſh; viz. Joſephus's works, Cicero's Offices, Seneca's Morals, Eraſmus's Colloquies, Æſop's Fables, and Bonas's Guide to Eternity. The character of his ſtyle has been variouſly repreſented; his language being obſerved by ſome to be eaſy and humorous; while Mr. Gordon ſays, "that his productions are not fit to be read by any who have taſte or good-breeding."

LES'TRE, a town of France, in the department of the Channel: five miles eaſt of Valognes, and fourteen north of Carentan.

LESTRYG'ONES. See LÆSTRYGONES, p. 80.

LESTWITH'IEL, [ſignifying, in Old Corniſh, *Withiel Palace.*] A town of England, in the county of Cornwall, ſuppoſed by Camden and Borlace to be the ancient *Uxella*; by the Britons called *Pen Uchel Coed*, "a high place with wood." It is ſituated on the river Fowey, which was formerly navigable ſo far for veſſels of conſiderable burthen; but the river is now choaked up; and the trade of the town, which was once flouriſhing, is in a ſtate of decay. The church is a handſome edifice; but the ſteeple carries the marks of the civil wars in the reign of Charles I. when the great hall and exchequer of the dukes of Cornwall were alſo utterly defaced. Some ſay this was formerly the county-town; and it ſtill retains ſeveral advantages, which ſupport its figure: as, 1. That it is one of the coinage or ſtannary towns. 2. The common gaol for the whole ſtannary is here, as are alſo the county-courts for Cornwall. 3. It has the privilege of ſending two members to parliament; and the members for the county are choſen here alſo.

The mode of election in this borough is ſuch as dupes the electors of privileges with which their repreſentative charter affects to inveſt them; for the ſeventeen common-council, who have a right of voting, being annually choſen by the ſeven aldermen, are ſure to be ſuch as will conform to the dictates of thoſe by whom they are appointed; thus limiting the right of election in this manner, ſeems as if it were done to excite the contempt of the electors themſelves againſt their own franchiſes. This place firſt ſent to parliament 33 Edw. I. and then diſcontinued until 4 Edw. II. It was incorporated by Richard earl of Cornwall, when he was king of the Romans; and is now governed by a mayor, ſix capital burgeſſes, and ſeventeen common-councilmen; in all 24 voters. The mayor is the returning officer. Members: Right Hon. Reginald Pole Carew, and John Aſhley Warre, eſq. *Oldfield's Hiſt. of Boroughs.*

The country about Leſtwithiel is remarkably beautiful and romantic, being decorated with varied and delightful views of the fine winding river Fowey, a canal, and many neat villages and ſeats, of which the following are ſome of the moſt remarkable: Pelyn, one mile from Leſtwithiel, noted for one of the fineſt woods in the weſt of England. Here is a fair on the 11th of July.—Boconneck, the ſeat of the late lord Camelford; a rural and romantic place, which has the fineſt trees in the county.—Ethy is a ſmall pleaſant village.—Roch, a village to the north-weſt; Reprin, to the north-eaſt.—Lanhydroc, formerly the ſeat of the earls of Radnor.—Llandlevery, one mile and a half weſt.—Menabilly, the ſeat of William Raſhleigh, eſq. which is large and commodious, ſtanding in a lawn near the ſea; near which, and almoſt on the beach, is a grotto, built chiefly of large rough pebbles; the inſide whereof is covered with valuable and curious foſſils, fixed to the walls and arranged in a maſterly manner by the former proprietor, who repreſented this borough near thirty years.—Half a mile to the north-weſt of Menabilly, is Kilmarth, the ſeat of Miſs Raſhleigh, pleaſantly ſituated on an eminence, commanding an extenſive proſpect by ſea and land.—Three miles up the river, and on the banks thereof, is Penquite, the manſion of John Raſhleigh, eſq. brother to the two former.

Polruan is a village chiefly inhabited by fiſhermen; and over againſt the upper end of the town is Boddinnick, where the ferry-boats are kept. Theſe two places muſt formerly have been very populous, as there are great numbers of houſes in ruins, and the veſtiges of many more.

Henſbury Hill, on the north-weſt ſide of Leſtwithiel, had the principal beacon, it being the higheſt hill in the county, and commanding a view of both the North and South Sea, as well as above thirty miles into Devonſhire, and almoſt to the Land's End on the weſt, which is above forty miles.

Leſtormel Caſtle, near Leſtwithiel, was formerly the reſidence of the earls of Cornwall. This caſtle is ſituated on the edge of a hill over-looking a deep valley, ſurrounded by a ditch which is very deep and wide, and was formerly filled with water brought by pipes from an adjoining hill; on the higher ſide, alſo leading to the principal gate, there are traces of buildings to be found. The keep is a very magnificent one; the outer wall or rampart is an exact circle 110 feet diameter within, and ten feet wide at the top, including the thickneſs of the parapet, which is two feet ſix inches, and the top of the parapet is ſeven feet high, garretted quite round. There are three ſtair-caſes leading to the top of the rampart, one on each ſide of the gateway, aſcending from the court within, and one betwixt the inner and outermoſt gate. The rooms are nineteen feet wide, the windows moſt in the innermoſt wall, but there are ſome very large open-

ings

ings (in the outermoſt wall or rampart) now walled up, ſhaped like Gothic church-windows, ſharply arched, which were formerly very handſome and pleaſant. Theſe large openings are all on the chamber-floor, (where the rooms of ſtate ſeem to have been;) and from the floor of theſe chambers you paſs on a level to the chapel, which is but a ſmall building, and more modern than the caſtle. But the chapel appears to be as ancient as Richard king of the Romans, who kept his court here. The offices belonging to this caſtle lay below in the baſs-court, where ſigns of many ruins to the north and eaſt are ſtill apparent, and, with the ruins on either hand as you come towards the great gate from the weſt, ſhow that this caſtle was of great extent. This noble keep ſtill holds up the ſhell of its turretted head. There was formerly a park round it, well wooded, and ſuitable to the quality of the ancient owners; but with ſeveral others was diſparked by Henry VIII. at the inſtance of ſir Richard Pollard. *Britiſh Directory.*

LES'WALT, a town of Scotland, in the county of Wigton: four miles north-north-weſt of Stranrawer.

LES'WES, or LESVES, *ſ.* A word uſed in Domeſday, to ſignify paſtures, and is ſtill uſed in many places of England, and often inſerted in deeds and conveyances. Hence the modern term *Leaſowes.*

LESZA'ISKO, a town of Auſtrian Poland, in Galicia: twenty-eight miles north-weſt of Przemyſl.

To LET, *v. a.* [lætan, Sax.] To allow; to ſuffer; to permit.—Where there is a certainty and an uncertainty, *let* the uncertainty go, and hold to that which is certain. *Biſhop Sanderſon.*—A ſolution of mercury in aqua fortis being poured upon iron, copper, tin, or lead, diſſolves the metal, and *lets* go the mercury. *Newton's Optics.*

On the crowd he caſt a furious look,
And wither'd all their ſtrength before he ſpoke;
Back on your lives, *let* be, ſaid he, my prey,
And let my vengeance take the deſtin'd way. *Dryden.*

Remember me; ſpeak, Raymond, will you *let* him?
Shall he remember Leonora? *Dryden's Spaniſh Fr.*

A ſign of the optative mood uſed before the firſt, and imperative before the third, perſon. Before the firſt perſon ſingular it ſignifies reſolution, fixed purpoſe, or ardent wiſh.—*Let* me die with the Philiſtines. *Judges.*

Here *let* me ſit,
And hold high converſe with the mighty dead. *Thomſon.*

Before the firſt perſon plural, *let* implies exhortation.—Riſe; *let* us go. *Mark.*—*Let* us ſeek out ſome deſolate ſhade. *Shakeſpeare.*—Before the third perſon, ſingular or plural, *let* implies permiſſion.—*Let* Euclid reſt, and Archimedes pauſe. *Milton.*—Or precept.—*Let* the ſoldiers ſeize him from one of the aſſaſſinates. *Dryden.*—Sometimes it implies conceſſion:

O'er golden ſands *let* rich Pactolus flow,
Or trees weep amber on the banks of Po. *Pope.*

Before a thing in the paſſive voice, *let* implies command.—*Let* not the objects which ought to be contiguous be ſeparated, and *let* thoſe which ought to be ſeparated be apparently ſo to us; but *let* this be done by a ſmall and pleaſing difference. *Dryden.*—*Let* has an infinitive mood after it without the particle *to*, as in the former examples.—The ſeventh year thou ſhalt *let* it reſt, and lie ſtill. *Exod.*—To leave: in this ſenſe it is commonly followed by *alone.*—The public outrages of a deſtroying tyranny are but childiſh appetites, *let alone* till they are grown ungovernable. *L'Eſtrange's Fables.*

They did me too much injury,
That ever ſaid I hearken'd for your death.
If it were ſo, I might have *let alone*
Th' inſulting hand of Douglas over you. *Shakeſpeare.*

Yet nether ſpinnes nor cards, ne cares nor frets,
But to her mother nature all her care ſhe *letts.* *Spenſer.*

To more than permit; to give.—Horatio, as I am *let* to know it is. *Shakeſpeare.*—To put to hire; to grant to a tenant.—Solomon had a vineyard at Baal Hamon; he *let* the vineyard unto keepers. *Cant.* viii. 11.—Nothing deadens ſo much the compoſition of a picture, as figures which appertain not to the ſubject: we may call them figures to be *let.* *Dryden.*—To ſuffer any thing to take a courſe which requires no impulſive violence. In this ſenſe it is commonly joined with a particle.—She *let* them *down* by a cord through the window. *Joſhua.*—You muſt *let* it *down*, that is, make it ſofter by tempering it. *Moxon's Mechanical Exerciſes.*—As terebration doth meliorate fruit, ſo doth pricking vines or trees after they be of ſome growth, and thereby *letting forth* gum or tears. *Bacon.*—From this point of the ſtory, the poet is *let down* to his traditional poverty. *Pope.*

And, if I knew which way to do't,
Your honour ſafe, I'd *let* you *cut.* *Hudibras.*

To permit to take any ſtate or courſe.—Finding an eaſe in not underſtanding, he *let* looſe his thoughts wholly to pleaſure. *Sidney.*

To LET *blood*, is elliptical for *to let out blood.* To free it from confinement; to ſuffer it to ſtream out of the vein.—Hippocrates *let* great quantities of *blood*, and opened ſeveral veins at a time. *Arbuthnot on Coins.*

Be rul'd by me;
Let's purge this choler without *letting blood.* *Shakeſpeare.*

With a dative of the perſon whoſe blood is let.—As terebration doth meliorate fruits, ſo doth *letting* plants *blood*, as pricking vines, thereby letting forth tears. *Bacon.*

To LET *in.* To admit.—The more tender our ſpirits are made by religion, the more eaſy we are to *let in* grief, if the cauſe be innocent. *Taylor.*

They but preſerve the aſhes, thou the flame,
True to his ſenſe, but truer to his fame;
Fording his current, where thou find'ſt it low,
Let'ſt in thine own to make it riſe and flow. *Denham.*

If a noun follows, for let *in*, let *into* is required.—Moſt hiſtorians have ſpoken of ill ſucceſs, and terrible events, as if they had been *let into* the ſecrets of Providence, and made acquainted with that private conduct by which the world is governed. *Addiſon.*—To procure admiſſion.—They ſhould ſpeak properly and correctly, whereby they may *let* their thoughts *into* other men's minds the more eaſily. *Locke.*—As ſoon as they have hewn down any quantity of the rocks, they *let in* their ſprings and reſervoirs among their works. *Addiſon.*

To LET *off.* To diſcharge. Originally uſed of an arrow diſmiſſed from the gripe, and therefore ſuffered to fly off the ſtring: now applied to guns.—Charging my piſtol with powder, I cautioned the emperor not to be afraid, and then *let* it *off* in the air. *Swift.*

To LET *out.* To leaſe out; to give to hire or farm.

To LET, *v. a.* [lettan, Sax.] To hinder; to obſtruct; to oppoſe.—Their ſenſes are not *letted* from enjoying their objects: we have the impediments of honour, and the torments of conſcience. *Sidney.*—To glorify him in all things, is to do nothing whereby the name of God may be blaſphemed; nothing whereby the ſalvation of Jew or Grecian, or any in the church of Chriſt, may be *let* or hindered. *Hooker.*

Leave, ah, leave off, whatever wight thou be,
To *let* a weary wretch from her due reſt. *Spenſer.*

To LET, when it ſignifies *to permit* or *leave*, has *let* in the preterite and part. paſſive; but, when it ſignifies *to hinder*, it has *letted*; as, *Multa me impedierunt*, Many things have letted me. *Introduction to Grammar.*

To LET, *v. n.* To forbear; to withhold himſelf.—After king Ferdinando had taken upon him the perſon of a fraternal ally to the king, he would not *let* to counſel the king. *Bacon.*

LET, *ſ.* Hindrance; obſtacle; obſtruction; impediment.—The ſecret *lets* and difficulties in public proceedings are innumerable and inevitable. *Hooker.*—Solyman without

without *let* preſented his army before the city of Belgrade. *Knolles's Hiſtory of the Turks.*

It had been done ere this, had I been conſul;
We had no ſtop, no *let*. *Ben Jonſon's Catiline.*

Juſt judge, two *lets* remove; that free from dread,
I may before thy high tribunal plead. *Sandys.*

LET, the termination of diminutive words from lȳte, Sax. *little*, *ſmall*; as, *rivulet*, a ſmall ſtream; *hamlet*, a little village.

LET-GAME, *ſ.* [from *let*, to hinder.] One that hinders pleaſure; a ſpy, a teltale.

LE'TA, a river of Italy, in the marquiſate of Ancona, which runs into the Adriatic in lat. 43. 8. N. lon. 13. 15. E.

LE'TA, *ſ.* A court-leet.

LE'TAC, a cape on the weſt coaſt of the iſland of Jerſey: ſix miles north-weſt of St. Aubin.

LET'ALA, a town of Sweden, in the government of Abo: thirty miles north-north-weſt of Abo.

LETA'NUM, a town of Propontis, built by the Athenians.

LETCH'ER. See LECHER.

LE'TECH, *ſ.* A Hebrew meaſure; half a homer.

LETHÆ'US, a river of Lydia flowing by Magneſia into the Mæander.—Another of Macedonia.—Of Crete.

LE'THAIS, a town of Mingrelia, on the Black Sea: ten miles north of Anarghia.

LETH'AL, *adj.* [from *lethalis*, Lat.] Mortal. *Bailey.*

LETHAL'ITY, *ſ.* Mortality.

LE'THAM, a town of Scotland, in the county of Angus, with a market five miles eaſt of Forfar.

LETHAR'GIC, *adj.* [*lethargique*, Fr. from *lethargy*.] Sleepy by diſeaſe, beyond the natural power of ſleep.—A lethargy demands the ſame cure and diet as an apoplexy from a phlegmatic caſe, ſuch being the conſtitution of the *lethargic*. *Arbuthnot on Diet.*

Let me but try if I can wake his pity
From his *lethargic* ſleep. *Denham's Sophy.*

LETHAR'GICNESS, *ſ.* Morbid ſleepineſs; drowſineſs to a diſeaſe:

A grain of glory mixt with humbleneſs,
Cures both a fever, and *lethargicneſs*. *Herbert.*

LETH'ARGIED, *adj.* Laid aſleep; entranced:

His motion weakens, or his diſcernings
Are *lethargied*. *Shakeſpeare's King Lear.*

LETH'ARGY, *ſ.* [λησαργια, Gr. *lethargie*, Fr.] A morbid drowſineſs; a ſleep from which one cannot be kept awake.—Europe lay then under a deep *lethargy*; and was no otherwiſe to be reſcued from it, but by one that would cry mightily. *Atterbury.*—A *lethargy* is a lighter ſort of apoplexy, and demands the ſame cure and diet. *Arbuthnot on Diet.*

Although his eye is open, as the morning's,
Towards luſts and pleaſures; yet ſo faſt a *lethargy*
Has ſeized his pow'rs tow'rds public cares and dangers,
He ſleeps like death. *Denham's Sophy.*

The lethargy is, in fact, a minor degree of apoplexy; it originates from the ſame cauſes, and implies a ſimilar ſtate of preſſure on the brain, the common centre of the nervous energy, as occaſions that diſeaſe. Various denominations have been given to lethargic complaints, according to the difference of the degree of ſeverity; and ſome noſologiſts have treated of theſe varieties as diſtinct ſpecies of diſeaſe. But it is obvious, as Dr. Cullen long ago obſerved, that theſe various appellations and definitions deſignate the ſame diſeaſe, in different degrees of ſeverity. We may juſt obſerve, that it originates from ſome compreſſion upon the ſubſtance of the brain, by which its functions are impeded, and its influence on the ſyſtem at large, through the medium of the nerves, obſtructed; that the moſt frequent cauſe of compreſſion is a plethoric ſtate, or an accumulation and congeſtion of blood in the venous veſſels of the head, operating, according to its degree, in producing over-diſtention or effuſion. Lethargic complaints may, therefore, both precede and ſucceed actual apoplexy, and are not unfrequently the forerunners of a fit. From this conſideration, the importance of obviating their progreſs in the outſet, before a rupture of the veſſels of the brain, or actual effuſion, takes place, muſt be obvious; for, however impracticable it may be to remove the fluids ſo effuſed, or to occaſion their abſorption, ſo as to preſerve the life of the patient, or to ſave him from an incurable palſy, if he ſurvive; yet, in the previous ſtate of mere plethora of the veſſels of the brain, the proper remedies may be employed with every proſpect of removing the lethargic ſymptoms, and warding off the impending danger. The plethora may be corrected by general evacuations by blood letting, if there is an imminent threatening of apoplexy; or by local evacuations by means of leeches, ſcarification, and cupping, bliſters, or iſſues, where the danger is leſs imminent. In a word, a lethargy is to be conſidered as an impending apoplexy, or an apoplexy already begun, and to be treated accordingly. See the article PATHOLOGY.

A ſingular caſe of a lethargy coming on ſuddenly happened lately at Horſley, in Glouceſterſhire: The ſon of Benjamin Gillman, a weaver, of that place, aged about five years, went to bed in apparent good health and ſpirits; in the morning he was ſtill aſleep, and, though inclined to be fat, was obſerved to be very much ſhrunk in his fleſh. He continued ſleeping for twelve days and twelve nights ſucceſſively, exiſting only on ſmall portions of liquid poured with great care down his throat with a tea-ſpoon, during which time he continually and gradually waſted away. Upon his waking, he was quite unconſcious of what had happened. No apoplexy enſued; and the child ſlowly recovered.

The native Africans about Sierra Leone are ſubject to a ſpecies of lethargy which proves fatal in almoſt every inſtance. The Timmanees call it *márree*, or *'nluoi*; the Bulloms *nagónlóe* or *kadeera*; the Sooſoos, *kee kóllee kondee*, or ſleepy ſickneſs; and the Mandingos, *ſeenoyúncaree*, a word of ſimilar import. This diſeaſe is very frequent in the Foola country, and it is ſaid to be much more common in the interior parts of the country than upon the ſea-coaſt. Children are very rarely, or never, affected with this complaint. At the commencement of the diſeaſe, the patient has commonly a ravenous appetite, eating twice the quantity of food he was accuſtomed to take when in health, and becoming very fat. When the diſeaſe has continued ſome time, the appetite declines, and the patient gradually waſtes away. Squinting occurs ſometimes, though ſeldom, in this diſeaſe; and in ſome rare inſtances the patient is carried off in convulſions. Small glandular tumors are ſometimes obſerved in the neck a little before the commencement of this complaint, though probably depending rather upon accidental circumſtances than upon the diſeaſe itſelf. Slave-traders, however, appear to conſider theſe tumors as a ſymptom indicating a diſpoſition to lethargy; and they either never buy ſuch ſlaves, or get rid of them as ſoon as they obſerve any ſuch appearances. The diſpoſition to ſleep is ſo ſtrong, as ſcarcely to leave a ſufficient reſpite for the taking of food; even the repeated application of a whip, a remedy which has been frequently uſed, is hardly ſufficient to keep the poor wretch awake. The repeated application of bliſters and of ſetons has been employed by European ſurgeons without avail, as the diſeaſe, under every mode of treatment, uſually proves fatal within three or four months. The natives are totally at a loſs to what cauſe this complaint ought to be attributed; ſweating is the only means they make uſe of, or from which they hope for any ſucceſs: this is never tried but in incipient caſes, for, when the diſeaſe has been of any continuance, they think it in vain to make the attempt. The root of a graſs called by the

Soofoos *kallee*, and the dried leaves of a plant called in Soofoo *fingka*, are boiled for ſome time in water, in an iron pot; when this is removed from the fire, the patient is ſeated over it, and is covered with cotton cloths, a proceſs which never fails to excite a copious perſpiration. This mode of cure is repeated two or three times a-day, and is perſiſted in for a conſiderable length of time, until the diſeaſe be carried off, or appears to be gaining ground. No internal medicines are given in the complaint.

LE'THE, [Gr. oblivion.] In mythology, one of the rivers of hell, whoſe waters the ſouls of the dead drank after they had been confined for a certain ſpace of time in Tartarus. It had the power of making them forget whatever they had done, ſeen, or heard, before; and even, according to Virgil, that they had lived. Lethe is a river of Africa, near the Syrtes, which runs under the ground, and ſome time after riſes again, whence the origin of the fable of the Lethean ſtreams of oblivion.—There is alſo a river of that name in Spain.—Another in Bœotia, whoſe waters were drunk by thoſe who conſulted the oracle of Trophonius:

Lethe, the river of oblivion, rolls
His wat'ry labyrinth, which whoſo drinks
Forgets both joy and grief. *Milton.*

LE'THE, a river of Germany, which runs into the Hunte two miles from Oldenburg.

LE'THE, *ſ.* [Greek.] Oblivion; a draught of oblivion:

The conquering wine hath ſteept our ſenſe
In ſoft and delicate *lethe*. *Shakeſpeare.*

LE'THEED, *adj.* [from *Lethe.*] Oblivious:

Sharpen with cloyleſs ſauce his appetite;
That ſleep and feeding may prorogue his honour,
Even till a *letheed* dullneſs. How now, Varius? *Shakeſp.*

LETHEN'DY, a town of Scotland, in the county of Perth: ſix miles weſt-north-weſt of Coupar.

LETH'ERINGSETT, a village near Holt in Norfolk; ſo pleaſantly ſituated as ſometimes to be called the Garden of Norfolk. Here is porter-brewery.

LETH'ERS, a town of Hindooſtan, in the circar of Sumbulpour: ſixteen miles weſt-north-weſt of Sumbulpour.

LETHIF'EROUS, *adj.* [from the Lat. *lethum*, death, and *fero*, to bring.] Deadly, bringing death. *Bailey.*

LE'THRABERG, or LEDREBORG, a town of Denmark, in the iſland of Zealand: four miles ſouth-weſt of Roeſchild.

LE'THUM, in ancient mythology, was diſtinguiſhed by the Roman poets from *Mors*, or Death. Mr. Spence conjectures, that by Lethum they meant that general principle, or ſource of mortality, which they ſuppoſe to have its proper reſidence in hell; and by Mors, or Mortes, the immediate cauſe of each particular inſtance of mortality on our earth. The poets give him a robe, but mention his arms being exſerted out of it, as reaching at his prey. They hint at his catching people in a net, and his hunting them as they did beaſts, within his toils. They repreſent Lethum as nearly related to Sleep; and Valerius Flaccus, in particular, acquaints us that they were brothers. *Val. Flac.* viii. 74. *Spence's Polymetis*, 263. *Petronius Arbiter.*

LE'TI, a ſmall iſland in the Eaſtern-Indian Sea, near the iſland of Timor. Lat. 8. 28. N. lon. 127. 15. E.

LE'TI (Gregory), a copious writer of hiſtory, was born in 1630, at Milan, of a family originally from Bologna. He received his education at the Jeſuits' college at Coſenza, and afterwards paſſed ſome years in an unſettled ſtate, not very regular in his manners, and manifeſting a great repugnance for the eccleſiaſtical profeſſion, which was propoſed to him by his uncle, the biſhop of Aquapendente. Falling in company with a Calviniſt officer at Genoa, he was induced to call in queſtion the doctrines of the Roman-catholic faith; and, after an abode at Geneva for further inſtruction, he made open profeſſion of the reformed religion at Lauſanne. He returned to Geneva in 1660, married the daughter of a phyſician, and ſettled in that city in the quality of a man of letters, ſtill preſerving his connections with many literary characters in Italy. Such was his credit, that he obtained gratuitouſly the right of citizenſhip at Geneva in 1674. His quarrelſome and ſatirical humour, however, at length involved him in ſuch troubles, that in 1680 he retired to England. He was favourably received by Charles II. who gave him a conſiderable penſion, and promiſed him the office of royal hiſtoriographer. But, having exerciſed his pen, in his work entitled *Teatro Britannico*, with a freedom which diſpleaſed the court, he was commanded to quit the kingdom. He then went to Amſterdam, and formed a connection with the celebrated Le Clerc, who married his daughter: he obtained the title of hiſtoriographer of that city, where he died in 1701.

Leti was one of the moſt fertile and induſtrious writers of his time; the catalogue of his works gives the ſeparate titles of forty, amounting to about one hundred volumes. Moſt of them are hiſtorical; but, though he is ſaid to have poſſeſſed thoſe requiſites for an hiſtorian, of being without country and without religion, he was deſtitute of the more eſſential quality of regard to truth. He himſelf affirms that he replied to the dauphineſs, who queſtioned him as to the veracity of his hiſtory of pope Sixtus V. "that a ſtory well imagined gave more pleaſure than truth ſtript of ornament." He offered his pen to ſale; and, even when not mercenary, was led away by his paſſions. It is, however, to be obſerved, that his deſertion of the Roman-catholic religion, and the bitterneſs and freedom with which, on all occaſions, he expoſes its frauds and errors, has cauſed him to be judged without mercy by the writers of that communion. All his works are written in Italian, in a ſtyle lively but diffuſe and void of taſte. Among the beſt known of his productions are the lives of Sixtus V. of Charles V. of queen Elizabeth, of Philip II. of Cromwell, and of the duke of Oſſuna. Some of his ſevereſt attacks on the church of Rome are his Nepotiſmo di Roma, Cardinaliſmo de Santa Chieſa, and Itinerario della Corte de Roma. But his writings, though ſtill occaſionally read, cannot be uſed as authority. *Tiraboſchi.*

LETIF'ICAL, *adj.* [from the Lat. *lætus*, joyful, and *facio*, to make.] Making glad. *Cole.*

To LETIF'ICATE, *v. a.* To make glad. *Bailey.*

LET'LING, a town of Brandenburg, in the New Mark: five miles eaſt of Cuſtrin.

LET'NA, a river of Ruſſia, which runs into the Viatka at Podrelſkoi.

LE'TO, a river which riſes in the marquiſate of Ancona, and runs into the Adriatic three miles eaſt of Fermo.

LETSCH'KOM, or ODISCH, a town of Aſiatic Turkey, and capital of Mingrelia; the reſidence of the Dadian, or chief, and the ſee of a Greek archbiſhop: ſixty miles north of Cotatis.

LET'TER, *ſ.* [from *let.*] One who lets, or permits. One who hinders. One who gives vent to any thing; as, a *blood-letter.*

LET'TER, *ſ.* [*lettre*, Fr. *litera*, Lat.] One of the elements of ſyllables.—A ſuperſcription was written over him in *letters* of Greek, Latin, and Hebrew. *Luke* xxiii. 38.—A written meſſage; an epiſtle.—When a Spaniard would write a *letter* by him, the Indian would marvel how it ſhould be poſſible, that he, to whom he came, ſhould be able to know all things. *Abbot.*—The ſtile of *letters* ought to be free, eaſy, and natural; as near approaching to familiar converſation as poſſible; the two beſt qualities in converſation are, good humour and good breeding; thoſe *letters* are therefore certainly the beſt that ſhow the moſt of theſe two qualities. *Walſh.*

I have a *letter* from her
Of ſuch contents as you will wonder at. *Shakeſpeare.*

The verbal expreſſion; the literal meaning.—Touching tranſlations of holy ſcripture, we may not diſallow of their painful travels herein, who ſtrictly have tied themſelves to the very original *letter*. *Hooker*.—In obedience to human laws, we muſt obſerve the *letter* of the law, without doing violence to the reaſon of the law, and the intention of the lawgiver. *Taylor's Holy Living*.

What! ſince the pretor did my fetters looſe,
And left me freely at my own diſpoſe,
May I not live without controul and awe,
Excepting ſtill the *letter* of the law? *Dryden*.

Letters, without the ſingular: learning.—The Jews marvelled, ſaying, How knoweth this man *letters*, having never learned? *John* vii. 15.—Any thing to be read.—Good laws are at beſt but a dead *letter*. *Addiſon*.—Type with which books are printed.—The iron ladles that letter-founders uſe to the caſting of printing *letters*, are kept conſtantly in melting metal. *Moxon*.

As by the help of ſpeech we render our ideas audible; by the aſſiſtance of letters we render them viſible, and by their help we can wrap up our thoughts, and ſend them to the moſt diſtant parts of the earth, and read the tranſactions of different ages. As to the firſt letters, what they were, who firſt invented them, and among what people they were firſt in uſe, there is ſtill room to doubt: Philo attributes this great and noble invention to Abraham; Joſephus, St. Irenæus, and others, to Enoch; Bibliander, to Adam; Euſebius, Clemens Alexandrinus, Cornelius Agrippa, and others, to Moſes; Pomponius Mela, Herodian, Rufus Feſtus, Pliny, Lucan, &c. to the Phœnicians; St. Cyprian, to Saturn; Tacitus, to the Egyptians; ſome, to the Ethiopians; and others, to the Chineſe; but, with reſpect to theſe laſt, they can never be entitled to this honour, ſince all their characters are the ſigns of words, formed without the uſe of letters; which renders it impoſſible to read and write their language without a vaſt expenſe of time and trouble; and abſolutely impoſſible to print it by the help of types, or any other manner but by engraving, or cutting in wood. See the article PRINTING.

There have been alſo various conjectures about the different kinds of letters uſed in different languages: thus, according to Crinitus, Moſes invented the Hebrew letters; Abraham, the Syriac and Chaldee; the Phœnicians, thoſe of Attica, brought into Greece by Cadmus, and thence into Italy by the Pelaſgians; Nicoſtrata, the Roman; Iſis, the Egyptian; and Vulfilas, thoſe of the Goths.

Dr. Bryant opens the ſubject thus: "It is ſaid that *Oannes* (the Man of the Sea) and Siſuthrus inſtructed men in the knowledge of letters, and committed many things to writing. Now, if the people of the firſt ages had been poſſeſſed of ſo valuable a ſecret as that of writing, they would never have afterwards deſcended to means leſs perfect for the explanation of their ideas. And it is to be obſerved, that the invention of hieroglyphics was certainly a diſcovery of the Chaldeans, and made uſe of in the firſt ages by the Egyptians; the very nations, who are ſuppoſed to have been poſſeſſed of the ſuperior and more perfect art. They might retain the former, when they became poſſeſſed of the latter; becauſe their ancient records were entruſted to hieroglyphics; but, had they been poſſeſſed of letters originally, they would never have deviated into the uſe of ſymbols; at leaſt, for things which were to be publiſhed to the world, and commemorated for ages. Of their hieroglyphics we have ſamples without end in Egypt; on their obeliſks, portals, and other buildings; every mummy almoſt abounds with them. How comes it, if they had writing ſo early, that ſcarcely one ſpecimen is come down to us; but that every example ſhould be in the leaſt perfect character?" It is probable, therefore, that the Egyptian hieroglyphics were the firſt manner of writing; but whether Cadmus and the Phœnicians learned the uſe of letters from the Egyptians, or from their neighbours of Judea or Samaria, is a queſtion; for, ſince ſome of the books of the Old Teſtament were then written, they are more likely to have given them the hint than the hieroglyphics of Egypt. But, whereſoever the Phœnicians learned this art, it is generally agreed, that Cadmus the ſon of Agenor firſt brought letters into Greece; whence, in following ages, they ſpread over the reſt of Europe. See the article LANGUAGE.

Dr. Bryant continues: "For my part, I believe that there was no writing antecedent to the law at Mount Sinai. Here the divine art was promulgated; of which other nations partook; the Tyrians and Sidonians firſt, as they were the neareſt to the fountain-head. And, when this diſcovery became more known, even then I imagine that its progreſs was very ſlow; and that in many countries, whither it was carried, it was but partially received, and made uſe of to no purpoſe of conſequence. The Romans carried their pretenſions to letters pretty high; and the Helladian Greeks ſtill higher; yet the former marked their years by a nail driven into a poſt; and the latter for ſome ages ſimply wrote down the names of the Olympic victors from Corœbus, and regiſtered the prieſteſſes of Argos.

"Why letters, when introduced, were ſo partially received, and employed to ſo little purpoſe, a twofold reaſon may be given. Firſt, the want of antecedent writings, to encourage people to proceed in the ſame track. The practice of writing, or, in other words, compoſing, depends upon previous reading, and example. A ſecond reaſon ſeems to have been the want of ſuch materials as are neceſſary for expedition and free writing. The rind and leaves of trees, and ſhells from the ſea, can lend but ſmall aſſiſtance towards literature; and ſtones and ſlabs are not calculated to promote it much further. It is impoſſible for people to receive any great benefit from letters, where they are obliged to go to a ſhard or an oyſter-ſhell for information; and where knowledge is conſigned to a pantile. As to the high antiquity aſſigned to letters by Pliny, no credence can be given to that author, who from 720 years infers eternity, and ſpeaks of thoſe terms as ſynonymous. From writing upon leaves and ſhells, came the *petaliſmus* and *oſtraciſmus* of the Greeks: from the bark of trees, the *libri* of the Latins." See farther under the article WRITING.

Letters make the firſt part or elements of grammar; an aſſemblage of theſe compoſe ſyllables and words, and theſe compoſe ſentences. The alphabet of every language conſiſts of a number of letters, which ought each to have a different ſound, figure, and uſe. As the difference of articulate ſounds was intended to expreſs the different ideas of the mind, ſo one letter was originally intended to ſignify only one ſound, and not, as at preſent, to expreſs ſometimes one ſound and ſometimes another; which practice has brought a great deal of confuſion into languages, and rendered the learning of the modern tongues much more difficult than it would otherwiſe have been. This conſideration, together with the deficiency of all the known alphabets, from their wanting ſome letters to expreſs certain ſounds, has occaſioned ſeveral attempts towards an univerſal alphabet, to contain an enumeration of all ſuch ſingle ſounds or letters as are uſed in any language. See the article ALPHABET, vol. i.

Grammarians diſtinguiſh letters into vowels, conſonants, mutes, liquids, diphthongs, and characteriſtics. They are likewiſe divided into capital and ſmall letters. They are alſo denominated from the ſhape and turn of the letters; and in writing are diſtinguiſhed into different hands, as round text, German text, round hand, Italian, &c. and in printing, into Roman, Italic, and black. The term *letter*, or *type*, among printers, not only includes the CAPITALS, SMALL CAPITALS, and ſmall letters, but all the points, figures, and other marks, caſt and uſed in printing; and alſo the large ornamental letters, cut in wood or metal, which take place of the illumined letters uſed in manuſcripts. See FOUNDERY, vol. vii. p. 625; and FOUNT, p. 627. Alſo the article PRINTING.

The

The Greeks uſed all the twenty-four letters of their alphabet as muſical characters; and theſe, not ſufficing for all their modes and genera in their natural ſtate, were ſometimes uſed as capitals, ſometimes ſmall; ſome entire, ſome mutilated; ſome doubled, and ſome inverted; to the amount of 1620 notes. See the article MUSIC. They alſo uſed their letters for figures, and had two characters beſides; whereas the Roman numerals are only C, D, I, L, M, V, X; which are all formed by deſcribing a circle, and drawing two lines through it, croſſing each other at right angles in the centre: thus, ⊕.

LET'TER, in geography. See LEITERBACH.

To LET'TER, *v. a.* To ſtamp with letters.—I obſerved one weight *lettered* on both ſides; and I found on one ſide, written in the dialect of men, and underneath it, calamities; on the other ſide was written, in the language of the gods, and underneath, bleſſings. *Addiſon.*

LET'TER OF ATTORNEY, a writing, authoriſing another perſon, who, in ſuch caſe, is called the *attorney* of the party appointing him, to do any lawful act in the ſtead of another; as to give ſeiſin of lands; receive debts, or ſue a third perſon, &c. A letter of attorney is either general or ſpecial. The nature of this inſtrument is to give the attorney the full power and authority of the maker, to accompliſh the act intended to be performed; and ſometimes theſe writings are revocable, and ſometimes not ſo; but, when they are revocable, it is uſually a bare authority only; they are irrevocable when debts, &c. are aſſigned to another, in which caſe the word *irrevocably* is inſerted; and the intention of them then is to enable the aſſignee to receive the debt, &c. to his own uſe.

LET'TER-CASE, *ſ.* A kind of pocket-book; a book to put letters in.

LET'TER-CARRIER, *ſ.* A poſtman; the bearer of a letter.—Aſſes will do very well for trumpeters; and hares will make excellent *letter-carriers*. *L'Eſtrange.*

LET'TERS CLAU'SE, cloſe letters, oppoſed to letters patent; being commonly ſealed up with the king's ſignet or privy ſeal: whereas the letters patent are left open, and ſealed with the broad ſeal.

LET'TER OF CRED'IT, is where a merchant or correſpondent writes a letter to another, requeſting him to credit the bearer with a certain ſum of money.

LET'TER-FOUNDER, *ſ.* One who caſts types for printing.—The iron ladles that *letter-founders* uſe are kept conſtantly in melting metal. *Moxon's Mechanical Exerciſes.*

LET'TER-GO', *ſ.* A ſquanderer.—A careleſs *letter-go* of money. *B. Jonſon's Horace.*

LET'TER-LEARNED, *adj.* Skilled in that learning which is chiefly collected from books.

LET'TER-LEARNING, *ſ.* That learning which is chiefly collected from books.

LET'TER OF LI'CENCE, an inſtrument or writing made by creditors to a man that hath failed in his trade, allowing him longer time for the payment of his debts, and protecting him from arreſts in going about his affairs. Theſe letters of licence give leave to the party to whom granted to reſort freely to his creditors, or any others, and to compound debts, &c. And the creditors ſeverally covenant, that, if the debtor ſhall receive any moleſtation or hindrance from any of them, he ſhall be acquitted and diſcharged of his debt againſt ſuch creditor, &c.

LET'TERS OF MAR'QUE, commiſſions for extraordinary repriſals for reparation to merchants taken and deſpoiled by ſtrangers at ſea, grantable by the ſecretaries of ſtate, with the approbation of the king and council; and uſually in time of war, &c. The words *marque* and *repriſal* are uſed as ſynonymous; and ſignify, the latter a taking in return, the former the paſſing the frontiers in order to ſuch taking.

Theſe letters are grantable by the law of nations, wherever the ſubjects of one ſtate are oppreſſed and injured by thoſe of another, and juſtice is denied by that ſtate to which the oppreſſor belongs. In this caſe, letters of marque and repriſal may be obtained, in order to ſeize the bodies or goods of the ſubjects of the offending ſtate, until ſatisfaction be made, wherever they happen to be found; and in fact this cuſtom of repriſals ſeems dictated by nature. The neceſſity, however, is obvious of calling in the ſovereign power to determine when repriſals may be made; elſe every private ſufferer would be a judge in his own cauſe. In purſuance of which principle it is declared by ſtat. 4 Hen. V. c. 7, that if any ſubjects of the realm are oppreſſed, *in the time of truce*, by any foreigners, the king will grant marque in due form, to all that feel themſelves grieved; which form is thus directed to be obſerved: The ſufferer muſt firſt apply to the lord privy-ſeal, and he ſhall make out *letters of requeſt under the privy-ſeal*; and, if after ſuch requeſt of ſatisfaction made, the party required do not within convenient time make due ſatisfaction or reſtitution to the party grieved, the lord chancellor ſhall make him out *letters of marque under the great ſeal*; and by virtue of theſe, he may attack and ſeize the property of the aggreſſor nation, without hazard of being condemned as robber and a pirate. 1 *Comm. c.* 7. p. 258, 9. See ſtat. 14 Hen. VI. c. 7, that goods taken on-board enemies' ſhips ſhall be lawful prize, though belonging to foreigners in amity.

It ſeems that the manner of granting letters of marque under this ſtatute has been long diſuſed, as it could only be granted to perſons actually grieved. But if, during a war, a ſubject without any commiſſion from the king ſhould take an enemy's ſhip, the prize would not be the property of the captor, but would be one of the *droits of admiralty*, and would belong to the king, or his grantee the admiral. Therefore, to encourage merchants and others to fit out privateers, or armed ſhips, in time of war, the lord high admiral or the commiſſioners of the admiralty are, from time to time, empowered by various acts of parliament to grant *commiſſions* to the owners of ſuch ſhips; and the prizes captured are divided between the owners and the captain and crew of the privateer. But the owners, before the commiſſion is granted, give ſecurity to the admiralty, to make compenſation for any violation of treaties between thoſe powers with whom the nation is at peace; and that ſuch armed ſhip ſhall not be employed in ſmuggling. Theſe commiſſions are now upon all occaſions, as well as in the ſtatutes, called letters of marque. Sometimes the lords of the admiralty have this authority by a proclamation from the king in council.

If a letter of marque wilfully and knowingly take a ſhip and goods belonging to another nation, not of that ſtate againſt whom the commiſſion is awarded, but of ſome other in amity, this amounts to a piracy.

Muratori, in his "Antichità Italiane," has a curious chapter on *Rappreſaglie* (Repriſals), from which ſome extracts may perhaps be intereſting to an Engliſh reader; for, although we are familiar enough with repriſals by ſea, the notion of a ſimilar policy by land will probably be new to thoſe who have not ſtudied the hiſtory of the dark ages in Europe. He begins with the following quotation from Malvezzi's Chronicle of Breſcia. "About this time, (A. D. 1289,) repriſals were granted in the ſeveral ſtates of Lombardy; which practice prevailed ſo far to the detriment of the public, that not only the conveyance of merchandiſe from place to place was ſuſpended, but that no one undertook journeys to foreign ſtates. In fine, the abominable cuſtom of repriſals occaſioned diſcord and many evils, not only throughout Lombardy, but all Italy, and even ſome other countries." An ancient writer thus defines the practice: "Repriſals are ſaid to take place, when any native of one diſtrict is robbed or otherwiſe damnified by the native of another; or even if he is refuſed payment of a debt; for then, the perſon aggrieved is empowered to ſatisfy himſelf at the expenſe of any one belonging to the diſtrict of the robber or debtor." Thus (ſays Muratori), if it ſhould happen that any Modeneſe were deſpoiled by a Bologneſe, and upon carrying his complaint to the magiſtrates of Bologna could obtain no

redreſs, he then applied for relief to his own magiſtrate, who granted him the right of *repriſals*, that is, the right of ſtripping any Bologneſe of as much as had been taken from him; and the ſame thing took place if a Bologneſe debtor ſhould refuſe to pay a Modeneſe creditor. Of the licence for ſuch an act of violence there is no veſtige in the laws of antiquity, ſince thoſe ſage legiſlators conceived it an injuſtice to make one perſon pay for what was due by another. But it ſeems evident that ſuch repriſals were common after the tenth or eleventh century of the Chriſtian æra, when the cities of Italy were become free, and formed ſeparate republics, frequently at ſtrife with each other. Theſe diſorders were augmented by the quarrels between the popes and emperors, and the Guelf and Ghibelline parties, which ſpread diviſion through the whole country, and rendered it a ſcene of rapine and violence. The ſyſtem of repriſals appears in as equitable a form as it was capable of in the ſtatutes of the Modeneſe, A.D. 1327. Theſe enjoin, that, before repriſals ſhould be granted to any individual who had been robbed in another city or diſtrict, or was refuſed payment of a debt, a diligent enquiry ſhould be made into the truth of his caſe. If his claim ſhould appear juſt and clear, the community was to write in his favour to the other community. If letters were of no avail, the community was to ſend a perſon in a public character to the city of the robber or debtor, to enquire further into the fact, and ſeek the remedy provided by the law of nations. In caſe no regard was paid to this miſſion, then permiſſion was to be given for making repriſals. All that ſhould be taken from a citizen or inhabitant of the community refuſing juſtice was to be put up to auction, and ſatisfaction to be made out of it to the injured perſon. The care of theſe repriſals was committed to the merchants' conſuls. If any city ſhould decree repriſals againſt any Modeneſe, it was the buſineſs of the podeſta (chief magiſtrate) of Modena to interpoſe in order to divert the ſtroke by way of agreement, and exempt his people, if poſſible, from miſchief. By a further law it was enacted, for the public advantage of the merchants, that the podeſta of Modena, in the firſt month of his office, ſhould enquire and refer to the general council concerning the terminating of all repriſals ſubſiſting between the community and men of Modena, and thoſe of Parma, Cremona, Reggio, and other cities, in order that the men of Modena might go and come with their perſons and goods ſecurely in the ſaid cities." Arbiters were at length appointed between neighbouring cities to decide all controverſies relative to repriſals; and, in fine, decrees were made condemning the communities themſelves, and not individuals, in coſts and damages, which was an important ſtep to the abolition of the cuſtom of repriſals. For, when the communities were obliged to anſwer for the defaults or violences of their members againſt thoſe of another community, it became their intereſt to ſee that juſtice was done to ſtrangers according to the law of nations; and thus all pretexts for private retribution were abrogated. Permiſſions for repriſals therefore ceaſed to be granted, as ſocieties became better ordered and more enlightened; and the practice finally went into total diſuſe in Italy, and alſo in Germany, whither it had penetrated.

LETTER MIS'SIVE, in chancery. If a peer is defendant in this court, the lord chancellor ſends a letter miſſive to him, to requeſt his appearance, together with the copy of the bill; if he neglects to appear, then he may be ſerved with a ſubpœna; if he continues ſtill in contempt, a ſequeſtration iſſues out immediately againſt his lands and goods, without any of the meſne proceſs of attachments, &c. which are directed only againſt the perſon, and therefore cannot affect a lord of parliament. The ſame proceſs iſſues againſt a member of the houſe of commons, except that the lord chancellor does not ſend him any letter miſſive.

LETTERS PAT'ENT, ſometimes called *letters overt*, or open; are writings of the king ſealed with the great ſeal of England, whereby a perſon is enabled to do or enjoy that which otherwiſe he could not; and ſo called, becauſe they are open, with the ſeal affixed, and ready to be ſhown for confirmation of the authority thereby given. And we read of letters patent to make denizens, &c. Letters patent may be granted by common perſons, but in ſuch caſe the grantees are not properly called patentees; for diſtinction, the king's letters patent have been called letters patent royal. See GRANTS OF THE KING, vol. viii. p. 791.

Peers are created ſometimes by patent, and ſometimes by writ. See the article HERALDRY, vol. ix. p. 416, 787.

The king may grant *letters patent of precedence* to certain barriſters. See the article BARRISTER, vol. ii. p. 757.

As to patents for new inventions, it has been adjudged, that the manufacture muſt be ſubſtantially new, and not barely an additional improvement of any old one; it muſt be ſuch as none other uſed at the time of granting the letters patent. Theſe conditions are required particularly by the ſtat. 21 Jac. I. c. 3. againſt monopolies; for all monopolies are againſt the ancient and fundamental laws of the realm; and by the common law are void, as being againſt the freedom of trade, and diſcouraging labour and induſtry. Upon this ground it hath been held, that the king's grant to any corporation of the ſole importation of any merchandiſe, is *void*. The making uſe of or procuring any unlawful monopoly, is puniſhable by fine and impriſonment at common law. 3 *Inſt.* 181, 182. Theſe monopolies had been carried to an enormous height during the reign of queen Elizabeth; but were in a great meaſure remedied by the ſtat. 21 Jac. I. c. 3. by which all monopolies, grants, letters patent, and licences, for the ſole buying, ſelling, and making, of goods and manufactures, are declared void, except in ſome particular caſes; and perſons grieved by putting them in uſe, ſhall recover treble damages and double coſts, by action on the ſtatute. But this does not extend to any grant or privilege granted by act of parliament; or to any grant or charter to corporations or cities, &c. or to grants to companies or ſocieties of merchants, for enlargement of trade; or to inventors of new manufactures, who have patents for the term of fourteen years; grants of privileges for printing; or making gunpowder, caſting ordnance, &c. The moſt glaring monopolies permitted in this kingdom, are the Eaſt-India Company and the two London play-houſes.

The following is the manner of proceeding for obtaining letters patent. In the firſt place, a *petition* muſt be prepared, together with an *affidavit* of the inventor in ſupport of the petition. Theſe are then taken to the office of the ſecretary of ſtate for the home department, (at the top of the Treaſury ſtair-caſe, Whitehall,) where they are lodged. A few days after, the anſwer to the petition may commonly be had, containing a reference of it to the attorney or ſolicitor general, which muſt be taken to either of their chambers, for the report thereon, and in a few days afterwards the clerk will deliver it out. The *report* is then to be taken to the ſecretary of ſtate's office, for the king's warrant; and the clerk will inform the perſon leaving it when it may be called for. The *warrant* is directed to the attorney or ſolicitor-general, and is to be taken to their patent office, (No. 4, Lincoln's-Inn Old Buildings,) for the bill. When the *bill* is prepared, it is taken to the ſecretary of ſtate's office, for the king's ſign manual to the bill. As ſoon as this is obtained, it is carried to the ſignet-office, to be paſſed there, when the clerk prepares a warrant to the lord keeper of the privy ſeal, whereupon the clerk of the privy ſeal prepares his warrant to the lord chancellor. [The ſignet and privy ſeal offices are both held together in the north-eaſt wing of Somerſet-houſe.] This warrant is then to be taken to the lord chancellor's patent-office, (No. 12, George-ſtreet, Adelphi,) where the *patent* itſelf is prepared, and will be delivered out as ſoon as it is ſealed. The *ſpecification* ſhould then be prepared, acknowledged, and lodged at the enrolment-office (Rolls-yard, Chancery-lane,) to have the

uſual certificate of the enrolment indorſed on it; this is commonly done in about a week or a fortnight afterwards; and then the patent is in every reſpect complete.

Agreeably to the terms of the patent, the patentee, within a limited time after its date, commonly, though not always, one calendar month, is particularly to deſcribe and aſcertain the nature of his invention, and in what manner the ſame is to be performed. The object of which is to publiſh the invention, for the benefit of the public, at the expiration of the patent granted as the patentee's reward for the diſcovery. The inſtrument deſcribing and aſcertaining the nature of the invention, and in what manner it is performed, is named the *ſpecification*. And, if any material part of it be falſe, or only ambiguous, the patent will be void. Therefore, where the patent was for making a particular ſort of yellow, and the patentee directed any kind of foſſil ſalt to be uſed, when only one ſort of it would anſwer the purpoſe, the patent was held void. So it was where the patent was for ſteel truſſes, and the patentee had omitted what was of uſe in tempering the ſteel, namely, rubbing it with tallow. So if an article of no uſe be inſerted, that will likewiſe vitiate the patent. Indeed, the patentee muſt deſcribe his invention in the moſt clear and unequivocal terms of which the ſubject is capable; therefore, if the proceſs, as directed by the ſpecification, do not produce that which the patent profeſſes it to do, the patent will be void. For the invention ſhould be ſo deſcribed, that perſons in the ſame line may thereby perform the thing invented, it being incumbent on the patentee, ſo clearly to deſcribe the invention, that any man of ſcience need not reſort to experiments, but may be able to do the thing for which the patent is granted, by merely following the directions of the ſpecification. And not only the thing invented muſt be deſcribed, but the relation of the ſeveral parts, and the union of the whole, where complex mechaniſm is the object of the patent. Beſides which, the patentee muſt ſo deſcribe his invention, that the public may, after the expiration of the patent, have the uſe of it as beneficially as the patentee himſelf had before.

If the patent be in all points good, and any perſon infringes on it, the patentee may either bring an action at law, for damages, or file a bill in equity, for an account of the profits made from the illegal uſe of the invention, and thereupon obtain an injunction to reſtrain the party from the further uſe of it; but there muſt be ſeparate bills upon every diſtinct invaſion of the patent. On the trial of the action for damages, the patentee muſt give ſome evidence, though ſlight will be ſufficient, to ſhow the nature of his invention, and in what it conſiſts, and that he produced the effect, propoſed by the patent, in the manner ſpecified; and then it is incumbent on the other party to falſify it. Here we may add, that, if the patentee wiſhes the trial to be at the Weſtminſter ſittings, the party complained againſt will not be permitted to remove it to any other place.

If an inventor be not prepared to apply for a patent for his invention, and wiſhes effectually to prevent its being purloined from him, he ſhould enter what is called a *caveat*, againſt any patent being granted, which, he thinks, may intrench upon his invention. The mode of entering the caveat, and the effect of it, is this: A *requeſt* is left at both the attorney and ſolicitor general's chambers, deſiring notice of any application for ſuch a patent. This requeſt, or caveat as it is now called, muſt be annually renewed; when, if any application for ſuch a patent ſhould be made, pending its continuance, the clerk ſends notice, in the nature of a ſummons, requiring the attendance, at a ſpecified time, of all the parties concerned, on the attorney or ſolicitor general, whichever it comes from. Both parties then attend accordingly, with their ſolicitors, and models, drawings, or other explanations, of their inventions; and, upon the inſpection of them, the attorney or ſolicitor general decides whether the inventions are the ſame. If they are different, each party will have his patent as a matter of courſe. But, if it appears to be one invention, he then decides, on hearing both parties, to which of them, in his opinion, it belongs, and reports accordingly. If the party is diſſatisfied with his deciſion, a ſimilar caveat ſhould then be entered at the chancery patent-office, when, on the patent's coming to the great ſeal, the lord-chancellor will, in like manner, ultimately decide, whether he ſhould or not permit the patent applied for to be ſealed.

Though no grant by letters patent, for inventions, can be for a longer term than fourteen years, yet the legiſlature may, and often does, prolong the term, by an act of parliament; where it appears, that the patentee, on account of any ſpecial circumſtances, will not, within the time for which the patent was granted, be ſufficiently rewarded for making the invention or diſcovery public; or where, in conſequence of ſubſequent improvements, he is equitably entitled to a prolongation of the term. In theſe caſes, the additional terms granted depend on the particular circumſtances, varying from ſeven to fourteen years. The act of parliament is obtained much in the manner that private acts are; but the final clauſe generally declares it a public act, and to be judicially noticed without being ſpecially pleaded.

Laſtly, though the patent contains a proviſo for making it void on an aſſignment of it to a greater number than *five perſons*; yet the legiſlature will, by an *act of parliament*, enable the patentee to make a transfer of his intereſt in the patent to more than ſuch limited number, on a ſufficient reaſon being given for the application; as if, on account of the magnitude of the concern, it be expedient that more than the limited number of perſons ſhould become intereſted in the patent.

We ſhall inſert the forms neceſſary to be filled up in order to obtain letters-patent; and alſo of that very important paper, the Specification.

PETITION *for the* PATENT.

To the King's Moſt Excellent Majeſty.

The humble petition of R. W. of ſheweth, That your petitioner, after conſiderable application and expenſe, hath invented or found out [here comes in the title of the invention], which invention, he believes, will be of general benefit and advantage. That he is the true and firſt inventor thereof, and that the ſame hath not been made or uſed by any other perſon or perſons whomſoever, to his knowledge or belief.

Your petitioner, therefore, humbly prays, that your majeſty will be graciouſly pleaſed to grant unto him, his executors, adminiſtrators, and aſſigns, your royal letters patent, under the great ſeal of Great Britain, for the ſole working, conſtructing, making, ſelling, uſing, and exerciſing, of his ſaid invention, and all other benefit and advantage thereof, within that part of your majeſty's united kingdom of Great Britain and Ireland called England, your dominion of Wales and town of Berwick-upon-Tweed, *and alſo in all your majeſty's colonies and plantations abroad*, [if the patent be not meant to extend to the colonies, the words in Italics are not inſerted,] for the term of fourteen years, according to the ſtatute in that caſe made and provided.

And your petitioner ſhall ever pray, &c.

[The petition to be written on unſtamped paper, and need not be ſigned.]

AFFIDAVIT *in ſupport of the* PETITION.

R. W. of maketh oath and ſaith, that, after conſiderable application and expenſe, he hath invented, or found out, [here comes in the title of the invention, as deſcribed in the petition,] which invention, he believes, will be of general benefit and advantage; and this deponent further ſaith, that he is the true and firſt inventor thereof, and that the ſame hath not been made or uſed by any other perſon or perſons whomſoever, to his knowledge or belief. R. W.

Sworn

Sworn at [the Public Office in Southampton-Buildings, London, the 22d day of October, 1812,] before me, W. ALEXANDER.

[To be written on a common affidavit-ſtamp; and in town may be ſworn before either of the maſters in chancery; but in the country it muſt be ſworn before one of the maſters extraordinary.]

Reference of the Petition to the Attorney or Solicitor General.

[Written either on the back or in the margin of the petition.]

Whitehall, [22d October, 1812.]

His majeſty is graciouſly pleaſed to refer this petition to Mr. Attorney or Mr. Solicitor General, to conſider thereof, and report his opinion what may be properly done therein, whereupon his majeſty will declare his further pleaſure. SIDMOUTH.

REPORT *of the* ATTORNEY GENERAL.

To the King's Moſt Excellent Majeſty.

May it pleaſe Your Majeſty;

In humble obedience to your majeſty's commands, ſignified to me by one of your majeſty's principal ſecretaries of ſtate, referring to me the annexed petition of R. W. of to conſider thereof, and report my opinion what may be properly done therein; which petition ſets forth that the petitioner [here come in the allegations of the petition]; the petitioner, therefore, moſt humbly prays your majeſty will [here follows the prayer of the petition]. And I humbly beg leave to certify unto your majeſty, that, in ſupport of the allegations contained in the ſaid petition, the affidavit of the ſaid petitioner hath been laid before me; whereby he maketh oath and ſaith, that [here follows the affidavit]. Upon conſideration of all which, and as it is entirely at the hazard of the ſaid petitioner whether the ſaid invention is new or will have the deſired ſucceſs, and as it may be reaſonable for your majeſty to encourage all arts and inventions which may be for the public good; I am humbly of opinion, that your majeſty may, by your royal letters patent, under the great ſeal of Great Britain, grant unto the petitioner, his executors, adminiſtrators, and aſſigns, the ſole benefit and advantage of his ſaid invention, within that part of your majeſty's united kingdom of Great Britain and Ireland called England, your dominion of Wales, and the town of Berwick-upon-Tweed, *and alſo in all your majeſty's colonies and plantations abroad,* for the term of fourteen years, according to the ſtatute in that caſe made and provided, if your majeſty ſhall be graciouſly pleaſed ſo to do. Provided the ſaid petitioner doth, within ſuch reaſonable time as ſhall be limited in the ſaid letters patent, to be computed from the date thereof, cauſe a particular deſcription of the nature of the ſaid invention, and in what manner the ſame is performed, under his hand and ſeal, to be enrolled in your majeſty's high court of chancery; otherwiſe the ſaid letters patent to be void. All which is humbly ſubmitted to your majeſty's royal wiſdom. THOMAS PLUMER.

[1ſt November, 1812.]

WARRANT *for the* BILL.

GEORGE R. Whereas R.W. of hath by his petition humbly repreſented to us, that [here come in the allegations of the petition]; the petitioner, therefore, moſt humbly prays, that we will be graciouſly pleaſed to [here follows the prayer of the petition]; we, being willing to give encouragement to all arts and inventions, which may be for the public good, are graciouſly pleaſed to condeſcend to the petitioner's requeſt. Our will and pleaſure, therefore, is, that you prepare a bill for our royal ſignature, to paſs our great ſeal of Great Britain, containing our grant unto him, the ſaid R.W. his executors, adminiſtrators, and aſſigns, of the ſole uſe, benefit, and advantage, of his ſaid invention, within that part of our united kingdom of Great Britain and Ireland called England, our dominion of Wales, and town of Berwick-upon-Tweed, *and alſo in all our colonies and plantations abroad,* for the term of fourteen years, according to the ſtatute in that caſe made and provided. Provided, that the petitioner does, within the ſpace of *one calendar month,* to be computed from the date of our intended grant, cauſe a particular deſcription of the nature of his ſaid invention, and in what manner the ſame is to be performed, by writing, under his hand and ſeal, to be enrolled in our high court of chancery; otherwiſe our ſaid intended letters patent to be void. And you are to inſert, in the ſaid bill, all ſuch clauſes, prohibitions, and proviſos, as are uſual and neceſſary in grants of the like nature, and as you ſhall judge requiſite; and, for ſo doing, this ſhall be your warrant. Given at our court at St. James's, the [*ſecond*] day of [*November, one thouſand eight hundred and twelve*], and in the [*fifty-third*] year of our reign. By his majeſty's command, SIDMOUTH.

To our Attorney or Solicitor-General.

BILL *for the* PATENT.

May it pleaſe your Moſt Excellent Majeſty;

This contains your majeſty's grant unto R. W. of of the ſole uſe, benefit, and advantage, of his invention of [here comes in the title of the invention], to hold to him, his executors, adminiſtrators, and aſſigns, within England, Wales, and the town of Berwick-upon-Tweed, *and alſo within all your majeſty's colonies and plantations abroad,* for the term of fourteen years, purſuant to the ſtatute in that caſe made and provided. Provided that he does, within one calender month from the date of the grant hereby intended, cauſe a particular deſcription of the nature of his ſaid invention, and in what manner the ſame is to be performed, by writing, under his hand and ſeal, to be enrolled in your high court of chancery; otherwiſe your majeſty's ſaid grant to be void. And all ſuch clauſes, prohibitions, and proviſoes, are therein inſerted, as are uſual and neceſſary in grants of the like nature. And this bill is prepared by warrant under your majeſty's royal ſign manual, counterſigned by Viſcount Sidmouth, ſecretary of ſtate for the home department.

THOMAS PLUMER.

[*9th November*, 1812.]

WARRANT *of the* PRIVY SEAL.

GEORGE the Third, by the grace of God, King of the united kingdom of Great Britain and Ireland, to our right truſty and well-beloved counſellor, John lord Eldon, Baron of Eldon, our chancellor of Great Britain, greeting. We will and command, that, under our great ſeal of Great Britain, remaining in your cuſtody, you cauſe theſe our letters to be made forth patent, in the form following: George, [here comes in the body of the patent.]

GIVEN under our privy ſeal, at our palace of Weſtminſter, the [*fifteenth*] day of [*December*], in the [*fifty-third*] year of our reign.

Examined. J. LARPENT, Deputy.

SPECIFICATION.

To all to whom theſe preſents ſhall come, I, R. W. of ſend greeting. Whereas his moſt excellent majeſty, King George the Third, by his letters patent, under the great ſeal of Great Britain, bearing date, at Weſtminſter, the [*eighth*] day of [*December*], in the [*fifty-third*] year of his reign, did, for himſelf, his heirs, and ſucceſſors, give and grant unto me, the ſaid R. W. his eſpecial licence, that I, the ſaid R. W. my executors, adminiſtrators, and aſſigns, or ſuch others as I, the ſaid R. W. my executors, adminiſtrators, or aſſigns, ſhould at any time agree with, and no others, from time to time, and at all times, during the term of years therein expreſſed, ſhould, and lawfully might, make, uſe, exerciſe, and vend, within England, Wales, and the town of Berwick-upon-Tweed, *and alſo within all his majeſty's colonies and plantations abroad,* my invention of [here deſcribe the invention in the words of the patent]; in which ſaid letters patent there is contained a proviſo, obliging me, the ſaid R. W. by an inſtrument in writing, under my hand and ſeal, particularly to deſcribe and aſcertain the nature of

my

my said invention, and in what manner the same is to be performed; and to cause the same to be enrolled in his majesty's high court of chancery, within one calendar month next and immediately after the date of the said recited letters patent, as in and by the same, reference being thereunto had, will more fully and at large appear; Now know ye, that, in compliance with the said proviso, I, the said R.W. do hereby declare, that the nature of my said invention, and the manner in which the same is to be performed, is described and ascertained in *the plan drawn in the margin of these presents*, [if there be no plan, or drawing, these words of course to be omitted;] and the following explanation thereof, that is to say [here are stated the particulars]. In witness whereof, I, the said R. W. have hereunto set my hand and seal, the [*eighth*] day of [*January*], in the year of our Lord [one thousand eight hundred and thirteen]. R. W. [Seal.]

Taken and acknowledged by the above-named R. W. at [the Public Office, Southampton Buildings, Chancery-lane, this eighth day of January, 1813,] before me, JOHN SIMEON.

Certificate of the Enrolment.—Enrolled in the Petty-Bag Office, in his majesty's high court of Chancery, the *eighth* day of *January*, in the fifty-third year of the reign of King George the Third. P. PARRY.

The Specification may be inspected by the public, and an office-copy had, any time during office hours, at the Petty-Bag office, Rolls-yard, Chancery-lane. Particular care should be taken, that the Specification is acknowledged and lodged in the enrolment-office, before the expiration of the time, as only the legislature can give relief afterwards. The Certificate of Enrolment is endorsed on the back of the Specification. If the patent is to be absolutely enrolled within one calendar month, the time for the enrolment will expire on the day month the patent bears date.

SOLICITOR'S BILL *for taking out a* PATENT.

Mr. R. W. to William Hands, Dr.

	£	s.	d.
Taking instructions for Patent, for your invention of	0	13	4
Drawing Petition for it, and fair copy to present	0	10	0
Drawing and engrossing your Affidavit in support of the Petition	0	10	0
Paid for the stamp and oath	0	4	3
Paid Fees, at the Secretary of State's Office, for reference thereon	2	2	6
Paid Fees, at the Attorney General's, for his Report	4	4	0
Paid Fees, at the Secretary of State's Office, for the Warrant for the Bill	9	1	0
Paid Fees, at the Patent-Office, for the Bill	20	18	6
Paid Fees, at the Secretary of State's Office, for the King's Sign Manual to the Bill	9	1	0
Paid Fees, at the Signet and Privy Seal Offices, for Warrant to the Lord Chancellor	10	14	0
Paid Fees, at the Lord Chancellor's Patent Office, for the Patent	43	15	6
Solicitor's Fee	10	10	0
Taking instructions for the Specification	0	13	4
Drawing the same	1	6	8
Fair Copy for Counsel to peruse and settle	0	10	0
Attending Mr. H. therewith, and several times afterwards in conference with him and you thereon	1	6	8
Gave him and clerk	5	15	6
Engrossing the Specification, plan paid for by you	0	13	4
Examining the same, and Parchment	0	11	8
Paid the Stamp Duty on the Specification	5	0	0
Attending at the Stamp Office for that purpose	0	6	8
Attending with you to the Public Office, on your acknowledging the Specification	0	13	4
Paid Fee thereon	0	2	6
Several Attendances at the Petty Bag-Office, enrolling the Specification	0	13	4
Paid thereon	2	2	6
Letters, porters, and petty expenses	1	1	0
	£133	0	7

Hands's Law and Practice of Patents.

THREATENING-LETTERS. See THREAT.

LET'TER-WRITING. The art of epistolary writing, as the translator of Pliny's Letters has observed, was esteemed by the Romans in the number of liberal and polite accomplishments; and we find Cicero mentioning with great pleasure, in some of his letters to Atticus, the elegant specimen he had received from his son of his genius in this way. It seems indeed to have formed part of their education; and, in the opinion of Mr. Locke, it well deserves to have a share in ours. "The writing of letters (as that judicious author observes) enters so much into all the occasions of life, that no gentleman can avoid showing himself in compositions of this kind. Occurrences will daily force him to make this use of his pen, which lays open his breeding, his sense, and his abilities, to a severer examination than any oral discourse." It is to be wondered we have so few writers in our own language who deserve to be pointed out as models upon such an occasion. After having named sir William Temple, it would perhaps be difficult to add a second. The elegant writer of Cowley's life mentions him as excelling in this uncommon talent; but as that author declares himself of opinion, "That letters which pass between familiar friends, if they are written as they should be, can scarce ever be fit to see the light," the world is deprived of what no doubt would have been well worth its inspection. A late distinguished genius treats the very attempt as ridiculous, and professes himself "a mortal enemy to what they call *a fine letter*." His aversion, however, was not so strong, but he knew to conquer it when he thought proper; and the letter which closes his correspondence with bishop Atterbury is, perhaps, the most genteel and manly address that ever was penned to a friend in disgrace. The truth is, a fine letter does not consist in saying fine things, but in expressing ordinary ones in an uncommon manner. It is the *proprie communia dicere*, the art of giving grace and elegance to familiar occurrences, that constitutes the merit of letter-writing. Mr. Gay's letter, concerning the two lovers who were struck dead with the same flash of lightning, is a masterpiece of the sort; and the specimen he has there given of his talents for this species of composition, makes it much to be regretted we have not more from the same hand.

Purity in the choice of words, and justness of construction, joined with perspicuity, are the chief properties of the epistolary style. Accordingly Cicero says: "In writing letters, we make use of common words and expressions." And Seneca more fully, "I would have my letters to be like my discourses, when we either sit or walk together, unstudied and easy." And what prudent man, in his common discourse, aims at bright and strong figures, beautiful turns of language, or laboured periods? Nor is it always requisite to attend to exact order and method. He that is master of what he writes, will naturally enough express his thoughts without perplexity and confusion; and more than this is seldom necessary, especially in familiar letters.

Indeed, as the subjects of epistles are exceedingly various, they will necessarily require some variety in the manner of expression. If the subject be something weighty and momentous, the language should be strong and solemn; in things of a lower nature, more free and easy; and upon lighter matters, jocose and pleasant. In exhortations, it ought to be lively and vigorous; in consolations, kind and compassionate; and in advising, grave and serious. In narratives, it should be clear and distinct; in requests,

requeſts, modeſt; in commendations, friendly; in proſperity cheerful, and mournful in adverſity. In a word, the ſtyle ought to be accommodated to the particular nature of the thing about which it is converſant.

Beſides, the different character of the perſon, to whom the letter is written, requires a like difference in the mode of expreſſion. We do not uſe the ſame language to private perſons, and thoſe in a public ſtation; to ſuperiors, inferiors, and equals. Nor do we expreſs ourſelves alike to old men and young, to the grave and facetious, to courtiers and philoſophers, to our friends and ſtrangers. Superiors are to be addreſſed with reſpect, inferiors with courteſy, and equals with civility; and every one's character, ſtation, and circumſtances in life, with the relation we ſtand in to him, occaſion ſome variety in this reſpect. But, when friends and acquaintances correſpond by letters, it carries them into all the freedom and good-humour of converſation; and the nearer it reſembles that, the better, ſince it is deſigned to ſupply the room of it. For, when friends cannot enjoy each other's company, the next ſatisfaction is to converſe with each other by letters. Indeed, ſometimes greater freedom is uſed in epiſtles, than the ſame perſons would have taken in diſcourſing together; becauſe, as Cicero ſays, "A letter does not bluſh." But ſtill nothing ought to be ſaid in a letter, which, conſidered in itſelf, would not have been fit to ſay in diſcourſe; though modeſty perhaps, or ſome other particular reaſon, might have prevented it. And thus it frequently happens in requeſts, reproofs, and other circumſtances of life. A man can aſk that by writing, which he could not do by words, if preſent; or blame what he thinks amiſs in his friend with greater liberty when abſent, than if they were together. From hence it is eaſy to judge of the fitneſs of any expreſſion to ſtand in an epiſtle, only by conſidering, whether the ſame way of ſpeaking would be proper in talking with the ſame perſon. Indeed, this difference may be allowed, that, as perſons have more time to think when they write than when they ſpeak, a greater accuracy of language may ſometimes be expected in one than the other. However, this makes no difference as to the kind of ſtyle; for every one would chooſe to ſpeak as correctly as he writes, if he could. And therefore all ſuch words and expreſſions as are unbecoming in converſation, ſhould be avoided in letters; and a manly ſimplicity, free of all affectation, plain, but decent and agreeable, ſhould run through the whole. This is the uſual ſtyle of Cicero's epiſtles, in which the plainneſs and ſimplicity of his diction is accompanied with ſomething ſo pleaſant and engaging, that he keeps up the attention of his reader, without ſuffering him to tire. On the other hand, Pliny's ſtyle is ſuccinct and witty; but generally ſo full of turns and quibbles upon the ſound of words, as apparently render it more ſtiff and affected than agrees with converſation, or than a man of ſenſe would chooſe in diſcourſe, were it in his power. You may in ſome meaſure judge of Pliny's manner, by one ſhort letter to his friend, which runs thus: "How fare you? As I do in the country? pleaſantly? that is, at leiſure? For which reaſon I do not care to write long letters, but to read them; the one has the effect of niceneſs, and the other of idleneſs. For nothing is more idle than your nice folks, or curious than your idle ones. Farewell." Every ſentence here conſiſts of an antitheſis, and a jingle of words, very different from the ſtyle of converſation, and plainly the effect of ſtudy. But this was owing to the age in which he lived, at which time the Roman eloquence was ſunk into puns, and an affectation of wit; for he was otherwiſe a man of fine ſenſe and great learning.

Letter-copying Machine.—In the year 1780, the ingenious Mr. Watt, of Birmingham, invented a method of copying letters and other writings, which we believe is very much uſed in merchants' counting-houſes, where it is neceſſary to retain copies of letters ſent to their correſpondents; and muſt be the means of ſaving a great deal of valuable time. A patent (the term of which is expired) was taken out for the invention, and the mode of proceeding is deſcribed as follows: "Take a piece of thin paper which contains no ſize, or glue, or gummy or mucilaginous matter, or which at leaſt does not contain ſo much ſize, or other matter, as would make it fit for being written upon. Cut this paper to the ſize and ſhape of the writing of which a copy is wanting; moiſten or wet the ſaid thin paper with water, or other liquid, by means of a ſponge or bruſh, or by dipping, or otherwiſe. Having moiſtened or wet the thin paper, lay it between two thick unſized ſpongy papers, or between two cloths, or other ſubſtances capable of abſorbing the ſuperfluous moiſture from the thin paper; when it has been ſlightly preſſed between ſuch thick ſpongy papers, or other ſubſtances, by the hand or otherwiſe, lay the ſaid thin paper, ſo moiſtened and preſſed, upon or under the ſide of the writing which is to be copied, and in ſuch manner that the one ſide of the ſaid moiſtened paper ſhall be in contact all over the ſide of the ſaid writing, ſo intended to be copied; and that to the other ſide of the ſaid moiſtened thin paper there ſhall be applied a piece of clean writing-paper, or cloth, or other ſmooth uniform ſubſtance. Lay the ſaid writing intended to be copied, with the thin moiſtened paper intended to receive the copy, (placed reſpectively as above directed,) upon the board of a common rolling-preſs, or of that of which a deſcription and drawing are contained in the ſpecification, and preſs them once, or oftener, through the rolls of the ſaid preſs, in the ſame manner as is uſed in printing by copper-plates; or, inſtead of uſing the ſaid or any rolling-preſs, ſquecze the ſaid papers, placed reſpectively in the manner above deſcribed, in a ſcrew-preſs; or ſubject them to any other preſſure ſufficient for the purpoſe; by means of which preſſure, in whatever manner applied, part of the ink of the writing intended to be copied ſhall preſs from the ſaid writing into, upon, and through, the ſaid thin moiſtened paper, ſo that a copy of the ſaid writing, more or leſs faint, according to the quality of the ink and paper employed, ſhall appear impreſſed on both ſides of the ſaid moiſtened paper, viz. upon one of the ſides in the natural or proper order and direction of the lines, as they are in the original writing, and on the other ſide in the reverſe order and direction. But, in order to make the impreſſion or copy of the writing more ſtrong, legible, and durable, it is proper and uſeful to moiſten the ſaid thin paper, which is to receive the copy or impreſſion, with the following liquor, inſtead of water or other liquid, and to proceed in all other reſpects as is above directed; or to moiſten the ſaid thin paper with the following liquor, and to dry the ſaid paper; and, when a copy of a writing is required to be taken, the ſaid paper, thus previouſly prepared and dried, ought to be moiſtened with water or other liquid, and to be proceeded with in all other reſpects as has been directed. The ſaid liquor to be uſed for moiſtening the ſaid thin paper, or for preparing the ſaid paper previouſly to its being uſed, is made in the following manner: Take of diſtilled vinegar two pounds weight, diſſolve it in one ounce of the ſedative ſalt of borax; then take four ounces of oyſter-ſhells calcined to whiteneſs, and carefully freed from their brown cruſt; put them into the vinegar, ſhake the mixture frequently for four-and-twenty hours, then let it ſtand until it depoſits its ſediment; filter the clear part through unſized paper into a glaſs veſſel; then add to the ſaid mixture or ſolution two ounces of the beſt blue Aleppo galls bruiſed; and place the liquor in a warm place, ſhaking it frequently for twenty-four hours; then filter the liquor again through unſized paper; and add to it, after filtration, one quart, ale-meaſure, of diſtilled or other pure water. It muſt then ſtand twenty-four hours, and be filtered again if it ſhows a diſpoſition to depoſit any ſediment, which it generally does. The liquor, thus compounded and prepared, is to be uſed as hath been directed. In place of the vinegar, any other liquor impregnated with a vegetable acid may be uſed; and, in place of the galls, oak-bark, or any other vegetable aſtringent, or ſubſtance which is capable of becoming black, or deep-coloured, with ſolutions of iron; and,

and, in place of the oyſter-ſhells, any other pure calcareous earth may be uſed. But, if the impreſſions are not wanted to be very black, and the writing-ink is good, water itſelf may be uſed to moiſten the thin paper, as herein firſt directed. It may be found neceſſary to add more or leſs water, in the preparation of the above liquor to be uſed for moiſtening the thin paper, or to vary the proportions of the other ingredients, according as they are more or leſs perfect or ſtrong, or as the impreſſion is required to be more or leſs deep coloured. The writing-ink, which I uſe for letters or writings intended to be copied, is prepared as follows: Take four quarts, ale-meaſure, of ſpring-water; one pound and a half, avoirdupois weight, of Aleppo galls; half a pound of green copperas or green vitriol; half a pound of gum-arabic; four ounces of roach-alum: pound the ſolid ingredients, and infuſe them in the water ſix weeks or two months, during which time the liquor ſhould be frequently ſhaken; ſtrain the liquor through a linen cloth, and keep it in bottles, cloſely corked, for uſe.

"Fig. 1 repreſents a front or end view of the rolling-preſs invented by me, and referred to in the above ſpecification. A B C is one of the ends of an iron or wooden frame, which ſerves to connect the two rollers. D D are two wooden or metallic rollers, turned extremely exact, or truly cylindrical, and which are mounted on iron axles, firmly fixed in them. E E is a double-ended lever, by means of which the roller, on whoſe axle it is applied, may be forcibly turned round. F F repreſents the board of the rolling-preſs, on which the writings to be copied are to be laid. N N is a piece of cloth, or other elaſtic pliable ſubſtance, placed next the roller, and above the writings to be copied; and the board G is a ſtrong plank of wood, or plate of metal, ſerving to connect the two end-pieces of the frame at bottom. H H repreſents the edge of a common table, to which the preſs may be faſtened by the iron ſcrew-cramps I I. K is a ſlit, of which there is one in each end-piece of the frame; theſe ſlits are filled with elaſtic-ſteel or other metalline ſprings, or with ſome other elaſtic ſubſtances which ſerve to preſs the two rollers forcibly together. L is a braſs bolſter, ſupported upon the ſprings, and ſerving to ſupport the end of the axis of the under roller. Fig. 2 repreſents a ſide view of the rolling-preſs, in which A B, A B, are the two end-pieces of the frame. D D are the two rollers. E is the double-ended lever. G is the ſtrong plank, or plate of metal, which forms the bottom of the frame. H H is the table on which the preſs ſtands. I is one of the iron cramps which faſten the preſs to the table; and M is a bar of iron which connects the upper part of the frame. Fig. 3 repreſents a ſcrew-preſs, which may be uſed, inſtead of the rolling-preſs, in taking off impreſſions from writings. A A is a double-ended lever. B B the ſcrew. C a block of wood, or metal, which the ſcrew acts upon, and which is attached to it. D D the frame of the preſs, made of iron or wood. E E is a moveable board, on which the writing to be copied is to be laid, with a cloth over it. F F, the bottom or ſole of the preſs, made of wood or metal. Theſe preſſes are made of different ſizes, according to the ſize of the writing intended to be copied. Thoſe ſhown above are drawn from one ſufficiently large to take an impreſſion from a folio page of writing or poſt paper, and are drawn to a ſcale of one inch and a half for each foot, or one eighth of their natural ſize."

LET'TERE, a town of Naples, in Principa.o Citra, the ſee of a biſhop, ſuffragan of Amalfi: twelve miles weſt-north-weſt of Salerno. Lat. 40. 43. N. lon. 14. 20. E.

LET'TERED, *adj.* Literate; educated to learning.—A martial man, not ſweetened by a *lettered* education, is apt to have a tincture of ſourneſs. *Collier on Pride.*

LET'TERHOUT, a town of Flanders: ſix miles weſt of Aloſt.

LET'TERING, *ſ.* The act of marking with letters.

LET'TERKENNY, a town of Ireland, in the county of Donegal, on the river Swilly: fifteen miles ſouth-weſt of Londonderry, and twenty north-north-eaſt of Donegal.

LET'TERKENNY, a townſhip of America, in Franklin county, Pennſylvania; containing 1497 inhabitants.

LET'TERN, *ſ.* [*lectrinum*, Lat.] The reading-deſk in ancient churches, &c. from which the epiſtles and goſpels of the liturgy were read. The deſks for the former frequently repreſented the prophet Moſes with his horned countenance; thoſe for the latter an eagle, the well-known emblem of St. John the Evangeliſt.

LET'TES, or LETTO'NIANS, a people of Ruſſia, whoſe country is now included in the government of Riga. See LIVONIA and RIGA.

LET'TICE, [corrupted from *Letitia.*] A woman's name.

LET'TING, *ſ.* The act of permitting or ſuffering; of hindering or obſtructing.

LETTO'NIA, a province of Ruſſia, now included in the government of Riga.

LET'TOWITZ, a town of Moravia, in the circle of Brünn: twenty miles north-north-weſt of Brunn.

LET'TUCE, *ſ.* [*lactuca*, Lat.] The ſpecies are, common or garden *lettuce*; cabbage *lettuce*; Sileſia *lettuce*; white and black cos; white cos; red capuchin *lettuce*. *Miller.*—See the article LACTUCA, p. 72 of this volume:

Fat colworts, and comforting purſeline,
Cold *lettuce*, and refreſhing roſemarine. *Spenſer.*

LET'TUCE (Hare's). See SONCHUS.

LET'TUCE (Lamb's). See VALERIANA.

LET'TUCE (Wild). See PRENANTHES.

LETU'SHIM, [Hebrew.] A man's name.

LETZ, a river of France, which runs into the Rhône a little below Pont St. Eſprit.

LETZ'KAW, a town of Pruſſia, on the Viſtula: thirteen miles ſouth-eaſt of Dantzic.

LETZ'NIG, a town of the duchy of Holſtein: ſix miles ſouth-ſouth-weſt of Segeberg, and ſix north-weſt of Oldeſlohe.

LE'VA, a river of Sicily, which runs into the ſea eleven miles north-weſt of Sacca.

LEVAL'ZUI, a river of Servia, which runs into the Morava ſix miles weſt-north-weſt of Parakin.

LEV'AN's Bridge, Hall, and Park. See KENDAL, vol. xi. p. 661.

LEVA'NA, a goddeſs at Rome, who preſided over the action of the perſon who took up from the ground a newly-born child, after it had been placed there by the midwife. This was generally done by the father; and ſo religiouſly obſerved was this ceremony, that the legitimacy of a child could be diſputed without it.

LEVAN'GHE, a ſmall iſland near the eaſt coaſt of the Iſtria. Lat. 45. 1. N. lon. 13. 52. E.

LEV'ANT, *adj.* [*levant*, Fr.] Eaſtern:

Thwart of thoſe, as fierce
Forth ruſh the *levant* and the ponent winds,
Eurus and Zephyr. *Milton's Paradiſe Loſt.*

LEVAN'T, in geography, ſignifies any country ſituated to the eaſt of us, or in the eaſtern ſide of any continent or country, or that on which the ſun riſes.

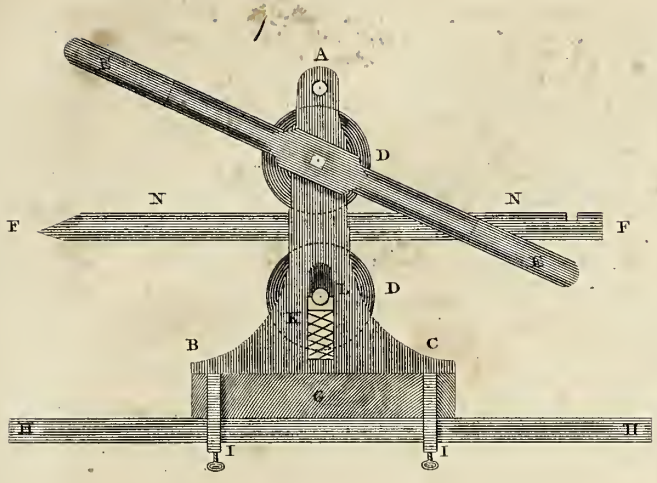
LEVAN'T is alſo a name given to the eaſtern part of the Mediterranean Sea, bounded by Natolia, or Aſia Minor on the north, by Syria and Paleſtine on the eaſt, by Egypt and Barca on the ſouth, and by the iſland of Candia and the other part of the Mediterranean on the weſt; including the iſlands formerly belonging to the Venetians; as, Corfu, Paxo, Bacintra, Parga, Preveſa, Vonizza, St. Maura, Thiaqui, Cephalonia, Zante, the Strophades, Cerigo, and Ceregotta.

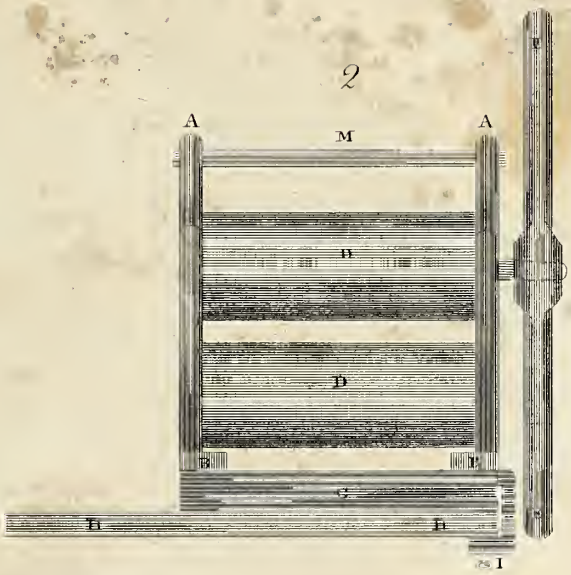
LEVANT COMPANY. See COMPANY, vol. iv. p. 874.

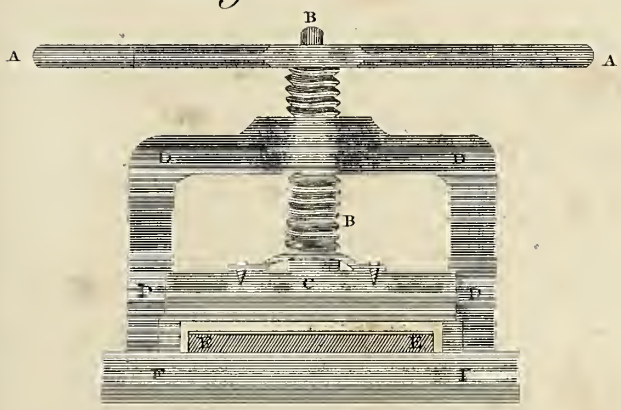
LEVAN'T, or TITAN, one of the Hieres iſlands, in the Mediterranean, near the coaſt of France. Lat. 43. 4. N. lon. 6. 34. E.

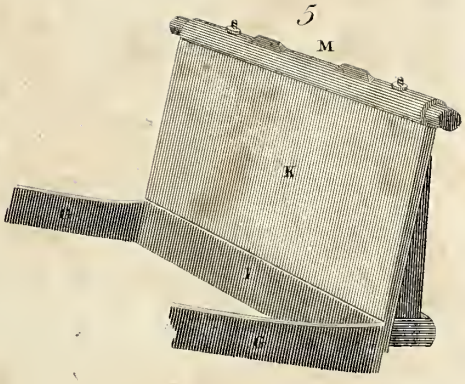
LEV'ANT AND COU'CHANT, a law-term for cattle

LETTER-COPIER AND LEVELLER.









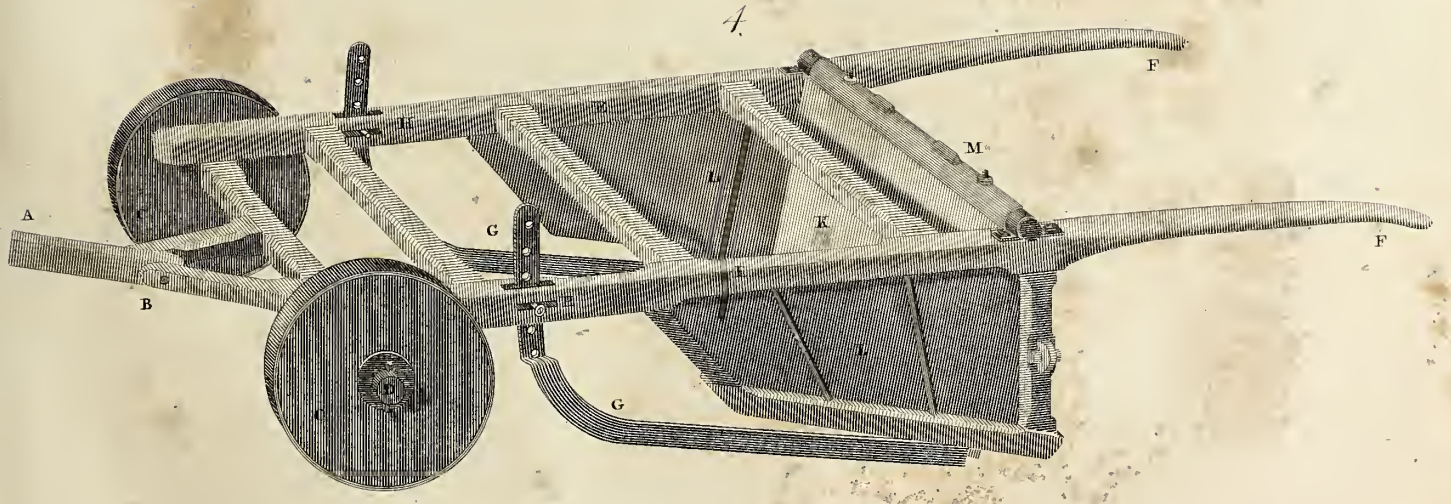


Fig. 1, 2, 3, Watts's Machine for Copying Letters. 4, 5, Charles's Leveller.

London Published as the Act directs March 31.1813 J.Jones.

J.Pass sc

that have been ſo long in the ground of another, that they have lain down and are riſen again to feed. When the cattle of a ſtranger are come into another man's ground, and have been there a good ſpace of time, (ſuppoſed to be a day and a night,) they are ſaid to be *levant* and *couchant*. *Terms de Ley.*

LEVAN'TINE, *adj.* [from *Levant.*] Belonging to the Levant, coming from the Levant.

LEVAN'TINE VAL'LEY, or VALLE LEVENTINA, a valley of Helvetia, ſubject to the canton of Uri, and ſituated ſouth of St. Gothard, watered by the Teſino, and inhabited chiefly by Italians. It is ſuppoſed to retain, by its name, traces of the Lepontii, the ancient inhabitants of the ſurrounding regions. Its length, from the ſummit of the paſſage on the St. Gothard, is about eight leagues; breadth very inconſiderable. The lower part is extremely populous, rich in paſturage, and produces much hemp and flax. In the vicinity of the lofty mountains adjacent to it, the climate is various, and the country ſubject to much rain. To prevent the rain from damaging the crops, the inhabitants ſuſpend and dry the corn and graſs, on bars ſupported by two high poles about fifteen feet aſunder. The houſes are entirely of wood, and externally appear like Swiſs cottages; but a neglect of cleanlineſs proves the vicinity and greater ſimilarity to the Italians. The Teſino is here joined by the Bromio, a torrent which takes its riſe in Mount Uccello, or the Vogelſberg, near Splagen; a bridge over it is the boundary of the two bailliages of the valleys Levantine and Poleſe, and leads into that of Riviere. The valley now becomes perfectly flat, and of courſe ſubject to violent inundations; the few villages are ſcattered on the ſides of the ſteep mountains; all below is deſolate. Oſſogne, the reſidence of the bailiff, conſiſts only of a few houſes.

LEVAN'TO, a town of the Ligurian republic, on the coaſt of the Mediterranean: ſix miles ſouth of Brugnetto, and eight weſt of Spezza.

LEVAN'ZO, a ſmall iſland in the Mediterranean, near the weſt coaſt of Sicily, about nine miles weſt of Trapani. Lat. 38. 5. N. lon. 12. 24. E.

LEVA'RI FA'CIAS. See the article EXECUTION, vol. vii. p. 107.

LEVAR'LOW, a town of Poland, in the palatinate of Lublin: forty miles ſouth-ſouth-weſt of Lublin.

LEVASCHE'VA, a town of Ruſſia, in the government of Olonetz, on the weſt coaſt of the lake Latcha: ſixteen miles ſouth-ſouth-weſt of Kargapol.

LEVA'TA, a deſert country of Africa, between Egypt and Berdoa.

LEVA'TOR, *ſ.* [Latin.] A chirurgical inſtrument, whereby depreſſed parts of the ſkull are lifted up.—Some ſurgeons bring out the bone in the bore; but it will be ſafer to raiſe it up with your *levator*, when it is but lightly retained in ſome part. *Wiſeman's Surgery.*—In anatomy, a name given to various muſcles, which have the effect of drawing parts upwards, or elongating them.

LEU'BITZ, a town of Hungary: eight miles ſouth of Podolicz.

LEU'BUS, a town of the duchy of Sileſia, in the principality of Wohlau, on the Oder, near which is a celebrated Ciſtertian abbey, founded in the beginning of the eleventh century: eight miles ſouth-ſouth-eaſt of Steinau, and nine ſouth-weſt of Wohlau.

LEU'CA, *ſ.* A meaſure of land, conſiſting of 1500 paces. Ingulphus ſays, it is 2000 paces. In the Monaſticon, it is 480 perches.

LEU'CA, in ancient geography, a ſmall town of Italy, in the country of the Salentins, and in the vicinity of the Japygian promontory. *Strabo.*—A town of Aſia Minor, on the confines of Ionia and Æolia. Pomponius Mela places it near Phocæa, in the gulf of Smyrna; Pliny places it near Phocæa, on a promontory which was formerly an iſland; and Diodorus Siculus ſays, it was ſituated between Cumæ and Clazomenæ.

LEUCADEN'DRON, *ſ.* in botany. See PROTEA.

LEUCA'DIA, [from λευκος, Gr. white, on account of the whiteneſs of the rocks.] In ancient geography, an iſland, or rather a peninſula which was attached to Epirus by a ſtrait iſthmus about one hundred paces long and ſix hundred broad. Upon it was ſituated the town of Leucas, on the ſummit of a mountain towards the north-eaſt. Homer places here three towns, viz. Neriton, Crocylea, and Agylipa. On the ſcite of the firſt of theſe towns the Corinthians built that already mentioned; Leucas is now an iſland, the iſthmus having been ſeparated from the continent by manual labour ſoon after the Peloponneſian war. See St. MAURA, one of the Seven Iſlands.

On the promontory, which was called *Leucas*, *Leucata*, or *Leucate*, ſtood a temple of Apollo, thence ſurnamed *Leucadius*. At his feſtival, which was annually celebrated there, the people were accuſtomed to offer an expiatory ſacrifice to the god, and to avert on the head of the victim all the calamities with which they might be threatened. For this purpoſe, they made choice of a criminal condemned to die; and, leading him to the brink of the promontory, precipitated him into the ſea amidſt the loud ſhouts of the ſpectators. The criminal, however, ſeldom periſhed in the water; for it was the cuſtom to cover him with feathers, and to faſten birds to his body, which by ſpreading their wings might ſerve to break his fall. No ſooner did he touch the ſea, than a number of boats ſtationed for the purpoſe came to his aſſiſtance, and drew him out; and, after being thus ſaved, he was baniſhed for ever from the territory of Leucadia.

According to ancient authors, a ſtrange opinion concerning this promontory prevailed for ſome time among the Greeks. They imagined that the leap of Leucata was a potent remedy againſt the violence of love. Hence diſappointed or deſpairing lovers, it is ſaid, were often known to have come to Leucadia; and, having aſcended the promontory, offered ſacrifices in the temple, and engaged by a formal vow to perform the deſperate act, they voluntarily precipitated themſelves into the ſea. Some are reported to have recovered from the effects of the fall; and among others mention is made of a citizen of Buthroton in Epirus, whoſe paſſions always taking fire at new objects, he four times had recourſe to the ſame remedy, and always with the ſame ſucceſs. As thoſe who made the trial, however, ſeldom took any precaution to render their fall leſs rapid, they were generally deſtroyed; and women often fell victims to this act of deſperation. At Leucata was ſhown the tomb of Artemiſia, that celebrated queen of Caria who gave ſo many proofs of courage at the battle of Salamis. Inflamed with a violent paſſion for a young man who inflexibly refuſed her love, ſhe ſurpriſed him in his ſleep, and put out his eyes. Regret and deſpair ſoon brought her to Leucata, where ſhe periſhed in the waves notwithſtanding every effort to ſave her. Such likewiſe was the end of the unhappy Sappho: forſaken by her lover Phaon, ſhe came hither to ſeek relief from her ſufferings, and found her death.

LEUCANTHE'MUM. See CHRYSANTHEMUM and OSMITES.

LEUCA'RUM, in ancient geography, a place of Great Britain, on the route from Caleva to Urioconium, according to the Itinerary of Antonine. It lies between Scadum Nunniorum and Bomium; and is ſuppoſed to be near Glaſtonbury.

LEU'CAS, *ſ.* in botany. See DRYAS and NEPETA.

LEUCA'SIA, in ancient geography, an iſland of the Tyrrhenian ſea, upon the weſtern coaſt of Italy, in the gulf of Pæſtum, according to Strabo and Mela.

LEUCAS'PIS, a port of Africa, in the gulf of Libya. *Ptolemy.*

LEUCAS'PIS, a man's name; a companion of Eneas.

LEUCA'TA, in ancient geography, a promontory of Gaul, in the Mediterranean; now called *Cap de la Franqui.*

LEUCA'TA, *ſ.* A ſpace of ground, as much as a mile contains; and ſo it ſeems to be uſed in a charter of William the Conqueror to Battle-abbey. *Cowell.*

LEUCA'TAS,

LEUCA'TAS or LEUCA'TE, in ancient geography, a promontory of Aſia, in Bithynia, and one of thoſe which formed the gulf called Aſſacenus Sinus, according to Pliny.

LEUCA'TE, a town of France, in the department of the Aude, remarkable for a ſiege, which it endured in the year 1637, againſt the Spaniards, who were defeated by marſhal Schomberg; the fortifications have been demoliſhed. It is ſituated on the north ſide of a large lake, to which it gives name: ſeventeen miles ſouth of Narbonne. Lat. 42. 54. N. lon. 3. 7. E.

LEUCA'TE, a lake of France, which takes its name from the town ſo called, and diſcharges itſelf into the Mediterranean by two ſtreams. It is ſituated partly in the department of the Aude, and partly in that of the Eaſtern Pyrenées.

LEU'CE, a ſmall iſland in the Euxine ſea, of a triangular form, between the mouths of the Danube and the Boryſthenes. According to the poets, the ſouls of the ancient heroes were placed there as in the Elyſian fields, where they enjoyed perpetual felicity, and reaped the repoſe to which their benevolence to mankind, and their exploits during life, ſeemed to entitle them. From that circumſtance it has often been called the Iſland of the Bleſſed, &c. According to ſome accounts, Achilles celebrated there his nuptials with Iphigenia, or rather Helen, and ſhared the pleaſures of the place with the manes of Ajax, &c.

LEU'CE, *ſ.* [Gr. white.] A term nearly ſynonymous with the *vitiligo* of the Latins, ſignifying a leprous affection of the ſkin, of a white colour, with a loſs of ſenſibility in the parts affected, the hair at the ſame time becoming white, and falling off. This is ſuppoſed to have been the Jewiſh LEPROSY. See that article, p. 509.

LEU'CHARS, a town of Scotland, in Fifeſhire, near the German Ocean: ſix miles north of St. Andrew's.

LEU'CHTENBERG, a town of Bavaria, and capital of a landgraviate, to which it gives name. The landgraviate lies in the Nordgau, and belongs to the elector of Bavaria; who on account of it enjoyed a ſeat and voice in the college of imperial princes. Its aſſeſſment in the matricula of the empire was ſix horſe and 14 foot, or 128 florins; and to the imperial chamber 135 rix-dollars, 26½ kruitzers: thirty-ſix miles eaſt of Nuremberg, and thirty-nine north of Ratiſbon. Lat. 49. 35. N. lon. 12. 11. E.

LEU'CHTENBERG, a town of Saxony, in the principality of Altenburg: four miles north-eaſt of Orlamunda.

LEU'CHTENBERG. See LEUTENBERG.

LEU'CHTERSHAUSEN, a town of Germany, in the marggravate of Anſpach, on the Altmuhl: ſeven miles weſt of Anſpach, and thirty-ſeven ſouth-ſouth-eaſt of Wurzburg.

LEU'CI, a people of Gaul, between the Moſelle and the Maeſe. Their capital is now called *Toul. Cæſ. B. G.* c. 40.——Mountains on the weſt of Crete, appearing at a diſtance like *white* clouds, whence the name.

LEUCIP'PIDES, the daughter of Leucippus. See LEUCIPPUS.

LEUCIP'PUS, a brother of Tyndarus, king of Sparta, who married Philodice daughter of Inachus, by whom he had two daughters, Hilaria and Phœbe, known by the patronymic of Leucippides. They were carried away by their couſins Caſtor and Pollux, as they were going to celebrate their nuptials with Lynceus and Idas. *Ovid. Faſt.*

LEUCIP'PUS, a ſon of Xanthus, deſcended from Bellerophon. He became deeply enamoured of one of his ſiſters; and, when he was unable to check or reſtrain his unnatural paſſion, he reſolved to gratify it. He acquainted his mother with it, and threatened to murder himſelf if ſhe attempted to oppoſe his views or remove his affection. The mother, rather than loſe a ſon whom ſhe tenderly loved, cheriſhed his paſſion; and by her conſent her daughter yielded herſelf to the arms of her brother. Some time after, the father reſolved to give his daughter in marriage to a Lycian prince. The future huſband was informed that the daughter of Xanthus ſecretly entertained a lover; and he communicated the intelligence to the father. Xanthus upon this ſecretly watched his daughter; and, when Leucippus had introduced himſelf to her bed, the father, in his eagerneſs to diſcover the ſeducer, occaſioned ſome noiſe in the room. The daughter was alarmed, and as ſhe attempted to eſcape ſhe received a mortal wound from her father, who took her to be the lover. Leucippus came to her aſſiſtance, and ſtabbed his father in the dark, without knowing who he was. This accidental parricide obliged Leucippus to fly from his country. He came to Crete, where the inhabitants refuſed to give him an aſylum, when acquainted with the atrociouſneſs of his crime; and he at laſt came to Epheſus, where he died in the greateſt miſery and remorſe. *Hermeſianax apud Parthen.* c. 5.

LEUCIP'PUS, a ſon of Œnomaus, who became enamoured of Daphne, and to obtain her confidence diſguiſed himſelf in a female dreſs, and attended his miſtreſs as a companion. He gained the affections of Daphne by his obſequiouſneſs and attention; but his artifice at laſt proved fatal; for, when Daphne and her attendants were bathing in the Ladon, the ſex of Leucippus was diſcovered, and he periſhed by the darts of the females. *Parthen. Erotic.* c. 15.

LEUCIP'PUS, a celebrated Greek philoſopher, of the Eleatic ſect, and a diſciple of Zeno, who flouriſhed under the eighty-eighth Olympiad, or about the year 428 B. C. The ancients are not agreed concerning the place of his birth; ſome making him a native of Abdera, others of Berea, others of Miletus, and others, among whom is Diogenes Laertius, of Elea. They almoſt all concur, however, in attributing to him the firſt idea of the atomic ſyſtem, which was improved by his diſciple Democritus, and carried to all the perfection which a ſyſtem ſo fundamentally defective would admit of by Epicurus. He wrote a treatiſe concerning nature, now loſt, from which the ancients probably collected what they relate concerning his tenets. Diſſatisfied with the metaphyſical ſubtleties by which the former philoſophers of the Eleatic ſchool had confounded all evidence from the ſenſes, he reſolved to examine the real conſtitution of the material world, and enquire into the mechanical properties of bodies; that from theſe he might, if poſſible, deduce ſome certain knowledge of natural cauſes, and hence be able to account for natural appearances. His great object was, to reſtore the alliance between reaſon and the ſenſes, which metaphyſical ſubtleties had diſſolved. For this purpoſe he ſuggeſted the doctrine of indiviſible atoms, poſſeſſing within themſelves a principle of motion; which was adopted by his diſciple Democritus, who united with his maſter in modifying his ſyſtem. It is true that Anaxagoras, Empedocles, Heraclitus, and other philoſophers, before their time, had conſidered matter as diviſible into indefinitely ſmall particles; but Leucippus and Democritus were the firſt who taught that theſe particles were originally deſtitute of all qualities except figure and motion, and, therefore, may juſtly be conſidered as the joint authors of the atomic ſyſtem of philoſophy. The following ſummary of the doctrine of Leucippus, drawn up by Dr. Enfield, will exhibit the infant ſtate of the atomic philoſophy, and at the ſame time ſufficiently expoſe its abſurdity. "The univerſe, which is infinite, is in part a *plenum*, and in part a *vacuum*. The *plenum* contains innumerable corpuſcles or atoms, of various figures, which, falling into the *vacuum*, ſtruck againſt each other; and hence aroſe a variety of curvilinear motions, which continued till, at length, atoms of ſimilar forms met together, and bodies were produced. The primary atoms being ſpecifically of equal weight, and not being able, on account of their multitude, to move in circles, the ſmaller roſe to the exterior parts of the vacuum, whilſt the larger, entangling themſelves, formed a ſpherical ſhell, which revolved about its centre, and which included within itſelf all kinds of bodies. This central maſs was gradually increaſed by a perpetual acceſſion of particles

particles from the ſurrounding ſhell, till at laſt the earth was formed. In the mean time, the ſpherical ſhell was continually ſupplied with new bodies, which, in its revolution, it gathered up from without. Of the particles thus collected in the ſpherical ſhell, ſome in their combination formed humid maſſes, which, by their circular motion, gradually became dry, and were at length ignited, and became ſtars. The ſun was formed in the ſame manner, in the exterior ſurface of the ſhell; and the moon, in its interior ſurface. In this manner the world was formed; and, by an inverſion of the proceſs, it will at length be diſſolved." From this ſyſtem Des Cartes borrowed his hypotheſis of the *vortices*, as has been ſatisfactorily proved by the learned Huet; and we may alſo find in it ſome hints of his grand mechanical principle, "that bodies, in a circular motion, remove from the centre as much as poſſible." But Kepler had preceded Des Cartes in his obligations to Leucippus concerning vortices and the cauſes of gravity. *Diogenes Laert. Enfield's Hiſt. Phil.* vol. i.

LEU'CITE, *ſ.* in mineralogy. See SCHORLUS granatinus.

LEUCOGÆ'US, in ancient geography, a hill ſituated between Puteoli and Neapolis in Campania, abounding in ſulphur; now *l'Alumera*. Whence there were alſo ſprings called *Leucogæi fontes*; the waters of which, according to Pliny, gave a firmneſs to the teeth, clearneſs to the eyes, and proved a cure in wounds.

LEUCOI'UM, *ſ.* [λευκον ιον, Gr. white violet.] GREATER SNOW-DROP, or SNOW-FLAKE; in botany, a genus of the claſs hexandria, order monogynia, natural order of ſpathaceæ, (narciſſi, *Juſſ.*) The generic characters are—Calyx: ſpathe oblong, obtuſe, compreſſed, gaping on the flat ſide, withering. Corolla: bell-ſhaped-expanding; petals ſix, ovate, flat, conjoined at the baſe; with the tips thickiſh and ſtiffiſh. Stamina: filaments ſix, ſetaceous, very ſhort; antheræ oblong, obtuſe, quadrangular, upright, diſtant. Piſtillum: germ roundiſh, inferior; ſtyle clavate, obtuſe. Stigma: ſetaceous, upright, ſharp, longer than the ſtamens. Pericarpium: capſule top-ſhaped, three-celled, three-valved. Seeds: ſeveral, roundiſh.—*Eſſential Character.* Corolla bell-ſhaped, ſix-parted, thickened at the tips; ſtigma ſimple.

Species. 1. Leucoium vernum, great ſpring ſnow-drop, or ſnow-flake: ſpathe one-flowered; ſtyle club-ſhaped; leaves flat. Bulb oblong, ſhaped like that of the daffodil, but ſmaller. Leaves flat, deep green, four or five in number, broader and longer than thoſe of the common ſnow-drop, Galanthus nivalis. Scape angular, near a foot high, hollow and channelled: towards the top comes out a whitiſh ſheath, opening on the ſide, out of which come two or three flowers, hanging on ſlender peduncles; corolla much larger than that of the common ſnow-drop; and the ends of the petals are green; they appear in March, and have an agreeable ſcent, not much unlike thoſe of the hawthorn. In its wild ſtate, the ſcape is only half a foot in height, or little more; and generally has only one flower, very ſeldom two. The whole plant is very ſmooth. The flowers, which at firſt ſight reſemble thoſe of the common ſnow-drop, are eaſily diſtinguiſhed by the abſence of the three-leaved nectary. They do not come out ſo ſoon by a month. This plant, being of a different genus from the true ſnow-drop, ought certainly to have another Engliſh name; Mr. Curtis therefore calls it *ſpring ſnow-flake*. Parkinſon had named it *great early bulbous violet*, and Gerard *late-flowering bulbous violet*. It is a native of Italy, the South of France, Germany, Auſtria, and Swiſſerland. Cultivated in 1596 by Gerard.

2. Leucoium æſtivum, great ſummer ſnow-drop: ſpathe many-flowered; ſtyles club-ſhaped; leaves flat. Bulb the ſize of a cheſnut, ſomewhat ovate, outwardly pale brown, inwardly white; coats numerous, thin, and cloſely compacted. Mr. Miller ſays, the bulb is nearly as large as that of the common daffodil, and very like it in ſhape; that the leaves alſo are not unlike thoſe of the daffodil, more in number than in the preceding, and keeled at the bottom, where they fold over each other, and embrace the ſtalk. Leaves about a foot and a half in length, upright, nearly linear, almoſt an inch in breadth, obtuſe; the lower ones ſhorteſt. Flowers pendulous, growing all one way, having little ſcent; petals white, finely grooved within, not at all uniting at bottom; the tips thickiſh, a little puckered, and marked with a green ſpot. Seeds large, black and gloſſy. The flowers appear at the end of April or the beginning of May, and there is a ſucceſſion of them during three weeks, or longer in cool weather. Native of Hungary, Auſtria, Carniola, Tuſcany, and Sileſia. Mr. Curtis firſt obſerved it in England between Greenwich and Woolwich, about half a mile below the former place, cloſe by the Thames ſide, juſt above high-water mark, with reed, marſh-marigold, and other common water-plants, and in a ſimilar ſituation to that in which it is found wild in Auſtria. It has alſo been found wild in the Iſle of Dogs, which is the oppoſite ſhore. It grows here even more luxuriantly than in gardens, where it ſeldom has a ſoil or ſituation ſufficiently moiſt. Mr. Gough found it in a ſmall iſland, in the river, about three miles ſouth of Kendal, on the dam of the gunpowder-mill.

3. Leucoium autumnale, or autumnal ſnow-drop: ſpathe two-leaved, many-flowered; ſtyles and leaves filiform. Bulb thick for the ſize of the plant, compoſed of many glutinous coats, bitter, covered with a whitiſh membrane. Scape ſlender, browniſh, a hand in height, ſupporting two or three ſmall white flowers (ſometimes only one), hanging down, having no ſmell: the flowers are a little reddiſh at the bottom next the ſtalk. Native of Portugal, and Spain on the confines near Badajos. It flowers in September.

4. Leucoium trichophyllum, or briſtle-leaved ſnow-flake: ſpathe two-leaved, many-flowered; ſtyle thread-ſhaped. Gathered on the ſandy plains of Barbary, flowering in the midſt of winter. Stalk radical, ſheathed by the leaves at its baſe, thread-ſhaped, five or ſix inches high. Flowers from two to four, pendulous, white, occaſionally tinted with red on the outſide. Redouté regrets that he could not call this *hyemale*, as the name of *trichophyllum* had previouſly been applied by Renealmius to the preceding ſpecies, to which indeed this is cloſely allied. The ſpecific name of *hyemale* would have been particularly deſirable, on account of carrying on the analogy of nomenclature with the three firſt ſpecies. It is greatly to be wiſhed that botaniſts who give new names to plants would well conſider ſuch analogies.

5. Leucoium ſtrumoſum, or ſwelling ſnow-flake: ſpathe two-leaved, many-flowered; flowers erect; ſtyle inflated at the baſe, globular. Bulb roundiſh, white, leſs than a haſel-nut. Leaves two or three, incloſed at the baſe in a white ſheath, filiform, dotted with white, keeled at bottom, flat, or a little convex on the back, weak, and more or leſs lying on the ground. Scape flexuoſe-erect, ſlender, about half a foot high, roundiſh, terminated by a ſpreading umbel of from three to ſeven flowers. The whole plant is ſmooth. See CRINUM TENELLUM. Native of the Cape of Good Hope, where it was diſcovered by Maſſon. Introduced in 1774. It flowers in November.

Propagation and Culture. Theſe bulbs are increaſed by offsets, which the two firſt ſorts put out pretty plentifully, in a favourable ſituation, when they are not too often removed. They ſhould have a ſoft loamy ſoil, and an expoſure to the eaſt. Plant the roots ſix inches aſunder, and four or five inches deep. They ſhould not be tranſplanted oftener than every third year. A north or north-eaſt border is beſt for them; and the proper ſoil a mixture of loam and bog earth. In different aſpects, however, their flowering may be forwarded or protracted, and thus a longer ſucceſſion of theſe and other flowers produced. The fourth ſort muſt be houſed with other Cape bulbs, and treated as they are. See ALYSSUM, ARABIS,

Biscutella, Cheiranthus, Draba, Erysimum, Galanthus, Heliophila, Hesperis, and Verbascum.

LEUCO'MA, among the Athenians, ſignified a public regiſter of the whole city, in which were written the names of all the citizens, as ſoon as they came to be of age to enter upon their paternal inheritance.

LEUCO'MA, *ſ.* [from λευκος, Gr. white.] In ſurgery, a whitiſh opacity of the cornea, ſimilar to the *albugo*; and requiring the ſame mode of treatment. See the article Surgery.

LEUCO'MA, *ſ.* [Greek.] A white ſcar in the horny coat of the eye.

LEUCONO'TUS, *ſ.* [Latin.] A dry fair ſouth-weſt wind.

LEUCOPE'TRA, in ancient geography, ſo called from its white colour, a promontory of the Bruttii, in the territory of Rhegium, the termination of the Apennines; the utmoſt extremity of the Bruttii, or the modern *Calabria Ultra*; as the Japygium is of the ancient Calabria, or the modern Calabria Citra.

LEUCOPE'TRIANS, *ſ.* in eccleſiaſtical hiſtory, the name of a fanatical ſect which ſprang up in the Greek and eaſtern churches towards the cloſe of the 12th century. The fanatics of this denomination profeſſed to believe in a double trinity, rejected wedlock, abſtained from fleſh, treated with the utmoſt contempt the ſacraments of baptiſm and the Lord's ſupper, and all the various branches of external worſhip; placed the eſſence of religion in internal prayer alone; and maintained, as it is ſaid, that an evil being, or genius, dwelt in the breaſt of every mortal, and could be expelled from thence by no other method than by perpetual ſupplication to the Supreme Being. The founder of this enthuſiaſtical ſect is ſaid to have been a perſon called *Leucopetrus*, and his chief diſciple Tychicus, who corrupted, by fanatical interpretations, ſeveral books of Scripture, and particularly St. Matthew's Goſpel.

LEUCOPHLEG'MACY, *ſ.* Paleneſs, with viſcid juices and cold ſweatings.—Spirits produce debility, flatulency, fevers, *leucophlegmacy*, and dropſies. *Arbuthnot on Aliments.*

LEUCOPHLEGMAT'IC, *adj.* [λευκος and φλεγμα, Gr.] Having ſuch a conſtitution of body where the blood is of a pale colour, viſcid, and cold, whereby it ſtuffs and bloats the habit, or raiſes white tumours in the feet, legs, or any other parts; and ſuch are commonly aſthmatic and dropſical.—Aſthmatic perſons have voracious appetites, and for want of a right ſanguification are *leucophlegmatic*. *Arbuthnot.*

LEUCO'PHRA, *ſ.* in helminthology, the Transparent Worm; a genus of the order infuſoria. This worm is inviſible to the naked eye, and every-where ciliate.

Species. 1. Leucophra conflictor: ſphærical, ſubopake, with moveable inteſtines. Found in clear water; yellowiſh with dark edges, and filled with moſt minute molecules in perpetually-violent agitation. See Animalcule, vol. i. p. 723, 4.

2. Leucophra veſiculifera: ovate, with veſicular inteſtines; body pellucid with a dark edge, the middle frequently appearing blue. See Helminthology, Plate VI. fig. 21. vol. ix. p. 362.

3. Leucophra acuta: black, pointed.

4. Leucophra fluxa: ſinuate, kidney-ſhaped. Body oblong, yellowiſh, obtuſe on one part, the other produced into a cone, and generally filled with molecules. This is ſhown at fig. 10 on the Plate at p. 526.

5. Leucophra armilla: round, annular. Body a little thickened above, and bent like a ring. See the ſame Plate, fig. 11.

6. Leucophra cornuta: inverſely conic, green, opake. Inhabits marſhy grounds. Body broad and truncate on the fore-part, with a ſmall ſpine each ſide; the hind-part pellucid and pointed; ſometimes it appears oval or kidney-ſhaped, and, when the water which contains it evaporates, it breaks into molecular veſicles.

7. Leucophra heteroclita: cylindrical, obtuſe on the fore-part, the hind-part furniſhed with a double creſted exſertile organ. Body to the naked eye like a white point; inteſtines viſible. See Helminthology, Plate VI. fig. 22.

8. Leucophra nodulata: ovate-oblong, depreſſed, with a double row of tubercles. Found in the inteſtines of the Lumbricus terreſtris and Nais littoralis; very pellucid, ſhining like ſilver, and is propagated by a tranſverſe diviſion; oval when young, and growing more oblong with age; truncate at the tip.

LEUCOPO'GON, *ſ.* [ſo named by Mr. Brown, from the Gr. λευκος, white, and πωγων, beard, on account of the white erect hairs on the upper ſide of the ſegments of the corolla, very conſpicuous even in dried ſpecimens.] In botany, a genus of the claſs pentandria, order monogynia, natural order epacrideæ, *Brown.* In the Prodromus of Mr. Brown, ſo rich in botanical novelties, we find the definitions of forty-eight ſpecies of this new genus, which he has ſeparated from the Styphelia of preceding writers; retaining in the latter ſuch plants only as have four or more leaves to their external calyx; a more elongated and cylindrical corolla, with five internal tufts of hair near the bottom; the limb revolute as well as bearded; filaments prominent; and a rather dry drupe, always of five cells. It is, on the whole, a very elegant as well as natural genus; and it is to be regretted that only one of the ſpecies has hitherto been made known to our cultivators of curious plants. The plumy whiteneſs of the flowers gives a ſtriking and peculiar aſpect to the whole. See Epacus and Styphelia.

LEUCOP'SIS, *ſ.* in helminthology, the White-eye; a genus of hymenopterous inſects. Generic characters: Mouth horny, with ſhort jaws; the mandible thick, and three-toothed at the tip; lip longer than the jaw, membranaceous, and emarginate at the tip; feelers four, ſhort, equal, filiform; antennæ ſhort, clavate; thorax with a long lanceolate ſcale beneath; wings folded; ſting reflected, and concealed in a groove of the abdomen. There are four ſpecies.

1. Leucopſis gigas, the large leucopſis: black, with two yellow dots on the back; abdomen ſeſſile, with four yellow bands. Wings duſky; hind thighs dentated.

2. Leucopſis dorſigera, the high-backed leucopſis: abdomen ſeſſile, black, with two yellow bands and a dot between them. Head black. Thorax gibbous, black, with a double tranſverſe yellow line; abdomen compreſſed and grooved on the back; ſting double, as long as the abdomen, and reflected back into the abdominal groove. Legs yellow, ſpotted with black; hind-thighs toothed, with a black ſpot. Upon the whole it appears at firſt ſight like a waſp, to which genus the folded wings would have referred it, had not the remarkable ſting or tube on the back have prevented it. It is thought to be a ſpecies between, and uniting, the ſphex and waſp, in ſome degree partaking of the characters of both. The antennæ are black and cylindrical, increaſing in thickneſs towards the extremity; the joint neareſt the head is yellow; the head is black; ſo alſo is the thorax, encompaſſed with a round yellow line, and furniſhed with a croſs one of the ſame colour near the head. The ſcutellum is yellow; the abdomen black, with two yellow bands, and a ſpot of the ſame colour on each ſide between the bands. The anus and the whole body, when viewed with a low magnifier, appear punctuated; and the points, when examined carefully, ſeem to be hexagonal, and in the centre of each hexagon a ſmall hair is ſeen. Inhabits Italy, Swiſſerland, France, and ſome parts of Germany. This beautiful inſect is figured in Adamé's Eſſays on the Microſcope; the drawing was taken from a ſpecimen in her majeſty's cabinet of inſects. There is one alſo in the cabinet of Linnæus, now in the poſſeſſion of Dr. Smith, P. L. S. Our delineation is taken from Fueſly's Archives de l'Hiſt. des Inſectes: fig. 12 ſhows the inſect of the natural ſize; fig. 13, the ſame lying on its back.

3. Leucopſis petiolata: black; abdomen petiolate, ferruginous; the petiole with a yellow dot each ſide. The thorax is elevated, with two yellow ſtreaks before; under-

the ſcutel is a yellow dot; the ſecond ſegment of the abdomen is edged with yellow, and the tail is black; legs black edged with yellow; wings black. Found in Tranquebar.

4. Leucopſis cœlogaſter: abdomen ſeſſile; ſcale of the thorax half as long as the abdomen. It is found in ſome parts of Germany.

LEUCORRHÆ'A, *ſ.* [Gr. literally ſignifying *fluor albus*, or white flux.] A diſorder of the uterus or its paſſages, from which a whitiſh or pale-coloured fluid is diſcharged, accompanied by pains in the loins, conſiderable loſs of ſtrength, and a wan ſickly aſpect. It is commonly expreſſed by the appellation of *the whites* by the patients. See the article PATHOLOGY.

LEUCOSCEP'TRUM, *ſ.* [named and inſtituted by Dr. Smith, from the Gr. λευκος, white, and σκηπτρος, a ſceptre, on account of its elegant ſceptre-ſhaped ſpike of white flowers. The author of this genus remarks, that "it has the habit of a Buddleia, but belongs to the ſecond ſection of Vitices in Juſſieu, near Verbena; and ſhould, along with Verbena, ſtand near Mentha in the Linnæan ſyſtem.] In botany, a genus of the claſs didynamia, order gymnoſpermia. Eſſential generic characters—Corolla unequal, in four ſegments; the uppermoſt deeply cloven; calyx five-cleft; ſtamens declining, much longer than the corolla, parallel; ſeeds four.

Leucoſceptrum canum, or hoary leucoſceptrum, is the only ſpecies known, and was gathered by Dr. Buchanan in the woods of Upper Nepal, where it flowers in December, and is called *mutſola* by the Nawars. The branches are obtuſely quadrangular, compreſſed, clothed with fine, denſe, whitiſh, pubeſcence. Leaves on ſhortiſh downy footſtalks, oppoſite, elliptical, pointed, and tapering at both ends, bluntly ſerrated, veiny; green and naked above; white and downy beneath. Spike terminal, ſolitary, ſeſſile, erect, cylindrical, denſe, many-flowered. Bractes ſmall, in four rows, oppoſite, each common to many flowers. Calyx tubular, downy; its margin obtuſe, unequally five-cleft. Corolla longer than the calyx, with a ſhort tube; the limb in four very-unequal obtuſe ſegments, of which the uppermoſt is deeply divided; the lowermoſt, or lip, large, concave, and entire. Stamens declining, parallel, thread-ſhaped, ſmooth; the two longeſt double the length of the lip; anthers roundiſh, two-lobed, yellowiſh. Germen ſuperior, four-lobed; ſtyle declining, as long as the longer ſtamens, with a cloven, acute ſtigma; ſeeds four, truncated, naked, in the bottom of the calyx. This is one of the numerous ſplendid plants ſent by Dr. Buchanan, from the mountains of Nepal, to Dr. Smith, which ſo greatly enrich the work whence the above deſcription is chiefly taken. *Smith's Exot. Bot.* ii. 113.

LEUCO'SIA, a ſmall iſland in the Tyrrhene ſea. It received its name from one of the companions of Æneas, who was drowned there; or from one of the ſirens, who was thrown there by the ſea. *Ovid. Met.* 15.

LEUCO'SIS, *ſ.* [Greek.] A morbid whiteneſs in any part of the body.

LEUCOSPER'MUM, *ſ.* [ſo named by Mr. Brown, from λευκος, white, and σπερμα, ſeed.] A genus of plants deſcribed by Mr. Brown in the 10th volume of Linn. Tranſ. Eighteen ſpecies are defined by Mr. Brown, all natives of ſouthern Africa, about the Cape of Good Hope, growing for the moſt part in dry, ſandy, rather-elevated, ſituations. Eight of them are cultivated in the royal garden at Kew. The whole are divided into two ſections; the firſt having a rounder head of flowers, whoſe calyx-ſcales are permanent, becoming ſomewhat hardened, of which deſcription are fourteen ſpecies: the remaining four have a flatter common receptacle, with narrow deciduous ſcales, of which the innermoſt are very thin and chaffy. All are ſhrubs of rather humble growth, rarely arboreſcent; many of them downy or hairy. Leaves either entire, or furniſhed with callous teeth at the extremity. Flowers yellow, in terminal heads. The ſpecies are partly new, and partly ſelected from the genus PROTEA, which ſee.

LEUCOSYR'II, a people of Aſia Minor, called afterwards Cappadocians. *Strabo.*—The ſame name is given to the inhabitants of Cilicia where it borders on Cappadocia. *C. Nep.*

LEUCOTH'OE, in fabulous hiſtory, a daughter of king Orchamus by Eurynome. Apollo became enamoured of her; and, to introduce himſelf to her with greater facility, he aſſumed the ſhape and features of her mother. Their happineſs was complete, when Clytia, who tenderly loved Apollo, and was jealous of his amours with Leucothoe, diſcovered the whole intrigue to her father, who ordered his daughter to be buried alive. The lover, unable to ſave her from death, ſprinkled nectar and ambroſia on her tomb, which, penetrating as far as the body, changed it into a beautiful tree which bears the frankincenſe. *Ovid.*

LEUCOTH'OE, or LEUCOTHE'A, in fabulous hiſtory, the wife of Athamus, changed into a ſea-deity; ſee INO, vol. xi. p. 94. She was called *Matuta* by the Romans. She had a temple at Rome, where all the people, particularly women, offered vows for their brothers' children. They did not entreat the deity to protect their own children, becauſe Ino had been unfortunate in her's. To this ſupplicating for other people's children, Ovid alludes in theſe lines:

Non tamen hanc pro ſtirpe ſua pia mater adorat,
Ipſa parum felix viſa fuiſſe parens. Faſt. vi.

LEUCOX'YLON, *ſ.* in botany. See BIGNONIA.

LEU'CTRA, a village of Bœotia, between Platæa and Theſpia, famous for the victory which Epaminondas the Theban general obtained over the ſuperior force of Cleombrotus, king of Sparta, on the 8th of July, B.C. 371. In this famous battle 4000 Spartans were killed, with their king Cleombrotus, and no more than 300 Thebans. From that time the Spartans loſt the empire of Greece, which they had retained for near 500 years. See the article GREECE, vol. viii. p. 910, 11.

LEUD, or LEUDE, *adj.* Unlearned; ignorant; fooliſh. *Chaucer.*

LEU'DILY, *adv.* Unlearnedly; fooliſhly. *Chaucer.*

LEU'DINESS, *ſ.* Ignorance; folly. *Chaucer.*

LEU'DLY, *adv.* Ignorantly; fooliſhly. *Chaucer.*

LEV'EE, *ſ.* [French.] The time of riſing. The concourſe of thoſe who crowd round a man of power in a morning:

Would'ſt thou be firſt miniſter of ſtate;
To have thy *levees* crowded with reſort
Of a depending, gaping, ſervile, court? *Dryden.*

LEV'EL, *adj.* [læpel, Sax.] Even; not having one part higher than another:

The garden, ſeated on the *level* floor,
She left behind. *Dryden's Boccace.*

Even with any thing elſe; in the ſame line with any thing.—There is a knowledge which is very proper to man, and lies *level* to human underſtanding, the knowledge of our Creator, and of the duty we owe to him. *Tillotſon.*

Our navy is addreſs'd, our pow'r collected,
And ev'ry thing lies *level* to our wiſh. *Shakeſpeare.*

Having no gradations of ſuperiority.—Be *level* in preferments, and you will ſoon be as *level* in your learning. *Bentley.*

To LEV'EL, *v. a.* To make even; to free from inequalities: as, he *levels* the walks.—To reduce to the ſame height with ſomething elſe:

He will thy foes with ſilent ſhame confound,
And their proud ſtructures *level* with the ground. *Sandys.*

To lay flat.—We know by experience, that all downright rains do evermore diſſever the violence of outrageous winds, and beat down and *level* the ſwelling and mountainous billows of the ſea. *Raleigh.*

With unreſiſted might the monarch reigns:
He *levels* mountains, and he raiſes plains;
And, not regarding diff'rence of degree,
Abas'd your daughter, and exalted me. *Dryden.*

To

To bring to equality of condition.—Reaſon can never aſſent to the admiſſion of thoſe brutiſh appetites which would over-run the ſoul, and *level* its ſuperior with its inferior faculties. *Decay of Piety.*—To point in taking aim; to aim:

One to the gunners on St. Jago's tow'r,
Bid 'em for ſhame *level* their cannon lower. *Dryden.*

To direct to any end.—The whole body of puritans was drawn to be abettors of all villainy by a few men, whoſe deſigns from the firſt were *levelled* to deſtroy both religion and government. *Swift.*—To ſuit; to proportion:

Behold the law
And rule of beings in your Maker's mind:
And thence, like limbecs, rich ideas draw,
To fit the *level'd* uſe of humankind. *Dryden.*

To LEV'EL, *v. n.* To aim at; to bring the gun or arrow to the ſame direction with the mark.—The glory of God, and the good of his church, was the thing which the apoſtles aimed at, and therefore ought to be the mark whereat we alſo *level*. *Hooker.*—To conjecture; to attempt to gueſs.—I pray thee overname them; and, as thou nameſt them, I will deſcribe them; and, according to my deſcription, *level* at my affection. *Shakeſpeare.*—To be in the ſame direction with a mark:

He to his engine flew,
Plac'd near at hand in open view,
And rais'd it till it *level'd* right
Againſt the glow-worm tail of kite. *Hudibras.*

To make attempts; to aim.—Ambitious York did *level* at thy crown. *Shakeſpeare.*—To efface diſtinction or ſuperiority: as, Infamy is always trying to *level.*—To accord:

With ſuch accommodation and beſort,
As *levels* with her breeding. *Shakeſpeare's Othello.*

LEV'EL, *ſ.* A plane; a ſurface without protuberances or inequalities.—Thoſe bred in a mountainous country overſize thoſe that dwell on low *levels*. *Sandys's Travels.*—Rate; ſtandard; cuſtomary height.—The praiſes of military men inſpired me with thoughts above my ordinary *level*. *Dryden.*—Suitable or proportionate height:

It might perhaps advance their minds ſo far
Above the *level* of ſubjection, as
T' aſſume to them the glory of that war. *Daniel.*

A ſtate of equality.—Providence, for the moſt part, ſets us upon a *level*, and obſerves proportion in its diſpenſations towards us. *Addiſon's Spectator.*—Rule; plan; ſcheme: borrowed from the mechanic level:

Be the fair *level* of thy actions laid,
As temp'rance wills, and prudence may perſuade,
And try if life be worth the liver's care. *Prior.*

The line of direction in which any miſſive weapon is aimed:

Thrice happy is that humble pair,
Beneath the *level* of all care,
Over whoſe heads thoſe arrows fly
Of ſad diſtruſt and jealouſy. *Waller.*

The line in which the ſight paſſes:

Fir'd at firſt ſight with what the muſe imparts,
In fearleſs youth we tempt the heights of arts;
While from the bounded *level* of our mind
Short views we take, nor ſee the lengths behind. *Pope.*

An inſtrument whereby maſons adjuſt their work.—The *level* is from two to ten feet long, that it may reach over a conſiderable length of the work; if the plumb-line hang juſt upon the perpendicular, when the *level* is ſet flat down upon the work, the work is level; but, if it hangs on either ſide the perpendicular, the floor or work muſt be raiſed on that ſide, till the plumb-line hang exactly on the perpendicular. *Moxon's Mechanical Exerciſes.*—An inſtrument which enables us to find a line parallel to the horizon, or concentric with the circumference of the earth, and to continue it to any diſtance: to form a ſurface exactly level, having all its points at equal diſtances from the earth's centre; or to find the difference of aſcent between ſeveral places, for the purpoſe of making roads, conducting water, draining low grounds, rendering rivers navigable, forming canals, &c. &c. A great variety of inſtruments have been invented for theſe purpoſes; for which, and their application, ſee the article SURVEYING.

LEV'ELLER, *ſ.* One who makes any thing even. One who deſtroys ſuperiority; one who endeavours to bring all to the ſame ſtate of equality.—You are an everlaſting *leveller*; you won't allow encouragement to extraordinary merit. *Collier.*

LEVELLER, in agriculture, the name of a machine, invented by Mr. David Charles, ſteward to lieutenant-colonel Hardy, of Weſtmead in Carmarthenſhire, for the purpoſe of rendering high ridges and other inequalities, in ſuch lands as are in a ſtate of cultivation, more level and even in their ſurfaces. Such a machine is ſtated to be uſeful and neceſſary, even in the moſt fertile parts of the country, where the improved ſyſtem of drill-huſbandry has been introduced, or even where there is any attention to the waſte of time, or to the eaſe of cattle in the act of ploughing; in order to get rid of crooked or unequal ridges, without either a ſummer fallow by croſs-ploughing, or elſe by frequent repetitions of ploughing in the winter and ſpring, which the humidity of this climate will not allow in every kind of ſoil. "Fourteen acres of land were reduced with this tool by the inventor to a perfect level, where the crowns of the ridges were about two feet higher than the furrows, and where they were crooked and of unequal breadths. But the chief ſucceſs has been upon a field of eight acres, which lay in an unprofitable ſtate, and which is a deep clay, that had produced a crop of wheat from an old lay-ſod the former year, without any manure, which was winter-ploughed, and lay in that ſtate until the machine was introduced the firſt dry weather in April. It was preceded by two horſe-ploughs, taking perhaps the ſquare of an acre at once; theſe looſened the ſoil the depth of a common furrow, and twice the breadth acroſs the ridges. The leveller followed, drawn by two oxen and two horſes, with a man at each handle, to preſs it down where the height was to be removed, and to lift up the body by the handles where it was to be diſcharged. Thus, four men, one driver, and eight head of cattle, will more effectually level from half an acre to three roods in one day, according as the earth is light or heavy, than ſixty or eighty men would accompliſh with harrows and ſhovels, &c. even with the aſſiſtance of a plough. In ſandy ground, where the depth of one furrow will bring all to a level, as much, of courſe, will be done in one day as two ploughs can cover;" but in this caſe, the ground required to be gone over ſeveral times. It is further ſtated, that, "after this field was levelled, the backs of the ridges, as they are termed, which were ſtripped of their vegetable mould, were ploughed up, the furrows not requiring it. They were alſo harrowed, and the field copiouſly manured with lime-compoſt, harrowed in, and broke into nine-feet ridges, perfectly ſtraight, in order to introduce Duckit's drill. It was ſown under furrow, broad-caſt, the laſt of it not until the 13th of May; and was cut down, a reaſonable crop, the 4th of September, 1802." And "the field now lies in a proper form, well manured, with the advantage of a fair crop from heavy tenacious ground, without loſing a ſeaſon, and in a year by no means favourable." The writer is "well aware there are many ſhallow ſoils, where it may be hazardous to remove the enriched ſurface, and truſt perhaps one half of the land for a crop that had never before been expoſed to the atmoſphere; but, where the ſoil is ſufficiently deep, or there is a good under-ſtratum, with manure at hand to correct what is ſour for want of expoſure and tillage, it is evident, from this experiment, that no riſk is run." And "to avoid the expenſe of a fallow, and to lay out ground in ſtraight and even ridges, even where the drill-huſbandry is not practiſed, ſhould

be

be objects to every rational farmer; but, where the new ſyſtem is intended to be adopted, it becomes indiſpenſably neceſſary. In laying down lawns, parks, &c. where furrows are an eye-ſore, or places inacceſſible to wheel-carriages from their declivity, and from which earth is to be removed, it will alſo be found equally uſeful." Beſides theſe, there are many other caſes in which the old rounded ridges may be levelled down with great advantage, either by this or ſome other means.

A repreſentation of this machine is given at fig. 4 in the Plate at p. 546. A is a part of the pole, to which the oxen or horſes which draw the machine are faſtened, and which is attached to the machine by a pin at B. CC, the two wheels, ſhod with iron, which run upon the axle D. EE, the upper frame-work of the machine, extending from the axle to the extremity of the handles, FF, and ſecured firmly by the croſs pieces, GG, the curved iron ſliders of the machine, which may be raiſed or depreſſed a little by means of the pins, HH, which paſs through holes in the wood-work, and alſo in the iron ſliders. Theſe ſliders form one piece with the back iron ſcraper I, in the manner more fully explained in fig. 5. K, the wooden back of the machine, which ſhould be made ſtrong, to reſiſt the weight of the earth when collected therein. The iron ſcraper ſhould be firmly ſecured to this by ſcrews and iron-work. LL, the wooden ſides of the machine, firmly connected with the back and frame-work, in order to aſſiſt in collecting the earth to be removed. M, a ſtrong croſs-piece, into which the ribs which ſupport the back are well mortiſed. The interior part of the back of the machine is ſhown at K, fig. 5; I, the iron ſcraper, ſharp at the bottom, firmly ſcrewed to the back of the machine; GG, parts of the ſide-irons or ſliders, ſhowing the mode in which they are united with the ſcraper I; M, the croſs-piece already deſcribed. The ſilver medal of the Society of Arts was voted to Mr. Charles for his invention. See their Tranſ. vol. xxi.

LEV'ELLING, *ſ.* The art or act of finding a line parallel to the horizon at one or more ſtations, to determine the height or depth of one place with reſpect to another; for laying out grounds even, regulating deſcents, draining moraſſes, conducting water, &c. See the article SURVEYING. The act of directing any thing to a certain point. The act of making level, by filling up the holes, or other depreſſions and inequalities, that are met with in lands, whether they are in the ſtate of ſward, or in that of tillage. It ſhould always be performed in ſuch a manner, as the parts thus filled up may at firſt be ſomewhat higher than the common ſurface round them, in order to allow for the ſettling which neceſſarily takes place; and ſhould be done with ſuch materials as can be moſt conveniently procured, and which are proper for the purpoſe, being filled in an even and regular manner, and well trodden down at the time. See LEVELLER.

LEV'ELNESS, *ſ.* Evenneſs; equality of ſurface. Equality with ſomething elſe.—The river Tiber is expreſſed lying along, for ſo you muſt remember to draw rivers, to expreſs their *levelneſs* with the earth. *Peacham.*

LEV'EN, *ſ.* [*levain*, Fr. Commonly, though leſs properly, written LEAVEN, which ſee.] Ferment; that which, being mixed in bread, makes it riſe and ferment. Any thing capable of changing the nature of a greater maſs.—The matter fermenteth upon the old *liven*, and becometh more acrid. *Wiſeman's Surgery.*—The peſtilential *levains* conveyed in goods. *Arbuthnot.*

LEV'EN, *ſ.* in natural hiſtory, a term uſed by Boccone for the milky juice contained in the globules at the tops of the ſtalks of red coral. Theſe round buttons are the only part of the coral which are ſoft while under water; and from theſe the milky juice is eaſily expreſſed by a gentle ſqueezing between the fingers. The globules are each made up of five or ſix little cells, not communicating with one another, and each containing its own ſeparate quantity of this white and thick fluid. When the coral is newly taken up out of the ſea, this juice is of a ſharp, acrimonious, and aſtringent, taſte; but, when it has been ſome time expoſed to the air, it loſes the acrimony, and the aſtringency of the taſte only remains. This change in the taſte is made in ſix or eight hours, in hot weather; and the juice, in the ſame time, loſes its colour and conſiſtence, growing hard and brown. *Phil. Tranſ.* N° 100.

LEV'EN, a river of Scotland, which runs from Loch Lomond, and falls into the Clyde near Dunbarton.

LEV'EN, a river of Scotland, which runs from Loch Leven into the bay of Largo.

LEV'EN, a town of Scotland, in the county of Fife, on the north coaſt of the Frith of Forth, in Largo Bay, at the mouth of the river Leven: thirteen miles north-north-eaſt of Leith. Lat. 56. 12. N. lon. 3. 1. W.

LEV'EN, a river of England, in the county of Lancaſter, which paſſes through Winander Mere, and empties itſelf in Morecambe Bay.

LEV'EN, a village in the eaſt riding of Yorkſhire, in Holderneſs, weſt of Hornſey-Meer.

LEV'EN (Black), a river in Cumberland, which runs into the White Leven at Buckneſs.

LEV'EN (White), a river in Cumberland, which runs into the Kirkſop near Tomwat-Hill.

LEV'ENANT, a river of Wales, which runs into the Dovy about one mile below Machynlleth.

LEV'ENEN, LIVENEN, or LEVONTINA, a valley of Helvetia, belonging or ſubject to the canton of Uri, the ſeat of the ancient Lepontii, ſituated to the ſouth of St. Gothard; the inhabitants are chiefly Italians. It is watered by the Teſino.

LEU'ENFORDE, a town of Weſtphalia, in the principality of Calenberg, on the Weſer: twenty-five miles weſt-north-weſt of Göttingen.

LEVEN'NY, a river of Wales, in the county of Denbigh, which runs into the Cluyd near Ruthin.

LEVEN'NY, or LEONNY, a river in Caernarvonſhire, which runs into the Iriſh Sea at Caer-Jerienrade.

LEV'ENS, LE'VA, or LEV'ENEZ, a town of Hungary, near the river Gran, where the Turks were defeated in the year 1664, by general Souches, a Frenchman. The loſs of the Turks was 12,000 killed, and 1500 priſoners, with 100 colours, 2000 waggons, 200,000 ſequins, 20 pieces of cannon, and abundance of proviſion, ammunition, and baggage. It is twenty-four miles north-north-eaſt of Gran, and eighty-four eaſt of Vienna.

LEU'ENSTEDE, a town of the duchy of Holſtein: five miles ſouth of Rendſburg.

LEVEN'TEN, a lake of Pruſſia: fifty-ſix miles ſouth-eaſt of Königſberg.

LEV'ENTHORP, a village in the north riding of Yorkſhire, on the Tees, north-eaſt of Yarm.—A village in the weſt riding, near Bradford.

LE'VER, *ſ.* [*levier*, Fr.] The firſt and moſt ſimple of the mechanical powers. See the article MECHANICS.—In a *lever*, the motion can be continued only for ſo ſhort a ſpace, as may be anſwerable to that little diſtance betwixt the fulciment and the weight; which is always by ſo much leſſer, as the diſproportion betwixt the weight and the power is greater, and the motion itſelf more eaſy. *Wilk. Math. Magick.*—Have you any *leavers* to lift me up again, being down? *Shakeſpeare.*

Some draw with cords, and ſome the monſter drive
With rolls and *levers*. *Denham.*

LE'VER, *adv.* [uſed by Spenſer for *liefer*, the comparative of *lief*.] Rather:

Die had ſhe *lever* with enchanter's knife,
Than to be falſe in love. *Fairy Queen.*

[Prefixt to *were*, it makes an impersonal verb.] Rather let.—*Me lever were* with point of foeman's ſpeare be dead. *Fairy Queen.*

LE'VER (Sir Aſhton), was the ſon of ſir Darcy Lever, of Alkington, near Mancheſter. He finiſhed his education at Corpus-Chriſti college, Oxford; and, on leaving

the univerſity, he went to reſide with his mother, and afterwards ſettled at his family-ſeat, which he rendered famous by the beſt aviary in the kingdom. He next extended his views to all branches of natural hiſtory, and became at length poſſeſſed of one of the fineſt muſeums in the world, ſparing no expenſe in procuring ſpecimens from the moſt diſtant regions. This muſeum was diſpoſed of by lottery in 1785, but to the great loſs of the proprietor. It was, for ſome years after this, exhibited to the public at a ſmall charge; but is now diſperſed, the articles having been ſold ſeparately by auction. Sir Aſhton died in 1780.

LE'VER (Darcy, Great, and Little), three populous townſhips of Lancaſhire, in the neighbourhood of Bury.

LEVERA'NO, a town of Naples, in the province of Otranto: ſeven miles north of Nardo.

LEV'ERET, *ſ.* [*lievret*, Fr.] A young hare:

Their travels o'er that ſilver field does ſhow
Like track of *leverets* in morning ſnow. *Waller.*

LEV'ERETT, a townſhip of North America, in Hampſhire-county, Maſſachuſetts, near Connecticut River; ninety-four miles weſt from Boſton; incorporated in 1774. A copper-mine has been lately diſcovered in this townſhip.

LEV'ERIDGE (Richard), was a ſinger of Purcell's ſongs in the time of Charles II. and in that of William and Mary. During the reign of queen Anne, he performed in 1706 the part of Sir Truſty, in Addiſon's Roſamond; and, in the firſt attempts at opera on the Italian model, he ſang his part in Engliſh, in Camilla and Thomyris; while Nicolini, Valentini, and the Margarita, performed theirs in Italian. He had a deep and powerful baſe voice; was a uſeful performer on the Engliſh ſtage on many occaſions; and was not without genius for poetry and compoſition, as far as a ballad went. As he was not only a celebrated ſinger of convivial ſongs, but the writer of many that were in great favour with ſingers and hearers of a certain claſs, who more pioufly performed the rites of Comus and Bacchus than thoſe of Minerva and Apollo, he had always a crowded houſe at his benefit; nor did he leave this ſublunary world, or the ſtage, till 1758, at eighty-eight years of age.

LEV'EROOK, *ſ.* [lapeye, Sax.] This word is retained in Scotland, and denotes the lark. See LAVEROCK.—The ſmaller birds have their particular ſeaſons; as, the *leverook*. *Walton's Angler*.—If the lufft fa', 'twill ſmoore aw the *leverooks*. *Scotch Prov.*

LEV'ERINGTON, a village near Wiſbeach, thirty-ſeven miles from Cambridge.

LEV'ERMINE, Northumberland, a hamlet belonging to the barony of Wark.

LEV'ERSAL, a village near Doncaſter, Yorkſhire.

LEV'ERSDALE, a village, in the pariſh of Irthington, Cumberland.

LEV'ERSEDGE, a village in Yorkſhire, between Halifax and Wakefield.

LEV'ERTON, a village in the north riding of Yorkſhire, eaſt of Gainſbrough.

LEV'ERTON, North and South, villages near Boſton, Lincolnſhire.—Villages on the eaſt ſide of Retford, Nottinghamſhire.

LE'VESDEN, a village in Hertfordſhire, in the pariſh and manor of Watford.

LE'VESHAM, a village in the north riding of Yorkſhire, ſouth-weſt of Blackenmore.

LEV'ESTON, a village of Dorſetſhire, ſouth of Sherborne.

LEV'ET, *ſ.* [from *lever*, Fr.] A blaſt on the trumpet; probably that by which the ſoldiers are called in the morning:

He that led the cavalcade
Wore a ſowgelder's flagellet,
On which he blew as ſtrong a *levet*,
As well-ſee'd lawyer on his breviate. *Hudibras.*

LE'VET, a town of France, in the department of the Cher: ſix miles ſouth of Bourges, and twelve ſouth-ſouth-eaſt of Charoſt.

LE'VETHAM, a village in Bliſland, Cornwall, north-eaſt of Bodmin.

LEU'GAST, a town of Bavaria: thirty-four miles eaſt-north-eaſt of Bamberg.

LEU'GNERSH, a village of Suſſex, north of Pagham.

LE'VI, one of the twelve Hebrew patriarchs, was the third ſon of Jacob and Leah, born in Meſopotamia, A. M. 2248, ante A. D. 1756. *Gen.* xxix. 34. After Shechem, the ſon of Hamor, had violated Dinah, Jacob's daughter, and ſiſter to Levi and Simeon, theſe two brethren fraudulently engaged Shechem and his men to receive circumciſion; and, on the third day, when the pain was greateſt, they entered the town of Shechem, ſlew all the males, retook their ſiſter Dinah, and pillaged the place. *Gen.* xxxiv. This action was very diſpleaſing to their father Jacob. Levi went down into Egypt with his father, having three ſons, Gerſhom, Kohath, and Merari. *Gen.* xlvi. 11. When Jacob bleſſed his ſons on his death bed, he ſaid to Simeon and Levi: "Ye are brethren, and united in doing miſchief; ye are inſtruments of cruelty. God forbid that I ſhould be a partaker in their ſecret deſigns, and that my honour ſhould be concerned in their combinations; curſed be their anger for it was fierce, and their wrath for it was cruel. *I will divide them in Jacob, and ſcatter them in Iſrael.*" Gen. xlix. 5, 6. Accordingly, Levi was ſcattered over all Iſrael, having no ſhare in the diviſion of Canaan; but only ſome cities within the portions of other tribes. However, by their zeal againſt idolatry, and the readineſs with which they executed the command of Moſes to put to death a number of the worſhippers of the golden calf, they obtained a mitigation of the ſentence pronounced againſt them in the perſon of their progenitors. For they were admitted to the prieſthood; which, though ſubordinate to that of Aaron and his poſterity, entitled them to conſiderable privileges and immunities. They were thus appointed the keepers of the Jewiſh religion, and inſtructors of the people; and were entitled to a place in the judicial courts of every city and town, and to the property of thirty-five cities, with all their territories, in which they were ſupported by a fixed contribution of the tenths of all kinds of beaſts, fruits, and grain, in Iſrael. The Teſtament of the Twelve Patriarchs, an ancient but apocryphal book, ſays, that the prieſthood was to be ſettled in the family of Levi; and that the Saviour of the world was to be born of his tribe and that of Judah; and it was the opinion of many of the ancients, that the bleſſed Virgin was of the two tribes of Levi and Judah; of Judah by her father, and Levi by her mother. Levi, as this book ſays, died in Egypt, aged a hundred and thirty-ſeven years; and his ſons, at their return into the land of Canaan, huried him in the cave of Hebron.

LE'VI BEN GER'SHOM, a learned rabbi, born about the year 1290, at Bagnoli in Provence, which being ſubject to Spain, both French and Spaniards claim him as their countryman. He was deſcended from a family which had produced many learned men; and was himſelf educated to the medical profeſſion. His celebrity, however, is chiefly founded on his philoſophical and theological writings. He was a diſciple of Ariſtotle; and philoſophizes in the ſpirit of his maſter when diſcuſſing ſubjects in ſacred literature. He oppoſed many of the Talmudical interpretations of Scripture; and, inſtead of receiving the accounts of the appearance of angels to Abraham, Balaam, &c. in a literal ſenſe, he maintained that they are only narratives of viſions, dreams, &c. The gift of prophecy he conſidered to be the effect, not of a divine *afflatus*, but of a natural genius, and bodily temperament. He died at Perpignan in 1370, when he was about eighty years of age. He was the author of Commentaries on all the books of the Old Teſtament, of which ſome are inſerted in the great Bibles of Venice, and Baſil; and others were ſeparately printed, at different periods, at Peſaro, Venice, and Paris. He was alſo the author of a laborious and curious philoſophical work, entitled *Millemot Haſchem*, or the Battles of the Lord, divided into treatiſes—on the immortality

immortality of the ſoul; the knowledge of future events, prophecy, and the interpretation of dreams; the omniſcience of God; divine providence; the heavens, and their motion; and the creation of the world, with a diſcuſſion of the queſtion, whether it has exiſted from eternity. The author inclines, with Ariſtotle, to the affirmative ſide. This work was publiſhed in folio, at Riva, or Reiſſ, in the year 1560. Beſides the works already mentioned, our rabbi compoſed a ſhort Expoſition on the Logic of Averroës, or the Ten Categories of Ariſtotle, &c. a Latin tranſlation of which was printed at Venice, in 1552, in 4to. and various other mathematical and philoſophical treatiſes, which were formerly preſerved in manuſcript in the Vatican library, and that belonging to the congregation of the fathers of the oratory at Paris. *Wolfii Bibliotheca Hebræa*, vol. i.

LE'VI (Iſle du Fort), an iſland in the river St. Lawrence, Upper Canada, in front of the townſhip of Edwardſburg. On this iſland are the ruins of a French fortification.

LEV'IABLE, *adj.* That may be levied.—The ſums which any agreed to pay, and were not brought in, were to be *leviable* by courſe of law. *Bacon's Henry* VII.

LEVI'ATHAN, *ſ.* [לויתן, Heb.] A water-animal mentioned in the book of Job; in poetry generally taken for the whale.—Canſt thou draw out *leviathan* with an hook? *Job.*

More to embroil the deep; *leviathan*,
And his unwieldy train, in dreadful ſport
Tempeſt the looſen'd brine. *Thomſon's Winter.*

This word the fathers underſtand generally, in a moral ſenſe, of the devil, the enemy of mankind, the ſerpent. See 2 Eſdras vi. 49, 52. The word *leviathan*, according to its etymology, may ſignify any large fiſh, or ſea-monſter; the former part of the word denoting "what is joined, faſtened, or tied together;" and the latter part, *than*, "a great fiſh;" i. e. "the great fiſh covered with ſcales, ſtuck cloſe one upon another." Thus we have a very exact deſcription of the crocodile; and Bochart concludes that this muſt be the animal intended. See the article LACERTA, and the correſpondent Engravings, at p. 34 of this volume.

LEVI'E, a town of the iſland of Corſica: thirteen miles north-weſt of Porto Vecchio.

LEVIEI'ON, a town of Perſia, in the province of Irak: thirty-ſix miles weſt-ſouth-weſt of Iſpahan.

LEVI'ER, a town of France, in the department of the Doubs: ten miles weſt of Pontarlier, and nine ſouth of Ornans.

To LEV'IGATE, *v. a.* [*lævigo*, Lat.] To rub or grind to an impalpable powder. To mix till the liquor becomes ſmooth and uniform.—The chyle is white, as conſiſting of ſalt, oil, and water, much *levigated* or ſmooth. *Arbuthnot.*

LEV'IGATING, *ſ.* The act of reducing to an impalpable powder.

LEVIGA'TION, *ſ.*—*Levigation* is the reducing of hard bodies, as coral, tutty, and precious ſtones, into a ſubtle powder, by grinding upon marble with a muller; but, unleſs the inſtruments are extremly hard, they will ſo wear as to double the weight of the medicine. *Quincy.*

LEVIGNAC', a town of France, in the department of the Upper Garonne: eight miles ſouth-ſouth-weſt of Grenade, and eleven weſt-north-weſt of Toulouſe.—A town of France, in the department of the Lot and Garonne: eight miles north of Marmande.

LEV'IN, *ſ.* Lightning:

As when the flaſhing *levin* haps to light
Upon two ſtubborn oaks. *Spenſer.*

LEV'IN-BRON'D, *ſ.* Thunder-bolt.—And eft his burning *levin-brond* in hand he took. *Spenſer.*

LEV'INER, *ſ.* A kind of hound. *Urry.*

LEV'INGTON, a village in Lincolnſhire, ſouth-weſt of Fokingham.

LEV'IRATE, *ſ.* [from *levor*, Lat. huſband's brother, or brother-in-law.] A term uſed by authors who have written on the law and cuſtoms of the Jews, to denote particularly that law of Moſes, which obliges one brother to marry the widow of another, who died without children, to raiſe up ſeed to him. *Deut.* xxv. 5.

This law, which is an exception to that which condemns marriages between brothers and ſiſters, and between brothers-in-law and ſiſters-in-law, ſeems to have been in uſe among the Hebrews and Canaanites before the time of Moſes; ſince Judah gave his firſt-born Er, and Onan his ſecond ſon, ſucceſſively to Tamar, and obliged himſelf to give to her likewiſe Shelah his third ſon. *Gen.* xxxviii. 8, 11.

It is very remarkable, that the ſame cuſtom or law prevails in ſome parts of India, as we are informed by Mr. Elliot in his Obſervations on the Inhabitants of the Garrow Hills, which bound the north-eaſtern parts of Bengal. "I diſcovered theſe circumſtances of the marriage-ceremony of the Garrows, from being preſent at the marriage of Lungree, youngeſt daughter of the chief Oodaſſy, ſeven years of age, and Buglun, twenty-three years old, the ſon of a common Garrow; and I may here obſerve, that this marriage, diſproportionate as to age and rank, is a very happy one for Buglun, as he will ſucceed to the booneaſhip and eſtate; for, among the Garrows, the youngeſt daughter is always heireſs, and, if there were any other children born before her, they would get nothing on the death of the booneah. What is more ſtrange, if Buglun were to die, Lungree would marry one of his brothers; and, if all his brothers were dead, ſhe would then marry the father; and, if the father afterwards ſhould prove too old, ſhe would put him aſide, and take any one elſe ſhe might chooſe." *Aſiatic Reſearches*, vol. iii. p. 35. It is clear, that Lungree would have acted exactly like Tamar; who, becauſe Shelah was not given to her, conſidered him "as dead, and married the father;" for doing which, Judah not only acquits her of any tranſgreſſion, but confeſſes, "ſhe has more cloſely adhered to the law (*is more righteous*) than I." It appears too that the children of Judah by Tamar did actually inherit as his ſons, lawfully, as well as naturally; hence they are reckoned to him, 1 Chron. ii. 4. *And Tamar his daughter-in-law, bare him Pharez and Zerah.* Again, in Numb. xxvi. 20. *The ſons of Judah were—of Shelah—of Pharez—of Zerah*; without any particular mark of abaſement on Pharez. Alſo in Ruth iv. 18. the pedigree of David is expreſsly derived from the ſame ſon of Judah, by Tamar. If the pedigree of David be ſo derived, then that of the Meſſiah follows it; and it needs little conſideration to determine which is moſt convenient, to allow the legality of Tamar's marriage, and the legal acknowledgment of her children, or to baſtardize, not merely Pharez, but his poſterity, Boaz, David, Solomon, and the kings of Judah and Iſrael.

The inſtance of Ruth, who married Boaz her huſband's relation, is an evidence of this practice under the judges. Boaz was neither the father of, nor the neareſt relation to, Elimelech, father-in-law to Ruth, the wife of Mahlon; and yet he married her after the refuſal of him who was the neareſt relation. *Ruth*, iii. iv.

The rabbins ſuggeſt many exceptions to and limitations of this law; as, that the obligation on the brother to marry his ſiſter-in-law regards only brothers born of the ſame father and mother; that it has a reſpect only to the eldeſt brother of the deceaſed; and, farther, ſuppoſes that he was not married already; for, if he were, he might either take or leave his brother's widow. If the deceaſed had left a natural or adoptive ſon or daughter, a grandſon or grand-daughter, the brother was under no obligation to marry his widow. If the dead perſon left many wives, the brother could marry but one of them; if the deceaſed had many brothers, the eldeſt alone had a right to all his eſtate, and enjoyed the property which his wife had brought him. They add, that the marriage of the widow with her brother-in-law was performed without ſolemnity; becauſe the widow of the brother who died

without children became the property of the brother-in-law, like any other chattel. Yet cuſtom required that he ſhould take her in the preſence of two witneſſes, and that the brother ſhould give a piece of money to the widow; the nuptial bleſſing was added, and a writing to ſecure the wife's dower. Some believe, that this law was not obſerved after the Babyloniſh captivity, becauſe ſince that time there has been no diſtinction of the inheritances of the tribes. At any rate, the Jews of the preſent day do not practiſe this law, or at leaſt very rarely.

Leo of Modena deſcribes the ceremony of *refuſal* in the following manner: Three rabbins and two other witneſſes, the evening before, chooſe a place where the ceremony may be performed. The next day, when they come from morning prayers, they all follow the rabbins and witneſſes, who meet in the appointed place, where they ſit down, and order the widow and her brother-in-law to appear before them. The principal rabbin propoſes ſeveral queſtions to the man, and exhorts him to marry the widow. If the man perſiſts in his refuſal, he, as a token of it, puts on one of the rabbin's ſhoes, which is fit for any foot; and the woman then approaches, and, aſſiſted by the rabbin, ſays to him in Hebrew; *My huſband's brother refuſeth to raiſe up unto his brother a name in Iſrael; he will not perform the duty of my huſband's brother.* Gen. xxv. 7. The brother-in-law anſwers, *I like not to take her.* Hereupon the woman ſtoops down, looſens and pulls off the ſhoe, throws it upon the ground, "ſpits before him," and ſays in Hebrew, *So ſhall it be done unto the man that will not build up his brother's houſe; and his name ſhall be called in Iſrael the houſe of him that hath his ſhoe looſed.* Ver. 8, 9. Theſe words ſhe repeats three times; and they who are preſent anſwer as often, "He that hath his ſhoe looſed." Hereupon the rabbins immediately tell her that ſhe may marry again; and, if ſhe requires any certificate of what is done, the rabbins deliver one to her. *Leo of Modena*, cap. 7.

From this it appears, that the rabbins do not underſtand Moſes's words literally, that the woman ſhall *ſpit in his face*, (ver. 9.) but explain it, "ſhe ſhall ſpit in his preſence, ſhe ſhall ſpit on the ground before him;" but the text is expreſsly for the former meaning, and Joſephus underſtood it literally in the hiſtory of Ruth. *Antiq.* lib. v. cap. 11. We hardly need obſerve, that to ſpit in any one's face is a mark of the higheſt contempt and inſult. See Numb. xii. 14.

The precept in Deut. xxvi. 6. does not ſeem poſitively to require, that the eldeſt ſon of ſuch marriages ſhould abſolutely bear the name of the deceaſed; but merely that he ſhould *ſucceed in the name* of the deceaſed; paſs for his ſon; ſupport his name and family, &c. The inſtance of Ruth, who called her ſon by Boaz *Obed*, not Mahlon, the name of her firſt huſband, proves, that it was not neceſſary the child ſhould receive the name of his mother's firſt huſband. Leo of Modena obſerves, that the Jews ſometimes, from avarice, kept their ſiſters-in-law long in ſuſpenſe, without declaring whether they would marry them or not, to tire their patience, and extort money from them; wherefore ſome fathers, if they married their daughters to men who had ſeveral brothers, ſtipulated, that they ſhould ſet the widow at liberty gratis. Others perſuaded the huſband, when ſick, and in danger, to divorce his wife, that ſhe might not come into the power of her brother-in-law. The marrying a ſiſter-in-law the Jews call *ibum*; and the pulling off the ſhoe, and ſetting a woman at liberty, *chaleza*. *Calmet.*

LEVISA'NUS, or LEWISANUS, [ſo called by Petiver and Sherard, from the Rev. Mr. *Lewis*, who ſent ſome ſhells to Petiver from Fort St. George.] In botany, a genus of the claſs pentandria, order monogynia. The generic characters are—Calyx: perianthium common hemiſpheric, imbricated, many-flowered; leaflets linear. Perianthium proper, one-leafed, ſuperior, five-toothed, ſharp, upright, permanent. Corolla: petals five; claws ſlender; borders oblong, ſhorter. Stamina: filaments five, capillary, inſerted into the bottom of the perianthium; antheræ oblong. Piſtillum: germ top-ſhaped, inferior; ſtyles two, conjoined into one, or elſe diſtinct and approximated, capillary; ſtigmas ſimple. Pericarpium: berry corticated, ovate, incruſted by the calyx: with the tip free, two-celled. Seeds: five or ſix, oblong compreſſed; receptacle of the ſeeds fungous, large, in the middle of the partition. Receptacle: common globoſe, villoſe, chaffy. The fruit of all the ſpecies is not yet known.—*Eſſential Character.* Flowers aggregate; calyx one-leafed, ſuperior, five-cleft. Corolla five-petalled, ſuperior; filaments inſerted into the baſe of the perianthium; ſtyles two, conjoined. Berry two-celled; ſeeds five or ſix, compreſſed.

Species. 1. Leviſanus nodiflorus, or knotted leviſanus: leaves imbricate; three-ſided, acute. 2. Leviſanus paleaceus, or chaffy leviſanus: leaves in five rows, imbricate, preſſed cloſe, corymb terminating; chaffs of the heads ſtanding out. 3. Leviſanus abrotanoides: leaves linear-lanceolate ſpreading, three-ſided, callous at the tip. 4. Leviſanus radiatus, or rayed leviſanus: leaves linear, three-ſided; calyx rayed, the inner leaflets coloured. 5. Leviſanus glutinoſus, or glutinous leviſanus: leaves linear, three-ſided, calyx rayed; all the leaflets coloured. Theſe are all ſhrubs, and natives of the Cape of Good Hope.

LEVISOM'NOUS, *adj.* [from the Lat. *levis*, light, and *ſomnus*, ſleep.] Sleeping lightly; watchful.

LEVIS'TICUM, *ſ.* in botany. See LIGUSTICUM.

LEVI'THA, an iſland in the Grecian Archipelago, about eight miles in circumference. Lat. 37. N. lon. 26. 14. E.

LEVI'THA (Elias). See ELIAS LEVITA, vol. vi. p. 472.

LEVITA'TION, *ſ.* [from the Lat. *levis*, light.] Lightneſs; the property which ſtands oppoſed to gravitation. *Scott.*

LE'VITE, *ſ.* [*levita*, Lat. from *Levi.*] One of the tribe of Levi; one born to the office of prieſthood among the Jews.—In the Chriſtian church, the office of deacons ſucceeded in the place of the *levites* among the Jews, who were as miniſters and ſervants to the prieſts. *Ayliffe's Parergon.*—A prieſt: uſed in contempt.

LEVITE, in a general ſenſe, means all the deſcendants of Levi, among whom were the Jewiſh prieſts themſelves, who, being deſcended from Aaron, were likewiſe of the race of Levi. In a more particular ſenſe, *levite* is uſed for an order of officers in that church, who were employed in performing the manual ſervice of the temple. They were obedient to the prieſts in their miniſtration; and brought them wood, water, and other neceſſaries for the ſacrifice. They ſang and played upon inſtruments in the temple and in other places. They applied themſelves to the ſtudy of the law, and were the ordinary judges of the country, but always ſubordinate to the prieſts. Their ſubſiſtence was the tithe of corn, fruit, and cattle, throughout Iſrael; but the prieſts were entitled to a tenth of their tithes, by way of firſt fruits to the Lord. Eight and forty cities were aſſigned for the reſidence of the levites, of which the prieſts claimed thirteen, ſix whereof were choſen for cities of refuge. They were conſecrated, before they entered upon their miniſtry, by ſhaving their fleſh, waſhing their clothes, and ſprinkling with the water of expiation. Impoſition of hands was uſed in conſecration; and two bullocks were offered at the door of the tabernacle. They waited weekly, and by turns, in the temple, beginning their attendance on one ſabbath, and ending the next: during this time they were maintained out of the offerings, &c. In the time of Solomon, the number of levites, from the age of twenty, and capable of ſerving, was thirty thouſand.

LEVIT'ICAL, *adj.* Belonging to the levites; making part of the religion of the Jews.—By the *levitical* law, both the man and the woman were ſtoned to death; ſo heinous a crime was adultery. *Ayliffe.*

LEVITI'CI, in church-hiſtory, a ſect of heretics, who ſprung from the Gnoſtics and Nicolaitans.

LEVIT'ICUS,

LEVIT'ICUS, a canonical book of the Old Teſtament, ſo called from its containing the laws and regulations relating to the prieſts, levites, and ſacrifices.

LEV'ITY, *ſ.* [*levitas*, Lat.] Inconſtancy; changeableneſs.—They every day broached ſome new thing; which reſtleſs *levity* they did interpret to be their growing in ſpiritual perfection. *Hooker.*

Where wigs with wigs, with ſword-knots ſword-knots ſtrive,
Beaus baniſh beaus, and coaches coaches drive,
This erring mortals *levity* may call. *Pope.*

Unſteadineſs; laxity of mind:

I unboſom'd all my ſecrets to thee;
Not out of *levity*, but over-power'd
By thy requeſt. *Milton's Agoniſtes.*

Idle pleaſure; vanity.—He never employed his omnipotence out of *levity* or oſtentation, but as the neceſſities of men required. *Calamy.*—Trifling gaiety; want of ſerioufneſs.—That ſpirit of religion and ſeriouſneſs vaniſhed, and a ſpirit of *levity* and libertiniſm, infidelity and profaneneſs, ſtarted up in the room of it. *Atterbury.*—Lightneſs; not heavineſs; the quality by which any body has leſs weight than another.—He gave the form of *levity* to that which aſcended; to that which deſcended, the form of gravity. *Raleigh.*

The ſchools maintain, that there is ſuch a thing as *poſitive* and *abſolute* levity, and impute to this the riſe or emergency of bodies lighter in ſpecie than the bodies wherein they riſe. But we find by experience, that all bodies tend towards the earth, ſome ſlower and ſome faſter, in all fluids, or mediums, whether water, air, &c. Thus, cork is only ſaid to be lighter than gold, becauſe, under equal dimenſions, the gold will ſink in, and the cork ſwim upon, water. Yet Dr. Hook ſeems to maintain ſomething like a poſitive levity; which, if we miſtake not, is what he means by the term *levitation*; viz. a property of bodies directly contrary to that of gravitation towards the ſun. This, he thinks, he has diſcovered in the ſtreams of ſeveral comets; which, though they had a deſcent from the nucleus of the comet towards the ſun, yet they quickly returned, and went oppoſite to the ſun, and that to a prodigious extent. In effect, where the power of gravitation ceaſes, it ſhould ſeem ſome ſuch contrary force does begin; whereof we have inſtances in the phenomena of attraction. This is what ſir Iſaac Newton calls the *vis repellens*, and appears to be one of the laws of nature; without which it would be hard to account for rarefaction, and ſome other appearances.

LEVIZA'NO, a town of Italy, in the department of the Panaro: ſix miles ſouth-ſouth-eaſt of Modena.

LEUK, a town of Swiſſerland, in the Valais, ſituated about one mile from the Rhône; the principal place of a dixain: behind is a lofty mountain, and on the ſides are two brooks, which run into deep beds. It contains two churches, and a large palace of the biſhops of Sion: ſix miles to the north are ſome celebrated baths, ſaid to be beneficial in rheumatiſms, diſeaſes of the ſkin, &c. It is twenty miles eaſt of Sion.

LEVKOPOL', a town of Ruſſia, in the province of Tauris: eighty miles ſouth of Perekop. Lat. 45. 6. N. lon. 34. 24. E.

LEU'LINGHEM, a village of France, in the department of the Straits of Calais, remarkable for a conference held here in 1389, for an accommodation between France and England, which held nine days; and another conference in 1401, on reſtoring the dowry of the queen of Richard II. In 1413, a third conference was held on the buſineſs of peace in the reign of Henry V. It is midway between Calais and Boulogne.

LEUM'MIM, third ſon of Dedan, and grandſon to Abraham and Keturah. *Gen.* xxv. 3. Leummim might be the father of the Omonians, whoſe country extended from Petra to Charax. Petra is the capital of Arabia Petræa, and Charax lies on the Euphrates. *Pliny*, lib. vi. cap. 28.

LE'UN, or LEIN, a town of Germany, in the principality of Solms-Braunfels, ſituated on the Lahn: two miles north of Braunfels, and four north-eaſt of Weilburg.

LEUNCLA'VIUS (John), an eminent man of letters of the ſeventeenth century, was the ſon of a gentleman at Amelbrun in Weſtphalia. He appears to have been brought up to the profeſſion of the law, with which ſcience he was intimately acquainted, as well as with literature in general. He travelled into various parts of Europe, and reſided a conſiderable time in Turkey. He died at Vienna in 1693, about the ſixtieth year of his age. From his knowledge of the Turkiſh language he was enabled to collect ſome valuable materials for the hiſtory of that nation, which he gave to the world in his Hiſtoriæ Muſlimanicæ Turcarum, and his Annales Turcici. His intimate knowledge of the Greek language was diſplayed in ſeveral Latin tranſlations of Greek authors, viz. Xenophon, Zoſimus, the annals of Conſtantine Manaſſes and of Michael Glycas, the Greek abridgement of the ſixty books of the Roman law, entitled *Baſilics*, various works of St. Gregory of Nazianzen, &c. As a tranſlator he is much praiſed by Huet, but has been criticiſed by H. Stephanus and others.

LEVONOV'K, a town of Ruſſia, in the government of Irkutſk, on the Lena: fifty-two miles ſouth-ſouth-weſt of Kirenſk.

LEU'POLD (James), one of the ableſt artiſts in Europe, during his day, in conſtructing mathematical inſtruments and machines, was counſellor and commiſſary of mines to the king of Poland, and a member of the Royal Society of Berlin, and other ſcientific bodies. He died at Leipſic in 1727, after having acquired celebrity by the publication of his great work, entitled, *Theatrum Machinarum*, in 3 vols. folio, 1724. This performance, though a compilation, is uſeful and much eſteemed.

LEU'PUSCH, a town of Sileſia, in the principality of Neiſſe: three miles north-weſt of Grotkau.

LEU'RE, a river of France, which runs into the Loire a little below St. Florent le Viel, in the department of the Mayne and Loire.

LEURE, *ſ.* in falconry. See LURE.

LEV'RET (Andrew), an eminent French ſurgeon and accoucheur, was admitted a member of the Royal Academy of Surgery at Paris in February 1742. He obtained a high and extenſive reputation in his department of the art, by the improvements which he made in ſome of the inſtruments neceſſary to be employed in certain difficult caſes, (eſpecially the forceps,) and by the prodigious number of pupils whom he inſtructed. He was employed and honoured with official appointments by all the female branches of the royal family. He publiſhed ſeveral works, which underwent various additions and tranſlations; as, 1. Obſervations ſur les Cauſes et les Accidens de pluſieurs Accouchemens laborieux; Paris, 1747. To the fourth edition, in 1770, were added, Obſervations on the lever of Roonhuyſen. 2. Obſervations ſur la Cure radicale de pluſieurs Polypes de la Matrice, de la Gorge, et du Nez, operée par de nouveaux moyens; 1749, &c. 3. Suite des Obſervations ſur les Accouchemens laborieux, 1751. 4. Explication de pluſieurs figures ſur le Méchaniſme de la Groſſeſſe et de l'Accouchement; 1752. 5. L'Art des Accouchemens démontré par des Principes de Phyſique et de Méchanique; 1753, &c. 6. Eſſai ſur l'Abus des Regles generales, et contre les Préjugés qui s'oppoſent aux Progrès de l'Art des Accouchemens, 1766. *Eloy Dict. Hiſt.*

LEVROU'X, a town of France, in the department of the Indre: ten miles north of Châteauroux, and ſeventeen eaſt of Châtillon ſur Indre. Lat. 46. 59. N. lon. 1. 41. E.

LEU'SCHEIDT, a town of the grand duchy of Berg: nine miles eaſt-ſouth-eaſt of Blankenberg.

LEU'SDEN (John), an eminent philologiſt, eſpecially in the oriental languages, was born at Utrecht in 1624.

He ſtudied in his native city, and then went to Amſterdam in order to improve himſelf in the Hebrew language, and in the knowledge of the Jewiſh ritual, from converſation with the learned rabbis. In 1649 he obtained the chair of Hebrew and Jewiſh antiquities at Utrecht, which he held till his death with great reputation. He once relaxed from his labours in a tour to the catholic Netherlands, France, and England, in which countries he formed connections with the learned. He died in 1699. Leuſden was a diſcerning critic, and taught with great perſpicuity. He was much attached to the opinions of the Buxtorfs, and adopted their method. He gave correct editions of the works of Bochart and Lightfoot, and of Poole's Synopſis. His own writings were numerous and valuable. The principal are, 1. Onomaſticon Sacrum, 8vo. 1665 and 1684. 2. Clavis Hebraica & Philologica Vet. Teſt. 4to. 1683. 3. Clavis Græca Novi Teſt. cum annotat. 8vo. 1672. 4. Compendium Biblicum Vet. Teſt. 8vo. 1673; ſeveral times reprinted. 5. Compendium Græcum Novi Teſt. The beſt edition is that of London, 12mo. 1688. 6. Philologus Hebræus. 7. Philologus Hebræo-mixtus. 8. Philologus Hebræo-Græcus. 9. Philological Notes upon Jonas, Joel, and Hoſea, two vols. 8vo. He alſo aſſiſted in various editions of the Old and New Teſtament in the original languages, and in oriental verſions. *Moreri.*

LEU'TENBERG, or LEUCHTENBERG, a town of Germany, in the county of Schwartzburg-Rudolſtadt, on the Sorbitz. Near it are mines of ſilver and copper. It is eight miles ſouth-eaſt of Saalfeld, and twelve ſouth-ſouth-eaſt of Rudolſtadt. Lat. 50. 28. N. lon. 11. 35. E.

LEU'TERSDORF, a town of Germany, in the county of Henneberg: ſix miles ſouth-eaſt of Meinungen.

LEUTH, a town of France, in the department of the Lower Meuſe: two miles ſouth of Stockem.

LEU'THEN, a town of Sileſia, in the principality of Breſlau. In 1757, the Auſtrians were defeated near this place by the Pruſſians. It is ten miles weſt of Breſlau.

LEUT'KIRCH, a town of Bavaria, near the Eſchach, on a heath to which it gives name; free and imperial, till, in 1802, it was given among the indemnities to the elector (now called king) of Bavaria. In it is a Lutheran and a Roman-catholic church, together with a nunnery of Franciſcans; but the greateſt part of the magiſtracy are Lutherans. Its immediate dependence on the empire may be traced with certainty, at leaſt from the time of king Rudolph; and the emperors Charles IV. and Wenceſlaus promiſed to preſerve it in the ſame. Its aſſeſſment to the matricula of the empire and circle was, in the year 1683, reduced from 40 to 14 florins; but, in 1728, raiſed to 21: to the chamber of Wetzlar it paid 33 rix-dollars 69½ kruitzers. Leutkirch is twelve miles north of Iſny, and twenty-eight ſouth of Ulm. Lat. 47. 53. N. lon. 10. 0. E.

LEUT'MERITZ. See LEITMERITZ, p. 464.

LEUT'MISCHL, or LI'TOMYSL, a town of Bohemia, in the circle of Chrudim, erected into a biſhopric in the year 1344; but, the town being ruined by the Huſſites, the biſhopric was ſuppreſſed. In 1758, this town was taken by the Pruſſians, with ſome magazines belonging to the Auſtrians. It is twenty-two miles eaſt of Chrudim, and ſeventy-ſix eaſt of Prague. Lat. 49. 47. N. lon. 16. 5. E.

LEU'TSCH, a town of the duchy of Carniola: eight miles ſouth-ſouth-eaſt of Hydria.

LEU'TSCH, or LOC'ZE, a town of Hungary. In 1601, this town was ſacked by the Heyducks. It was taken by Bethlem Gabor, by George Rokotzy, by count Tekeli, and by Francis Rakotzy. In 1494, a treaty was concluded here between the kings of Hungary and Poland. It has been ſeveral times deſtroyed by fire. It is fourteen miles weſt of Szeben, and thirty-four north of Caſſovia.

LEUTZ'BURG, a town of Swiſſerland, in the canton of Berne: ſix miles ſouth of Brugg.

LEUT'ZENDORF, a town of Bavaria, in the territory of Rothenburg: three miles weſt of Rothenburg.

To LEV'Y, *v. a.* [*lever*, Fr.] To raiſe; to bring together: applied to men.—He reſolved to finiſh the conqueſt of Ireland, and to that end *levied* a mighty army. *Davies on Ireland.*—To raiſe; applied to war. This ſenſe, though Milton's, ſeems improper:

They lived in hatred, enmity, and ſtrife,
Among themſelves, and *levy* cruel wars. *Milton.*

To raiſe; applied to money.—*Levy* a tribute unto the Lord of the men of war. *Numbers.*—Inſtead of a ſhip, he ſhould *levy* upon his county ſuch a ſum of money. *Clarendon.*

LEV'Y, *ſ.* The act of raiſing money or men.—They have already contributed all their ſuperfluous hands, and every new *levy* they make muſt be at the expenſe of their farms and commerce. *Addiſon's State of the War.*—War raiſed:

Treaſon has done his worſt: nor ſteel, nor poiſon,
Malice domeſtic, foreign *levy*, nothing
Can touch him further! *Shakeſpeare's Macbeth.*

LEV'YING, *ſ.* The act of raiſing by a levy.

LEU'ZE, a town of France, in the department of Gemappe, ſituated on a brook near the Dender. The armies of the allies under the command of the prince of Waldeck, after the departure of William III. to England, quitting Leuze to encamp at Chambron, their rear-guard was attacked by the duke of Luxemburg; but after a few hours' engagement, the French were obliged to retire, with the loſs of eight or nine hundred men killed and wounded; this action took place on the 19th of September 1691: eight miles eaſt of Tournay, and fourteen north-weſt of Mons.

LEW, a village in Oxfordſhire, north of Bampton.

LEW (North), a village in Devonſhire, ſouth-weſt of Hatherleigh.

LEWAL'DE, a town of Pruſſia, in the province of Oberland: twelve miles north-north-weſt of Soldau.

LEWAR'DE, a town of France, in the department of the North: three miles eaſt of Douay, and ſix weſt-north-weſt of Bouchain.

LEWAR'DEN, a city of Holland, and capital of Frieſland, ſituated in the quarter called *Ooſtergoo.* It was only a ſmall town in the year 1190, when it was firſt ſurrounded with a wall. It is now large, rich, and populous, and fortified with good ramparts, defended by a large ditch, full of water; ſeveral baſtions, and other works. All the ſtreets are ſtraight, large, and handſome, and divided by many canals which interſect each other, and communicate with all parts of the province and the ſea, by means of which the inhabitants carry on conſiderable trade with Holland, Bremen, Embden, Hamburg, &c. The town-houſe is a handſome building, erected in the year 1715. In the year 1559, Paul IV. erected it into a biſhopric, ſubject to the archbiſhop of Utrecht. It is twenty-eight miles weſt of Groningen. Lat. 53. 12. N. lon. 5. 43. E.

LEW'CKOCE, a town of Poland, in Podolia: forty-four miles north-north-eaſt of Kaminiec.

LEW'COMBE, a village in Dorſetſhire, north-weſt of Everſhot.

LEWD, *adj.* [læpede, Sax.] Wicked; bad; diſſolute.—If ſome be admitted into the miniſtry, either void of learning, or *lewd* in life, are all the reſt to be condemned? *Whitgifte.*—Before, they did oppreſs the people only by colour of a *lewd* cuſtom; they did afterwards uſe the ſame oppreſſions by warrant. *Davies.*—Luſtful; libidinous:

Then *lewd* Anchemolus he laid in duſt,
Who ſtain'd his ſtep-dame's bed with impious luſt. *Dryd.*

Lay; not clerical; from leod, *people.*—It is ſometimes groſs; ignorant. *Obſolete.*—For *lewyd* men this book I writ. *Biſhop Groſthead.*

So

So theſe great clerks their little wiſdom ſhow
To mock the *lewd*, as learn'd in this as they. *Davies.*

LEW'DLY, *adv.* Wickedly; naughtily:

A ſort of naughty perſons, *lewdly* bent,
Have practis'd dangerouſly againſt your ſtate. *Shakeſpeare.*

Libidinouſly; luſtfully:

He lov'd fair lady Eltred, *lewdly* lov'd,
Whoſe wanton pleaſures him too much did pleaſe,
That quite his heart from Guendeline remov'd. *Spenſer.*

In a ſtate of ignorance:

All which my daies I have not *lewdly* ſpent,
Nor ſpilt the bloſſom of my tender yeares
In ydleſſe. *Fairy Queen.*

LEW'DNESS, *ſ.* Luſtful licentiouſneſs.—Damianus's letter to Nicholas is an authentic record of the *lewdneſſes* committed under the reign of celibacy. *Atterbury.*

Suffer no *lewdneſs*, nor indecent ſpeech,
Th' apartment of the tender youth to reach. *Dryden.*

Open and notorious lewdneſs, being contrary to religion and morality, as by frequenting houſes of ill fame, is an indictable offence, *Poph.* 208. or by ſome groſsly ſcandalous and public indecency, for which the puniſhment is fine and impriſonment. A temporal puniſhment may in certain circumſtances be inflicted for having baſtard children. By ſtat. 18 Eliz. c. 3, two juſtices may take order for the puniſhment of the mother, and reputed father; but what that puniſhment ſhall be, is not therein aſcertained, though the contemporary expoſition was that a corporal puniſhment was intended. *Dalt. J.* c. 11. By ſtat. 7 Jac. I. c. 4, a ſpecific puniſhment, commitment to the houſe of correction, is inflicted on the woman only. But in both caſes it ſeems that the penalty can only be inflicted if the baſtard becomes chargeable to the pariſh; for otherwiſe the very maintenance of the child is conſidered as a degree of puniſhment. Many offences of the incontinent kind fall properly under the juriſdiction of the eccleſiaſtical court; and are appropriated to it. But, except thoſe appropriated caſes, the court of king's bench is the *cuſtos morum* of the people; and has the ſuperintendency of offences *contrà bonos mores*. But acts of indecency and immorality are puniſhable by indictment in any criminal court, as public miſdemeanors. 4 *Comm.* c. 4. p. 64. in n.

LEW'DSTER, *ſ.* A lecher; one given to criminal pleaſures:

Againſt ſuch *lewdſters*, and their lechery,
Thoſe that betray them do no treachery. *Shakeſpeare.*

LEW'EHAGEN, a town of Pruſſia, in the circle of Natangen: eight miles eaſt-ſouth-eaſt of Königſberg.

LEW'ELL, a village in Dorſetſhire, between Stafford and Woodford.

LEWEL'LIN, *ſ.* [Welch.] A man's name.

LEW'EN, a town of Bohemia, in the circle of Leitmeritz: eight miles north-eaſt of Leitmeritz.

LEW'EN. See LÖWEN.

LEWEN'TZ. See LEVENS, p. 553.

LEW'ES, a market and borough town in Suſſex, ſituated about fifty miles ſouth from London, and ſix from the ſea. It is by ſome writers ſaid to have derived its name from *lewſa*, which in the Saxon tongue ſignifies paſtures. Two mints were eſtabliſhed here by Athelſtan; and, in the reign of Edward the Confeſſor, this town had a hundred and twenty-ſeven burgeſſes. It now ſends two members to parliament, and the right of voting is in the reſident inhabitants paying ſcot and lot.

This town was never incorporated. The borough was formerly under the abſolute controul of the late duke of Newcaſtle. This influence his grace acquired from the weight of property which he poſſeſſed here, and from the diſtribution of ſome employments under government, of which he was at that time ſole manager. In 1768 the late colonel Hay, of Glynde Bourne, near Lewes, was recommended by the duke as one of the candidates for its repreſentation; in conſequence of which he obtained from the voters a promiſe of their ſuffrages. Immediately after this tranſaction, the duke thought proper to countermand his former recommendation; and accordingly withdrew his ſanction from colonel Hay, and gave it to ſir Thomas Miller. The people however thought themſelves bound in honour to abide by their promiſes; and colonel Hay, conceiving himſelf ill-treated, reſolved to ſtand the poll. Upon the day of election he was firmly ſupported by his friends, who gave him ſixty ſingle votes, and obtained for him ſo great a majority over his opponent, as to make him finally ſucceſsful. In 1780 there was a croſs-poll, when the Hon. Henry Pelham, colonel Hay, and Thomas Kemp, eſq. were candidates, each of whom ſtood upon his own ſeparate intereſt. In this conteſt Mr. Hay was unſucceſsful; and Mr. Kemp was returned by the intereſt which had always ſhown itſelf hoſtile to that of lord Pelham. In 1784, ſir Henry Blackman was put in nomination by the famous Mr. Harben, who, notwithſtanding this profeſſion of friendſhip, on the day of election deſerted and betrayed him: upon which ſir Henry repreſented to the people the ſituation into which he had been led by the artifices of this man, in ſo pathetic and convincing a manner, that Mr. Harben was obliged inſtantly to quit the hall, amidſt the hiſſes and murmurs of his fellow-townſmen. At length there was an union between the leading men in the independent party and thoſe in the intereſt of lord Pelham, which Mr. Shelly, who was countenanced by adminiſtration, oppoſed; but the Hon. Henry Pelham and Mr. Kemp ſucceeded. Mr. Kemp, when he firſt offered himſelf a candidate, pledged himſelf, that he would accept of neither place, penſion, gratuity, nor reward of any kind, from any adminiſtration, while he ſhould have the honour of repreſenting them in parliament. His ſon, Thomas Read Kemp, is the preſent member, in conjunction with George Shiffner, eſq. Lewes is a borough by preſcription, governed by two conſtables, annually choſen at the court-leet. It ſent to parliament 23 Edw. I. The returning-officers are the conſtables; the number of voters about 240.

Here William de Warren earl of Surrey, and the lady Gundreda his wife, in the year 1078, founded a priory of Cluniac monks, which was the firſt and principal houſe of the order in England; in after-times it had many noble benefactors, namely, the ſucceeding earls of Surrey and others, ſeveral of whom, with their ladies, were interred here. It continued a cell to the abbey of Cluny in Burgundy, till king Edward III. made it independent. At the general diſſolution its revenues were valued by Dugdale at 920l. 4s. 6d. a-year, and at 1091l. 9s. 6d. by Speed. It was granted, with all its appendages, to Thomas lord Cromwell; ſince which time it has been in the poſſeſſion of the dukes of Dorſet and earls of Thanet; and ſome remains of the priory are to be ſeen at this day. It had alſo a priory of grey friars; a monaſtery dedicated to St. James, for thirteen poor brethren and ſiſters; and an hoſpital dedicated to St. Nicholas, which at the time of the diſſolution had thirteen poor brothers and ſiſters. The earls of Surrey were for ſeveral centuries ſtyled Lords of Lewes; and we may mention the ſpirited behaviour, known indeed to many readers, of John de Warren, ſeventh earl of Surrey. In the year 1280, Edward I. iſſued writs of *quo warranto*, inquiring by what right the nobility and others held their lands. The deſign was inſidious, and many were glad to compound by advancing conſiderable ſums; but, when this earl of Surrey was queſtioned, he drew a ruſty ſword, declaring that this was his warrantry for all he poſſeſſed: "By that old ſervant (ſays he) my anceſtors won their lands, as well as the *conqueror* himſelf; and with the ſame, their undegenerate deſcendant is reſolved to maintain them." Such a declaration, from ſo reſolute a baron, it is obſerved, might have been the ſignal for civil war, had not the king prudently given up the ſcheme, though exceedingly productive. This no-

doubt

doubt was brave; yet ſtill more noble was the conduct of one of the earl's ſucceſſors, earl of Surrey and lord of Lewes, beheaded in the reign of Richard II. others, who were engaged with him in an oppoſition to that unworthy prince, ſaved themſelves by meanneſs and falſehood; this nobleman, however, preſerved his integrity while he loſt his life.

This town is alſo famous in hiſtory for a bloody battle fought here between Henry III. and the barons, on the 14th of May, 1264. See the article ENGLAND, vol. vi. p. 584. As ſome labourers were at work in removing mould and rubbiſh, preparatory to the opening a new chalk-pit under Landport Shaw, near Lewes, in the year 1805, they found, about four feet below the ſurface of the ground, lying ſide by ſide, in the direction that bodies are uſually interred, two human ſkeletons. It was evident, from the appearance and rottenneſs of the bones, that they had lain buried many centuries; and it is conjectured that they were the remains of two of the fugitive Londoners, who, at the great battle of Lewes, fought near that ſpot, fled from the royal army, and in their flight on that memorable day were drowned in the adjoining brooks, and afterwards buried in the place above mentioned.

Lewes is built on the margin of the South Downs, and on the banks of the river Ouſe, which is navigable for barges from the harbour at Newhaven to many miles up the country beyond the bridge. On this river are ſeveral iron-works, where cannon are caſt for merchant-ſhips, beſides other uſeful works of that kind. The caſtle, which flouriſhed under the Saxons, commands a moſt delightful proſpect of the ſea and the weald. The town was formerly incloſed with very thick high walls, parts and fragments of which are ſtill to be ſeen at both the north and ſouth ſides of it. It is a pleaſant town, and one of the largeſt and moſt populous in the county. It ſtands in an open champaign country. It has handſome ſtreets, and two fair ſuburbs. A charity-ſchool was opened here in 1711, where twenty boys are taught, clothed, and maintained, at the expenſe of a private gentleman, by whom they were alſo furniſhed with books; and eight boys more are taught here at the expenſe of other gentlemen. A ſchool on the Lancaſterian plan was opened in 1810; not leſs than three hundred children are educated by this means. Here are horſe-races, almoſt every ſummer, for the king's plate of one hundred pounds. The roads here are deep and dirty; but then it is the richeſt ſoil in this part of England. Lewes had originally twelve pariſh-churches, but of which there are now only ſeven; of which St. Thomas's in the Cliffe is a peculiar belonging to the archbiſhop of Canterbury, and is reckoned one of the neateſt in the whole county: its altar is remarkably pretty; it has two pillars in the middle, between which are the ten commandments, and two pilaſters on the outſide, all of the Doric order, with architrave, cornice, and frize, neatly carved and gilt; and between the pillar and pilaſter on the north ſide the Lord's Prayer, and on the ſouth ſide, between the other pillar and pilaſter, the Creed. There are alſo ſeven meeting-houſes. The market is on Saturday; fairs, May 6, Whit-Tueſday, and October 6.

From a windmill near this town there is a proſpect which is hardly to be matched in Europe: it takes in the ſea for thirty miles weſt, and an uninterrupted view of Banſted-downs, which is full forty miles. Between this town and the ſea there is the beſt winter-game that can be for a gun, and ſeveral gentlemen here keep packs of dogs; but the hills hereabouts are ſo ſteep, that it is extremely dangerous to follow them, though their horſes will naturally run down a precipice ſafely with a bold and ſkilful rider. On the eaſt ſide of this town there has been a camp; and it had formerly a wall, of which few remains are now to be ſeen. The timber of this part of the county is prodigiouſly large. The trees are ſometimes drawn to Maid-ſtone, and other places on the Medway, on a ſort of carriage called a *tug*, drawn by twenty-two oxen a little way, and then left there for other tugs to carry it on; ſo that a tree is ſometimes two or three years drawing to Chatham; becauſe, after the rain is once ſet in, it ſtirs no more that year, and ſometimes a whole ſummer is not dry enough to make the roads paſſable.—North-weſt of Lewes is the village of Hurſt Pierrepoint, which has a fair on the 10th of Auguſt.—Twineham and Sharmanbury are two other little villages near the above.

LEW'ES, a ſeaport town of United America, in the ſtate of Delaware, ſituated on the weſt coaſt of Cheſapeak bay, a few miles above the light on Cape Henlopen: twenty-eight miles ſouth-ſouth-eaſt of Dover. Lat. 38. 46. N. lon. 75. 17. W.

LEW'ES, a town of Virginia: twenty-three miles eaſt of Weſt Point.—Another town of Virginia, thirty miles weſt-north-weſt of Richmond.

LEW'ESTEIN, a town of Pruſſia: ſixteen miles north-weſt of Raſtenburg.

LEW'IN, a town of Sileſia, in the principality of Glatz: fifteen miles weſt of Glatz. Lat. 50. 14. N. lon. 16. 4. E.

LEW'ING, *ſ.* in metallurgy, the ſifting of the ores of metals in water. This is done in fine ſieves moved backward and forward under water; and is the method of ſeparating the finer part of the ores which had ſubſided among the larger lumps, under that part of it ſeparated for uſe in the various waſhings. The coarſer matter, left in the ſieve, is powdered again with the larger maſſes, and all thus ſifted together for the blowing-houſe.

LEW'IS, an iſland, or rather peninſula, among the weſtern iſlands of Scotland, forming, with Harris, a large iſland, near ſixty miles in length. Lewis, which is the northern part, is forty miles in length from north-eaſt to ſouth-weſt, and about thirteen in its mean breadth. It is on every part of its coaſt greatly indented with bays or lochs. The country is in general wild, bleak, barren of wood, and little fitted for cultivation; the hills are covered with heath, which affords ſhelter for various ſorts of game. The lakes and ſtreams abound with ſalmon, large red trout, and other fiſh. The only town in Lewis is Stornaway, ſituated on the eaſt ſide of the north diviſion of the iſland. To the weſt of Lewis and Harris, the coaſt is annually viſited by myriads of herrings. So immenſe are the ſhoals of dog-fiſh (Squalus canicula) that purſue the herrings, that their dorſal fins are ſometimes ſeen like a thick buſh of ſedges above water, as far as the eye can reach. From the liver of the dog-fiſh a conſiderable quantity of oil is extracted. In the ſeaſon, theſe ſhores are the reſort of many fiſhing-veſſels from different parts. Many of the inhabitants here, as well as in the northern iſles, live chiefly by fiſhing, and a pitiful kind of agriculture. The ſoil is a light ſand, which the inhabitants manure with ſoot and ſea-ware; but great part of the iſland is covered with heath. The labouring people dig the land with ſpades, and break the clods with ſmall harrows, the foremoſt teeth of which are made of wood, and the remainder of rough heath, which ſmooths what the others have broken; and this harrow is drawn by one man, having a ſtrong trace of horſe-hair acroſs his breaſt. Of their corn they not only make malt for ale, but likewiſe a ſtrong ſpirit called *treſtareg*, which is the whiſky, or uſquebaugh, three times diſtilled.

Along this coaſt we ſee ſeveral natural mounts, or forts, called *Duns*; ſuch as Dun-rowly, Dun-coradel, and Dun-eiſten. There are alſo the remains of ſome old caſtles, and other monuments of antiquity. At Stornaway are the ruins of a fortreſs deſtroyed by the Engliſh garriſon ſent thither by Oliver Cromwell. To the northward of Brago there is a round tower built of large ſtones, three ſtories high, tapering towards the top, with a double wall, and a circular ſtaircaſe between, by which one may go quite round the building. On the heaths and ſummits of hills there are ſeveral cairns, or heaps of ſtones, which ſerved either for graves or beacons. In the pariſh of Barvas we ſee a ſingle ſtone called the *thruſhel*, ſtanding upright, above twenty

feet high, and almoſt as much in breadth. Three ſtones, about twelve feet high each, are ſeen ſtanding on the north ſide of Loch Carlvay; and many others ſtanding ſingle at great diſtances, and in remote parts of the iſland. But the moſt remarkable monument of this kind appears by the village of Claſſerniſs. Here we find thirty-nine pyramidal ſtones ſtanding upright, about ſix or ſeven feet high from the ſurface, each about two feet in breadth. They are placed in form of an avenue, eight feet wide; the diſtance between every ſtone amounting to ſix feet, and a ſingle piece ſtands at the entrance. This avenue leads to a circle of twelve ſtones of the ſame dimenſions, with one in the centre thirteen feet in length, and ſhaped like a rudder; on the eaſt, ſouth, and weſt, ſides of this circle, are four ſtones, ſuch as thoſe that compoſe this round and avenue, forming three lines, or as it were rays from the body of the circle. This is ſuppoſed to have been a Druid temple; and tradition reports, that the chief Druid ſtood by the large ſtone in the centre, and harangued the audience. At the diſtance of a quarter of a mile there is another circle of the ſame nature; but without the range and avenue. The chief town in Lewis is STORNAWAY, which ſee.

There is a conſiderable number of inferior adjacent iſles and rocks, ſome of which hardly deſerve to be mentioned; ſuch as the ſmall iſland of Garve at the mouth of Loch Carlvay, Berinſay, Fladda, Bernera Minor and Bernera Major, Kialiſay, Cavay, Carvay, Grenim, Pabay, Shirem, Vexay, Wuya the Larger and the Leſs, and the Flannan iſlands, which the ſeamen denominate the *Hunters*. Theſe are viſited every ſummer by the inhabitants of the Lewis, who go thither in queſt of fowls, eggs, down, quills, and feathers, as well as to ſhear or kill the ſheep that are kept here for paſture. As theſe iſlands are very ſteep and rocky, the viſitors, after having landed and climbed up the rock by a ladder, uncover their heads, and, making a turn ſunways, thank God for having eſcaped the danger they have undergone. In the largeſt iſland are the ruins of a chapel dedicated to St. Flannan, from whom the iſles derive their name. Thither the fowlers repairing, ſtrip themſelves of their upper garments, which being laid upon a ſtone, they advance towards the altar, and repeat three prayers; an exerciſe which is performed every morning and evening. They obſerve many other ſuperſtitious cuſtoms during their reſidence on theſe rocks. Among the iſlands belonging to the Lewis, we may likewiſe take notice of the ſmall Iſle of Pigmies, ſo called, becauſe, it is ſaid, bones reſembling thoſe of human creatures, but of very ſmall dimenſions, have been dug out of the ground.

The iſland of Lewis is divided into the two pariſhes of Barvas and Eye, and in each of theſe a miniſter is ſettled; but there is a great number of churches and chapels dedicated to different ſaints, in the different iſles which compoſe this cluſter. All theſe were ſanctuaries before the reformation, but now they are diveſted of that privilege. The people of theſe iſlands are preſbyterians, with a few proteſtants of the Engliſh communion, and a ſtill ſmaller number of Roman catholics. How happy a change has been brought about in the iſland of Lewis ſince the reign of James VI. of Scotland, and I. of England, a period of leſs than two centuries! That prince, who was a great encourager of all the arts of peace, ſent a colony of induſtrious fiſhermen from the ſhire of Fife, in Scotland, with ſeveral Danes and Dutchmen, to teach and to exhibit an example of uſeful induſtry to the natives, with the encouragement of large allotments of bays and lands, indiſputably in the gift of the crown. The heir to Macleod, the chieftain of Lewis, together with his neighbours, fell upon the unfortunate ſtrangers from the low lands, and maſſacred them, to the number of many hundreds, in one night. Lat. 58. 8. N. lon. 6. 35. W.

LEW'IS, a town of America, in Eſſex county, ſouth-weſt of Lemington adjoining, in Vermont; about eight miles ſouth of the Canada line.

LEW'IS, a Chriſtian name. See LOUIS.

LEWIS (John), a learned Engliſh divine, hiſtorian, and antiquary, was born at Briſtol in the year 1675. He was educated in grammar-learning at the free-ſchool of Winbourn, in Dorſetſhire; and was ſent from thence to the univerſity of Oxford, where he was admitted a ſcholar in Exeter-college. After having taken one degree, he was ordained by the biſhop of London, and officiated for ſome time as curate of St. John's in Wapping. In the year 1699, lord-chancellor Somers preſented him to the rectory of Acris, in Kent; and, in 1705, he was appointed miniſter of Margate. In 1719, archbiſhop Wake conſtituted him maſter of Eaſtbridge-hoſpital, in the city of Canterbury. He reſided at Margate from the time of his being appointed miniſter of that place till his death, in January 1746–7, when he was in the ſeventy-ſecond year of his age. He was the author of various publications, which reflect credit on his induſtry and learning. His productions were, 1. A Companion for the Afflicted, 1706, 8vo. 2. An Apology for the Clergy of the Church of England, 1711, 8vo. 3. The Church Catechiſm explained, by way of Queſtion and Anſwer, and confirmed by Scripture Proofs, 1712, 12mo. extracted chiefly from biſhop Williams's Expoſition of the Church Catechiſm. 4. Two Letters in Defence of the Engliſh Liturgy and Reformation, 1717, 8vo. 5. The Hiſtory of the Life and Sufferings of the Rev. John Wickliffe, D.D. Warden of Canterbury-hall, and Public Profeſſor of Divinity in Oxford, &c. together with a Collection of Papers relating to the ſaid Hiſtory, never before printed, &c. 8vo. 6. The New Teſtament, tranſlated out of the Latin Vulgate, by John Wickliffe; to which is prefixed, a Hiſtory of the ſeveral Tranſlations of the Holy Bible, and New Teſtament, &c. into Engliſh, both in MS. and Print, and of the moſt remarkable Editions of them, ſince the Invention of Printing, in folio. Some time afterwards he reviſed and enlarged the preface, and publiſhed it by itſelf, under the title of A complete Hiſtory of the ſeveral Tranſlations of the Holy Bible and New Teſtament into Engliſh, 1739, 8vo. 7. The Hiſtory and Antiquities of the Iſle of Thanet, or Tenet, &c. 8. The Hiſtory of the Abbey and Church of Faverſham, &c. 1727, 4to. 9. The Lyfe of Mayſter Wyllyam Caxton, of the Weald of Kent, the firſt Printer in England, &c. 1737, 8vo. 10. Hiſtory of the Riſe and Progreſs of Anabaptiſm in England, 1738, 8vo. 11. A Diſſertation on the Uſe and Antiquity of Seals in England, 1740, 8vo. 12. A Defence of the Communion Office and Catechiſm of the Church of England, from the falſe and groundleſs Charge of their favouring the Doctrine of Tranſubſtantiation, brought againſt them by two of the preſent Popiſh Miſſionaries, &c. 1742, 8vo. 13. The Life of Dr. Reynold Pecock, Lord Biſhop of St. Aſaph and Chicheſter, in the Reign of King Henry VI. being a Sequel to the Life of Wickliffe, 1744, 8vo. 14. A brief Diſcovery of ſome of the Arts of the Popiſh Proteſtant Miſſioners in England, 1750, 8vo. And he left behind him ſeveral pieces in manuſcript, the ſubjects of which may be ſeen in the Biog. Brit.

LEW'IS (William-Thomas), a theatrical performer of conſiderable eminence, who enjoyed the ſmiles of a London audience for thirty-ſix years. As a comic actor, he was certainly at the head of his profeſſion for the whole of the period of which he was on the London ſtage. He had acquired conſiderable fame as a comedian before he ventured on the boards of the great metropolis of the Britiſh empire. He made his firſt appearance in London at Covent-Garden Theatre, about the year 1774, in the part of the Weſt Indian, which he repreſented with ſo much eaſe, ſprightlineſs, and humour, that he fixed his reputation on his firſt appearance; and made ſuch a progreſs in public favour, that he was, during the whole of his career, the popular comedian of his day. From the characters which he generally aſſumed, and from his well-bred manners in private life, he ſoon acquired the deſignation of Gentleman Lewis, to diſtinguiſh him from Lee Lewis, who generally repreſented parts of a leſs elegant

deſcription. Mr. Lewis came upon the London boards juſt as Woodward was cloſing his career, and he was the rightful inheritor of that excellent actor's range of characters; and was indeed capable of aſſuming parts which Woodward would have been incapable of repreſenting; ſuch, for inſtance, as Faulkland in the Rivals, a part which Mr. Lewis rendered very prominent in that admirable comedy, and which he ſupported with all requiſite eaſe and ſenſibility. There was an original ſpirit, gaiety, and whim, in Mr. Lewis's manner, which not only enabled him to diſplay the general round of ſtock-characters, as they are called, of the legitimate drama, with great ſkill, but which induced O'Keeffe, and other dramatic writers of the preſent day, to deſign parts entirely for the purpoſe of drawing forth his peculiar talents, and affording ſcope for the exuberance of his humour. Indeed it may be truly ſaid, that many productions of the preſent day were indebted for the favour with which they were received wholly to the whim, gaiety, and ſportive humour, with which he ſupported the principal characters. But the powers of Mr. Lewis were not confined to comedy: he was a very reſpectable actor in the tragic province; and we are aſſured that the excellence which he diſplayed in Hannah More's tragedy of Percy, procured him the warm approbation of Garrick himſelf. His favourite parts were Belcour, Ranger, Benedict, Mercutio, and the Copper Captain, in which laſt he took a final leave of his generous friends and admirers about eighteen months previous to his deceaſe. He then aſſured the audience that it would be gratifying in his ſecluſion to reflect, that, during the long period he had been in their ſervice, he had never once incurred their diſpleaſure. And this we have reaſon to believe was the real fact. Mr. Lewis died in Jan. 1811, at the age of 65. Though diſtinguiſhed ſo much in what may be called the daſhing characters of comedy, his private life was marked by every domeſtic virtue: he was an affectionate huſband and father; and he was rewarded by the poſſeſſion of an eſtimable wife, and amiable and accompliſhed offspring. The immediate cauſe of his death was a fever on his cheſt; and he had only been confined to his bed a week, before his family and numerous train of friends had the misfortune to be deprived of him. As a member of ſociety he was diſtinguiſhed for probity, and a ſtrict performance of all his engagements. It was generally ſuppoſed that Mr. Lewis was a native of Ireland; but he was born in the principality of Wales.

LEW'IS's CREE'K, a ſmall ſtream in Vermont, which falls into Lake Champlain at Ferriſberg, a little north of Little Otter Creek.

LEW'IS AND RE'HOBOTH, a town in Suſſex county, Delaware, containing 1514 inhabitants.

LEW'ISBURG. See LOUISBURG.

LEW'ISHAM, a village in the hundred of Blackheath, and county of Kent, is ſituated five miles and a half from London, and extends nearly a mile in length on the road to Bromley; with a population of 6625 inhabitants. Here was anciently a benedictine priory, ſubordinate to the abbey of St. Peter in Ghent, and moſt probably founded in the Saxon times; this manor having been given to that abbey by Elthruda, niece to king Alfred. After the ſuppreſſion of the alien priories, Henry V. made this a part of the endowment of his newly erected Carthuſian priory at Sheene in Surry. Upon the general diſſolution of monaſteries in England, this manor came to the crown, and remained there till the 5th of queen Elizabeth, who then granted it, with the appurtenances, to Ambroſe Dudley, earl of Warwick. But, after various changes, it has for ſome time belonged to the family of the preſent earl of Dartmouth, who is now the proprietor of it. The church of Lewiſham being judged incapable of a repair, application was made to parliament in 1774, by the inhabitants, to empower them to raiſe money for rebuilding it; an act was obtained; in purſuance of which the old church was taken down, and a new one erected on the ſame ground. The preſent church, which is diſtinguiſhed for its neatneſs and ſimplicity, is a ſtone ſtructure, in form of an oblong ſquare, with a circular receſs at the eaſt end for the altar. On the ſouth ſide is a portico, ſupported by four columns of the Corinthian order. The ancient ſquare tower remains at the weſt end, but the upper-part of it has been rebuilt. It contains ſeveral neat monuments; particularly one to the memory of Anne, wife of John Petrie, eſq. this was executed in Italy; it includes a fine bas-relief in marble, repreſenting the deceaſed on her death-bed, with her huſband and children lamenting round her. And another to commemorate Margaret, relict of the Rev. Robert Petrie, ſculptured by Banks: it repreſents Mrs. Petrie dying in the arms of Religion, ſupported by Faith and Hope. Many old monuments were thrown careleſsly into the vault, when the church was rebuilt.

An excellent free grammar-ſchool was founded by the Rev. Abraham Colfe, who was rector of this pariſh from the year 1610 to 1656. His will contains the regulations of the ſchool, and directs that it ſhall be for the education of thirty-one boys, five of whom ſhall be of the pariſh of Lewiſham (one of theſe to be nominated by the lord of the manor from among his tenants' ſons, the others from the reading-ſchool alſo founded by Mr. Colfe at Lewiſham, in preference to any others); ten of Greenwich; eight of Deptford; one of Lee; one of Charlton; three of Eltham; and three of Woolwich, to be choſen in the ſeveral pariſhes at a public meeting of the chief pariſhioners; and, in addition to this number, every incumbent miniſter in the hundred of Blackheath, and alſo the miniſter of Chiſlehurſt, ſhould have the privilege of ſending their ſons to the ſchool for education; but no miniſter to have more than one ſon in the ſchool at a time. The maſter to be examined and approved by the head-maſter of Weſtminſter, St. Paul's, and Merchant-Taylors', ſchools, by the preſident of Sion College, the miniſters of the hundred of Blackheath, and the miniſter of Chiſlehurſt; and to be choſen by them, in conjunction with the wardens of the Leatherſellers' Company and the lord of the manor, who ſhould have the privilege of nominating a Weſtminſter ſcholar, to ſtand in election with one, two, or three, candidates nominated by the other electors. The maſter ſhould not undertake any church-duty without leave of the truſtees, by whom he might be diſplaced if guilty of any notorious miſbehaviour; as, "if he give ſcandal or evil example to the ſcholars or others, by being a gameſter or diver, or a frequenter of taverns and alehouſes, or a drunkard, or a whoremonger, or given to wanton dalliancies and unſeemly behaviour with women, or laviſh in unneceſſary expenſes in following vain gaudy faſhions of apparel, or if he wear long, curled, or ruffin-like, hair, or if he be a ſwearer or a curſer, or unſound in the faith, or corrupt in religion; either Papiſt or popiſhly affected, or an Armenian, or Socinian, or Anabaptiſt, or one holding or broaching hereſies, and groſs erroneous opinions, contrary to the articles of our Chriſtian faith, and of the true religion eſtabliſhed of the Church of England, and confirmed by public authority of public laws and ſtatutes; or if he delight, and being admoniſhed to the contrary do yet continue, to teach the ſcholars ſuch books and ſuch parts in the book, in either of Latin or Greek authors, whether poets or others, and do not withal ſhow them the errors and vices to be avoided, which may draw youth to popiſh ſuperſtition, to epicuriſm, licentiouſneſs, profaneneſs, and atheiſm, and not induce them to godlineſs and leading a holy life." After a vacancy, the election of a new maſter muſt be within eighteen days; his ſalary is fixed at 30l. with a houſe for his reſidence, which, as it was built large and commodious that he might enjoy the advantage of taking boarders, the founder directed that he ſhall keep it in repair. (It is now, in fact, a reſpectable boarding-ſchool.) The founder's relations, being duly qualified, are to have the preference, if candidates for the maſter's place. The uſher, or ſecond maſter, for whom alſo a houſe was built adjoining the ſchool, and for which he is charged with 6s. a-year due to the pariſh

of Lewiſham, for the herbage of the ground on which the ſchool ſtands, is to be examined and approved by the ſame perſons as the head-maſter, and alſo by the head-maſter himſelf, after which, being preſented to the wardens of the Leatherſellers' Company, he is to be admitted by them; he muſt be a ſingle perſon, and continue unmarried; his ſalary is fixed at 20l. per annum. Mr. Lyſons ſays, there is no uſher now of the deſcription mentioned in the founder's will; an aſſiſtant who teaches writing has 10l. per annum and a houſe: a writing-maſter is alſo appointed, with a ſalary of 11l. per annum. Mr. Colfe gave various regulations reſpecting the internal government of the ſchool; the rewards, puniſhments, and recreations, of the ſcholars; which latter are preſcribed to be ſhooting in long bows, ſtool-ball, running, wreſtling, leaping, and other inoffenſive exerciſes; but money-plays not to be ſuffered. They are ſtrictly forbidden to wear long, curled, frizzled, or powdered, or ruffin-like, hair; but enjoined, on the contrary, "to cut their hair, and wear it in ſuch a ſort and manner that both the beauty of their foreheads may be ſeen, and that their hair ſhall not grow longer than above one inch below the loweſt tips of their ears." Public diſputations and trials of ſkill are appointed to be held once a-year, when prizes are given to the three beſt ſcholars, and the beſt writers. A ſcholar from the grammar-ſchool (having been examined and choſen by one of the chief ſchoolmaſters in London, and the miniſters of Lewiſham, Lee, Greenwich, Deptford, and Chiſlehurſt) is ordered to be ſent every year to one of the univerſities, Oxford or Cambridge, and to have an exhibition of 10l. per annum during ſeven years; theſe exhibitioners are to be children of perſons not reputed to be worth 500l. natives of Lewiſham to be preferred; they are to promiſe to take upon them the function of the miniſtry, and that before the end of ten years they will preach one or two ſermons in Lewiſham church; that they will ſet forth ſome ſermons alſo in print, and do their endeavours to write ſome learned commentaries upon the Scriptures. *There have not been any exhibitions for many years, though for what cauſe, or how the money is now applied, does not appear.* Proviſion is made in caſe, at any time, a ſcholar fit for the univerſity ſhould not be found in the ſchool at Blackheath, that an exhibitioner ſhall be choſen from among the children of perſons belonging to the Leatherſellers' Company; if there be none qualified, then from the free-ſchool within the precincts of Chriſt-church, Canterbury, or, in failure of a fit ſcholar there, from Chriſt's Hoſpital, London. The ſum of 13s. 4d. is allowed for an anniverſary ſermon at Lewiſham or Greenwich, in Whitſun-week, being the time when the ſchool was opened; 20s. for the annual election-dinner; and the like ſum for a dinner at the election of a ſchool-maſter. The great room over the ſchool is appropriated by the founder for a library, to which he bequeathed all his books, in folio, quarto, and thick octavo; he allowed one pound per annum for the augmentation of it; 5s. to the uſher as librarian; and 7s. to buy chains. He enjoins the exhibitors to preſent a copy of all books which they ſhall publiſh, and bequeath ſome other ſmall fund for its increaſe.

Mr. Colfe alſo founded an Engliſh ſchool at Lewiſham, for thirty-one boys, who are to be taught reading, writing, pſalm-ſinging, and the accidence. They are forbidden to wear long ruffin-like hair on the head or forehead, neck or cheeks, above an inch below the loweſt tips of the ears. The maſter, whoſe ſalary is fixed at 20l. is to be choſen by the Leatherſellers' Company. The founder bequeathed 5l. per annum for the purchaſe of bibles and other books neceſſary for the uſe of the ſchool; and 6s. for mending the bibles, (rather repairing their bindings;) he alſo bequeathed 5l. per annum towards apprenticing the boys; and afterwards allotted the ſum of 440l. to be laid out in the purchaſe of 24l. yearly rent, for the purpoſe of apprenticing ſix ſcholars annually from this ſchool. *This purchaſe was not made, and only 3l. a-year is now paid for this purpoſe.*

Mr. Colfe alſo directed by his will that a certain ſum ſhould be laid out in the building five alms-houſes, (the chapel having been converted into a dwelling-houſe, there are now ſix penſioners,) to be begun in April 1662, "for poor godly houſeholders of this pariſh, ſixty years of age or upwards, and able to ſay the Creed, the Lord's Prayer, and Ten Commandments." The allowance fixed for the penſioners is 1s. 9d. per week, and 18s. for a gown once in two years. Theſe alms-houſes are on the weſt ſide of the village of Lewiſham, to the ſouth of the church; and over the door are the arms of the founder. The ſame gentleman was in other reſpects a conſiderable benefactor to this pariſh; and gave 5l. to the pariſh as a ſtock to keep poor children to knitting. *This has been long diſuſed.*

Between this place and Dulwich, but in Lewiſham pariſh, is a hill with an oak upon it, called the Oak of Honour, becauſe queen Elizabeth is reported to have once dined under it. Indeed the original tree, which ſhould have perpetuated the remembrance of its having ſerved for a canopy to that illuſtrious princeſs, has long ſince periſhed; but, it is ſaid, care has been always taken to plant an oak near the ſpot, on which this traditional anecdote might be conſtantly ingrafted. The river Ravenſbourn directs its courſe through this pariſh; at the hamlet of Southend it moves the engines by which the late Mr. How made thoſe knife-blades, ſo famous throughout England.

Sydenham is a conſiderable hamlet to Lewiſham, ſituated on the declivity of a fine hill, on the borders of the county of Surry, and about eight miles from London. This place is celebrated for its mineral ſprings diſcovered in 1640. They are of a mild cathartic quality, and nearly reſemble thoſe of Epſom. Between Lewiſham and Brockley is a well of the ſame quality as thoſe at Tunbridge, where a woman attends to ſerve the water, which is delivered gratis to the inhabitants of the pariſh. This ſpring is the property of the earl of Dartmouth. A ſpacious common, taking its name from the hamlet, adjoins to Sydenham, from the upper part of which there is a very extenſive and beautiful proſpect; and its delightful ſcenery has lately been rendered more attractive, by the Croydon Canal winding its courſe in the vale beneath. Its beauties are ſoon to be diſturbed by encloſure, an act of parliament having paſſed for that purpoſe.

In 1682, lord Dartmouth obtained a grant of a market to be held twice a-week on that part of Blackheath within this pariſh, and two annual fairs, each to laſt three days; but the market has been diſcontinued for ſome years, and the fairs are only held one day each, viz. on the 12th of May, and the 11th of October.

The hills ſurrounding the village of Lewiſham command the moſt delightful proſpects. That from Vicar's hill is peculiarly intereſting and extenſive, and is varied with almoſt every object that can inſpire the mind with pleaſure. On the left it is bounded by the junction of the Kent and Surry hills, and on the right by Shooter's hill. In front is Blackheath, with its numerous villas; over which are ſeen Woolwich and Charlton, Greenwich-park, with the Obſervatory and Hoſpital. To the left appear Deptford and its Royal Dock-yard; and, beyond theſe, the metropolis, and diſtant hills of Middleſex and Eſſex, while numerous openings permit the view of the Thames, fraught with the riches of the globe; importing the luxuries of the Eaſt and Weſt, and bearing away to diſtant worlds the marks of Britiſh ingenuity and Britiſh opulence. See DEPTFORD, vol. v. p. 738. and GREENWICH, vol. ix. p. 6–9.

LEWSON-HILL', Dorſet, ſouth-weſt of Beminſter, with Pilſdon-hill, ſurmount all the hills between them and the ſea; and by mariners are called the Cow and Calf, as land-marks to thoſe who ſail on the coaſt.

LEW'STON, Dorſet, a hamlet that claims to be extra-parochial, ſituated a mile ſouth-weſt from Long-Burton, whoſe church was anciently a chapel of eaſe to Sherborne.

LEWUNAK' BAN'NEK, a town in North America, on

on the Ohio; in which is a ſettlement of Chriſtian Indians, formed by the Moravian miſſionaries.

LEX, *ſ.* [Latin.] The Law. See that article.

LEX TALIO'NIS. See Talio.

LEX TER'RÆ, the law and cuſtom of the land; by which name it is diſtinguiſhed from the civil law. See the article Law, p. 365.

LEXAWAS'SIN, a river of Pennſylvania, which runs into the Delaware in lat. 41. 27. N. lon. 74. 58. W.

LEX'DEN, a village in the county of Eſſex, in the liberty of Colcheſter, on the ſide of a fine heath.

LEX'EN, a town of Moravia, in the circle of Olmutz: eighteen miles north-weſt of Olmutz.

LEX'HAM, Eaſt and Weſt, villages in Norfolk, north-eaſt of Swaffham.

LEXI'ARCH, *ſ.* [Greek.] An officer at Athens, of which there were ſix, aſſiſted by thirty inferior ones, whoſe buſineſs it was to lay fines upon ſuch as came not to the public aſſemblies, and alſo to make ſcrutiny among ſuch as were preſent. The lexiarchi kept a regiſter of the age, manners, and abilities, of all the citizens, who were always enrolled at the age of twenty.

LEXICOG'RAPHER, *ſ.* [*lexicon*, and γραφω, Gr. to write.] A writer of dictionaries.—Commentators and *lexicographers* acquainted with the Syriac language, have given theſe hints in their writings on ſcripture. *Watts.*

LEXICOG'RAPHY, *ſ.* The art or practice of writing dictionaries.

LEX'ICON, *ſ.* [Greek.] A dictionary; a book teaching the ſignification of words.—Though a linguiſt ſhould pride himſelf to have all the tongues that Babel cleft the world into, yet, if he had not ſtudied the ſolid things in them as well as the words and *lexicons*, yet he were nothing ſo much to be eſteemed a learned man as any yeoman competently wiſe in his mother-dialect only. *Milton.* —It is chiefly uſed in ſpeaking of Greek dictionaries.

LEX'INGTON, a county of South Carolina.

LEX'INGTON, a town of United America, in the ſtate of Kentucky, ſituated on the Elkhorn river, where the courts are held. It is twenty-three miles eaſt of Frankfort, and 480 weſt-ſouth-weſt of Philadelphia. Lat. 37. 57. N. lon. 84. 43. W.

LEX'INGTON, a town of the ſtate of Maſſachuſetts, celebrated for being the firſt place where hoſtilities commenced between the Britiſh troops and the Americans, in April 1775. It is twelve miles north-weſt of Boſton.

LEX'INGTON, a town of Virginia: 160 miles weſt of Richmond.

LEXO'VII, a people of Gaul, at the mouth of the Seine, conquered with great ſlaughter by a lieutenant of Julius Cæſar. *Cæſ. Bell. G.*

LEY, a village of Devonſhire, in the pariſh of Bear Ferris.

LEY, *ſ.* A lea; a meadow; a piece of ground that lies untilled.

To LEY, *v. n.* To lie as land uncultivated; to lie untilled. *Obſolete.*

LEY, *ſ.* See Lixivium.

LEY, *ſ.* in the cotton-manufacture, 120 yards: ſeven leys make a *hank*,

LEY, *ſ.* [old French.] The law.

LEY'-GAGER, *ſ.* An old word, a wager of law; one who commences a lawſuit. *Phillips.*

LEY'BA, a town of South America, in New Grenada: ninety miles north-north-eaſt of Santa Fé da Bogota, and 320 ſouth-ſouth-eaſt of Carthagena.

LEY'BORN, a conſiderable village in the North Riding of Yorkſhire, a mile and a half north of Middleham; with four fairs, viz. on the ſecond Fridays of February, May, October, and December. It is 229 miles from London.

LEY'BOURNE (William), a mathematician, but originally a printer in London. He publiſhed a courſe of mathematics, which was held in conſiderable eſtimation. He was author of a treatiſe on Surveying, a work on Dialling, and another work, entitled the Trader's Guide. He died about the year 1690.

LEY'DECKER (Melchior), a celebrated Dutch Calviniſt divine, was born at Middleburg, in Zealand, in the year 1652. For ſome time he officiated as paſtor of a church in his native place; and, in the year 1678, was appointed profeſſor of divinity at Utrecht. Some time afterwards he received the degree of doctor in that faculty. He was profoundly ſkilled in divinity, eccleſiaſtical hiſtory, and rabbinical learning; but he had no taſte for polite literature, or criticiſm. He was alſo prejudiced in the extreme againſt writers who did not come up to his ſtandard of orthdooxy. The union of the Calviniſts and Lutherans was an object which he had much at heart; and he made ſome ineffectual efforts to promote it. He died in 1721, about the age of ſixty-nine. He was the author of, 1. Fax Veritatis, 1667, 8vo. 2. Synopſis Controverſiarum de Fœdere. 3. Commentary on the Catechiſm of Heidelberg. 4. The Hiſtory of the Church of Africa, 4to. 5. An Analyſis of Scripture, with Rules for Preaching. 6. A Continuation of the Eccleſiaſtical Hiſtory of Hornius, with Notes. 7. A Hiſtory of Janſeniſm, 1695, 8vo. 8. Treatiſe on the Republic of the Hebrews, 2 vols. folio, 1714 and 1717; replete with erudition and intereſting matter. The author left behind him a third volume in manuſcript, bringing down the hiſtory of the Jews from the birth of Chriſt to his own time; but we do not learn that it has been ſent to the preſs. All Dr. Leydecker's works are written in Latin, without any pretenſions to elegance or purity of ſtyle. *Moreri.*

LEY'DEN, a city of Holland, ſuppoſed to be the ſame which Ptolemy calls *Lugdunum Batavorum*, and Antoninus, in his Itinerary, *Caput Germanorum*. It holds a fourth rank among the ſix capital cities of Holland, and is the capital of a ſmall diſtrict, called *Rhynland*, which comprehends forty-nine towns, or villages; the ſtreets are exceedingly neat, wide, and long, divided by many handſome canals; and it is, without doubt, one of the handſomeſt and largeſt cities of Holland, next to Amſterdam, and one of the moſt agreeable in Europe. It is ſituated on the ancient bed of the Rhine, which paſſes through the city, and divides it into about fifty iſlands, which have an eaſy communication with each other by means of a great number of bridges, computed at 145, of which more than one hundred are built of freeſtone; the different ſtreams of the Rhine unite again, at leaving the city, at the white gate. The city was conſiderably enlarged towards the ſouth in the year 1389. In 1419 it was beſieged and taken by Albert count of Bavaria, for having taken part with Florent de Wevelinchoven biſhop of Utretcht. In the year 1574, the Spaniards, after they had taken Haerlem, and been obliged to raiſe the ſiege of Alcmaer, attempted to lay ſiege to Leyden; but Louis of Naſſau, brother to the prince of Orange, advancing with ſome troops, the Spaniards, not thinking themſelves at that time in ſufficient force, abandoned their enterpriſe. Some time after, having obtained a reinforcement, they returned to the ſiege, under the command of Francis Baldez; this general, having ſeized the outworks, and not thinking himſelf able to force the city, reſolved to turn the ſiege into a blockade, and ſtarve them to a ſurrender. It is hardly credible what the inhabitants endured; they indeed ſignalized their conſtancy on this occaſion, during a ſiege of five months, when neither famine nor peſtilence were able to deſtroy their courage. The women lined the ramparts, and performed all the duties of ſoldiers, animated by one whoſe name was Kennava, a woman of undaunted ſpirit; ſhe attended with her companions all the ſallies made on the enemy. The miſery became ſo great, that above 6000 perſons died, and there remained no more than 107 muids of wheat for the 14,000 inhabitants who yet remained alive. Of this the Spaniſh general being appriſed, ſummoned them to ſurrender; but they told him, they could not want the means of exiſtence ſo long as their left arms remained;

thoſe they were determined to feed on, and reſerve their right to defend their liberty. Adrian de Werf, burgomaſter of the city, ſhowed at this criſis admirable conſtancy and courage: being ſolicited by ſome of the inhabitants to ſurrender, he ſaid, "My friends, ſince I muſt die, it is of little importance whether I fall by you or by the enemy; cut me to pieces, and divide them amongſt you: I ſhall die ſatisfied, if in my death I can be the leaſt uſeful." During the ſiege, they made uſe of paper money, with the inſcriptions, HÆC LIBERTATIS ERGO, and PUGNO PRO PATRIA. Towards the month of October, juſt as they were on the point of ſurrendering, they underſtood, by means of ſome pigeons, that relief was at hand; accordingly, on the third of October, the dykes of the Meuſe and Iſſel having been opened, Louis Boiſſot, admiral of Zealand, advanced with a number of troops in flat-bottomed boats to their aſſiſtance. The Spaniards, ſeeing the ſudden inundation, were fearful of being deſtroyed immediately, and abandoned the ſiege, with all the works they had conſtructed for the blockade. In memory of this remarkable event, the inhabitants repreſent a ſpectacle of the ſiege every ſeven years. William prince of Orange, who was hardly recovered of an illneſs, ordered himſelf to be conveyed to Leyden, that he might in perſon thank the citizens for their brave defence: he liberally rewarded the admiral Boiſſot, and Janus Douza the lord of Noortwyck, who commanded in the city; and did not forget the officers and ſoldiers. He granted ſeveral privileges to the city; and founded the famous univerſity, the firſt in the whole country; and Janus Douza was appointed the firſt curator, an employment worthy of his merit, his capacity, and his erudition.

In the year 1655, Leyden was viſited by the plague, which carried off near 4000 of the inhabitants; but, by the great care of the magiſtrates, it was prevented from ſpreading farther into the country. On the 12th of January, 1807, by the accidental exploſion of a large quantity (40,000 pounds) of gunpowder, a great part of the city was deſtroyed, and upwards of 2000 perſons buried in the ruins, 500 of whom were dug out alive.

The cloth manufactured at Leyden is much celebrated; and there is a ſtaple-hall built for the uſe of the manufacturers and merchants. The town-houſe is a good ſtructure, with a handſome ſtone front; in the burgomaſter's chamber is a very capital painting of the laſt judgment, by Luke of Leyden, for which it is ſaid the emperor Rodolphus offered as many gold ducats as would cover it; with many other capital paintings, and the celebrated ſiege of 1574 wrought in tapeſtry. The great church is one of the handſomeſt in Holland. In this city was born the famous John of Leyden, otherwiſe Bucold, a tailor, and chief of the Anabaptiſts. Boats are going from Leyden to Amſterdam, Haerlem, Utrecht, Delft, the Hague, &c. returning daily. Leyden has eight gates; one part of the ramparts is of earth covered with turf; but the other part is faced with brick, and has ſeveral baſtions. The land about Leyden is exceedingly rich, and much cultivated by gardeners, who ſend the produce even to Amſterdam; from the rich meadows and paſtures, they make excellent butter and cheeſe, equal to any part of the province. Some prove the antiquity of Leyden from an ancient round tower called the *Burght*, about ſix hundred feet in circumference, ſaid to have been built by the Romans or Saxons; while Joſeph Scaliger, on the other hand, pretends it was built only five or ſix centuries ago, by the counts of Holland.

The fair of Leyden is an ancient eſtabliſhment, and ſtill much frequented; it occupies by its booths, arranged under trees, and along the borders of canals, about a fourth part of the town.

As to the univerſity, of which the foundation and the occaſion of it have been already noticed, it would ſcarcely be known to exiſt, ſays Mrs. Radcliffe, in her Journey through Holland, if it had no more conſpicuous objects than its buildings. The Dutch univerſities have no endowed foundations; ſo that the profeſſors, who have their ſalaries from the ſtates, live in private houſes, and the ſtudents in lodgings. The ſalaries of the profeſſors, excluſively of fees from the ſtudents, are nearly 200l. a-year. The government of the univerſity is in the rector, who is choſen out of three perſons, returned by the ſenate to the ſtates; the ſenate conſiſts of the profeſſors; and, on extraordinary occaſions, the ſenate and rector are directed by curators, who are agents for the ſtates. The conſtitutional regulations, however, of this univerſity, are conceived in a noble ſpirit of liberality. No offenſive obligations, no religious teſts, no repulſive oaths, are impoſed; no inſidious attempts at proſelytiſm are exerciſed. Youths of every religious perſuaſion mingle together in perfect harmony; like brothers they aggregate to ſtudy, and not to quarrel about modes of faith. Whatever may be the rank of the ſtudent, or from whatever country he may come, he ſpeedily adopts the decent, gentle, and frugal, manners and habits of the inhabitants. The long war and revolution of this country have naturally withdrawn a great number of young men of rank and fortune from this ſeminary, and prevented others from entering it. The ſtudents do not now exceed two hundred. A conſiderable number of Engliſh ſtudents, in a period of peace, uſed to flock to this illuſtrious academy, which, as well as the beauty, tranquillity, cleanlineſs, and ſalubrity, of the city in which it ſtands, and the cheapneſs and perfect freedom of living, and the charms of the ſurrounding country, holds out the ſtrongeſt attractions to the recluſe and ſtudious. The examinations for academical honours are more ſevere than even for thoſe of Trinity-College, Dublin.

The library of the univerſity is celebrated through Europe for the many valuable ſpecimens of oriental literature with which it abounds. Golius, on his return from the Eaſt, and who afterwards filled with great reputation the Arabic profeſſorſhip of the univerſity, enriched this valuable depoſitory of learning with many Arabic, Turkiſh, Chaldean, and Perſian, manuſcripts. Joſeph Scaliger bequeathed his valuable collection of Hebrew books to it. The precious manuſcripts contained here are ſaid to exceed eight thouſand. Since the war commenced, no addition of Engliſh publications has been made to this library, which contains the Tranſactions of the Royal Society and of the Society of Antiquaries of London, and the Hiſtories of Gibbon, Robertſon, and Hume. The king of Spain preſented this library with ſome magnificent folios, deſcriptive of the Antiquities of Herculaneum. Moſt of the books are bound in fine white vellum, and decorated with conſiderable taſte and ſplendour. There is a Muſeum of Natural Hiſtory, principally collected by profeſſor Allemand, containing ſome fine ores, corals, and pebbles, and alſo ſome rare quadrupeds and amphibia; alſo a young oſtrich in the egg; the nautilus with the animal in it; and ſome papilios. In the anatomical theatre are the valuable preparations of Albinus; and amongſt them ſome ſpecimens of the progreſs of oſſification in the fœtus.

The botanical garden occupies about four acres of land, and is kept in excellent order. Amongſt the plants are the remains of vegetable antiquity, in the ſhape of a palm, which ſtands in a tub in the open air, ſupported by a thin frame of iron-work; it is about fourteen feet high, and was raiſed from ſeed by the celebrated Carolus Cluſius, who died profeſſor at Leyden in 1609. This plant is ſaid to be the palm mentioned by Linnæus in his Prælectiones in Ordines Naturales Plantarum, publiſhed by Giſeke, in 1792, at Hamburgh, which Linnæus ſuſpected to be a Chamærops, but which, as Dr. Smith obſerves, his editor rightly refers to the Raphis flabelliformis. It comes from China and Japan; and there is a tree of this kind, and about as large, in the botanic garden at Paris, and another at Piſa. In this garden is alſo the Ginkgo of the Chineſe, a ſtandard twenty feet high; Strelitzia regina, which has never yet flowered in any garden out of England; the Olea laurifolia, a new ſpecies, according

to Van Royen; Royena lucida, in flower, as large as a moderate hawthorn-tree, and thought to be very handſome; and a ſingular plant from the Cape, ſuppoſed to be an Echites, with a large tuberous root raiſed high above the ſurface of the ground, two or three weak ſtems a foot high, and large dark-brown flowers. In the univerſity-library, is Rauwolf's Herbarium, which is very magnificent, and the plants well preſerved; alſo Boccone's Herbarium of the plants deſcribed in his Faſciculus Plantarum, publiſhed by Moriſon at Oxford in 1674. Herman's Collection of Ceylon Plants is alſo here, and a volume of Weſt-India Plants, belonging to Herman, which are very ſcarce in Holland.

We are told that four lyceums are to be eſtabliſhed immediately, in conſequence of a decree of Bonaparte, at Amſterdam, Utrecht, Leyden, and Groningen; beſides new colleges and central ſchools in all the other principal towns of Holland. How far the preſent ſtate of things (April 1813) may leſſen the force of decrees from France, we cannot at preſent conjecture.

Sir John Carr notices the carillons, or chimes, at Leyden and other cities of Holland. Theſe carillons are played upon by means of a kind of keys communicating with the bells, as thoſe of the piano-forte and organ do with ſtrings and pipes, by a perſon called the carilloneur, who is regularly inſtructed in the ſcience, the labour of the practical part of which is very ſevere, he being almoſt always obliged to perform in his ſhirt with his collar unbuttoned, and generally forced by exertion into a profuſe perſpiration, ſome of the keys requiring a two pound weight to depreſs them; after the performance, the carilloneur is frequently obliged immediately to go to bed. By pedals communicating with the great bells, he is enabled with his feet to play the baſe to ſeveral ſprightly and even difficult airs, which he performs with both his hands upon the upper ſpecies of keys, which are projecting ſticks, wide enough aſunder to be ſtruck with violence and celerity by either of the two hands edgeways, without the danger of hitting the adjoining keys. The player uſes a thick leather covering for the little finger of each hand. to prevent the exceſſive pain which the violence of the ſtroke, neceſſary to produce ſufficient ſound, would occaſion. Theſe muſicians are very dexterous, and will play pieces in three parts, producing the firſt and ſecond treble with the two hands on the upper ſet of keys, and the baſe as before deſcribed. By this invention a whole town is entertained in every quarter of it: that ſpirit of induſtry which pervades the kingdom, no doubt, originally ſuggeſted this mode of amuſing a large population, without making it neceſſary for them to quit their avocations one moment to enjoy it. The ſound at a diſtance is like the tones of a very ſweet hand-organ; but the want of ſomething to ſtop the vibration of each bell, to prevent the notes of one paſſage from running into another, is a deſideratum which would render this ſort of muſic highly delightful. Leyden is fourteen miles north of Rotterdam, and nineteen ſouth-weſt of Amſterdam. Lat. 52. 9. N. lon. 4. 20. E.

LEYDEN PHIAL. See the article ELECTRICITY, vol. vi. p. 411.

LEY'DEN (Lucas van), a Dutch painter of eminence, born at Leyden in 1494, was the ſon of Hugo Jacobs, a painter of moderate talents, who was his firſt inſtructor. At a very early age Lucas began to exerciſe himſelf in his art; and, being ſent to the ſchool of Cornelius Engelbrecht, he made a rapid progreſs. With aſtoniſhing induſtry he practiſed in the ſeveral branches of painting in oil, water-colours, and on glaſs, and in engraving; and before the age of fifteen he produced his picture of St. Hubert, by which he acquired a great reputation. His taſte and manner were thoſe of his country and age; the former without elegance, the latter ſtiff and dry; but he coloured well, deſigned with tolerable correctneſs, and gave ſtrong expreſſion. His paintings and engravings are finiſhed with great labour and exactneſs. An emulation prevailed between him and Albert Durer, but of a liberal kind. The latter took a journey to Leyden on purpoſe to viſit Lucas; they exchanged portraits, and ſent each other copies of all their engravings. Lucas married young, and lived in an expenſive ſtyle. When in the height of his fame, he equipped a veſſel at his own expenſe, with which he viſited the capital towns of the Low Countries, giving entertainments to all the principal painters in each. John Mabuſe of Middleburg made him ſo hoſpitable a return, that his health was much injured by his convivial tour, and he even fancied that he had been poiſoned. He took to his bed on his return; and, though he did not ceaſe from occaſionally exerciſing the bruſh and graver, yet he remained in the ſtate of an invalid till his death in 1533, at the age of thirty-nine. He left a great number of engravings on copper and wood, ſome of which are much valued by connoiſſeurs. His portraits and other paintings are found in various collections. A picture repreſenting the Laſt Judgment, containing a vaſt number of figures, well painted, but in a ſtrange extravagant ſtyle, is kept in the town-hall of Leyden as a relic of great value. *D'Argenville. Pilkington's Dict.*

LEY'DEN, a ſmall iſland in the Eaſtern Indian Ocean, near the coaſt of Java, in ſight of Batavia.

LEY'DEN, a ſmall iſland in the Gulf of Manar, near the weſt coaſt of Ceylon: twelve miles weſt of Jaffnapatam.

LEY'DEN, a ſmall iſland in a bay of the Pacific Ocean, on the north coaſt of New Guinea. Lat. 3. 58. S. lon. 135. 39. E.

LEY'DEN, a town of Pruſſia: twenty-ſeven miles ſouth-ſouth-eaſt of Königſberg.

LEY'ERWITE, *ſ.* A fine formerly paid for adultery or fornication. *Phillips.*

LEY'LAND, a townſhip of Lancaſhire. In 1801, the population was 2088, of which 619 were employed in trade and manufactures: ſix miles ſouth of Preſton.

LEY'MEN, or LEINEN, a town of Germany, in the palatinate of the Rhine: eight miles ſouth of Heidelberg.

LEY'NBACH, a river of Germany, which riſes about two miles ſouth of Eppingen, and runs into the Neckar three miles below Heilbronn.

LEY'PA, LIP'PEY, or LEIP'PA, a town of Bohemia, in the circle of Leitmeritz: twenty miles north-eaſt of Leitmeritz, and thirty-eight ſouth-eaſt of Dreſden. Lat. 50. 39. N. lon. 14. 43. E.

LEY'RE, a town of Spain, in Navarre: eight miles north-eaſt of Sangueſa.

LEYR'IA, a city of Portugal, in the province of Eſtremadura, the ſee of a biſhop, erected in the year 1545. Here is a glaſs-houſe, eſtabliſhed by an Engliſhman. The number of inhabitants is about 3500. On an eminence, near the town, is an ancient caſtle, built by the Moors: fifty-ſeven miles north-north-eaſt of Liſbon, and thirty-ſix ſouth of Coimbra. Lat. 39. 39. N. lon. 8. 34. E.

LEY'SE, a town of Pruſſia, in Ermeland: eighteen miles north-eaſt of Heilſberg.

LEYSE'RA, *ſ.* [ſo denominated by Linnæus, in honour of *Frederic-William Léyſer*, author of the Flora Halenſis, in 1761, 8vo. a ſynopſis of the plants found about Hall in Saxony, diſpoſed according to the Linnæan ſyſtem, but with ſcarcely any ſynonymes. Haller terms it "a rich Flora, with original remarks, as well as new plants."] In botany, a genus of the claſs ſyngeneſia, order polygamia ſuperflua, natural order of compoſitæ diſcoideæ, (corymbiferæ, *Juſſ.*) The generic characters are—Calyx: common ovate, imbricate; ſcales obtuſe, concave, harſh. Corolla: compound rayed; corollets hermaphrodite tubular, ſeveral, in the diſk; females ſtrap-ſhaped, ſeveral, in the ray. Proper of the hermaphrodite funnel-form, five-toothed, rather upright. Female ſtrap-ſhaped, lanceolate, entire. Stamina: in the hermaphrodites; filaments five, capillary, very ſhort; antheræ cylindric, tubular. Piſtillum: in the hermaphrodites; germ ſmall; ſtyle filiform; ſtigma bifid. Pericarpium: none; calyx unchanged. Seed: in the hermaphrodites, ſolitary, oblong;

long; down five-briſtled, feathery, long, within which is a very ſhort chaffy crown. In the females very ſimilar; down with the chaffy crown alone, without feathers.—*Eſſential Character.* Calyx ſcarioſe; down chaffy; in the diſk feathery alſo; receptaculum ſubpaleaceous.

Species. 1. Leyſera gnaphalodes, or woolly leyſera: leaves ſcattered; flowers peduncled. This is an evergreen ſhrub, with a balſamic ſmell. The trunk and older branches leafleſs, brown; the younger ones very cloſely covered with leaves, and ſpreading out very wide. Leaves very much cluſtered, filiform, ſpreading, quite entire, hoary, woolly, flaccid, an inch long, with brown-headed hairs. Among theſe are bundles of very ſmall leaves, like the rudiments of young branches, very few however of which come to perfection. Peduncles filiform at the ends of the branchlets, ſolitary, one-flowered. Calycine ſcales pale, with the middle of the back green; corolla yellow; ſeeds browniſh. Native of the Cape of Good Hope; introduced in 1774, by Mr. Frances Maſſon; it flowers from July to September.

2. Leyſera callicornia, or chaffy leyſera: leaves in three rows; flowers ſubſeſſile. Receptacle flat, with raiſed dots in the middle, naked, rugged, and having a ſingle row of chaffs in the circumference; chaffs ſcarioſe, white, covering the germs of the females externally, and ſcarcely or but little longer. Seeds uniform, linear-oblong, compreſſed, ſomewhat rugged at the edges, and ferruginous. Pappus or down difform; in the ray ſimple, chaffy, ten-leaved; leaflets linear-acuminate, white, one-fourth of the length of the ſeed; in the diſk compoſed of five rays, which are chaffy, linear-acuminate, very ſhort; and of five others which are feathery, longer than the ſeed, and alternate with the others. Sometimes a ſingle feathered ray is added to the down of the females; and in the ſeeds of the androgynous flowers the chaffy rays are frequently augmented by a leaflet or two, ſo that from five-leaved they become from ſix to eight-leaved. Native of the Cape of Good Hope.

3. Leyſera paleacea, or open leyſera: leaves three-ſided, callous at the tip, and curved back. Leaves with few hairs on them, with a tomentoſe groove on the inſide. The whole crown of the ſeed membranaceous, and none downy. Hence it agrees in character with Buphthalmum; but it reſembles the preceding ſo much, as ſcarcely to be diſtinguiſhed from it in appearance. L'Heritier removes it into a new genus, to which he has given the name of Relhania. Gærtner refers the ſpecies with a naked receptacle and a compound down to Vaillant's genus of Aſteropterus.

Thunberg adds ſeven more ſpecies to this genus, the ſpecific characters of which are given in his Prodromus, but nothing more is known concerning them. They are named ciliata, incana, arctotoides, piloſella, ovata, picta, and polyfolia.

LEYS'SARD, a town of France, in the department of the Ain: five miles weſt of Nantua, and ten eaſt of Bourg en Breſſe.

LEYSSE'NA, a town of Pruſſia, in Oberland: five miles weſt-north-weſt of Biſchofswerder.

LEY'TA, one of the Philippine Iſlands, about 240 miles in circumference. The ſoil is fertile, and is ſaid to yield two hundred for one. The mountains abound in deer, cows, wild hogs, and fowls; cocoas grow without culture. The air is pure and healthy, and more temperate than at Luçon. The inhabitants are of a mild and peaceable temper, and hoſpitable to ſtrangers. They reckon about 9000, who pay tribute in wax, rice, or cloth. Lat. 10. 50. N. lon. 124. 40. E.

LEY'TA, a town on the north coaſt of the iſland of Leyta, ſituated in a bay. Lat. 11. 20. N. lon. 124. 16. E.

LEZA'ISKO, a town of Auſtrian Poland, in Galicia: fifty-ſix miles weſt-north-weſt of Lemberg.

LEZA'MO, a town of Spain, in the province of Alaba: three miles north-eaſt of Orduna.

LEZA'NA (John-Baptiſt de), a learned Spaniſh Carmelite monk, was born at Madrid in the year 1586. He taught philoſophy, and afterwards theology, with great reputation at Toledo, Alcala, and Rome; and in the city laſt mentioned reſided in the character of ſolicitor-general to his order. By popes Urban VIII. Innocent X. and Alexander VII. he was held in much eſteem, and employed in various affairs of conſequence. He died at Rome in 1659, when he was about ſeventy-three years of age. Among other works he publiſhed, 1. Annales Sacri Prophetici et Eliani Ordinis Beat. Virg. Mar. de Monte Carmelo, 4 vols. folio, 1645–1656, abounding in abſurd fables relating to the origin of the order, as well as viſions and miracles. 2. De Regularium Reformatione, ex variis Patrum Sententiis, 1672, 4to. 3. Summa Queſtionum Regularium, ſeu de Caſibus Conſcientiæ, 1634; and enlarged in numerous ſubſequent editions, till in 1655 it extended to four vols. folio. 4. Conſulta varia Theologica, Juridica, et Regularia, 1651, folio. 5. Summa Theologiæ Sacræ, two vols. folio, ſame date; and a third volume of the work laſt mentioned in 1658, folio. *Antonii Bibliotheca Hiſpana.*

LEZANDRIEU'X, a town of France, in the department of the North Coaſts: five miles north of Pontrieu, and four eaſt of Treguier.

LEZAT', a town of France, in the department of the Arriege: twenty-five miles north-weſt of Mirepoix, and twenty-eight north-north-weſt of Taraſcon.

LEZA'Y, a town of France, in the department of the Two Sevres: ſix miles eaſt-north-eaſt of Melle, and eleven ſouth-eaſt of St. Maixent.

LEZEN'GO, a town of France, in the department of the Stura: four miles north-weſt of Coni.

LEZ'ERS, an Indian nation, which inhabits between the mouth of the Ohio and Wabaſh rivers. They can furniſh 300 warriors.

LEZIGNAN', a town of France, in the department of the Aude, and chief place of a canton, in the diſtrict of Narbonne. The place contains 1505, and the canton 6827, inhabitants, in 17 communes.

LEZI'MO, a part of the Apennines, between Genoa and Piedmont; where, in 1796, the Auſtrians were defeated by the French.

LEZLIN'GEN, a town of Weſtphalia, in the Old Mark of Brandenburg: five miles ſouth-ſouth-eaſt of Gardeleben.

LEZ'NICA. See Leesnitz, p. 443.

LEZOU'X, a town of France, in the department of the Puy de Dôme: ſeven miles weſt-ſouth-weſt of Thiers, and thirteen eaſt of Clermont.

LGOV', a town of Ruſſia, in the government of Kurſk, Lat. 48. N. lon. 35. 54. E.

LHAN DHE'WI BRE'VI, a village in Cardiganſhire, about three miles to the ſouthward of Tregarron. A horn of an ox is here preſerved in the church, of ſo extraordinary a ſize, that at the root it is ſeventeen inches in circumference; it is as heavy as ſtone, ſeemingly petrified, and is ſaid to have been preſerved in the church ever ſince the time of St. David, who lived in the beginning of the ſixth century.

L'HERITIE'R (Charles Louis), an eminent French botaniſt, one of the moſt diſtinguiſhed ſtudents and promoters of the Linnæan principles and accuracy in his own country, was born of an opulent mercantile family at Paris in 1746. In 1772 he was appointed ſuperintendant of the waters and foreſts of the generalité of Paris; and, his active mind being turned to fulfil the duties of his office, he began to apply to botany, with a particular view to the knowledge of foreſt-trees. Brouſſonet, who had ſtudied with ſir Joſeph Banks, and was an ardent Linnæan, was the intimate friend of L'Heritier, and contributed in no ſmall degree to urge him forward in his career. The firſt fruit of his labours was a ſplendid book, with finely-engraved plates, entitled *Stirpes Novæ*,

of

of which the firſt faſciculus, containing eleven plates with their deſcriptions, appeared in 1784. Some copies were coloured for thoſe who choſe to have them; but the author himſelf had a prepoſſeſſion in favour of uncoloured botanical works, from an opinion that painted ones were ſeldom ſufficiently correct to anſwer any good purpoſe. Contrary ſentiments have ſince prevailed; and it is curious to obſerve how the popular taſte for coloured books in natural hiſtory has extended the faſhion. Five more faſciculi of the Stirpes Novæ followed, amounting to eighty-four plates and their deſcriptions all together. They were all dated either 1784 or 1785, though many of them not actually publiſhed till ſeveral years afterwards. By this the author gave great offence to the abbé Cavanilles at Madrid, who was at the ſame period publiſhing upon the monadelphous or mallow tribe, which fills one of L'Heritier's laſt faſciculi. Some of the labours of the worthy Spaniard ſeemed foreſtalled, and the priority of his names infringed upon. A paper war enſued, in which we cannot but think juſtice was on his ſide, though we are equally certain L'Heritier never borrowed, nor could want to borrow, any thing from him, whoſe knowledge and whoſe performances could, at that period, bear no compariſon with his own, however eſtimable the character and the ſubſequent labours of the indefatigable Cavanilles. To ſecure to himſelf ſome of his own diſcoveries, and eſpecially the eſtabliſhment of certain new genera and their names, L'Heritier contrived a method of publiſhing ſuch in the form of monographs, with one or two plates; but the purpoſe ſeems imperfectly anſwered, theſe publications not being dated at all. The ſubjects were Louichea, Buchozia, Michauxia, Hymenopappus, and Virgilia. We have always underſtood that twelve of each were printed. His biographer, the celebrated Cuvier, ſays there were only five, and that, "in order to give them the value of rarity," by which only ſome collectors judge of books, "he diſtributed the copies gratuitouſly to different people, ſo that no individual might be poſſeſſed of the entire collection." There is, however, a complete ſet in the rich library of ſir Joſeph Banks. A ſixth diſſertation of the ſame kind on Kakile was preparing, but never finiſhed, ſo that one proof-copy only was in exiſtence, which was ſold with his library in 1802. The catalogue of this library amounts to 2957 articles. Its poſſeſſor ſpared no pains nor expenſe to enrich it; and he allowed his friends, and all who had a taſte for the ſame ſtudy, to conſult his collection without reſerve. He even propoſed at one time to dedicate it freely to public uſe, in order to ſhame the government of the day, who were about to render venal all acceſs to the public libraries and collections; and his example had in ſome meaſure the effect of defeating ſo ſcandalous a project.

The neighbourhood and the gardens of Paris were, in his time at leaſt, by far too confined a field for the aſpiring genius of L'Heritier. Prevented by inſurmountable obſtacles from botanizing in remote regions himſelf, he expreſſed, in the preface to his Stirpes, a wiſh that ſome traveller might entruſt him with the publication of his diſcoveries. His deſire was not entirely fruitleſs. Dombey returned to Paris in 1786, with the wreck of his vaſt collections made in Chili and Peru, and in vain ſolicited from M. de Calonne the requiſite aſſiſtance to render his diſcoveries of uſe to the public. The miniſter and the government had other things to think of. The horrors of impending bankruptcy, the juſt fear of reformation and revolution, all alike inevitable, left them neither attention nor money to beſtow upon ſcience. L'Heritier therefore purchaſed the herbal of Dombey, with a great collection in natural hiſtory; and he immediately put every thing in order, hired painters and engravers, and would ſoon have preſented his treaſure to the world, when the court of Spain, being about to publiſh the natural hiſtory of thoſe countries which they had cauſed to be examined, felt deſirous that the reſearches of Dombey ſhould not appear firſt, and ſignified its wiſhes to the court of France. L'Heritier heard by chance at Verſailles that an order had been given to Buffon to take the herbal of Dombey into his poſſeſſion. Alarmed at the news, he haſtened to Paris; conſulted his friend Brouſſonet; aſſembled twenty or thirty carpenters, whom he employed all night in making boxes; then, with the aid of his wife, Brouſſonet, and Redouté, packed up the herbal, and, early in the morning, ſet out for Calais, with his valuable luggage, and never reſted till he touched Engliſh ground.

L'Heritier did not return to Paris till after the revolution; and then accepted the office of a judge in the civil tribunals of the department of the Seine, and is recorded to have fulfilled its duties with the moſt exemplary rectitude and incorruptibility. He alſo ſat from time to time as a member of the repreſentative body. His views were always thoſe of a true patriot, the correction of abuſes, the maintenance of the laws in their genuine force and purity; and the darling object of his emulation was the uncorrupted Britiſh conſtitution. "In a ſhort time," ſaid he, in 1787, to Dr. J. E. Smith, "we may poſſibly hope to be governed as you are." It is with pain that we advance towards the dreadful cataſtrophe of his life. He had married, in 1775, an eſtimable woman of the name of Doré, with whom he paſſed nineteen years in domeſtic happineſs. She died in 1794, leaving him five children. He devoted himſelf to their education; but, with reſpect to one of them, a ſon, his parental ſolicitude was attended with little ſucceſs, and his hopes were blaſted in a cruel manner, by the moſt refractory and unprincipled conduct. The parent, returning very late one evening in Auguſt, we believe of the year 1800, from a meeting of the National Inſtitute, never again reached his own domeſtic circle. His children expected him all night in the greateſt anxiety and uncertainty. Some ſavage cries of inſult or exultation were overheard in the ſilence of the night, but their object was not diſcovered till the dawn of morning, when the murdered body of the father of the family was found near his own threſhold, with the money and other valuables which he carried about him untouched. Nothing certain was ever diſcovered, or at leaſt publiſhed, by the police or government, though the moſt horrible ſuſpicions aroſe, which even in thoſe days of murder and atrocity excited curioſity, if not feeling, in the mind of the Pariſians. "Vague and contradictory conjectures," ſays Cuvier, "aroſe." He declined to repeat them; nor can we throw any freſh light on this diſaſtrous hiſtory. The wretched ſon is now no more.

L'HERITIE'RA, *ſ.* in botany. See HERITIERA, vol. ix. p. 809.

LHO'TA, a town of Bohemia, in the circle of Konigingratz: ſix miles ſouth-eaſt of Trautenau.

LHOT'KA, a town of Bohemia, in the circle of Konigingratz: fourteen miles weſt of Konigingratz.

LHWYD, or LLHWYD (Edward), an eminent antiquary, born in Wales about 1670, was admitted of Jeſus-college, Oxford, in 1687. Having applied himſelf to the ſtudy of natural hiſtory, and eſpecially of foſſils, under Dr. Plot, he was appointed, on the reſignation of that learned man, to be his ſucceſſor as keeper of the Aſhmolean Muſeum. One great object of his ſtudies was the elucidation of the languages, manners, and hiſtory, of the original inhabitants of this iſland; and for this purpoſe, beſides a diligent peruſal of all the records and documents of public libraries, he made ſeveral journeys into Wales, and extended his travels into Cornwall, Scotland, Ireland, and the province of Brittany in France. He had amaſſed a great treaſure of materials, and raiſed a high reputation by his publications, when he was cut off by an untimely death in 1709. Mr. Lhwyd diſtinguiſhed himſelf both as a naturaliſt and antiquary; and, although his principal attachment was to the ſtudies of the latter, yet he did not fail in his journeys to attend to every thing remarkable in the departments of natural knowledge. To the Royal Society he made ſeveral communications, chiefly of this kind, which have been publiſhed in their

Tranſactions, from vol. xiv. to vol. xxviii. They are generally replete with new and curious information. He alſo publiſhed, in 1699, a work entitled *Lithophylacii Britannici Ichnographia*, 8vo which is a methodical catalogue of the figured foſſils in the Aſhmolean Muſeum, printed at the expenſe of ſir Hans Sloane, ſir Iſaac Newton, and a few other learned friends. A new edition of this work was publiſhed in 1760 by Mr. Huddesford, with the addition of ſeveral letters from Lhwyd to his philoſophical friends. In Ray's correſpondence are thirteen letters written by Lhwyd to that great naturaliſt, chiefly upon the ſubject of foſſils. He alſo brought to light ſeveral of the rare plants of Wales. His greateſt work as an antiquary was his *Archeologia Britannica*, vol. i. folio, Oxford, 1707. This contains ten ſections, relating to the etymology, grammar, vocabulary, &c. of the Welſh, Armoric, Iriſh, and Scotch, dialects of the Celtic, and was highly eſteemed by perſons converſant in thoſe ſubjects. His large materials for the continuance of this work were left in an undigeſted ſtate; but he communicated to biſhop Gibſon, for his edition of Camden's Britannia, many valuable additions concerning Wales. At the end of William Baxter's Latin Gloſſary of Britiſh Antiquities, are inſerted our author's obſervations on the names of the rivers, mountains, towns, &c. of Britain. He alſo drew up a Latin catalogue of the manuſcripts and curioſities contained in the Aſhmolean Muſeum. *Pultney's Sketches of Botany in England.*

LHWYD (Humphrey), a learned antiquary, was a native of Denbigh. Nothing is known of him till his name occurs as a commoner of Brazen-noſe college, Oxford, in 1547. He ſtudied phyſic, took the degree of M. A. in 1551, and, returning to his native place, practiſed in his profeſſion, reſiding within the walls of Denbigh caſtle. He died about 1570. Humphrey Lhwyd was regarded as an accompliſhed ſcholar, and an able antiquary, in which capacity he was highly eſteemed by Camden. He was intimately acquainted with the geographer Ortelius, to whom he communicated maps of England and Wales for his Ancient Geography. As he diſagreed with ſome former writers in his opinion concerning the poſitions of ſeveral ancient towns, caſtles, &c. he accompanied his preſent with a work entitled *Commentarioli Britannicæ Deſcriptionis Fragmentum.* He wrote a letter addreſſed to Ortelius, *De Monâ Druidum Inſulâ, Antiquitati ſuæ reſtitutâ:* this, with a tract of his, *De Armamentario Romano*, is annexed to Sir John Price's Hiſtoriæ Britannicæ Defenſio. Lhwyd tranſlated The Hiſtory of Cambria, now called Wales, from Caradoc of Lancarvan, afterwards edited by Dr. David Powel, 1584, 4to. He alſo tranſlated ſome medical pieces. *Nicolſon's Hiſt. Libr.*

LI, a town of China, of the third rank, in Chen-ſi: forty miles ſouth-weſt of Tſin.

LI-CHAN', a town of Corea: ſeventeen miles eaſt-ſouth-eaſt of Het-ſin.

LI-KIANG-TOU', a city of China, of the firſt rank, in Yun-nan, near the ſource of the river Yang-Gong-kiang. It is ſaid that the inhabitants of this city and its territory are deſcended from ſome ancient colonies of Chineſe, which came and fixed there; it has no other city within its diſtrict, but is ſurrounded by mountains, which ſeparate it from the land of the Lamas. It is not doubted but there are mines of gold within its mountains. The whole country is very well watered, and the land fruitful; there are found here amber and pine-apples: 1150 miles ſouth-weſt of Peking. Lat. 26. 52. N. lon. 100. 8. E.

LI-SIUEN', a town of China, of the third rank, in Chen-ſi: ſeven miles ſouth of Kan.

LI-TCHIN', a town of China, of the third rank, in Chan-ſi: thirty-five miles ſouth-eaſt of Tſing.

LI-TCHU'EN, a town of Corea: thirty miles ſouth-eaſt of King-kitao.

LI-TCHU'EN, a town of Corea: fifteen miles north-weſt of Long-kouang.

LI-TCIN', a town of China, of the third rank, in Chan-tong: twenty miles eaſt of Pin.

LI'ABLE, *adj.* [from *lier*, old French.] Obnoxious; not exempt; ſubject; with *to*.—The Engliſh boaſt of Spenſer and Milton, who neither of them wanted genius or learning; and yet both of them are *liable* to many cenſures. *Dryden.*

But what is ſtrength without a double ſhare
Of wiſdom? vaſt, unwieldy, burthenſome,
Proudly ſecure, yet *liable to* fall
By weakeſt ſubtleties. *Milton's Agoniſtes.*

LI'ABLENESS, *ſ.* The being liable.—Every one obſerves our *liableneſs* to be deceived by the falſehood of men. *Butler's Analogy.*—He has a ſcale in his mind, by which he eſtimates his *liableneſs* to err. *Reid.*

LIADO'VA, a town of Moldavia, on the Dneiſter: fifty-ſix miles eaſt-north-eaſt of Choczim.

LIA'LIA, a river of Ruſſia, which runs into the Soſva, in the province of Ekaterinburg, forty miles eaſt of Verchotura.

LIALO'RES, a town of France, in the department of the Gers: three miles ſouth of Condom.

LIAL'SKOI, a town of Ruſſia, in the province of Uſtiug, on the Vim: forty-eight miles eaſt of Yarenſk.

LIAM', a town of Lower Siam, on the eaſt ſide of the gulf. Lat. 12. 35. N. lon. 102. 18. E.

LIAM-PO'. See NING-PO.

LIAMO'NE, or LIMO'NE, a river of Corſica, which runs into the ſea ten miles north of Ajazzo. It gives name to a department.

LIAM'SA, a town of Ruſſia, in the government of Archangel, on the coaſt of the White Sea: thirty-ſix miles north-north-weſt of Oneg.

LIAN-TCHU'EN, a town of Corea: twenty-five miles eaſt-north-eaſt of Haimen.

LI'ANCOURT, a town of France, in the department of the Oiſe: four miles ſouth of Clermont.

LIA'NE, a river of France, which runs into the ſea near Boulogne.

LIANG-CHAN', a town of Corea: forty miles ſouth-ſouth-eaſt of Kang-tcheou.

LIAN'GA, a town of the eaſt coaſt of Mindanao. Lat. 8. 21. N. lon. 126. 10. E.

LIANGDAL', a river of Sweden, which riſes in the province of Harjedalen, and runs into the gulf of Bothnia near Sundſwal.

LI'AR, *ſ.* [from *lie*. This word would analogically be *lier*; but this orthography has prevailed, and the convenience of diſtinction from *lier*, he who lies down, is ſufficient to confirm it.] One who tells falſehood; one who wants veracity.—I do not reject his obſervation as untrue, much leſs condemn the perſon himſelf as a *liar*, whenſoever it ſeems to be contradicted. *Boyle.*

Thy better ſoul abhors a *liar*'s part:
Wiſe is thy voice, and noble is thy heart. *Pope.*

LI'AR DSA'KE, a lake of Thibet, about thirty miles in circumference. Lat. 34. 34. N. lon. 90. 44. E.

LI'ARD, *adj.* Mingled roan. *Markham.*—*Liard* in Scotland denotes grey-haired: as, He's a *liard* old man.

LI'ARD, *ſ.* [French.] A farthing.

LI'ART, a town of France, in the department of the Ardennes: twelve miles ſouth-weſt of Rocroy.

LIA'TRIS, *ſ.* in botany, a genus of the claſs ſyngeneſia, order polygamia æqualis, natural order of compoſitæ capitatæ, (cinarocephalæ, *Juſſ.*) The generic characters are —Calyx: common oblong, imbricated with ſeveral ſubovate, unarmed, coloured ſcales. Corolla: compound tubular, uniform; corollets hermaphrodite, equal. Proper one-petalled, funnel form; tube inflex, border five-cleft, diviſions recurved. Stamina: filaments five, capillary, very ſhort. Anthers cylindric, tubular. Piſtillum: germ oblong; ſtyle filiform, very long, bifid to the very ſtamens, ſtraight; ſtigmas rather ſharp. Pericarpium: none; ca-

lyx unchanged. Seeds: ſolitary, cornered; down feathery, coloured, ſeſſile. Receptacle naked, flat.—*Eſſential Character.* Calyx oblong, imbricate, awnleſs, coloured; down-feathered, coloured; receptacle naked, hollow-dotted.

This genus conſiſts of ſpecies ſeparated from Serratula, on account of the down being feathered and the receptacle naked. Juſſieu ſaw the neceſſity of this, and was of opinion that theſe plants are nearer to Eupatorium or Cacalia. Gærtner, ſeeing that they are diſtinct both from Serratula and Eupatorium, gave them the name of *Suprago.* Walter ſaw that they were diſtinct, but did not give them a generic name.

Species. 1. Liatris Noveboracenſis, or long-leaved liatris: leaves lanceolate-oblong, ſerrate, pendulous. Stems ſeveral, ten or twelve feet high, ſmooth, deeply ſtriated, pale green, ſtout, rigid, ſtraight, not branching except at top for the flowers. Leaves alternate, very long, narrow in proportion to their length, veined, wrinkled, roughiſh, but without hairs; dark green above, ſomewhat hoary underneath. Flowers in a ſort of umbel (or corymb) at top, conſiſting of fewer heads than in L. glauca, leſs ſcattered, and ſmall in proportion to the plant. Heads more ſtrigoſe, the florets not turned ſo much outwards: calycine ſcales, eſpecially the lower, narrower, and ending in ſlender, oblong, horns. It ſeldom flowers till the end of October. The florets are of a deep purple colour, and the calyx is tinged with purple. Seeds oblong, columnar, whitiſh: crowned with a hairy, ſtiffiſh, browniſh down. Native not only of New York, but of Virginia, Carolina, and other parts of North America.

2. Liatris prælta, or tall liatris: leaves lanceolate-oblong, ſerrate, ſpreading, hirſute underneath. Root perennial, large, ſtriking deep into the ground. Stems branching only at top, ſeven or eight feet high, purpliſh, ſtraight, deeply ſtriated. Leaves ſeven inches long, and an inch and a half broad in the middle, ending in acute points, entire, deep green above, hoary on their under ſide, ſeſſile. Flowers in looſe erect bunches at the ends of the branches; florets pale purple. Dillenius obſerves, that the leaves are ſhorter and leſs wrinkled, wider in the middle, not pendulous, as in the preceding, but either horizontal or pointing obliquely upwards; they are alſo leſs ſerrate, and more minutely; yellowiſh green above, and more hoary beneath. In figure and toothing they are like peach-leaves, but differ from them in being wrinkled above and hoary beneath; the heads of flowers are ſomewhat rounder, and the cuſps or horns at the end of the calycine ſcales are ſhorter. Native of Virginia and Carolina, and other parts of North America; flowers from September to November.

3. Liatris glauca, or glaucous liatris: leaves ovate-oblong, acuminate, ſerrate; flowers corymbed; calyxes roundiſh. Stems ſix or ſeven feet high, purple, and channelled. Leaves three inches long, and an inch and a half broad in the middle, ſtiff, and light green on both ſides. Native of Maryland, Virginia, and Carolina.

4. Liatris ſquarroſa, or rough-headed liatris: leaves linear; calyxes ſquarroſe, ſubſeſſile, acuminate, lateral. Root tuberous; root-leaves a foot long, and half an inch wide, rigid and nerved. Stems ſeveral, ſimple, from two to three feet in height, the thickneſs of the little finger, covered with a fine pubeſcence, and having many alternate leaves, reflex, rigid, nerved, with ſtraight veins, ſubhirſute, like thoſe of Tragopogon, but not ending in ſo acute a point, nor embracing the ſtem; all ſhorter than the root-leaves, gradually ſmaller and narrower towards the top of the ſtem; ſmooth above, hairy beneath and along the edges. Native of moſt of the provinces in North America. Miller ſays that he received the ſeeds from Carolina; the Kew Catalogue aſſigns it to Virginia. It flowers in July and Auguſt.

5. Liatris ſcarioſa, or ragged-cupped liatris: leaves lanceolate, quite entire; calyxes ſquarroſe, peduncled, blunt. This differs very much from the preceding. Stem ſingle, ſtrong, channelled, three or four feet high. Leaves three inches long, and half an inch broad. Flowers purple, in a long looſe ſpike, at the upper part of the ſtem, on pretty long blunt peduncles; they have large rough calyxes, compoſed of wedge-ſhaped ſcales. The flowers at the top of the ſpike open firſt. It flowers in Auguſt; but the ſeeds do not ripen here. Native of Virginia.

6. Liatris piloſa, or hairy-leaved liatris: leaves linear, hairy; flowers axillary, on long peduncles. Stem hairy, from three to five feet in height. Flowers purple, ſeſſile, ſubimbricate, in ſpikes; calyxes many-flowered, with the ſcales preſſed cloſe. Native of North America; introduced in 1783 by Mr. William Young; flowers in September and October.

7. Liatris ſpecioſa, or hairy-cupped liatris: leaves linear-ſickled; flowers ſeſſile, in ſpikes; calycine leaflets rough-haired, acute; inner elongated, coloured at the tip. Stem upright, two feet high, tomentoſe. Calyxes five-flowered, red at the tip. Native of Carolina and Georgia; introduced in 1787, by Meſſrs. Watſons; flowers in October.

8. Liatris ſpicata, or ſpiked-liatris: leaves linear, ciliate at the baſe; flowers in ſpikes, ſeſſile, lateral; ſtem ſimple. Root tuberous; ſtem ſmooth, three feet high. Flowers purple, ſubimbricate, on ſhort peduncles. Calyxes many-flowered, ſubcylindric, imbricate, with oblong blunt ſcales, preſſed cloſe, glutinous, as is the whole plant. Native of North America; where it is called *throat-wort*, the root being diſcutient. It flowers from Auguſt to October.

9. Liatris graminifolia, or graſs-leaved liatris: ſtem ſimple, ſmooth, ſix feet high. Leaves long, like thoſe of graſs, ſubvilloſe within. Flowers purple, ſeſſile, in ſpikes; calyxes many-flowered, with blunt ſubconverging ſcales.

10. Liatris ramoſa, or branching liatris: ſtem ſomewhat branched, four feet high, pubeſcent. Leaves lanceolate. Flowers ſubſeſſile, purple, in ſpikes.

11. Liatris paniculata, or panicled liatris: ſtem hairy, viſcid, a foot high, ſimple. Calyxes ſimple, five-leaved, five-flowered. It varies with purple and with white flowers.

12. Liatris uniflora, or one-flowered liatris: ſtem ſhort, branched. Peduncles one-flowered; calyxes many-flowered, with converging ſcales.

13. Liatris odoratiſſima, or ſweet liatris: ſtem three or four feet high. Root-leaves obovate-oblong; ſtem-leaves oblong-lanceolate, even. Flowers in corymbs, purple.

The laſt five ſpecies, as well as the 6th and 7th, all from Walter's Carolina, Gmelin has inſerted among the Chryſocomas, as it ſhould ſeem without any foundation.

To LIB, *v. a.* [in *Ray's* North Country words.] To geld:

> The next ſow-gelder,
> (O' my life) ſhould *lib* me, rather than embrace thee.
> *Maſſinger's City Madam.*

LI'BA, a town of Bohemia, in the circle of Saatz: ten miles eaſt of Eger.

LIBA'MEN, *ſ.* [Latin.] A libation. *Bailey.*

LI'BAN, a town of Bohemia, in the circle of Boleſlaw: twelve miles eaſt-ſouth-eaſt of Jung Buntzel.

LIBA'NA, *ſ.* [Greek.] Frankincenſe.

LIBA'NIUS, a celebrated Greek ſophiſt or rhetorician, was born of an ancient family at Antioch, about the year 314. From his youth he devoted himſelf to literature; and he purſued his ſtudies at Athens, which city ſtill maintained its ancient ſuperiority in eloquence and philoſophy, though vitiated by the bad taſte of the age. After he had finiſhed his education, he collected diſciples, and made himſelf known by various rhetorical compoſitions. His reputation was high both at Conſtantinople and Nicomedia; at which latter city, Julian, then prince, though forbidden to attend upon his lectures, yet became acquainted with his writings, and imitated his ſtyle and manner. The jealouſy of his rivals purſued him from place to place; and he finally returned to Antioch, where he ſpent the remainder of his days. About the year 360 he was preceptor to two perſons who afterwards became

celebrated

celebrated in the Chriſtian church, Baſil and John Chryſoſtom. He himſelf, however, was zealouſly attached to the ancient religion; and, upon the acceſſion of Julian, he was one of the firſt whom that emperor invited to be near his perſon. Libanius, with a truly philoſophic ſpirit, declined the dignities which were offered him, and, remaining in his own city, rather ſhrunk from the advances of imperial favour than conrted them. He was, however, warmly attached to a prince who patroniſed his ſtudies and ſupported the ſame religious cauſe: he loved him while living, and panegyriſed him after death. On various occaſions he employed his influence with Julian to ſoften his reſentments. When, in conſequence of a tumult at Antioch, the emperor had given orders to put all the magiſtrates in priſon, Libanius pleaded for them with a boldneſs which drew a menacing remark from a ſervile courtier preſent; but the orator indignantly retorted, and, perſiſting in his plea, obtained a revocation of the order. Julian admitted him to the equality of a literary friend, and is thought to have had his aſſiſtance in ſome of his compoſitions; though, in fact, the emperor had a better taſte in writing than the rhetorician. His death was a ſevere ſtroke upon Libanius, who had flattered himſelf with the triumphant reſtoration of the heathen religion and philoſophy. He ſurvived to an advanced age, ſometimes endangered by ſuppoſed diſaffection to the ſucceeding emperors, and complaining of various injuries from rivals. The time of his death is not known, but he mentions the ſeventy-ſixth year of his age, A. D. 390. He was never married, but is ſaid to have had a concubine; to which is imputed his interference with the emperor Valens, in order to obtain the confirmation of a law admitting illegitimate children to a ſhare of the paternal inheritance.

The writings of Libanius were very numerous; and a great quantity of them have come down to our times, conſiſting of orations and declamations upon real and fictitious occaſions, diſſertations and epiſtles. They are characteriſed by Gibbon as "for the moſt part the vain and idle compoſitions of an orator who cultivated the ſcience of words; the productions of a recluſe ſtudent, whoſe mind, regardleſs of his contemporaries, was inceſſantly fixed on the Trojan war and the Athenian commonwealth." Yet liberal ſentiments frequently occur; and many anecdotes reſpecting the hiſtory of the times cannot but appear in a collection of nearly two thouſand letters written to his correſpondents. Of the works of Libanius, two vols. folio, Gr. and Lat. were publiſhed at Paris, 1606, 1627. Theſe contain his declamations, orations, and diſſertations, with his life, a prolix and vain narrative written by himſelf. Many of his epiſtles and orations yet remain in manuſcript in different libraries. *Gibbon.*

LIBA'NIUS (George), one of the moſt able profeſſors of the college of Cracow in Poland, who flouriſhed in the ſixteenth century, was deſcended from a reſpectable family at Lignitz, of which place he was a native. After purſuing his ſtudies for ſeveral years in the moſt celebrated German univerſities, he came to Cracow, where his talents and manners ſecured him the eſteem of the moſt eminent characters in that city, who were diſtinguiſhed by their love of literature. He was appointed one of the profeſſors in the firſt college at Cracow, and acquitted himſelf in that poſt with great reputation. He is conſidered as the firſt perſon who introduced there the ſtudy of the Greek tongue, and excited a taſte for it in the Poliſh nation. He was the author of, 1. Œconomicorum Ariſtotelis Libri, Græcis et Latinis Annotationibus illuſtrati, 1537, 4to. 2. Carmina Sibyllæ Erithreæ, in quibus Reſurrectio Corporum, Mutatio Sæculorum, Dei adventus ad Judicium, Præmia et Supplicia Hominum, deſcribuntur, Scholiis quæ ad Grammaticam attinent additis, 1545, 8vo. 3. Paracleſis; id eſt, Adhortatio ad Græcarum Literarum Studioſos, habita Cracoviæ, of the ſame date. 4. De Muſicæ Laudibus Oratio, cui annexa eſt, quæ in Scalis et Muſica tractantur, multorum Vocabulorum Græcorum Interpretatio, 1540, 8vo. Theſe were all publiſhed at Cracow. He alſo compiled an Anthology, dated in 1528, which ſtill remains in manuſcript, and conſiſts of choice ſelections from the works of St. Baſil, St. Gregory Nazianzen, and St. John Chryſoſtom. *Moreri.*

LIBANO'TIS, *ſ.* in botany. See ATHAMANTA, CACHRYS, FERULA, LASERPITIUM, LIGUSTICUM, SESELI, SILER, and THAPSIA.

LIB'ANUS, or LEBA'NON, a celebrated mountain of Aſia, ſituated on the borders of Paleſtine and Syria. It takes its name, as ſome ſay, from the Hebrew *laban*, on account of the whiteneſs of its ſummits, which appear covered with ſnow a great part of the year. Others derive it from the Greek *libanos*, frankincenſe, alleging, without ſufficient reaſon as Reland obſerves, that it furniſhed this or any other aromatic gum. *Anti-Libanus* is ſo called from its parallel courſe in oppoſition to the other. Some ancient fathers, as St. Jerome and Euſebius, have deſcribed the Libanus and Antilibanus as one continued ridge, winding about in the form of a horſe-ſhoe, which begins about three or four leagues from the Mediterranean, a little above Smyrna, and, running ſouthward towards Sidon, takes an eaſtern courſe towards Damaſcus; winding thence northward towards Laodicea Cabioſa. The weſtern ridge is that which is properly called Libanus; the eaſtern is Antilibanus, and the hollow between is Cœloſyria. See ANTILIBANUS and CŒLOSYRIA.

St. Jerome repreſents Libanus as by far the loftieſt hill in the whole land of promiſe, as well as the moſt woody and thick-ſet; and Theodoret alſo ſtates it to be the higheſt of all Paleſtine. Although the height of this mountain has not been determined by the barometer, Volney deduces it from another conſideration. In winter the tops of the adjoining mountains are entirely covered with ſnow from Alexandretta to Jeruſalem; but after the month of March it melts, except on Mount Libanus, where however it does not remain the whole year, except in the higheſt cavities, and towards the north-eaſt, where it is ſheltered from the ſea-winds and the rays of the ſun. Since it is well known that ſnow in this latitude requires an elevation of fifteen or ſixteen hundred fathoms, we may conclude, ſays Volney, that to be the height of Libanus; and that it is conſequently much lower than the Alps, or even the Pyrenees. Mont Blanc, the loftieſt of the Alps, is eſtimated at 2488 fathoms above the level of the ſea; and the Peak of Oſſian, in the Pyrenees, at 1900.

Mount Libanus is computed at about one hundred leagues in compaſs; and is bounded by Meſopotamia on the eaſt, Armenia on the north, Paleſtine on the ſouth, and the Mediterranean on the weſt. It conſiſts of four ridges of mountains, which riſe one above the other; the firſt of theſe is very fertile in grain and fruit; the ſecond is barren and rocky, producing nothing but briars and thorns; the third, though ſtill higher, is ſaid to enjoy a conſtant verdure and ſpring, its gardens and orchards producing ſuch a variety of herbs, fruits, &c. that it has been ſtyled an earthly paradiſe; the laſt and loftieſt is uninhabitable, by reaſon of its exceſſive coldneſs, being covered with deep ſnows almoſt all the year. It is moſtly inhabited by the Maronites below; and by the wild Arabs, called Amadea, of the ſect of Ali, every where elſe but on the top. Here are ſeveral churches, convents, and chapels, and caverns cut into the rock. The monks that inhabit it are very poor, but courteous to travellers, from whom they expect ſome token of beneficence. The convent, or cœnobium, where the Maronite patriarch reſides, lies almoſt in a bottom; the deſcent to it is very ſteep, narrow, and winding; and it has only that one avenue, which makes it ſo much the ſafer, as well as the more retired. It chiefly conſiſts of ſundry grottoes, cut into the rock; of which the church is one of the largeſt. A river, which empties itſelf at Tripoli, runs a little below it, and ſupplies it with water. Near the grotto of St. Marina, who is reputed to have lived here as an hermit, in man's

clothes, are ſome vines, which afford excellent wine; and fine young mulberry-trees, as well as cedars, and other curioſities. Of the boaſted cedars of Libanus, there are no very magnificent remains; four or five of them only deſerving notice; but the number of firs, oaks, brambles, mulberry-trees, figs, and vines, is much more conſiderable.

The wines of Libanus were much extolled by the Grecian and Roman epicures. It is probable, that the inhabitants of this territory have made no change in their ancient method of making wines, nor in the culture of their vines. They are not pruned as in France, which muſt certainly, ſays Volney, greatly injure both the quantity and quality of the crop. The vintage begins about the end of September. The convent of Mar-hanna makes about 150 rabia, or earthen jars, containing about 14 gallons. The price current in the country is about 2s. 6d. per gallon. Of the numerous kinds of wine made in Syria, the chief is the *vino d'oro*, or golden wine, of Mount Libanus. This is not boiled, as in the preparation of other wines, but left to purify itſelf by keeping; the quantity produced is ſmall. It is, as its name implies, of a bright golden colour; and is highly prized even on the ſpot.

Several conſiderable rivers have their ſource in this mountain, viz. the Jordan, Rocham, Nahar-Roſſian, and Nahar-Cadicha; beſides many ſmaller ſtreams, that run between the valleys; particularly that of Ahouali, which flows down into the Romantic Valley, ſo called, becauſe it is ſurrounded on all ſides with high rocks. Theſe rivers, ruſhing down from ſuch heights, form ſeveral beautiful caſcades, like thoſe of the Nile. This mountain has been, and is ſtill to this day, a place of retreat and refuge for a great number of robbers, and other deſperate people. The ſtone which compoſes the mountains of Libanus and Antilibanus, and thoſe of Syria in general, is a hard calcareous ſtone of a whitiſh colour, ſonorous like free-ſtone, and diſpoſed in ſtrata variouſly inclined. Of this ſtone the inhabitants build their houſes, and make lime.

LIBA'TION, *ſ.* [*libatio*, Lat.] The act of pouring wine on the ground in honour of ſome deity.—In digging new earth, pour in ſome wine, that the vapour of the earth and wine may comfort the ſpirits; provided it be not taken for a heathen ſacrifice, or *libation* to the earth. *Bacon's Natural Hiſtory.*—The wine ſo poured.—They had no other crime to object againſt the Chriſtians, but that they did not offer up *libations*, and the ſmoke of ſacrifices, to dead men. *Stillingfleet on Romiſh Idolatry.*

The goblet then ſhe took, with nectar crown'd,
Sprinkling the firſt *libations* on the ground. *Dryden.*

LIBATION, among the Greeks and Romans, was an eſſential part of ſolemn ſacrifices. It was alſo performed alone, as a drink-offering, by way of procuring the protection and favour of the gods, in the ordinary affairs of life. Libations, according to the different natures of the gods in honour of whom they were made, conſiſted of different liquids, but wine was the moſt uſual. The wine offered to the gods was always unmixed with water. We meet with libations of water, libations of honey, libations of milk, and libations of oil; theſe are called νηφαλια ιερα. The libation was made with a ſerious deportment and ſolemn prayer. At ſacrifices, the libation, after it had been taſted by the prieſt, and handed to the byſtanders, was poured upon the victim. At entertainments, a little wine was generally poured out of the cup, before the liquor began to circulate, to ſhow their gratitude to the gods for the bleſſings they enjoyed. Alexander the Great is ſaid to have ſacrificed a bull to Neptune; and, for an offering to the ſea-gods, to have thrown the golden veſſels uſed for the libation into the ſea.

Libations were alſo in uſe under the law of Moſes, as the Hebrews poured a kind of wine on the victim after it was killed, and the ſeveral pieces of the ſacrifice were laid on the altar, ready to be conſumed in the flames. This at leaſt we underſtand to be the nature of the *drink-offering* commanded in Numbers xv. 4–10. And the pouring *the blood beſide the bottom of the altar*, Exod. xxix. 12. we take to have been another ſpecies of libation.

LIBAT'TA. See OLIBATO.

LIBAU', a ſeaport of the duchy of Courland, ſituated on the Baltic. It was built by the Lettonians; and is ſaid to derive its name from the Lettonian word *leepaja*, i. e. a piece of ground planted with linden-trees; for a great number of thoſe trees formerly grew here; and, to this day, the Lettonians call the town *Leepaja*. It obtained the privileges of a city in 1625. It contains about 5000 inhabitants. As the harbour has not a ſufficient depth of water for ſhips of burden, they are unloaded in the road; but duke Erneſt John, in 1737, cauſed it to be cleared, and the future accumulation of mud and ſand to be prevented by a water-work, which has rendered it very commodious for light veſſels. About 260 or 270 veſſels generally enter, one year with another. Not long ſince the importations amounted to the value of 931,551 roubles; the exports, on the contrary, amounted to 2,028,520 roubles. This town was often taken by the Swedes, but finally ceded to Courland by the peace of 1660: ſixty-ſix miles weſt of Mittau. Lat. 55. 28. N. lon. 21. 37. E. *Malte-brun's Picture of Poland.*

LIBA'VIUS (Andrew), a phyſician and chemiſt, was a native of Hall in Saxony. In 1588 he was profeſſor of hiſtory and poetry at Jena. Thence he removed in 1591 to Rothenburg, on the Tauber; which he quitted in 1605 for Coburg in Franconia, where he was appointed principal of the college of Caſimir. He died in that city in 1616. Libavius was greatly attached to the ſtudy of chemiſtry, and was one of the firſt who purſued it upon true principles, although he was not free from the deluſions of alchemy. He made uſe of many chemical preparations in medicine; but with more ſobriety than Paracelſus, whoſe doctrines he frequently refutes. He was the author of a great number of works in medicine and chemiſtry, which contain ſome valuable obſervations, though now obſolete. His laſt work, entitled *Examen Philoſophiæ Novæ*, folio, 1615, is remarkable for the firſt mention of the transfuſion of blood from one animal to another, of the ſalutary effects of which he ſpeaks with great confidence. It was not, however, till beyond the middle of the ſame century that it was experimentally tried. See LOWER (Richard), vol. xiii. A chemical preparation called the *ſmoking liquor of Libavius*, or ſpirit of Libavius, has long been known in laboratories; it is a highly-concentrated muriatic acid much impregnated with tin. See the article CHEMISTRY, vol. iv. p. 292, 3.

LIB'BARD, *ſ.* [*liebard*, Germ. *leopardus*, Lat.] A leopard.—The torrid parts of Afric are by Piſo reſembled to a *libbard*'s ſkin, the diſtance of whoſe ſpots repreſent the diſperſeneſs of habitations, or towns of Afric. *Brerewood.*

The *libbard* and the tiger, as the mole
Riſing, the crumbled earth above them threw. *Milton.*

LIB'BARD's BANE, or LEOPARD's BANE, a plant ſuppoſed to be poiſonous; as to which, ſee DORONICUM, vol. vi. p. 28.—Nightſhade, moonwort, *libbard's bane. B. Jonſon.*

LIBEC'CHIO, [Italian.] The Libyan wind; a hot wind.

LI'BEL, *ſ.* [*libellus*, Lat. *libelle*, Fr.] A ſatire; defamatory writing; a lampoon.—Are we reproached for the name of Chriſt? that ignominy ſerves but to advance our future glory; every ſuch *libel* here becomes panegyric there. *Decay of Piety.*

Good heav'n! that ſots and knaves ſhould be ſo vain,
To wiſh their vile reſemblance may remain!
And ſtand recorded, at their own requeſt,
To future days, a *libel* or a jeſt. *Dryden.*

LIBEL, in law, a contumely, or reproach, publiſhed to the defamation of the government, of a magiſtrate, or of a private perſon. It is alſo defined to be, a malicious defamation, expreſſed either in printing or writing, or by ſigns,

ſigns, pictures, &c. tending either to blacken the memory of one who is dead, or the reputation of one who is alive; and thereby expoſing him to public hatred, contempt, and ridicule. 1 *Hawk. P. C.* c. 73. § 1. 5 *Co.* 121, 5.

Libels, ſays Blackſtone, taken in their largeſt and moſt extenſive ſenſe, ſignify any writings, pictures, or the like, of an *immoral* or *illegal* tendency. Conſidered particularly as offences againſt the public peace, they are malicious defamations of any perſon, and eſpecially a magiſtrate, made public by either printing, writing, ſigns, or pictures, in order to provoke him to wrath, or expoſe him to public hatred, contempt, or ridicule. The direct tendency of theſe libels is the breach of the public peace, by ſtirring up the objects of them to revenge, and perhaps to bloodſhed. 4 *Comm.* c. 11. 3 *Comm.* c. 8.

A libel is the greateſt degree of ſcandal, and does not die like words which may be forgot, an action for which is confined to the perſon; but the cauſe of action for ſcandal in a libel ſurvives. 5 *Rep.* 125. This ſpecies of defamation therefore is uſually termed *written ſcandal*; and thereby receives an aggravation, in that it is preſumed to have been entered upon with coolneſs and deliberation; and to continue longer and propagate wider and farther than any other ſcandal. 5 *Rep.* 125. Whatever renders a man ridiculous, or lowers him in the eſteem and opinion of the world, amounts to a libel; though the ſame expreſſions, if ſpoken, would not have been defamation. An action for a libel alſo differs from an action for words in this particular; that the former may be brought at any time within ſix years, and *any* damages will entitle the plaintiff to full coſts; while the latter ought to be brought within two years, and the damages recovered muſt be 40s. to carry coſts. To print of any perſon that he is a ſwindler, is a libel, and actionable. 1 *Term Rep.* 748.

Libels againſt magiſtrates deſerve the greateſt puniſhment. If a libel be made againſt a private man, it may excite the perſon libelled, or his friends, to revenge, and break the peace; but, if againſt a magiſtrate, it is not only a breach of the peace, but a ſcandal to government, and ſtirs up ſedition. 5 *Rep.* 121.

Where a writing inveighs againſt mankind in general, or againſt a particular order of men, this is no libel; it muſt deſcend to particulars and individuals to make it a libel. But a general reflection on the government is a libel, though no particular perſon is reflected on; and the writing againſt a known law is held to be criminal. According to Holt, C. J. ſcandalous matter is not neceſſary to make a libel; it is enough if the defendant induces an ill opinion to be had of the plaintiff, &c. But, if a man ſpeak ſcandalous words, unleſs they are put in writing he is not guilty of a libel; for the nature of a libel conſiſteth in putting the infamous matter into writing. A defamatory writing, expreſſing only one or two letters of a man's name, if it be in ſuch a manner, that, from what goes before and follows after, it muſt be underſtood, by the natural conſtruction of the whole, to ſignify and point at ſuch a particular perſon, is as properly a libel as if the whole name was expreſſed at large. 1 *Hawk. P. C.* c. 73. § 5. On application for an information for this offence, ſome friend to the party complaining ſhould in ſuch caſe ſtate by affidavit the having read the libel, and that he underſtands and believes it to mean the party. And in the caſe of actions for libels by ſigns or pictures, it ſeems neceſſary always to ſhow, by proper inuendoes and averments of the defendant's meaning, the import and application of the ſcandal, and that ſome ſpecial damage has followed; otherwiſe it cannot appear that ſuch libel by picture was underſtood to be levelled at the plaintiff, or that it was attended with any actionable conſequences. 3 *Comm.* c. 8. p. 612.

Though a private perſon or magiſtrate be dead at the time of making the libel, yet it is puniſhable; as it tends to a breach of the peace. 5 *Co.* 125. 1 *Hawk. P. C.* c. 73. § 1.

A private libel for a private matter, as a letter ſcandalizing a perſon courting a woman, is indictable, and puniſhable by fine.

Printing or writing may be libellous, though the ſcandal is not directly charged, but obliquely and ironically; and where a writing, pretending to recommend to one the characters of ſeveral great men for his imitation, inſtead of taking notice of what they are generally famous for, pitches on ſuch qualities only which their enemies charge them with the want of; as by propoſing ſuch a one to be imitated for his learning, who is known to be a good ſoldier, but an illiterate man, &c. this will amount to a libel. 1 *Hawk. P. C.* c. 73. § 4.

The petition of the ſeven biſhops in the reign of king James II. againſt the king's declaration, ſetting forth, that it was founded on a diſpenſing power, which had been declared illegal in parliament, &c. was called a ſeditious libel againſt the king; and they were committed to the Tower; but, being after tried at the bar, were acquitted. 3 *Mod.* 212. The printing of a petition to a committee of parliament, (which would be a libel againſt the party complained of, were it made for any other purpoſe,) and delivering copies thereof to the members of the committee, is not the publication of a libel, being juſtified by the order and courſe of proceedings in parliament. 1 *Hawk. P. C.* c. 73. § 8.

Scandalous matter in legal proceedings by bill, petition, &c. in a court of juſtice, amounts not to a libel, if the court hath juriſdiction of the cauſe. *Dyer*, 285. 4 *Rep.* 14. But he who delivers a paper full of reflections on any perſon, in nature of a petition to a committee, to any other perſons except the members of parliament who have to do with it, may be puniſhed as the publiſher of a libel. 1 *Hawk.* c. 73. § 8. And, by the better opinion, a perſon cannot juſtify the printing any papers which import a crime in another, to inſtruct counſel, &c. but it will be a libel. *Sid.* 414.

The communication of a libel to any one perſon is a *publication* in the eye of the law; and therefore the ſending an abuſive private letter to a man is as much a libel as if it were openly printed; for it equally tends to a breach of the peace. 1 *Hawk. P. C.* c. 73. § 11. 4 *Comm.* c. 11.

It is immaterial, on a *criminal proſecution*, with reſpect to the eſſence of a libel, whether the matter of it be true or falſe; becauſe it equally tends to a breach of the peace; and the provocation, not the falſity, is the thing to be puniſhed criminally; though doubtleſs the falſehood of it may aggravate its guilt, and enhance its puniſhment. See 7 Term Rep. 4, that it is not neceſſary to allege the falſity of the libellous matter. Sir Richard Phillips, in his Powers and Duties of Juries, ch. x. preſents ſome very ſenſible and uſeful conſiderations for jurymen, on the trial of libel cauſes. His principle with regard to public libels is, "that, as the propagation of *truth* on ſubjects of public intereſt is a common right, ſo whatever is true in regard to public things, or the public conduct of public perſons, as ſuch, can be no libel; and herein, if a juſtification of the fact is made out, it ought to procure an acquittal." This principle is, as we have ſhown, more agreeable to ſound common ſenſe than to ſtrict law, which will not allow the *truth* of a libel to be any defence of its author. Yet, whatever ſubtle reaſons may be found in the technical ſtructure of the law for this rule, the confuſion of falſehood and truth never can be reconciled to ordinary ideas of juſtice; and a common underſtanding never can be thoroughly convinced of the propoſition, that the falſe calumniator of the beſt miniſter commits only the ſame degree of offence with the man who attacks the vices of the worſt. We conceive the drift of the author's argument to be, that, though *falſehood* is not neceſſary to be proved in order to convict a perſon of a libel, it is admitted that *malice* is; and therefore that a jury may conſcientiouſly weigh the truth or falſehood of the facts alledged, as material towards forming a judgment of the *malicious* intent. Though the law does not ſtrictly belong to the province of the jury, yet, as their undoubted power to return a general verdict of *guilty* or *not guilty* does in effect place the law as well as the fact in their hands, they are exhorted to exert that power by an *acquittal*, if they are convinced that nothing but truth has been advanced

in the publication into which they are charged to inquire. And, indeed, although the truth of a libel is no legal juſtification in a criminal proſecution, yet in many inſtances it is conſidered as an extenuation of the offence; and the court of king's bench has laid down this general rule; viz. that it will not grant an *information* for a libel, unleſs the proſecutor who applies for it makes an affidavit, aſſerting directly and pointedly that he is innocent of the charge imputed to him. But this rule may be diſpenſed with, if the perſon libelled reſides abroad; or if the imputations of a libel are general and indefinite; or if it is a charge againſt the proſecutor for language which he has held in parliament. *Dougl.* 271–372. (284–388.)

In a *civil action*, however, a libel muſt appear to be falſe as well as ſcandalous; for, if the charge be true, the plaintiff has received no private injury, and has no ground to demand a compenſation for himſelf, whatever offence it may be againſt the public peace; and therefore, upon a civil action, the truth of the accuſation may be pleaded in bar of the ſuit.

The puniſhment of libellers, for either making, repeating, printing, or publiſhing, a libel, is fine, and ſuch corporal puniſhment (as impriſonment, pillory, &c.) as the court in its diſcretion ſhall inflict; regarding the quantity of the offence, and the quality of the offender. 1 *Hawk. P. C.* c. 73.

If a printer print a libel againſt a private perſon, he may be indicted and puniſhed for it; and ſo may he who prints a libel againſt a magiſtrate; and much more one who does it againſt the king and ſtate; and it is no excuſe for the printing or publiſhing a libel, to ſay that he did it in the way of trade, or to maintain his family. 11 *St. Tr.* 982, 986. Alſo if bookſellers, &c. publiſh or ſell libels, though they know not the contents of them, they are puniſhable. It has been reſolved, that, where perſons write, print, or ſell, any pamphlet, ſcandalizing the public, or any private perſons, ſuch libellous books may be ſeized, and the perſons puniſhed by law; and all perſons expoſing any books to ſale, reflecting on the government, may be puniſhed; alſo writers of falſe news are indictable. 2 *St. Tr.* 477. See SCANDALUM MAGNATUM.

It has been frequently determined, that in the trial of an indictment for a libel the only queſtions for the conſideration of the jury are the fact of publiſhing, and the truth of the innendoes; that is, the truth of the meaning and ſenſe of the paſſages of the libel, as ſtated and averred in the record; whether the matter be or be not a libel is a queſtion of law for the conſideration of the court. 3 *Term Rep.* 428. But ſee the ſtat. 32 Geo. III. c. 60; that the jury may give a general verdict on the whole matter put in iſſue, and ſhall not be required or directed by the court or judge to find the defendant guilty merely on the proof of the publication of the paper, and the ſenſe aſcribed to it in the indictment. See this more fully diſcuſſed under the article JURY, vol. xi. p. 547.

In the caſe of Peltier, for a libel againſt Bonaparte, then firſt conſul of the French republic, lord Ellenborough, in his charge to the jury, ſaid, "I lay it down as law, that any publication which tends to degrade, revile, and defame, perſons in conſiderable ſituations of power and dignity in *foreign countries*, may be taken to be and treated as a libel, and particularly where it has a tendency to interrupt the amity and peace between the two countries. If any publication contains a plain and manifeſt incitement and perſuaſion, addreſſed to others, to aſſaſſinate and deſtroy the perſons of ſuch magiſtrates, as the tendency of ſuch a publication is to interrupt the harmony ſubſiſting between two countries, the libel aſſumes a ſtill more criminal complexion." In K. B. Feb. 21, 1803.

Upon this doctrine, we have the following very ſpirited remarks in the Monthly Magazine: "The monſtrous and inconſiſtent doctrines which have been lately maintained in caſes of libel have given a juſt and ſerious alarm to the real friends of the Britiſh conſtitution; and, if the aſſertions of *lawyers* are not counteracted by the exertions of *juries*, they will extend to ſuch an exceſs as to be fatal to the liberty of the preſs, which was ſo juſtly a ſubject of eulogium with our preſent worthy and conſtitutional miniſter. Mr. Fox's bill has re-inveſted juries with a great and conſtitutional power; but this power does not ſeem to have been hitherto felt, and much leſs acted upon, by juries as it ought to have been, and as might have been expected from the ſpirit of Engliſhmen. The caſe of Johnſon, who was convicted merely for an act of his ſhopman, the ſupplying a cuſtomer with Mr. Wakefield's pamphlet, not publiſhed by himſelf, in his, Johnſon's, abſence, and while he was perfectly unconſcious of the tranſaction, was, to ſay the leaſt of it, a *hard* caſe. The verdict, I apprehend, ſhould be founded on the words of the indictment. Now the words of the indictment are, 'that he, the ſaid A. B. being a wicked and ſeditious perſon, did, with a wicked and malicious *intention*, ſell or publiſh, &c. &c.' Now how could Johnſon ſell or publiſh with a wicked and malicious *intention* what he did not ſell or publiſh at all? and does not the oath of a juryman confine him to give a true verdict, according to the matter alleged in the indictment? But even this is a matter of ſmall conſequence compared with the *new*, and I apprehend unfounded and unconſtitutional, doctrine, firſt introduced in the caſe of lord George Gordon, and ſince proceeded upon in the caſe of the proprietor of the Courier, and of Peltier:—that of the right of *foreign powers* to inſtitute criminal proceſſes in our courts for libel. If thoſe whom we have been accuſtomed to regard as the oracles of Britiſh law are deſerving of credit, I do not heſitate to pronounce ſuch a doctrine, in the language of the celebrated Iriſh Reſolutions, 'unconſtitutional, illegal, and a grievance;' deſtructive of the truth of hiſtory, and dangerous in corrupting the channels of public information, which, even for the ſecurity of the government itſelf, ſhould be left as open as poſſible.

"A libel is a crime, according to Blackſtone, only as 'a breach of the *public peace*, by ſtirring up the objects of it to revenge, and perhaps to bloodſhed.' In this point of view, a criticiſm or a cenſure on a foreign government cannot poſſibly be a breach of the peace in this country, ſince the object of it is out of reach. The remedy, in this caſe, is in the hands of the foreign potentate himſelf, by prohibiting the circulation of ſuch libels in his own dominions. Only couple this doctrine with another, which has alſo been lately introduced in our courts, viz. 'that a libel may affect the *dead* as well as the living,' and then it will be ground for an information, to arraign the cruelty, tyranny, and ambition, of Louis XIV Carry the doctrine a little further, and ſuppoſe the pope might have inſtituted a proſecution for libel in an Engliſh court of juſtice;—where would our reformed religion now have been? But this, thanks to the wiſdom and ſpirit of our anceſtors, was not the doctrine of *thoſe times*, which eſtabliſhed the Engliſh church, and the Engliſh conſtitution. A well-known and rather trite anecdote will ſerve to convince us of what was the doctrine of thoſe times: When lord Moleſworth publiſhed his celebrated Account of Denmark, many paſſages were found extremely offenſive to the reigning monarch, who, by his ambaſſador, complained of the inſult, and demanded from our William III. *the head of the author.* 'Tell his Daniſh majeſty,' ſaid king William, 'that I cannot by my own authority diſpoſe of the heads of my ſubjects; nor can I grant to his majeſty any redreſs, except that I can communicate to lord Moleſworth the nature of this application, who will, I dare ſay, inſert it in the next edition of his book'."

When a perſon is brought before the court to receive judgment for a libel, his conduct ſubſequent to his conviction may be taken into conſideration, either by way of aggravation or mitigation of his puniſhment. 3 *Term Rep.* 432.

Judge Blackſtone obſerves, that, where blaſphemous, immoral, treaſonable, and ſchiſmatical, ſeditious, or ſcandalous, libels, are puniſhed by the Engliſh law, ſome with a greater and others with a leſs degree of ſeverity, the li-

berty of the preſs, properly underſtood, is by no means infringed or violated. See LIBERTY *of the* PRESS.

LI'BEL, or LIBELLUS, "a little book," in the ſpiritual court ſignifies the original declaration of any action in the civil law. 2 *Edw.* VI. c. 53. The libel uſed in eccleſiaſtical proceedings conſiſts of three parts. 1. The major propoſition, which ſhows a juſt cauſe of the petition. 2. The narration, or minor propoſition. 3. The concluſion, or concluſive petition, which conjoins both propoſitions. *Blackſt. Comm.* vol. iii.

LIBEL, in the law of Scotland, is uſed for a criminal accuſation or indictment.

To LI'BEL, *v. n.* To ſpread defamation, written or printed: it is now commonly uſed as an active verb, without the prepoſition *againſt*:

Sweet ſcrawls to fly about the ſtreets of Rome:
What's this but *libelling againſt* the ſenate? *Shakeſpeare.*

He, like a privileg'd ſpy, whom nothing can
Diſcredit, *libels* now *'gainſt* each great man. *Donne.*

To LI'BEL, *v. a.* To ſatiriſe; to lampoon.—Is the peerage of England diſhonoured when a peer ſuffers for his treaſon? if he be *libelled*, or any way defamed, he has his ſcandalum magnatum to puniſh the offender. *Dryden.*

But what ſo pure which envious tongues will ſpare?
Some wicked wits have *libell'd* all the fair. *Pope.*

LIBEL'LA, *ſ.* A piece of money amongſt the Romans, being the tenth part of the denarius, and equal in value to the as. It was called *libella*, as being a little pound, becauſe equal to a pound of braſs. Its value in our money is a halfpenny farthing. See MONEY.

LIBELLAT'ICI, an ancient kind of apoſtates from Chriſtianity, under the perſecution of Decius; who, to prevent their being obliged to renounce the faith, and ſacrifice to idols in public, made application to the magiſtrates, and abjured their faith in private; obtaining certificates of them, either by intreaty or by money; by which they were atteſted to have complied with the orders of the emperor; and were thereby ſheltered from any farther moleſtation on account of their religion. Theſe certificates were called *libelli*; whence the people who obtained them came to be denominated, *libellatici*. Others, particularly the centuriators of Madgebourg, are of opinion, that the libellatici were only ſuch as furniſhed the magiſtrates with money, to ſcreen them from proſecution, and from being obliged to renounce Chriſtianity. M. Tillemont retains ſomething of each opinion.

LI'BELLER, *ſ.* One who writes libels; one who defames another in writing; a lampooner.—Our common *libellers* are as free from the imputation of wit as of morality. *Dryden.*

LI'BELLING, *ſ.* The act of writing libels; the act of defaming.

LIB'ELLOUS, *adj.* Defamatory.—It was the moſt malicious ſurmiſe that had ever been brewed, howſoever countenanced by a *libellous* pamphlet. *Wotton.*

LIBEL'LULA, *ſ.* The DRAGON-fly; a genus of neuropterous inſects. Generic characters—Jaws always more than two in number, and fitted for gratifying that voracity by which the libellulæ are diſtinguiſhed: antennæ ſhorter than the thorax; wings always extended, and in ſome meaſure ſeveral inches from tip to tip. The male is diſtinguiſhed by a kind of hooked forceps, by which the extremity of the tail is terminated.

The dragon-flies, ſometimes improperly called horſe-ſtingers, are univerſally known, from their large ſize, and the frequency with which they every-where appear. The organs of generation are differently ſituated in the male and female of this tribe; in the former, they are placed upon the under-ſide of that part of the abdomen which lies between the inferior wings; while, in the latter, they are found at the tip or end of the abdomen. The ſeaſon of love in all inſects, from the brevity of their lives, is neceſſarily ſhort, but it is buſily employed. It is only the large inſects, ſuch as the libellulæ, that are frequently ſeen celebrating the rites of Venus; and among them the operation is performed with a frequency and diſpatch that ſeems perfectly to correſpond with the tranſient nature of their exiſtence, and the numerous race they tranſmit to poſterity. The addreſſes of the libellula to his female ſeem carried on in a rough and intrepid, but efficacious, manner. He hovers about on the wing, till the object of his amours makes her appearance; he then watches an opportunity of ſeizing her by the head with thoſe pincers with which his tail is armed. It is thus that the raviſher travels through the air, till the female, yielding to ſuperior ſtrength, perhaps to inclination, forms her body into a circle, that terminates at the genitals of the male, and thus accompliſhes the great purpoſe of nature. It is while theſe kind of rapes are perpetrating, that the libellulæ are ſeen coupled in the air, exhibiting the form of a ring. *Barbut*, p. 205.

This inſect exhibits an inſtance ſcarcely leſs ſtriking than the butterfly of that ſtrange diſſimilitude in point of form under which one and the ſame animal is deſtined to appear in the different periods of its exiſtence. Perhaps few perſons not particularly converſant in the hiſtory of inſects would imagine that theſe highly-brilliant and lively animals, which may be ſeen flying with ſuch ſtrength and rapidity round the meadows, and purſuing the ſmaller inſects with the velocity of a hawk, had once been inhabitants of the water, and that they had reſided for a very long ſpace of time in that element before they aſſumed their flying form. However, the female, when pregnant, retires to the ſide of a ditch or pond, when, by the aſſiſtance of a ſtick or reed, ſhe creeps, or lowers herſelf down, by moving backwards, till the tip of the tail is immerged about half an inch in the water; ſhe is then ſeized with a kind of trembling or ſhaking of the body, during which effort ſhe depoſits a ſingle egg in the water; afterwards ſhe immerges her tail a ſecond and a third time, when the ſame operations are performed. The tail is withdrawn from the water by contracting its annuli; and, by the preſſure of theſe upon each other, the egg is gradually forced from the ovary to the extremity of the tail, from whence it is ultimately ſeparated, by ſhaking that part in the water. The eggs thus protruded by the libellulæ are of a white colour and oblong form, reſembling thoſe produced by the Muſca vomitoria, or common blow-fly. The caterpillar, which iſſues from theſe eggs, at firſt feeds on ſmall aquatic inſects: gradually acquiring more voracity and boldneſs in the purſuit, in proportion as its ſtrength increaſes, at length it becomes ſo inſatiable, that it is ſaid to devour even thoſe of its own kind. The form and colour of theſe worms are extremely diſguſting: beneath the head is placed an inſtrument excellently adapted for ſeizing and holding their prey: it is furniſhed with a forceps at the end, and can be advanced or drawn back with all the agility of the human hand.

The caterpillar remains in the ſame ſtate for nearly twelve months before it has attained to its full ſize; when the period of tranſformation has arrived, the worm repairs to the margin of its pond in queſt of a convenient place of abode during the ſeaſon of its inaction. It there attaches itſelf to a plant or piece of dry wood; and the ſkin, which has gradually become parched and brittle, at laſt ſplits oppoſite to the upper part of the thorax. Through this aperture the winged inſect quickly puſhes its way; and, being thus extricated from confinement, begins to expand its wings, to flutter, and finally to launch into the air, with that gracefulneſs and eaſe peculiar to this majeſtic tribe. The wings, however, at firſt, are very ſhort, tender, and contracted, all the ramifications or fibres having been compreſſed within the ſmall compaſs of the oblong ſcales on the back of the larva, or rather pupa; but in the ſpace of about half an hour they are fully expanded, and have acquired the ſolidity and ſtrength neceſſary for flight. This curious proceſs of the evolution or birth of the libellula generally takes place in the morning, and during a clear ſunſhine. The remaining part of the animal's life is but ſhort in compariſon with that which it paſſed

paſſed in its aquatic ſtate; the froſts of the cloſe of autumn deſtroying the whole race. They are alſo the prey of ſeveral ſorts of birds. It is impoſſible not to be ſtruck with admiration on contemplating the changes of the libellula, which, while an inhabitant of the water, would periſh by any long expoſure to the air, while the complete animal, once eſcaped from the pupa, would as effectually be deſtroyed by ſubmerſion under the water, of which, not an hour before, it was the legitimate or natural inhabitant. No particular time ſeems appointed for the metamorphoſis of the libellula into its winged ſtate; the different ſpecies are continually emerging from the water from April to Auguſt; for, as the times of copulation are various and frequent during the whole ſummer, ſo the larvæ or caterpillars are found of different ſizes, according to their age. The ſmaller kinds, however, generally make their appearance before the largeſt; becauſe, from breeding in ſhallow water, they ſooner feel the influence of the ſun on the approach of ſpring.

The manners of theſe inſects muſt no doubt be greatly altered by a change, which not only confers upon them a new form, but introduces them into a different element. The complete inſect, in its winged ſtate, however, ſtill continues to purſue the ſame food, and remains inſectivorous. The lepidopterous inſects, the butterflies, and phalænæ, are deſtined for the ſupport of the larger libellulæ; they are a part of thoſe numerous tribes that are appointed to confine thoſe prolific genera within due bounds. See the article ENTOMOLOGY, vol. vi. p. 829 and 838, and the Engravings there referred to. There are fifty-ſix ſpecies, beſides many varieties: they are divided and ſubdivided as follows.

I. *Wings expanded when at reſt.*

a. Dorſal diviſion of the lip very minute.

1. Libellula quadri-maculata, the four ſpotted dragon-fly. Specific character, a blackiſh ſpot on the lower wings at the baſe, and on each wing in the middle on the fore-part; abdomen depreſſed, downy. The head is brown, and the fore-part above the jaws of a greeniſh yellow. The thorax is brown, but covered on the upper part with grey hairs. The abdomen is broad at top, but decreaſes downwards, and is terminated by two cylindrical appendices: the colour of it is brown; above, it is ſomewhat hairy on the ſides. The four wings are yellow at their baſe and along part of the exterior edge, beſides which the inferior ones have, beneath the yellow colour, a ſpot of very dark brown. But what eaſily diſtinguiſhes this ſpecies from all others, is its having two marginal ſpots on the outward edge of each wing; one towards the extremity, at the place where the other ſpecies have one, and a ſecond almoſt on the middle of the outer edge, which in that part is ſtreightened; both are of a dark brown. The ſpecies is ſcarce in this country; and is ſhown on the Plate of LERNÆA, &c. at fig. 14.

2. Libellula depreſſa, the flat dragon-fly: wings expanded when at reſt, blackiſh at the baſe; abdomen depreſſed, yellowiſh at the ſides. The body is ſhort and broad. The male is of a bright ſky-blue, with the ſides of the body yellow; the female of a fine brown or bay, with yellow ſides alſo. The wings in both ſexes are tranſparent, except at the ſhoulders, where they are each marked by a broad bed or patch of brown with a ſtripe of yellow; the tips of each wing have alſo a ſmall oblong-ſquare black ſpot on the outer margin. The larva of this ſpecies is of a greeniſh-brown colour.

3. Libellula trimaculata, the three-ſpotted dragon-fly: wings hyaline, with a ferruginous ſpot at the baſe and band in the middle. Inhabits Carolina.

4. Libellula bifaſciata, the two-banded dragon-fly: wings hyaline, with a brown ſpot at the baſe, and two bands. Thorax villous-brown, with two yellow lines under the wings; abdomen depreſſed brown, the ſides yellowiſh. Inhabits America.

5. Libellula quadri-punctata, the four-dotted dragon-fly: wings white; lower-ones black at the baſe with a yellow line; all with a black dot; abdomen cylindrical. Thorax downy, greeniſh; front veſicular, green; abdomen greeniſh at the baſe and blackiſh at the tip; all the wings with a black dot in the middle at the rib, and a common oblong ſtigma at the tip. Inhabits America.

6. Libellula flaveola, the yellow dragon-fly: wings pale yellow at the baſe. Wings ſometimes without the yellow ſpot. Inhabits Europe.

7. Libellula lineata, the lineated dragon-fly: wings white with a yellowiſh baſe and black band and tip; abdomen yellow with a lateral black line. Head and thorax yellow; abdomen compreſſed. Inhabits India.

8. Libellula ſtigmatizans, the marked dragon-fly: yellowiſh; wings with a brown ſpot, the tip brown with a ſnowy ſtigma. Abdomen with black lines; wings hyaline. Inhabits New Holland. In the muſeum of ſir Joſeph Banks.

9. Libellula oculata, the eyed dragon-fly: yellowiſh; upper-wings hyaline at the tip, lower ones at the margin, with a ſnowy ſtigma. Inhabits New Holland; reſembles the preceding.

10. Libellula Indica, the Indian dragon-fly: wings varied with yellow and brown; and white at the tip, lower ones with a blue ſpot at the baſe. Body green or brown; tip of the wings hyaline. Inhabits India.

11. Libellula murcia, the lazy dragon-fly: bronzed; wings whitiſh ſpotted with brown, lower ones yellow at the baſe. Inhabits India.

12. Libellula veſiculoſa, the veſicular dragon-fly: wings white; elevated veſicular front and thorax yellow, immaculate. Abdomen cylindrical, the ſegments pale at the baſe and black at the tip, tail with cylindrical ſcales. Inhabits America; large.

13. Libellula rubicunda, the red dragon-fly: lower wings only blackiſh at the baſe; body ſquare. In one ſex the back is ſpotted with red, in the other with yellow. Inhabits Europe.

14. Libellula vulgatiſſima, the very-common dragon-fly: thorax yellow, with eight black ſtreaks. Inhabits Europe.

15. Libellula obſcura, the duſky dragon-fly: all the wings ferruginous; body duſky. Abdomen cylindrical; wings with an oblong brown marginal dot. Inhabits America; ſize of L. flaveola.

16. Libellula vulgata, the common dragon-fly: wings hyaline, immaculate; abdomen cylindrical, rufous. Inhabits Europe.

17. Libellula Sibirica, the Siberian dragon-fly: wings hyaline, with a tranſverſe broad ferruginous band towards the tip; body reddiſh. Inhabits Siberia.

18. Libellula ſinuata, the crooked dragon-fly: wings flat, longitudinally ſinuate, and black on the thicker margin, with a white ſtigma. In the Britiſh Muſeum. Body bluiſh.

19. Libellula cancellata, the barred dragon-fly: wings immaculate at the baſe; back and ſides of the abdomen interrupted by yellow. Inhabits Europe.

20. Libellula Pedemontana, the Piedmonteſe dragon-fly: wings flat, cinereous with a brown band at the tip. Small. Body obſcure yellowiſh. Inhabits Italy.

21. Libellula faſciata, the banded dragon-fly: wings flat, brown, with a white ſtreak. Inhabits India.

22. Libellula umbrata, the clouded dragon-fly: wings flat, with a brown band. Inhabits South America.

23. Libellula ſerva: wings flat, white, with an oblong black ſpot at the baſe, and band in the middle. Inhabits China; reſembles the preceding. Body cylindrical.

24. Libellula notata: wings flat, with white ſpots and tip. Inhabits Africa. In the muſeum of ſir Joſeph Banks.

25. Libellula dimidiata: wings flat, and black from the baſe to the middle. Inhabits America.

26. Libellula equeſtris, the horſe-ſtinger: wings half black, with a ſnowy band in the middle. In the muſeum of ſir Joſeph Banks. Head brown, with a yellow dorſal line;

ſine; all the wings black from the baſe to the middle; then a ſnowy band; the tip hyaline, with a brown ſpot. Inhabits Africa.

27. Libellula fluctuans: wings black, tipt with white. Body brown: front veſicular, yellowiſh. Inhabits the Eaſt Indies; ſmall.

28. Libellula nebuloſa: wings white, tipt with black. Body black; mouth yellow; ſides of the thorax and abdomen ſpotted with yellow; tail with yellow appendages. Inhabits the Eaſt Indies; ſmall.

29. Libellula Chinenſis: upper-wings faint, teſtaceous; lower-ones green, tipt with brown. Inhabits China.

30. Libellula verſicolor: wings flat, white, with three black and three cinereous ſpots. Head brown, ſpotted with yellow; thorax brown, with two yellow lines each ſide under the wings; abdomen brown. Inhabits America. In the muſeum of Dr. Hunter.

31. Libellula vibrans: wings flat, white, with a black ſpot in the middle, the tips ferruginous. In the Britiſh Muſeum.

32. Libellula Americana: wings purpliſh, with a white band; upper-pair tipt with white, lower-ones with a white line at the baſe. Body green. Inhabits India.

33. Libellula marginata: wings black; upper-pair with a white ſpot at the tip; lower ones edged with white. Front blue; eyes brown, dotted with yellow; thorax black; abdomen brown, whitiſh at the baſe. Inhabits Africa. In the muſeum of ſir Joſeph Banks.

34. Libellula ferruginea: wings white, yellow at the baſe; body red. Inhabits China.

35. Libellula tomentoſa: wings white; body downy, variegated with brown and green. Front blue; abdomen cylindrical, black; the ſegments with a greeniſh dot each ſide. Inhabits America; ſmall.

36. Libellula ænea: wings hyaline; thorax green bronzed. Inhabits Europe.

37. Libellula cyanea: wings white, with a ſnowy ſpot terminated by a brown one; body blue. Inhabits America.

38. Libellula ſex-maculata: wings with three black coſtal ſpots, the laſt with a ſnowy ſtigma; lower-ones with yellowiſh bands. Head yellowiſh; thorax yellowiſh, with black lines; abdomen flat, yellowiſh with black lines. Inhabits China; ſmall.

39. Libellula contaminata: yellowiſh; wings whitiſh, with a yellowiſh ſhade in the middle. Head yellowiſh, crown brown; thorax and abdomen yellowiſh. Inhabits Eaſt India; ſmall.

40. Libellula eponina: wings yellowiſh, with about three black bands. Head and thorax yellowiſh; abdomen cylindrical, with a yellowiſh dorſal and lateral line; all the wings with a white coſtal ſpot near the tip. Inhabits Carolina.

41. Libellula varia: wings varied with yellow and brown, the tip with a white ſpot terminated by a black one. Head yellowiſh; thorax duſky, with three ſulphur lines under the wings; abdomen ſulphur, with three black lateral lines. Inhabits Africa.

42. Libellula juncea: wings with a blackiſh acceſſory membrane; thorax with ſix yellow lines; abdomen tapering towards the baſe. Inhabits Europe.

43. Libellula Carolina: wings whitiſh; lower-ones indented, ferruginous at the baſe; thorax brown. Inhabits America. See ENTOMOLOGY, Plate I. fig. 10, 11. Plate II. fig. 15, 16.

44. Libellula Capenſis: wings whitiſh, every-where ſpotted and dotted with brown. Inhabits the Cape of Good Hope.

45. Libellula tricolor: wings variegated with brown, bluiſh, and yellow; the tip hyaline. Inhabits India.

46. Libellula rubra: reddiſh; wings with a ferruginous baſe, and marginal lines. Inhabits out of Europe.

6. Diviſions of the lip equal. Æſhna.

47. Libellula forcipata, the hooked dragon-fly: thorax black, with various yellowiſh characters; tail with three incurved claws. This is a large inſect, expanding four inches and a half. The noſe is yellow, having a black line on the prominent part; the thorax is black, with ſeveral broad yellow ſtripes, two of which appear on the front, and two others between the ligaments of each pair of wings; the abdomen is alſo black, having two ſtreaks reſembling a creſcent on each ſegment; the wings are tranſparent; and, but for a ſlight tinge of amber, almoſt white.

48. Libellula grandis, the great dragon-fly: the largeſt of this genus found in Britain, and perhaps not inferior in bulk to any inſect which this country produces. The fore-part of the head is yellow; the eyes brown, and ſo very large, that they meet upon the top of the head. See the Plate, fig. 15. The thorax is dun-coloured, with two oblique bands on each ſide, of a lemon-colour. The abdomen, which is very long, is likewiſe of a deep buff-colour, often ſpotted with white upon the top and bottom of each ſegment; the ſmall appendages, which terminate the abdomen, are very long; the wings have more or leſs of a yellow complexion, and are diſtinguiſhed by a brown ſpot on the exterior edges. This inſect makes its appearance principally towards the decline of ſummer, and is an animal of ſingular beauty; its general length is about three inches from head to tail; and the wings, when expanded, meaſure near four inches from tip to tip; the head is very large, and affixed to the thorax by an extremely ſlender neck; the eyes occupy by far the greateſt part of the head, and are of a pearly blue-grey caſt, with a varying luſtre. In its motions it is extremely rapid, flying about in purſuit of its prey during the middle of the day, and is at this time taken with extreme difficulty, darting off on the ſlighteſt alarm from the ſpot on which it had ſettled, and in the ſpace of a ſecond or two flying to a vaſt diſtance. During the early morning hours, and thoſe of evening, it is eaſily taken; at ſuch times it is obſerved to ſit with its wings expanded, but in a perfectly inert ſtate; and will ſuffer itſelf to be readily ſeized by one of its wings, without attempting to ſtir from its place.

49. Libellula variegata, the variegated dragon-fly: thorax with two yellow lines each ſide; wings with a white ſpot at the baſe. Body brown; mouth yellowiſh with a black dot at the baſe; abdomen round ferruginous, the ſegments edged with black, and in each a white ſpot divided by a black line. Inhabits Terra del Fuego.

50. Libellula clavata, the clubbed dragon-fly: abdomen clavate, gibbous at the baſe; body variegated with brown and green. Head veſicular green; thorax green with black lines; abdomen green with black ſtreaks, the middle thinner and black with lateral yellow ſpots, the tip thickened black, with a white tail. Inhabits China.

51. Libellula minuta, the ſmall dragon-fly: abdomen yellow, with two black lines; lower-wings yellow with two black ſpots. Head yellow, eyes brown; thorax with yellow lines beneath; abdomen with two black lines above and one beneath; upper-wings black at the baſe with a yellow ſpot. Inhabits China.

II. *Wings erect when at reſt; eyes diſtinct; outer diviſions of the lip bifid.* Agrion.

52. Libellula virgo, the maiden dragon-fly. This beautiful libellula has a large head; reticulated prominent red eyes that are not in contact with each other. The ſpace intervening between the eyes, exhibits the three brown ſtemmata placed in triangle. The neck, on which the head is reſted, is ſhort and narrow. The thorax is larger, of a bright green or blue colour. From the inferior part of the thorax ariſe the ſix legs, long and charged with a double row of ſmall ſpines, a circumſtance common to this genus. From the upper part come forth the four wings, all of equal ſize: they are much reticulated, and have on their middle a large cloud of a bluiſh-brown that occupies above one half of them: the baſe and extremity of the wings are the only parts not charged with the ſame

colour, being only of a yellowiſh hue: on the outer edge of the wing there is no ſpot, which is uncommon in this genus. The abdomen, long, cylindric, and conſiſting of nine or ten ſegments, is of a blue colour, ſometimes bordering on green, and very bright. This beautiful inſect is met with in meadows on the banks of ponds. See fig. 16.

53. Libellula puella, the damſel dragon-fly. The wings of this inſect are whitiſh, nicely veined, with a black ſpot on the exterior edge towards the extremity. The colour of the head is a leaden blue, with brown eyes. The thorax, which is blue, is adorned with three brown longitudinal bands, one on the middle and two narrower ones on the ſides. The ſegments of the abdomen are blue, with a black ring towards their poſterior extremity. They are nine in number, the two laſt larger than the reſt, and entirely brown. This inſect is found in meadows. See fig. 17. Fig. 18 is a variety of the ſame, the body being of a fine red.

54. Libellula ciliata, the hairy dragon-fly: green-bronzed; abdomen brown; legs fringed black. Head and thorax bronzed; abdomen cylindrical. Inhabits Coromandel.

55. Libellula nobilitata, the noble dragon-fly: upper-wings duſky; lower-ones ſilky-green tipt with black. Body gloſſy green; lower-wings beneath black. Inhabits South America.

56. Libellula linearis, the long-bellied dragon-fly. The exotic libellulæ are very numerous; among the moſt remarkable may be numbered this ſpecies, which is figured in the elegant entomological work of Mr. Drury. It is a native of the Cape of Good Hope, and is diſtinguiſhed by the exceſſive length of its ſlender body, which meaſures not leſs than five inches and a half in length, though ſcarcely exceeding the tenth of an inch in diameter. The wings are tranſparent, of a ſlender or narrow ſhape, as in the *puella*, to which this ſpecies is allied in form; and meaſures five inches and a half in extent from tip to tip. The colour of the head and thorax is brown, with a yellowiſh ſtripe on each ſide; and the body is of a deep mazarine blue.

LIBEL'LUS, *ſ.* [Lat. a little book.] The name given to the bills which were put up amongſt the Romans, giving notice of the time when a ſhow of gladiators would be exhibited, with the number of combatants, and other circumſtances. Theſe bills were ſometimes termed *edicta*; and were frequently attended with pictures repreſenting the engagement of ſome celebrated gladiators. This cuſtom is alluded to by Horace, lib. ii. Sat. vii. 96. &c.

There was alſo the *famoſus libellus*, a defamatory libel. Seneca calls them *contumelioſi libelli*, infamous rhymes, which by a Roman ordinance were puniſhable with death. *Libellus* alſo in the civil-law ſignifies the declaration, or ſtate of the proſecutor's charge againſt the defendant; and it has the like ſignification in our ſpiritual courts. See LIBEL.

LI'BEN, a town of Bohemia, in the circle of Leitmeritz: eleven miles north of Leitmeritz.

LI'BEN, a town of Bohemia, in the circle of Kaurzim: five miles north-eaſt of Prague.

LI'BENAU, a town of Bohemia, in the circle of Boleſlaw: four miles eaſt of Aycha.

LI'BENAU. See LUBBENAU.

LIBENTI'NA, a ſurname of Venus, who had a temple at Rome, where the young women uſed to dedicate the toys and childiſh amuſements of their youth, when arrived at nubile years. *Varro.*

LI'BER, a ſurname of Bacchus, which ſignifies *free*. He received this name from his delivering ſome cities of Bœotia from ſlavery; or, according to others, becauſe wine, of which he was the patron, delivered mankind from their cares, and made them ſpeak with freedom and unconcern. The word is often uſed for wine itſelf. *Seneca de Tranq.*

LI'BER, *ſ.* An ancient Latin word for the thin inner bark or rind of a tree; which, being uſed to write upon before the invention of parchment or paper, is ſuppoſed to have given its name to a book. For the nature and functions of the *liber*, ſee BARK, vol. ii.

LI'BER NI'GER. See BLACK BOOKS, vol. iii. p. 76.

LI'BER NI'GER DO'MUS RE'GIS, the title of a book in which there is an account of the houſehold eſtabliſhment of king Edward IV. and of the ſeveral muſicians retained in his ſervice, as well for his private amuſement as for the ſervice of his chapel.

LIB'ERA, in mythology, the name of a goddeſs, which Cicero, in his book of the Gods, repreſents as the daughter of Jupiter and Ceres. Ovid in his Faſti ſays, that the name was given by Bacchus to Ariadne. Libera is exhibited on medals, as a kind of female Bacchus, crowned with vine-leaves.

LIB'ERA, *ſ.* in law, a livery or delivery of ſo much corn or graſs to a cuſtomary tenant, who cut down or prepared the ſaid graſs or corn, and received ſome part or ſmall portion of it as a reward or gratuity. *Cowell.*

LIB'ERA CHASE'A HABEN'DA, a judicial writ granted to a perſon for a free chaſe belonging to his manor, after proof made by inquiry of a jury, that the ſame of right belongs to him. *Reg. Orig.* 36.

LIB'ERA PISCA'RIA, a free fiſhery, which being granted to a perſon, gives him a property in the fiſh, &c. 2 *Salk.* 637.

LIB'ERAL, *adj.* [Fr. from *liberalis*, Lat.] Not low in birth; not low in mind:

Where gentle court and gracious delight
She to them made, with mildneſſe virginall
Shewing herſelfe both wiſe and *liberall*. *Fairy Queen.*

Becoming a gentleman. Munificent; generous; bountiful; not parſimonious:

The *liberal* are ſecure alone,
For what we frankly give, for ever is our own. *Granville.*

It has *of* before the thing, and *to* before the perſon.—There is no art better than to be *liberal of* praiſe and commendation to others, in that wherein a man's ſelf hath any perfection. *Bacon's Eſſays.*—Several clergymen, otherwiſe little fond of obſcure terms, are, in their ſermons, very *liberal of* all thoſe which they find in eccleſiaſtical writers, as if it were our duty to underſtand them. *Swift.*—[Sometimes in Shakeſpeare and his cotemporaries] Licentious.—Is he not a moſt profane and *liberal* counſellor? *Othello.*

I might, if it pleas'd me, ſtand ſtill, and hear
My ſiſter made a may-game, might I not?
And give allowance to your *liberal* jeſts
Upon *his* perſon, whoſe leaſt anger would
Conſume a legion of ſuch wretched people. *Beau. and Fletcher.*

Exalted; not mean, not mechanical; as, the *liberal* arts.

LIB'ERAL ARTS, ſuch as depend more on the labour of the mind than on that of the hands; or, that conſiſt more in ſpeculation than operation; and have a greater regard to amuſement and curioſity than to neceſſity.

When we interrogate Nature, ſays M. Watelet, (an excellent French writer *de l'origine des arts liberaux*,) we are in the road to ſcience; if we ſeek to imitate her, we are in that of the arts. If the arts employ our attention, and we enquire into their origin, like an illuſtrious race, their generation is confounded with that of men. If we follow man in his progreſs through life, we ſhall find him animated with a deſire of expreſſing what he feels, of imitating what he ſees. If we follow him by the help of hiſtory, in his progreſſive ſtudy of the arts, we ſhall find him varying his modes of imitation; that his repreſentations at firſt are ſimple, afterwards complex; that is, having firſt drawn an outline or ſhape only, he has next attempted to give the relief of colour and of ſhade.

In conſidering what connection the liberal arts have with our wants, the ſame writer conſiders them as ſo many languages, or improvements of expreſſion. The moſt ſimple as well as the moſt ancient was the language of action,

or

or pantomime; to that ſucceeded articulate ſounds, or ſpeech; that of modulated ſounds, or muſic, followed, owing its origin to joy or gratitude; and theſe three modes of expreſſion, images of the thoughts, are as quick and as tranſient as they; in a moment they are gone, or they live to the memory only, not to the eye. Painting, ſculpture, and architecture, are three other languages, whoſe expreſſions, on the contrary, are permanent, and which continue to ſpeak in ages when their immediate authors are no more.

Much has been written upon the fine arts, yet ſcarcely have they ever been preciſely and ſatisfactorily defined. Among the Greeks and Romans, theſe arts had a denomination from the firſt and greateſt of all bleſſings, *liberty*: they were called the *liberal* arts, becauſe at that time they made a part of the education of free men only; and we learn from Pliny that they began not to degenerate till riches and patronage became the price of adulation and ſervitude. Upon the revival of letters, or rather of the human mind, (ſince we regard as abſolute death that lethargy in which it lay under the dominion of barbariſm,) our anceſtors, to diſtinguiſh the arts they were labouring to revive from the mere mechanical arts, continued the ſame denomination which had been uſed by the Greeks and Romans; they called them *liberal*, though *liberty* no longer remained on the earth. To this appellation, which, like ſo many others borrowed from the Greek and Latin tongues, retained no mark of truth, they added another, more vague indeed, but much more juſt, and which ſeems to have ſuperſeded the former. The liberal arts are now more commonly called the *fine arts*; whether becauſe they have their origin in the fineſt faculties of our being, the thought, the imagination, the ſentiment; or becauſe their object is to embelliſh all the fineſt productions of nature.

Among the Greeks and Romans, the dominion of the liberal arts was much more extenſive than is that of the fine arts with us. The liberal arts included muſic, dancing, drawing, grammar, hiſtory, eloquence, poetry, geometry, racing, wreſtling, riding, and the various exerciſes of the gymnaſium. But, at preſent, ſince our political conſtitution neither forbids nor commands theſe exerciſes to be uſed by any particular claſs of perſons, we in general conſider the fine arts as confined to painting, ſculpture, engraving, architecture, muſic, and dancing. We ſhould indeed have mentioned the art of poetry, and even have placed it in the fore-ground; but it is now included in the claſs of *belles lettres*, or polite literature; and certainly, in the preſent ſtate of our manners and ideas, poetry belongs to literature rather than to the arts.

The fine arts are cloſely connected with the mechanical arts; for, except in muſic and dancing, there is in each a part that is manual and mechanical. But theſe are raiſed to a certain rank by the hand of the artiſt who executes them. All human operations, as well as all human actions, are raiſed by their principles or by their effects: the hand which, to repreſent an action or an idea, grinds or lays on colours, moiſtens or moulds, or chips away the inequalities of marble, is not more degraded than by the leſs-active exerciſe of the writer, who to communicate his thoughts handles and directs a pen. While the employment is to trace ideas, expreſs the ſentiments of the heart, to paint the paſſions, to ſhow images of men or things, what ſignifies the nature of the inſtrument employed?

The firſt and moſt reſpectable of public employments could hardly exiſt without the liberal arts; it could not employ the ſenſes, but muſt be merely perſonal, interior, conſequently deprived of unanimity, without the aſſiſtance of the liberal arts; that is, without the language of action, requiſite to explain and impreſs upon the ſight of an aſſembled multitude the reſpect due to the moſt holy of inſtitutions; of ſentimental eloquence, which inſtructs, exhorts, touches, conſoles; of poetry and muſic, which, exalting our gratitude and devotion, raiſe them towards heaven, make them audible to a great number of men collected together, and cauſe them to be adopted as it were in uniſon; of an architecture, which furniſhes the means of conveniently collecting together a number of perſons of ſimilar ſentiments, and by its forms and proportions contributes to inſpire and maintain in them religious ſentiments and impreſſions; the very intent of their meeting; laſtly, painting and ſculpture, the better to impreſs on the memory objects and events connected with religious worſhip.

When we extend this idea onward to heroiſm and patriotiſm, we ſhall be convinced, that the governors of a civilized nation ought to regard the liberal arts, not as objects merely of pleaſure and of luxury, but as the expreſſions or languages of the moſt noble, important, and elevated, ſentiments, that man is ſuſceptible of. And indeed, if the perfection of theſe languages be neceſſary for expreſſing, for communicating, for impreſſing with ſtrength and dignity, the ſentiments of religion, heroiſm, and patriotiſm; if words, accents, and repreſentations, excite emulation and enthuſiaſm, the imperfection of theſe arts muſt contribute to degrade the moſt noble inſtitutions, by exciting ridicule and irony; and we know that the impreſſions made upon the ſenſes of the multitude have a greater effect upon their actions than what is directed to the reaſon, or even to the imagination. It is therefore of the greateſt importance, for maintaining the authority and reſpect of high inſtitutions, that, when they fall under the notice of the ſenſes, they ſhould be as little as poſſible expoſed to what may degrade them; and it is an indiſputable advantage for thoſe who are eſteemed at once miniſters of the Supreme Being, models of heroic virtue, and repreſentatives of the country, to carry to perfection the languages of thoſe high inſtitutions with which they are identified by the rank they hold in civilized ſociety.

In conſidering the leſs ſublime uſes of the liberal arts, and the enjoyments and pleaſures of which they are an inexhauſtible ſource, may we not ſay that governors are bound to turn the very amuſements of the people to the encouragement of the fine arts, by making every thing conformable to the order which ſhould reign in a well-regulated community?

If our governors at length turn their attention to the loweſt branches of the arts, ſtill keeping in view the connecting chain, they will find that the induſtry which promotes commerce, namely the manufactures, or thoſe profeſſions where the mechanical part is ennobled by the liberal, thoſe objects, in ſhort, in which conſiſts that ſuperfluity which the richneſs of ſtates renders neceſſary, and even indiſpenſable,—cannot preſerve an advantageous ſuperiority, unleſs the ſublimity of the higher kinds, reflecting upon the ſecond rank to increaſe pleaſure and convenience, extends its influence alſo upon the loweſt, ſo as to make good taſte completely prevalent.

Yet it is eaſy to judge, that the power of the governors of nations over the fine arts cannot be coercive: the *liberal arts* are free, as their name imports; they cannot be conſtrained, any more than thought can be confined. What aſcendency then, it may be aſked, have perſons in authority over the fine arts? Not that of forcing or conſtraining them; but of *encouraging* and *favouring* them: they may recommend them by diſcourſe; encourage them by example; favour and protect them by patroniſing works of genius and men of genius. For it may be remarked, that every word which falls from him who is at the head of a particular order of men is of importance; a painful diſtinction, no doubt, when they are aware of their own conſequence; but they muſt be amply repaid by the pleaſure of ſo eaſily directing the opinions of men to laudable purpoſes.

And, as it is the duty of thoſe who hold the firſt rank in civilized ſociety to encourage and ſuſtain the liberal arts, we may ſuppoſe it to be the intereſt and the enjoyment of a vaſt number of the middle claſſes to promote them; and thus the patrons of art are multiplied without number. Herein they find matter of recreation and of perſonal

perſonal enjoyment; and muſt naturally wiſh to promote to the utmoſt the perfection of that which pleaſes them. When our eye or ear has been pleaſed by the works of the moſt eminent artiſts, we wiſh to ſee thoſe artiſts come ſtill nearer to perfection: and, if they find themſelves generally encouraged and careſſed, they will naturally redouble their efforts to ſucceed.

In Greece we are told that the common people were ſenſible to the refinements of eloquence, the niceſt ſhades of elocution. In Italy, even now, the people, judicious and frugal, are far from being deaf to the language of the ſtatuary, the painter, the muſician, the poet; they ſacrifice portions of the time intended for labour or refection in hearing and paſſing judgment upon arts and artiſts; they honour the maſter-pieces which are publicly expoſed in thoſe favoured climes, and explain their beauties to ſtrangers that ſtop to examine them; they feel and they ſing the verſes of Taſſo and Arioſto; and by a natural inſpiration they are capable of paſſing a correct judgment upon the ſublime muſic of their places of worſhip, and of their theatres, where they gain admiſſion at a ſmall expenſe.

Nature has not been ſo indulgent in theſe ſoft ſenſations to the Britiſh Iſles: a circumſtance which forms a remarkable trait in the national character. But the neglect of the liberal arts which ſpread the gloom of barbariſm over our anceſtors of the fifteenth century, may perhaps be more juſtly aſcribed to the operation of the feudal ſyſtem. This primary cauſe prevented that excitation of the public mind, which is neceſſary to the ſucceſsful cultivation of literature. The feudal ſyſtem was a ſyſtem of ſtrict ſubordination, which preſcribed to every member of the political community his particular rank and place, and ſurrounded him by a circle, beyond which he was forbidden to paſs. In the ſpirit of this ſyſtem, till the reign of Henry IV. no farmer or mechanic was permitted to ſend his children to ſchool; and, long after that period, a licenſe from his lord was neceſſary to enable a man of this deſcription to educate a ſon for the church. Whilſt the majority of the people were thus impeded in their approach to the fountains of knowledge, it was impoſſible for learning to raiſe her drooping head. The feudal ſuperiors, exalted by the accident of their birth to the enjoyment of power and plenty, had no motive to induce them to ſubmit to the labour of ſtudy. The younger branches of noble families were early taught to depend upon their ſwords for ſubſiſtence; and the acquiſition of learning was an object far beyond the ſcope of the oppreſſed and humble vaſſal. The influence of the feudal ſyſtem in checking the progreſs of intellect will be more plainly viſible if we conſider the circumſtances of Italy during the period in queſtion. In that country the ambition of adventurers, and the extenſion of commerce, had broken the fetters of feudaliſm; and had enabled the bold and daring, in every ſpecies of exertion, to riſe to the pitch of conſequence which their talents could vindicate. Hence the dormant powers of the human mind were rouſed, and the expanſion of learning and the liberal arts was promoted. The equalizing tyranny of the petty princes who uſurped the ſovereignty of various cities of Lombardy, whilſt it repreſſed the power of the ariſtocracy, called into life the abilities of all the orders of ſociety. The precarious title by which theſe chieftains held their exalted ſtations, induced them to court popularity by freeing the maſs of the people from invidious reſtraints. During the reſidence of the popes at Avignon, and during the continuance of the ſchiſm, the feeble rule exerciſed by the pontifical deputies over the eccleſiaſtical cities enabled the inhabitants of thoſe cities to defy the authority which endeavoured to confine their exertions within the limits of ſlaviſh ſubordination. The factions which diſturbed the peace of the Italian republics, tended alſo in an eminent degree to call forth the full energy of abilities, which in other circumſtances would have been buried in obſcurity. Great talents are too frequently united with turbulence of ſpirit. In times when the order of ſociety is inverted by the tumults of civil broils, while men of peaceful ſouls retire trembling from the conflict, he who is endued with the energy of genius comes forth, conſcious of his ſtrength, and, deſpiſing every danger, exults in the hope of vindicating his claim to promotion.

Since the deſtruction of the feudal ſyſtem, the liberal arts have been making a vaſt progreſs among us. They have ſoftened our rugged unſocial nature, and increaſed our enjoyments, by ſoothing the labours and inevitable anxieties of common life.

LIBERA'LIA, feſtivals yearly celebrated in honour of Bacchus the 17th of March. Slaves were then permitted to ſpeak with freedom, and every thing bore the appearance of independence. They are much the ſame as the Dionyſia of the Greeks. *Varro.*

LIBERAL'ITY, *ſ.* Munificence; bounty; generoſity; generous profuſion:

That *liberality* is but caſt away,
Which makes us borrow what we cannot pay. *Denham.*

To LIB'ERALIZE, *v. a.* To make liberal.—Such habits, as enlarge and *liberalize* the underſtanding. *Burke.*

LIB'ERALLY, *adv.* Bounteouſly; bountifully; largely.—If any of you lack wiſdom, let him aſk of God, that giveth to all men *liberally*, and upbraideth not. *James*, i. 5. Not meanly; magnanimouſly. Licentiouſly:

Had mine own brother ſpoke thus *liberally*,
My fury ſhould have taught him better manners.
Green's Tu quoque.

LIB'ERALNESS, *ſ.* Liberality. *Scott.*

LIBERA'TE, *ſ.* A writ for the payment of a yearly penſion or other ſum of money granted under the great ſeal, and directed to the treaſurer and chamberlains of the exchequer, &c. for that purpoſe. In another ſenſe it is a writ to the ſheriff of a county for the delivery of poſſeſſion of lands and goods extended, or taken upon the forfeiture of a recognizance. Alſo a writ iſſuing out of the chancery directed to a gaoler for delivery of a priſoner that hath put in bail for his appearance. 4 *Inſt.* 116. This writ is moſt commonly uſed for delivery of goods, &c. on an extent, to the conuſee of a recognizance who hath not any abſolute intereſt in the goods, until the *liberate*. See EXECUTION and EXTENT.

To LIB'ERATE, *v. a.* [from *liberare*, Lat.] To free from confinement.—Though this verb and its derivative noun are now frequent in periodical publications of news, they are too modern to be found in any dictionary; nor has the compiler met with either (to the beſt of his recollection) in any writer he would produce for an authority. *Maſon's Suppl.*

LIBERA'TION, *ſ.* [*liberatio*, Lat.] The act of delivering. The being delivered.

LIBERA'TUS, a deacon of the church of Carthage, and a ſtrenuous defender of the *three chapters*, flouriſhed about the middle of the ſixth century. In the year 534 or 535 he was ſent to Rome, by a council of African biſhops held at Carthage, for the purpoſe of conſulting with pope John about ſome dubious points; and he was frequently employed in other affairs of importance. Several journeys were undertaken by him in the cauſe of the three chapters; and he drew up an hiſtorical memorial of the conteſts which aroſe about the opinions of Neſtorius and Eutyches, entitled "Breviarium de Cauſa Neſtorii et Eutychetis, Capitibus 24 comprehenſum." This work commences with the ordination of Neſtorius, and ends at the fifth council, in 553; and it contains a variety of uſeful particulars relative to a period of nearly one hundred and twenty-five years, which are no where elſe to be found. In 1675, father Garner publiſhed an edition of it at Paris, in 8vo. with diſſertations and notes; and it is inſerted in the fifth volume of the Collect. Concil. An appendix to this Breviarium is given by father Crabbe, in the ſecond volume of his edition of the Councils, which is not to be met with in the later collections. *Cave's Hiſt. Lit.* vol. i.

LIBERAN', a ſmall iſland in the Eaſtern Indian Sea, near the north-eaſt coaſt of the iſland of Borneo, on which are many deer. Lat. 6. 2. N. lon. 116. 8. E.

LIBER'GA, a town of Pruſſia, in the palatinate of Culm: twenty-ſix miles eaſt of Culm.

LI'BERHOF, a town of Pruſſia, in the province of Pomerelia: eighteen miles ſouth-ſouth-eaſt of Dantzic.

LIBE'RIA, in Roman antiquity, a feſtival obſerved on the 16th of the kalends of April, at which time the youth laid aſide their juvenile habit for the toga virilis, or habit peculiar to grown men. See the article TOGA.

LIB'ERICH. See LIEDBERG.

LIBE'RIUS (Pope), a native of Rome, who, having diſcharged the duties of different eccleſiaſtical offices with reputation, was choſen biſhop in 352. Immediately after his election he wrote to Athanaſius, ſummoning him to appear at Rome, and clear himſelf from the accuſations preferred againſt him by the eaſtern biſhops. It ſhould ſeem he had afterwards a much better opinion of Athanaſius, and undertook his defence with great zeal. With this view he ſent legates to a council which the emperor Conſtantine had ſummoned to meet at Arles, but had the mortification to hear they had betrayed the cauſe entruſted to them. When Liberius was told of the conduct of his deputies, he was filled with reſentment and ſorrow, and diſavowed it in the ſtrongeſt terms, as well in his declarations as in his correſpondence. He requeſted the emperor to aſſemble a new council, for the purpoſe of examining the matters in diſpute between Athanaſius and his opponents, and of reſtoring peace and tranquillity to the catholic church. A council was accordingly held at Milan in 355, at which there were 300 weſtern biſhops, and a few from the eaſt. So far from calm diſcuſſion into the merits of the queſtion, the emperor inſiſted upon it, as a preliminary meaſure, that they ſhould give their ſignatures to the condemnation of Athanaſius, and alſo to an edict containing the chief tenets of Arius, which had been publiſhed in his name. Thoſe who had reſolution to oppoſe the will of the emperor were threatened with inſtant execution, and were actually baniſhed. Such were the means uſed by Conſtantius in obtaining the ſignatures of by far the greater part of the weſtern biſhops to the condemnation of Athanaſius; but Liberius ſtill declared in his favour, and exerted himſelf, by all the means in his power, to gain others to his party. At length, the emperor having failed, by threats and proffered bribes, to gain the ſuffrages of the pope, he determined to apprehend him, and gave his order accordingly. This was executed in the dead of night, to prevent any commotion among the people, who were much attached to their biſhop; he was carried firſt to Milan, and thence to Berœa in Thrace. The hardſhips which Liberius experienced in exile, diſpoſed him to yield to conditions which at one time he would have rejected with the utmoſt indignation. He not only ſubſcribed to the condemnation of Athanaſius, but received, as catholic, the Arian confeſſion, and made other conceſſions ſtill more diſgraceful to his reputation as biſhop of the holy Roman ſee. Before he could reach Rome, the emperor had embraced the doctrine of the Semi-Arians, and obliged Liberius to do the ſame; ſo that this pontiff, who, of courſe, was always the infallible head of the church, became by turns an Athanaſian, an Arian, and a Semi-Arian. On account of his obedience, he was permitted to return to Rome, on condition that he ſhould govern the church jointly with Felix II. Liberius arrived at Rome in Auguſt 358, and entered the city in a kind of triumph, being met on the road, and received by the people at large with loud acclamations of joy. He died in September 366, after he had preſided over the Roman ſee fourteen years; and, notwithſtanding his repeated change of religious opinions, he is honoured both by the Latin and Greek churches as a ſaint. "A Dialogue with the Emperor Conſtantius" is aſcribed to Liberius; ſo, likewiſe, are twelve Letters, inſerted in the ſecond volume of the Collect. Concil. *Cave's Hiſt. Lit.*

LIBER'TAS. See LIBERTY.

LIBERTA'TE PROBAN'DA, an ancient writ which lay for ſuch as, being demanded for villeins, offered to prove themſelves free; directed to the ſheriff, that he ſhould take ſecurity of them for the proving of their freedom before the juſtices of aſſiſe, and that in the mean time they ſhould be unmoleſted. See TENURES.

LIBERTAT'IBUS ALLOCAN'DIS, a writ lying for a citizen or burgeſs, impleaded contrary to his liberty, to have his privilege allowed. *Reg. Orig.*

LIBER'TI, *ſ. pl* Thoſe, among the Romans, who had been ſlaves, but were made free.

LIB'ERTINAGE, *ſ.* Libertiniſm. *Cole.*

LIB'ERTINE, *ſ.* [*libertin*, French.] One unconfined; one at liberty:

When he ſpeaks,
The air, a charter'd *libertine*, is ſtill;
And the mute wonder lurketh in men's ears,
To ſteal his ſweet and honied ſentences. *Shakeſp. Henry* V.

One who lives without reſtraint or law.—Want of power is the only bound that a *libertine* puts to his views upon any of the ſex. *Clariſſa.*

Man, the lawleſs *libertine*, may rove,
Free and unqueſtion'd. *Rowe's Jane Shore.*

One who pays no regard to the precepts of religion.—That word may be applied to ſome few *libertines* in the audience. *Collier's View of the Stage.*

They ſay this town is full of couzenage,
Diſguiſed cheaters, prating mountebanks,
And many ſuch-like *libertines* of ſin. *Shakeſpeare.*

LIB'ERTINE, *adj.* Licentious; irreligious.—There are men that marry not, but chuſe rather a *libertine* and impure ſingle life, than to be yoked in marriage. *Bacon.*

LIB'ERTINES, in ſcripture hiſtory, the denomination of a claſs of Jews, or Jewiſh proſelytes, who had a ſynagogue at Jeruſalem, which is mentioned in the book of Acts, ch. vi. 9. As *libertinus*, or libertine, denoted a perſon who had been a ſlave, but who had obtained his freedom; or one who was the ſon of a perſon that had been a ſlave, and was afterwards made free; ſeveral learned men have ſuppoſed, that the libertines above-mentioned were Jews, or proſelytes of the Jewiſh religion, who had been ſlaves to Roman maſters, and had been made free, or the children of ſuch. In proof of this, the learned Lardner alleges, that there was a great number of Jews at Rome; and, according to Philo, they occupied a large quarter of the city; and they were chiefly ſuch as had been taken captive at ſeveral times, and had been carried into Italy, and were made free by their Roman maſters. That theſe Jews were called Libertines, appears plainly from paſſages which Lardner has cited from Tacitus, Joſephus, and Suetonius, in which they ſpeak of the baniſhment of the Jews from Rome in the reign of Tiberius. Joſephus and Suetonius expreſsly call thoſe *Jews*, whom Tacitus calls *men of the libertine race*; and, as there were many of them at Rome, it is not at all unlikely that they had a ſynagogue at Jeruſalem.

LIBERTINES, *Libertini*, in eccleſiaſtical hiſtory, a religious ſect, which aroſe in the year 1525, whoſe principal tenets were, that the Deity was the ſole operating cauſe in the mind of man, and the immediate author of all human actions; that, conſequently, the diſtinctions of good and evil, which had been eſtabliſhed with regard to thoſe actions, were falſe and groundleſs, and that men could not, properly ſpeaking, commit ſin; that religion conſiſted in the union of the ſpirit, or rational ſoul, with the Supreme Being; that all thoſe who had attained this happy union, by ſublime contemplation and elevation of mind, were then allowed to indulge, without exception or reſtraint, their appetites or paſſions; that all their actions and purſuits were then perfectly innocent; and that, after the death of the body, they were to be united to the Deity. They likewiſe ſaid that Jeſus Chriſt was nothing but a mere *je ne ſçai quoi*, compoſed of the ſpirit of God, and of the

opinion of men. Theſe maxims occaſioned their being called *libertines*; and the word has been uſed in an ill ſenſe ever ſince. The libertini ſpread principally in Holland and Brabant: their leaders were one Quintin, a Picard, Pockeſius, Ruffus, and another called Chopin, who joined with Quintin, and became his diſciple. They alſo obtained a temporary footing in France through the favour and protection of Margaret, queen of Navarre, and ſiſter of Francis I. and found patrons in ſeveral of the reformed churches. This ſect was probably a remnant of the more ancient *Beghards*, or Brethren of the Free Spirit.

LIBERTINES *of* GENEVA, were a cabal of rakes rather than of fanatics; for they made no pretences to any religious ſyſtem, but pleaded only for the liberty of leading voluptuous and immoral lives. This cabal was compoſed of a certain number of licentious citizens, who could not bear the ſevere diſcipline of Calvin, who puniſhed with rigour, not only diſſolute manners, but alſo whatever bore the aſpect of irreligion and impiety. In this turbulent cabal there were ſeveral perſons who were notorious, not only for their diſſolute and ſcandalous manner of living, but alſo for their atheiſtical impiety and contempt of all religion. To this odious claſs belonged one Gruet, who denied the divinity of the Chriſtian religion, the immortality of the ſoul, the difference between moral good and evil, and rejected with diſdain the doctrines that are held moſt ſacred among Chriſtians; for which impieties he was at laſt brought before the civil tribunal, in the year 1550, and condemned to death. *Moſheim's Eccl. Hiſt.* vol. iv.

LIBER'TINISM, *ſ.* [from *libertine.*] Irreligion; licentiouſneſs of opinions and practice.—That ſpirit of religion and ſeriouſneſs vaniſhed all at once, and a ſpirit of liberty and *libertiniſm*, of infidelity and profaneneſs, ſtarted up in the room of it. *Atterbury's Sermons.*

LIBERTIN'ITY, *ſ.* The ſtate of one that is made free. *Scott.*

LIB'ERTON, a town of Scotland, in the county of Edinburgh: two miles ſouth of Edinburgh.

LIB'ERTON, a town of Scotland, in the county of Lanerk: ſeven miles eaſt of Lanerk.

LIBER'TUS, or LIBERTI'NUS, *ſ.* Among the Romans, a *freed-man*, or a perſon ſet free from a legal ſervitude. Theſe ſtill retained ſome mark of their ancient ſtate; he who made a ſlave free having a right of patronage over the libertus; ſo that, if the latter failed of ſhowing due reſpect to his patron, he was reſtored to his ſervitude; and, if the libertus died without children, his patron was his heir. In the beginning of the republic, *libertinus* denoted the ſon of a libertus, or freed-man; but afterwards, before the time of Cicero, and under the emperors, the terms libertus and libertinus, as Suetonius has remarked, were uſed as ſynonymous.

LIB'ERTY, *ſ.* [*liberté*, Fr. *libertas*, Lat.] Freedom, as oppoſed to ſlavery.—My maſter knows of your being here, and hath threatened to put me into everlaſting *liberty*, if I tell you of it; for he ſwears, he'll turn me away. *Shakeſpeare.*

O *liberty!* thou goddeſs, heav'nly bright!
Profuſe of bliſs, and pregnant with delight,
Eternal pleaſures in thy preſence reign. *Addiſon.*

Exemption from tyranny or inordinate government:

Juſtly thou abhorr'ſt
The ſon, who, on the quiet ſtate of man
Such trouble brought, affecting to ſubdue
Rational *liberty*; yet know withal,
Since thy original lapſe, true *liberty*
Is loſt, which always with right reaſon dwells. *Milton.*

Freedom, as oppoſed to neceſſity.—*Liberty* is the power in any agent to do, or forbear, any particular action, according to the determination, or thought of the mind, whereby either of them is preferred to the other.—As it is in the motions of the body, ſo it is in the thoughts of our minds: where any one is ſuch, that we have power to take it up, or lay it by, according to the preference of the mind, there we are at *liberty*. *Locke.* See the article METAPHYSICS.—Privilege; exemption; immunity.—His majeſty gave not an intire country to any, much leſs did he grant jura regalia, or any extraordinary *liberties*. *Davies.*—Relaxation of reſtraint: as, He ſees himſelf at *liberty* to chuſe his condition.—Licenſe they mean when they cry *liberty*. *Milton.*—Leave; permiſſion.—I ſhall take the *liberty* to conſider a third ground, which, with ſome men, has the ſame authority. *Locke.*

LIBERTY, in its moſt general ſignification, is ſaid to be a power to do as one thinks fit, unleſs reſtrained by the law of the land; and it is well obſerved, that human nature is ever an advocate for this liberty; it being the gift of God to man in his creation; therefore every thing is deſirous of it, as a ſort of reſtitution to its primitive ſtate. *Forteſc.* 96. It is upon that account the laws of England in all caſes favour liberty, and which is accounted very precious, not only in reſpect of the profit which every one obtains by his liberty, but alſo in reſpect of the public.

According to Monteſquieu, liberty conſiſts principally in not being compelled to do any thing which the law does not require; becauſe we are governed by civil laws, and therefore we are free living under thoſe laws.

The abſolute *rights of man*, conſidered as a free agent, endowed with diſcernment to know good from evil, and with power of chooſing thoſe meaſures which appear to him to be the moſt deſirable, are uſually ſummed up in one general appellation, and denominated *the natural liberty of mankind*. This natural liberty conſiſts properly in a power of acting as one thinks fit, without any reſtraint or controul, unleſs by the law of nature; being a right inherent in us by birth, and one of the gifts of God to man at his creation, when he endowed him with the faculty of free will. 1 *Comm. c.* 1. But every man, when he enters into ſociety, gives up a part of his natural liberty, as the price of ſo valuable a purchaſe; and, in conſideration of receiving the advantages of mutual commerce, obliges himſelf to conform to thoſe laws which the community has thought proper to eſtabliſh. And this ſpecies of legal obedience and conformity is infinitely more deſirable than that wild and ſavage liberty which is ſacrificed to obtain it. For no man, that conſiders a moment, would wiſh to retain the abſolute and uncontrouled power of doing whatever he pleaſes; the conſequence of which is, that every other man would alſo have the ſame power; and then there would be no ſecurity to individuals in any of the enjoyments of life.

Political or *civil liberty*, therefore, which is that of a member of ſociety, is no other than natural liberty, ſo far reſtrained by human laws (and no farther) as is neceſſary and expedient for the general advantage of the public. Hence we may collect, that the law, which reſtrains a man from doing miſchief to his fellow-citizens, though it diminiſhes the natural, increaſes the civil liberty of mankind; but every wanton and cauſeleſs reſtraint of the will of the ſubject, whether practiſed by a monarch, a nobility, or a popular aſſembly, is a degree of tyranny. Nay, that even laws themſelves, whether made with or without our conſent, if they regulate and conſtrain our conduct in matters of mere indifference, without any good end in view, are laws deſtructive of liberty; whereas, if any public advantage can ariſe from obſerving ſuch precepts, the controul of our private inclinations, in one or two particular points, will conduce to preſerve our general freedom in others of more importance, by ſupporting that ſtate of ſociety which alone can ſecure our independence. Thus the ſtatute of king Edward IV. which forbade the fine gentlemen of thoſe times (under the degree of a lord) to wear pikes upon their ſhoes or boots of more than two inches in length, was a law that favoured of oppreſſion; becauſe, however ridiculous the faſhion then in uſe might appear, the reſtraining it by pecuniary penalties could ſerve no purpoſe of common utility. But the ſtatute of king Charles II. which preſcribes a thing ſeemingly as indifferent,

different, viz. a dreſs for the dead, who were all ordered to be buried in woollen, is a law conſiſtent with public liberty; for it encourages the ſtaple trade, on which in great meaſure depends the univerſal good of the nation. So that laws, when prudently framed, are by no means ſubverſive, but rather introductive, of liberty; for (as Mr. Locke has well obſerved) where there is no law there is no freedom. But then, on the other hand, that conſtitution or frame of government, that ſyſtem of laws, is alone calculated to maintain civil liberty, which leaves the ſubject entire maſter of his own conduct, except in thoſe points wherein the public good requires ſome direction or reſtraint.

Civil and political eſtabliſhments muſt always keep pace with the illumination of the public mind, and change according to the variations of the ſtate of man. Power has been conſtantly conferred by, and wreſted from, the people, and as conſtantly abuſed. Uncontrouled authority ſeems to have a baneful influence on the human heart; and few are the examples of permanent virtue, or ſtrict moderation, in that dangerous ſtation. The hiſtory of mankind, and the experience of ages, ſtrongly enforce a belief that the multitude are incapable of governing themſelves, and hence are reduced to the neceſſity of confiding that important truſt, which cannot be exerciſed by the whole, to the virtue of one, or of a few; this delegation cannot, or, unfortunately for mankind, has not hitherto been conferred, without giving up at the ſame time ſuch a proportion of power as precludes a poſſibility of revoking the grant: ſhould the delegate become corrupt or arbitrary, he is already poſſeſſed of the means of ſupporting his authority by uſurpation; for authority maintained againſt the conſent of the whole body of the people is virtually uſurpation; and againſt this abuſe, when eſtabliſhed by military force, there is no remedy, no redreſs, other than inſurrection. Although the truth of this propoſition cannot be denied, and that every people have a right to oppoſe a ſimilar ſtate of tyranny, it muſt be confeſſed that the experiment has been ſometimes fatal, is always dangerous, and moſt frequently unſucceſsful.

Such nearly has been the ſtate of all the nations on the continent, very few excepted; the people had not, from almoſt time immemorial, been admitted to that rank and importance which their great preponderance entitled them to in the ſcale of public affairs; deſpiſed and unprotected by that power, which they themſelves had armed for their defence and ſecurity, they were abandoned to all the inſults of unfeeling pride and the depredations of inſatiable ſquanderers; but this unnatural perverſion of the order of things muſt have its limits, the day of retribution was to come, when the irreſiſtible advancement of literature and ſcience was to make the people ſenſible of the enormity of their grievances, the importance of their claims, and at the ſame time the juſtice of their ſeeking effectual redreſs by the recovery of their loſt privileges.

If the moſt moderate governments, however well organized, be defective in ſome eſſential points, and found ſubject to corruption and degeneracy, if not renovated and improved in proportion to the more general diffuſion of knowledge, we muſt not wonder that one founded on original injuſtice, and ſupported by an eſtabliſhed ſyſtem of rapaciouſneſs and oppreſſion, ſhould fall to the ground, and experience a more rapid decline. Deſpotic ſtates are ever expoſed to convulſions and danger; tyranny in the eye of reaſon is not government; it is a ſtate of violence, which muſt be ſupported by the ſword. Unqualified force and the ſtrong law of neceſſity may bind down the ſlave, intimidate the turbulent, and reſtrain the brave, (if the laſt can be ſuppoſed to exiſt under ſuch governments:) but muſt not at length the very inſtruments of ſuch a power become more dangerous to the uſurper, than even the inſurrection of the people? When ſtanding armies become ſenſible of their own ſtrength, muſt not the deſpot himſelf ſubmit to their dictates? The very banditti, whom he had hired for the baſe purpoſes of maintaining his uſurpation, and intimidating his vaſſals, muſt ultimately become his maſters. Hiſtory has furniſhed us with many dreadful examples of military tyranny; and the pretorian have not been the only bands that contributed to the fall of empires. But, when nations began to emerge from that ſtate of general ignorance which was ſo indiſpenſably neceſſary to the exiſtence and exercife of deſpotic power, when the diffuſion of knowledge became more univerſal, and extended to all ranks of the community, the ſoldier himſelf perceived that it was no longer his intereſt to form part of a body which militated againſt public liberty, and had been hitherto found inimical to the rights of the people; at length he became ſenſible that his military appointment was neither irreconcileable with the prior claims of ſocial duty, nor oppoſite to his obligations as a citizen; and conſidered the trade of war, as it had been carried on, to be no other than an artful ſyſtem, eſtabliſhed on the ruins of feudal barbarity, formed for the purpoſes of ambition, the ſupport of tyrants, and the deſtruction of his fellow-creatures.

Hence it is evident, that governments muſt become more equitable and mild, according to the progreſs of knowledge and a more enlightened ſtate of civil ſociety. An ignorant and unlettered people can patiently ſubmit to the moſt outrageous acts of violence and oppreſſion, and ſleep over their chains with an indifference bordering on brutal ſtupidity. The moſt fertile and favoured regions of the earth, where freedom, joined hand in hand with liberal knowledge, had once brought forth, nurtured, and matured, the faculties of man, where genius ſmiled, and civil life had gained its ultimate perfection, where poliſhed Greece had reared the empire of refinement and of reaſon, have for ages languiſhed in deeay and hopeleſs ſervitude, and bend beneath the iron ſway of haughty Ottoman; the plains, where Tyre and Carthage ſtood, are now the prey of rude barbarians, and the ſport of ruſſian power; the peaceful Hindoo has, from the remoteſt time, ſubmitted calmly to the yoke of ſucceſſive tyrants, and ſeems to have taken no intereſt in the ſcenes of rapine and ſlaughter that conſtantly ſurrounded him; the influence of a mild climate, an abundant ſoil, his habits of life, religion, and rigid temperance, together with his contented ignorance, all contribute to enervate his mind, and render him incapable of reſiſtance.

The idea and practice of political or civil liberty flouriſh in their higheſt vigour in theſe kingdoms, where it falls little ſhort of perfection, and can only be loſt or deſtroyed by the folly or demerits of its owner; the legiſlature, and of courſe the laws of Britain, being peculiarly adapted to the preſervation of this ineſtimable bleſſing even in the meaneſt ſubject. Very different from the modern conſtitutions of other ſtates on the continent of Europe, and from the genius of the imperial law; which in general are calculated to veſt an arbitrary and deſpotic power, of controuling the actions of the ſubject, in the prinee, or in a few grandees. And this ſpirit of liberty is ſo deeply implanted in our conſtitution, and rooted even in our very ſoil, that a ſlave or a negro, the moment he lands in Britain, falls under the protection of the laws, and ſo far becomes a freeman; though the maſter's right to his ſervice may poſſibly ſtill continue.

The abſolute *rights* of every Briton, (which, taken in a political and extenſive ſenſe, are uſually called their *liberties*,) as they are founded on nature and reaſon, ſo they are coeval with our form of government; though ſubject at times to fluctuate and change, their eſtabliſhment (excellent as it is) being ſtill human. At ſome times we have ſeen them depreſſed by overbearing and tyrannical princes; at others, ſo luxuriant as even to tend to anarchy, a worſe ſtate than tyranny itſelf, as any government is better than none at all. But the vigour of our free conſtitution has always delivered the nation from theſe embarraſſments; and, as ſoon as the convulſions conſequent on the ſtruggle have been over, the balance of our rights and liberties has ſettled to its proper level;

and their fundamental articles have been from time to time aſſerted in parliament, as often as they were thought to be in danger:

Firſt, By the Great Charter of liberties, which was obtained, ſword in hand, from king John, and afterwards, with ſome alterations, confirmed in parliament by Henry III. his ſon. Which charter contained very few new grants; but, as ſir Edward Coke obſerves, was for the moſt part declaratory of the principal grounds of the fundamental laws of England. Afterwards, by the ſtatute, called *Confirmatio Cartarum*, whereby the Great Charter is directed to be allowed as the common-law; all judgments contrary to it are declared void; copies of it are ordered to be ſent to all cathedral-churches, and read twice a-year to the people; and ſentence of excommunication is directed to be as conſtantly denounced againſt all thoſe that by word, deed, or counſel, act contrary thereto, or in any degree infringe it. Next, by a multitude of ſubſequent corroborating ſtatutes (ſir Edward Coke reckons 32), from the firſt Edward to Henry IV. of which the following are the moſt forcible. 25 *Edw.* III. *ſt.* 5. *c.* 4. None ſhall be taken by petition or ſuggeſtion made to the king or his council, unleſs it be by indictment of lawful people of the neighbourhood, or by proceſs made by writ original at the common-law. And none ſhall be put out of his franchiſes or freehold, unleſs he be duly brought to anſwer, and forejudged by courſe of law; and, if any thing be done to the contrary, it ſhall be redreſſed, and holden for none. 42 *Edw.* III. *c.* 3. No man ſhall be put to anſwer without preſentment before juſtices, or matter of record of due proceſs, or writ original, according to the ancient law of the land. And, if any thing be done to the contrary, it ſhall be void in law, and held for error.

After a long interval, theſe liberties were ſtill further confirmed by the Petition of Right; which was a parliamentary declaration of the liberties of the people, aſſented to by Charles I. in the beginning of his reign; and is claſſed among our ſtatutes as 3 Car. I. c. 1. By this it was provided, that no one ſhould be compelled to make, or yield, any gift, loan, benevolence, tax, or ſuch-like charge, without conſent by act of parliament. This Petition of Right was cloſely followed by the ſtill-more ample conceſſions made by that unhappy prince to his parliament (particularly the diſſolution of the Star-chamber, by 16 Car. I. c. 10.) before the fatal rupture between them; and by the many ſalutary laws, particularly the Habeas Corpus Act, paſſed under Charles II.

To theſe ſucceeded the Bill of Rights, or declaration delivered by the lords and commons to the prince and princeſs of Orange, February 13, 1688; and afterwards enacted in parliament, when they became king and queen; which is as follows: 1 *W. & M. ſt.* 2. *c.* 2. § 1. Whereas the lords ſpiritual and temporal, and commons, aſſembled at Weſtminſter, repreſenting all the eſtates of the people of this realm, did upon the 13th of February, 1688, preſent unto their majeſties, then prince and princeſs of Orange, a declaration containing that, The ſaid lords ſpiritual and temporal, and commons, being aſſembled in a full and free repreſentative of this nation, for vindicating their ancient rights and liberties, DECLARE, That the pretended power of ſuſpending of laws, or the execution of laws, by regal authority, without conſent of parliament, is illegal. That the pretended power of diſpenſing with laws, or the execution of laws, by regal authority, as it hath been aſſumed and exerciſed of late, is illegal. That the commiſſion for erecting the late court of commiſſioners for eccleſiaſtical cauſes, and all other commiſſions and courts of like nature, are illegal and pernicious. That levying money for or to the uſe of the crown, by pretence of prerogative, without grant of parliament, for longer time or in other manner than the ſame is or ſhall be granted, is illegal. That it is the right of the ſubjects to petition the king; and all commitments and proſecutions for ſuch petitioning are illegal. That the raiſing or keeping a ſtanding army within the kingdom in the time of peace, unleſs it be with conſent of parliament, is againſt law. That the ſubjects which are proteſtants may have arms for their defence ſuitable to their conditions, and as allowed by law. That elections of members of parliament ought to be free. That the freedom of ſpeech, and debates or proceedings in parliament, ought not to be impeached or queſtioned in any court or place out of parliament. That exceſſive bail ought not to be required, nor exceſſive fines impoſed, nor cruel and unuſual puniſhments inflicted. That jurors ought to be duly impanelled and returned, and jurors which paſs upon men in trials for high treaſon ought to be freeholders. That all grants and promiſes of fines and forfeitures of particular perſons before conviction, are illegal and void. And for redreſs of all grievances, and for the amending, ſtrengthening, and preſerving, of the laws, parliaments ought to be held frequently. And they do claim, demand, and inſiſt upon, all and ſingular the premiſes, as their undoubted rights and liberties; and that no declarations, judgments, doings, or proceedings, to the prejudice of the people in any of the ſaid premiſes, ought in any wiſe to be drawn hereafter into conſequence or example.

§ 6. All and ſingular the rights and liberties aſſerted and claimed in the ſaid declaration are the true, ancient, and indubitable, rights and liberties of the people of this kingdom, and ſo ſhall be eſteemed, allowed, adjudged, and taken to be; and all the particulars aforeſaid ſhall be firmly holden as they are expreſſed in the ſaid declaration; and all officers ſhall ſerve their majeſties according to the ſame in all times to come. § 12. No diſpenſation by *non obſtante* of any ſtatute ſhall be allowed, except a diſpenſation be allowed of in ſuch ſtatute; and except in ſuch caſes as ſhall be ſpecially provided for during this ſeſſion of parliament. § 13. No charter granted before the 23d of October, 1689, ſhall be invalidated by this act, but ſhall remain of the ſame force as if this act had never been made.

Laſtly, Theſe liberties were again aſſerted at the commencement of the laſt century, in the Act of Settlement, 12 & 13 Will. III. c. 2. whereby the crown was limited to his preſent majeſty's illuſtrious houſe; and ſome new proviſions were added at the ſame fortunate æra, for better ſecuring our religion, laws, and liberties, which the ſtatute declares to be "the birth-right of the people of England;" according to the ancient doctrine of the common law.

Thus much for the *declaration* of our rights and liberties. The rights themſelves thus defined by theſe ſeveral ſtatutes, conſiſt in a number of private immunities; which will appear, from what has been premiſed, to be indeed no other than either that reſiduum of natural liberty which is not required by the laws of ſociety to be ſacrificed to public convenience; or elſe thoſe civil privileges which ſociety hath engaged to provide in lieu of the natural liberties ſo given up by individuals. Theſe, therefore, were formerly, either by inheritance or purchaſe, the rights of all mankind; but in moſt other countries of the world, being now more or leſs debaſed or deſtroyed, they at preſent may be ſaid to remain, in a peculiar and emphatical manner, *the rights of the people of England.*

Theſe rights may be reduced to three principal or primary articles: The right of perſonal ſecurity. The right of perſonal liberty. The right of private property.

The right of *perſonal ſecurity* conſiſts in a perſon's legal and uninterrupted enjoyment of his life, his limbs, his body, his health, and his reputation. The enjoyment of this right is ſecured to every ſubject by the various laws made for the puniſhment of thoſe injuries, by which it is any way violated; for a particular detail of which, ſee the articles ASSAULT, HOMICIDE, LIBEL, &c.

Life, however, may, by the divine permiſſion, be frequently forfeited for the breach of thoſe laws of ſociety which are enforced by the ſanction of capital puniſhments. The ſtatute law of England does very ſeldom, and the common law does never, inflict puniſhment extending to life or limb, unleſs upon the higheſt neceſſity; and the conſtitution

conſtitution is an utter ſtranger to any arbitrary power of killing or maiming the ſubject without the expreſs warrant of law. The words of the Great Charter are, *Nullus liber homo capiatur, impriſonetur, vel aliquo modo deſtruatur, niſi per legale judicium parium ſuorum, aut per legem terræ.* "No freeman ſhall be taken, impriſoned, or any way deſtroyed, unleſs by the lawful judgment of his peers, or by the law of the land." Which words, *aliquo modo deſtruatur*, according to Coke, include a prohibition not only of *killing* or *maiming*, but alſo of *torturing*, (to which our laws are ſtrangers,) and of every oppreſſion by colour of an illegal authority. And it is enacted by ſtat. 5 Ed. III. c. 9, that no man ſhall be attached by any accuſation, nor forejudged of life or limb, nor ſhall his lands or goods be ſeized into the king's hands, contrary to the Great Charter and the law of the land. And again, by 28 Ed. III. c. 3, that no man ſhall be put to death without being brought to anſwer by due proceſs of law. 1 *Comm.* 133.

The right of *perſonal liberty* conſiſts in the power of locomotion, of changing ſituation, or moving one's perſon to whatſoever place one's own inclination may direct; without impriſonment or reſtraint, unleſs by due courſe of law. On this right there is at preſent no occaſion to enlarge. For the proviſions made by the laws of England to ſecure it, ſee the articles HABEAS CORPUS, FALSE IMPRISONMENT, &c. &c.

The abſolute *right of property*, inherent in every Engliſhman, conſiſts in the free uſe, enjoyment, and diſpoſal, of all his acquiſitions, without any controul or diminution, ſave only the laws of the land. The Great Charter has declared, that no freeman ſhall be diſſeized or diveſted of his freehold, or of his liberties or free cuſtoms, (or be outlawed, baniſhed, or otherwiſe deſtroyed, nor ſhall the king paſs or ſend upon him,) but by the judgment of his peers, or by the law of the land. And by a variety of ancient ſtatutes it is enacted, that no man's lands or goods ſhall be ſeized into the king's hands, againſt the Great Charter and the law of the land; and that no man ſhall be diſinherited, nor put out of his franchiſes or freehold, unleſs he be duly brought to anſwer and be forejudged by courſe of law; and, if any thing be done to the contrary, it ſhall be redreſſed, and holden for none. See ſtats. 5 Edw. III. c. 9. 25 Edw. III. ſt. 5. c. 4. 28 Edw. III. c. 3. So great moreover is the regard of the law for private property, that it will not authoriſe the leaſt violation of it; no not even for the general good of the whole community. In inſtances where the property of an individual is neceſſary to be obtained for the accommodation of the public, as in the caſe of enlarging or turning highways, all that the legiſlature does, is to oblige the owner to alienate his poſſeſſions for a reaſonable price; and even this is an exertion of power indulged with caution, and which none but the legiſlature, or thoſe acting under their immediate direction, can perform. See ſtat. 13 Geo. III. c. 78. Another effect of this right of private property is, that no ſubject of England can be conſtrained to pay any aids or taxes, even for the defence of the realm, or the ſupport of the government, but ſuch as are impoſed by his own conſent or that of his repreſentatives in parliament. By ſtat. 25 Edw. I. c. 5, 6, it is provided, that the king ſhall not take any aids, or *taſks*, but by the common aſſent of the realm. And what the common aſſent is, is more fully explained by the inſtrument uſually called the Statute *de Tallagio non concedendo*, uſually claſſed as ſtat. 34 Ed. I. ſt. 4. c. 1. which enacts that no talliage or aid ſhall be taken, without the aſſent of the archbiſhops, biſhops, earls, barons, knights, burgeſſes, and other freemen of the land; and again, by 14 Ed. III. ſt. 2. c. 1, the prelates, earls, barons, and commons, citizens, burgeſſes, and merchants, ſhall not be charged to make any aid, if it be not by the common aſſent of the great men and commons in parliament. And, as this fundamental law had been ſhamefully evaded, under many preceding princes, by compulſive loans and benevolences, extorted without a real and voluntary conſent, it was made an article in the Petition of Right, 3 *Car.* I. that no man ſhall be compelled to yield any gift, loan, or benevolence, tax, or ſuch-like charge, without common conſent by act of parliament. And, laſtly, by the Bill of Rights, ſtat. 1 W. & M. ſt. 2. c. 2, it is declared, that levying money for or to the uſe of the crown by pretence of prerogative, without grant of parliament, or for longer time or in other manner than the ſame is or ſhall be granted, is illegal. 1 *Comm.* 140.

In vain, however, would theſe rights be declared, aſcertained, and protected by the dead letter of the laws, if the conſtitution had provided no other method to ſecure their actual enjoyment. It has therefore eſtabliſhed certain other auxiliary ſubordinate rights of the ſubject, which ſerve principally as barriers to protect and maintain inviolate the three great and primary rights, of perſonal ſecurity, perſonal liberty, and private property. Theſe are,

1. The conſtitution, powers, and privileges of *parliament*; for which ſee the article PARLIAMENT.

2. The *limitation of the king's prerogative*, by bounds ſo certain and notorious, that it is impoſſible he ſhould exceed them without the conſent of the people; as to which, ſee the article KING, vol. xi. p. 731. The former of theſe keeps the legiſlative power in due health and vigour, ſo as to make it improbable that laws ſhould be enacted deſtructive of general liberty; the latter is a guard upon the executive power, by reſtraining it from acting either beyond or in contradiction to the laws that are framed and eſtabliſhed by the other.

3. A third ſubordinate right of every Briton is that of applying to the courts of juſtice for redreſs of injuries. Since the law is, in this realm, the ſupreme arbiter of every man's life, liberty, and property, courts of juſtice muſt at all times be open to the ſubject, and the law be duly adminiſtered therein. The emphatical words of Magna Charta, ſpoken in the perſon of the king, who in judgment of law (ſays ſir Edward Coke) is ever preſent and repeating them in all his courts, are theſe: *Nulli vendemus, nulli negabimus, aut differemus, rectum vel juſtitiam*; "and therefore every ſubject (continues the ſame learned author), for injury done to him *in bonis, in terris, vel perſona*, by any other ſubject, be he eccleſiaſtical or temporal, without any exception, may take his remedy by the courſe of the law, and have juſtice and right for the injury done to him, freely without ſale, fully without any denial, and ſpeedily without delay." It were endleſs to enumerate all the *affirmative* acts of parliament, wherein juſtice is directed to be done according to the law of the land; and what that law is, every ſubject knows, or may know if he pleaſes; for it depends not upon the arbitrary will of any judge; but is permanent, fixed, and unchangeable, unleſs by authority of parliament. We ſhall however juſt mention a few *negative* ſtatutes, whereby abuſes, perverſions, or delays of juſtice, eſpecially by the prerogative, are reſtrained. It is ordained by Magna Charta, that no freeman ſhall be outlawed, that is, put out of the protection and benefit of the laws, but according to the law of the land. By 2 Edw. III. c. 8. and 11 Ric. II. c. 10. it is enacted, that no commands or letters ſhall be ſent under the great ſeal, or the little ſeal, the ſignet or privy ſeal, in diſturbance of the law, or to diſturb or delay common right; and, though ſuch commandments ſhould come, the judges ſhall not ceaſe to do right; which is alſo made a part of their oath by ſtatute 18 Edw. III. ſtat. 4. And by 1 W. and M. ſt. 2. c. 2. it is declared, that the pretended power of ſuſpending or diſpenſing with laws, or the execution of laws, by regal authority without conſent of parliament, is illegal. Not only the ſubſtantial part, or judicial deciſions, of the law, but alſo the formal part, or method of proceeding, cannot be altered but by parliament; for, if once thoſe outworks were demoliſhed, there would be an inlet to all manner of innovation in the body of the law itſelf. The king, it is true, may erect new courts of juſtice; but then they muſt proceed according to the old eſtabliſhed forms of the common law. For which reaſon it is de-

clared in the ſtatute 16 Car. I. c. 10. upon the diſſolution of the court of ſtar-chamber, that neither his majeſty nor his privy-council have any juriſdiction, power, or authority, by Engliſh bill, petition, articles, libel, (which were the courſe of proceeding in the ſtar-chamber, borrowed from the civil law,) or by any other arbitrary way whatſoever, to examine or draw into queſtion, determine or diſpoſe of, the lands or goods of any ſubjects of this kingdom; but that the ſame ought to be tried and determined in the ordinary courts of juſtice, and by *courſe of law.*

4. If there ſhould happen any uncommon injury, or infringement of the rights before mentioned, which the ordinary courſe of law is too defective to reach, there ſtill remains a fourth ſubordinate right, appertaining to every individual, namely, the *right of petitioning* the king, or either houſe of parliament, for the redreſs of grievances. In Ruſſia we are told that the czar Peter eſtabliſhed a law, that no ſubject might petition the throne till he had firſt petitioned two different miniſters of ſtate. In caſe he obtained juſtice from neither, he might then preſent a third petition to the prince; but upon pain of death, if found to be in the wrong. The conſequence of which was, that no one dared to offer ſuch third petition; and, grievances ſeldom falling under the notice of the ſovereign, he had little opportunity to redreſs them. The reſtrictions, for ſome there are, which are laid upon petitioning in Britain, are of a nature extremely different; and, while they promote the ſpirit of peace, they are no check upon that of liberty. Care only muſt be taken, leſt, under the pretence of petitioning, the ſubject be guilty of any riot or tumult; as happened in the opening of the memorable parliament in 1640; and, to prevent this, it is provided by the ſtatute 13 Car. II. ſt. 1. c. 5. that no petition to the king, or either houſe of parliament, for any alteration in church or ſtate, ſhall be ſigned by above twenty perſons, unleſs the matter thereof be approved by three juſtices of the peace, or the major part of the grand jury, in the country; and, in London, by the lord mayor, aldermen, and common-council: nor ſhall any petition be preſented by more than ten perſons at a time. But, under theſe regulations, it is declared by the ſtatute 1 W. & M. ſt. 2. c. 2. that the ſubject hath a right to petition; and that all commitments and proſecutions for ſuch petitioning are illegal.

5. The fifth and laſt auxiliary right of the ſubject, that we ſhall at preſent mention, is that of having *arms for their defence*, ſuitable to their condition and degree, and ſuch as are allowed by law. Which is alſo declared by the ſame ſtatute 1 W. & M. ſt. 2. c. 2. and is indeed a public allowance, under due reſtrictions, of the natural right of reſiſtance and ſelf-preſervation, when the ſanctions of ſociety and laws are found inſufficient to reſtrain the violence of oppreſſion. See ARMS, vol. ii. p. 201.

In theſe ſeveral articles conſiſt the *rights*, or, as they are frequently termed, *the liberties, of Britons:* liberties more generally talked of than thoroughly underſtood; and yet highly neceſſary to be perfectly known and conſidered by every man of rank or property, leſt his ignorance of the points whereon they are founded ſhould hurry him into faction and licentiouſneſs on the one hand, or a puſillanimous indifference and criminal ſubmiſſion on the other. And we have ſeen that theſe rights conſiſt, primarily, in the free enjoyment of perſonal ſecurity, of perſonal liberty, and of private property. So long as theſe remain inviolate, the ſubject is perfectly free; for every ſpecies of compulſive tyranny and oppreſſion muſt act in oppoſition to one or other of theſe rights, having no other object upon which it can poſſibly be employed. To preſerve theſe from violation, it is neceſſary that the conſtitution of parliaments be ſupported in its full vigour; and limits, certainly known, be ſet to the royal prerogative. And, laſtly, to vindicate theſe rights, when actually violated or attacked, the ſubjects of Britain are entitled, in the firſt place, to the regular adminiſtration and free courſe of juſtice in the courts of law; next, to the right of petitioning the king and parliament for redreſs of grievances; and, laſtly, to the right of having and uſing arms for ſelf-preſervation and defence. And all theſe rights and liberties it is our birthright to enjoy entire, unleſs where the laws of our country have laid them under neceſſary reſtraints. Reſtraints in themſelves ſo gentle and moderate, as will appear upon farther inquiry, that no man of ſenſe or probity would wiſh to ſee them ſlackened. For all of us have it in our choice to do every thing that a good man would deſire to do; and are reſtrained from nothing but what would be pernicious either to ourſelves or our fellow-citizens. So that this review of our ſituation may fully juſtify the obſervation of a learned French author, (of former times!) who ſcrupled not to profeſs, even in the very boſom of his native country, "that the Britiſh is the only nation in the world where political or civil liberty is the direct end of its conſtitution." *Monteſq.* Sp. L. xi. 5.

LIB'ERTY, in mythology, was a goddeſs both among the Greeks and Romans. Among the former ſhe was invoked under the title *Eleutheria*; and by the latter ſhe was called *Libertas*, and held in ſingular veneration. Temples, altars, and ſtatues, were erected in honour of this deity. A very magnificent temple was conſecrated to her on Mount Aventine, by Tiberius Gracchus, before which was a ſpacious court, called *Atrium Libertatis.* The Romans alſo erected a new temple in honour of Liberty, when Julius Cæſar eſtabliſhed his empire over them, as if their liberty had been ſecured by an event which proved fatal to it. In a medal of Brutus, Liberty is exhibited under the figure of a woman, holding in one hand a cap, the ſymbol of liberty, and two poniards in the other, with the inſcription IDIBVS MARTIIS.—With us, Liberty is ſometimes repreſented by the figure of a woman, with a broken yoke-ſtick in her left hand, and trampling upon it as a mark of reſentment. She is dreſſed in white robes, to denote the bleſſings ſhe confers on mankind; and in her right hand ſhe holds a ſceptre, as a ſign of independence. She has alſo a cap of liberty on her head, in alluſion to the cuſtom of the Romans, in ſetting their ſlaves free; who alſo ſhaved their heads, and permitted them to be covered in the preſence of thoſe who gave them liberty. *Richardſon's Iconology.*

LIB'ERTY, a county of United America, in Georgia, bounded north by Brian, ſouth by Mackintoſh, weſt by Alatamaha, and north-eaſt by the ocean. It is forty miles long, and twenty-two broad. The productions are cotton and rice. An acre of land yields twenty-five or thirty buſhels of corn. It derives its name from the circumſtance, that its inhabitants were the firſt in the ſtate who declared for liberty, and ſent a delegate to the congreſs at Philadelphia. It is divided into five towns, and contains 5313 inhabitants, of whom 3940 are ſlaves.

LIB'ERTY, a poſt-town of Virginia, fifteen miles from New London. This is the chief town of Bedford county; it has a handſome court-houſe, and contains fifty or ſixty houſes.

LIB'ERTY, a poſt-town of Maryland, in Frederic county; twelve miles north-eaſt of Fredericſtown, and about forty-four miles north-north-weſt of the Federal city.

LIB'ERTY OF CON'SCIENCE, a right or power of making profeſſion of any religion, or of ſerving God in any manner that a man ſees fit.

As the gods of paganiſm were almoſt all local and tutelary, and as it was a maxim univerſally received, that it was the duty of every man to worſhip, together with his own deities, the tutelary gods of the country in which he might chance to reſide, there was no room for perſecution in the heathen world, on account of different ſentiments in religion, or of the different rites with which the various deities were worſhipped. Had the primitive Chriſtians joined their fellow-citizens in the worſhip of Jupiter, Juno, and the reſt of the Roman divinities, they would have been ſuffered to worſhip, without moleſtation, the

Creator

Creator of the world and the Redeemer of mankind; for in that caſe the God of the Chriſtians would have been looked upon as a Being of the ſame kind with the gods of the empire; and the great principle of intercommunity would have remained unviolated. But the true God had expreſsly prohibited both Jews and Chriſtians from worſhipping any other god beſides Himſelf; and it was their refuſal to break that precept of their religion which made their heathen maſters look upon them as atheiſts, and perſecute them as a people inimical to the ſtate. Utility, and not truth, was the object for which the heathen legiſlatures ſupported the national religion. They well knew that the ſtories told by their poets of their different divinities, of the rewards of Elyſium, and of the puniſhments of Tartarus, were a collection of ſenſeleſs fables; but they had nothing better to propoſe to the vulgar, and they were not ſuch ſtrangers to the human heart, as to ſuppoſe that mankind could live together in ſociety without being influenced in their conduct by ſome religion.

Widely different from the genius of paganiſm was the ſpirit of the Jewiſh diſpenſation. Truth, which is in fact always coincident with general utility, was the great object of the Moſaic law. The children of Iſrael were ſeparated from the reſt of the world, to preſerve the knowledge and worſhip of the true God, at a time when all the other nations on earth, forgetting the Lord that made them, were falling proſtrate to ſtocks and ſtones, and worſhipping devils and impure ſpirits. Such was the contagion of idolatry, and ſo ſtrong the propenſity of the Iſraelites to the cuſtoms and manners of the Egyptians, and other polytheiſtic nations around them, that the purpoſe of their ſeparation could not have been ſerved, had not Jehovah condeſcended to become, not only their tutelary God, but even their ſupreme civil Magiſtrate; ſo that, under the Moſaic economy, idolatry was the crime of high treaſon, and as ſuch juſtly puniſhed by the laws of the ſtate. Among the Jews, the church and ſtate were not indeed different ſocieties. They were ſo thoroughly incorporated, that what was a ſin in the one was a crime in the other; and the forfeiture of eccleſiaſtical privileges was the forfeiture of the rights of citizens.

In many reſpects the Chriſtian religion is directly oppoſite to the ritual law of Moſes. It is calculated for all nations, and intended to be propagated among all. Inſtead of ſeparating one people from another, one of its principal objects is to diſſeminate univerſal benevolence, and to inculcate upon the whole human race, that mutual love which naturally ſprings from the knowledge that all men are brethren. Its ultimate end being to train its votaries for heaven, it concerns itſelf no farther with the affairs of earth than to enforce by eternal ſanctions the laws of morality; and, the kingdom of its Founder not being of this world, it leaves every nation at liberty to fabricate its own municipal laws, ſo as beſt to ſerve its own intereſt in the various circumſtances in which it may be placed; and denounces a curſe upon all who pay not to thoſe laws the fulleſt obedience, when they are not obviouſly inconſiſtent with the laws of piety and virtue, which are of prior obligation. The Chriſtian church therefore muſt always remain a diſtinct ſociety from the ſtate; and though, till the preſent age of hazardous innovations, it has been deemed expedient in every country, where the truth of the goſpel is admitted, to give to the religion of Chriſt a *legal eſtabliſhment*, and to confer immunities on its miniſters, this meaſure has been adopted, not to ſecure the purity of the faith, which appeals to the private judgment of each individual, but merely to preſerve the peace of ſociety, and to put a reſtraint upon thoſe actions of which human laws cannot take cognizance. With religion, Chriſtian governments have no farther concern than as it tends to promote the practice of virtue. The early Chriſtians, however, not underſtanding the principle upon which penal laws were employed to preſerve the purity of the Jewiſh religion; and, as our bleſſed Lord obſerved to two of his apoſtles, not knowing what ſpirit they were of—haſtily concluded that they had a right to enforce the doctrines and worſhip of the New Teſtament by the ſame means which had been uſed to preſerve the Iſraelites ſteady to the doctrines and worſhip of the Old. Hence, though they had ſuffered the cruelleſt perſecutions themſelves, they no ſooner got the power of the ſtate in their hands, than they perſecuted the pagans for their idolatry; and afterwards, when hereſies aroſe in the church, perſecuted one another for expreſſing in different phraſes metaphyſical propoſitions of ſuch a nature as no human mind can fully comprehend. The apoſtle had forewarned them that there muſt be hereſies in the church, that they who are approved may be made manifeſt; but it did not occur to them that perſecution for opinion is the worſt of all hereſies, as it violates at once truth and charity.

Hitherto theſe unhallowed means of bringing Chriſtians to uniformity of faith and practice had been only occaſionally employed, from their not accurately diſtinguiſhing between the ſpirit of the goſpel and that of the law; but, as ſoon as the biſhops of Rome had brought the inhabitants of Europe to recognize their infallibility in explaining articles of faith and deciding points of controverſy, perſecution became a regular and permanent inſtrument of eccleſiaſtical diſcipline. To doubt or to deny any doctrine to which theſe unerring inſtructors had given the ſanction of their approbation, was held to be not only a reſiſting of the truth, but an act of rebellion againſt their ſacred authority; and the ſecular power, of which, by various arts, they had acquired the abſolute direction, was inſtantly employed to avenge both.

Thus Europe had been accuſtomed, during many centuries, to ſee ſpeculative opinions propagated or defended by force; the charity and mutual forbearance which Chriſtianity recommends with ſo much warmth were forgotten; the ſacred rights of conſcience and of private judgment were unheard of; and not only the idea of *toleration*, but even the word itſelf, in the ſenſe now affixed to it, was unknown. A right to extirpate error by force was univerſally allowed to be the prerogative of thoſe who poſſeſſed the knowledge of truth; and, though the firſt reformers did not arrogate to themſelves in direct terms that infallibility which they had refuſed to the church of Rome, they were not leſs confident of the truth of their own doctrines, and required with equal ardour the princes of their party to check ſuch as preſumed to impugn or to oppoſe them. To this requeſt too many of theſe princes lent a willing ear. It flattered at once their piety and their pride to be conſidered as poſſeſſing all the rights of Jewiſh princes; and Henry VIII. of England, after labouring to make his divines declare that all authority eccleſiaſtical as well as civil flows from the crown, perſecuted alternately the papiſts and proteſtants. Many of his ſucceſſors, whoſe characters were much better than his, thought themſelves duly authorized, in virtue of their acknowledged ſupremacy over all ſtates and conditions of men, to enforce by means of penal laws an uniformity of faith and worſhip among their ſubjects; and it was not till the revolution that any ſect in England ſeems to have fully underſtood, that all men have an unalienable right to worſhip God in the manner which to them may ſeem moſt ſuitable to his nature, and the relation in which they ſtand to him; or that it is impoſſible to produce uniformity of opinion by any other means than candid diſquiſition and ſound reaſoning.

That the civil magiſtrate has a right to check the propagation of opinions which tend to ſap the foundations of virtue, and to diſturb the peace of ſociety, cannot, we think, be queſtioned; but that he has no right to reſtrain mankind from publicly profeſſing any ſyſtem of faith, which comprehends the being and providence of God, the great laws of morality, and a future ſtate of rewards and puniſhments, is as evident as that it is the object of religion to fit mankind for heaven, and the whole duty of the magiſtrates to maintain peace, liberty, and property.

property, upon earth. Among a number of different ſects of Chriſtians, it is not the ſuperior purity of the ſyſtem of faith profeſſed by one of them that gives it a right to the immunities of an eſtabliſhment in preference to all its rivals; but, though the legiſlature is authorized, in certain circumſtances, to make a leſs pure ſyſtem the religion of the ſtate, it would be the height of abſurdity to ſuppoſe that any man, or body of men, can have authority to prevent a purer ſyſtem from being acknowledged as the religion of individuals. For propagating opinions and purſuing practices which neceſſarily create civil diſturbance, every man is anſwerable to the laws of his country; but for the ſoundneſs of his faith, and the purity of his worſhip, he is anſwerable to no tribunal but that which can ſearch the heart.

When churches are eſtabliſhed, and creeds drawn up as guides to the preaching of the national clergy, it is obvious that every clergyman who teaches any thing directly contrary to the doctrine of ſuch creeds, violates the condition on which he holds his living, and may be juſtly deprived of that living, whether his obnoxious opinion be in itſelf true or falſe, important or unimportant; but his puniſhment ſhould be extended no farther. To expel a Chriſtian from private communion for teaching any doctrine which is neither injurious to the ſtate nor contrary to the few ſimple articles which compriſe the ſum of the Chriſtian faith, is the groſſeſt tyranny; and the governors of that church which is guilty of it, uſurp the prerogative of the bleſſed Lord, who commanded the apoſtles themſelves not to be called maſters in this ſenſe; *for one* (ſays he) *is your maſter*; *even Chriſt*. It is indeed a hardſhip to deprive a man of his living for conſcientiouſly illuſtrating what he believes to be a truth of the goſpel, only becauſe his illuſtration may be different from that which had formerly been given by men fallible like himſelf; but, if the eſtabliſhment of human compilations of faith be neceſſary, this hardſhip cannot be removed, but by making ſuch compilations as ſimple as poſſible, and drawing them up in ſcripture language. Such a reformation, could it be effected peaceably, would ſerve other good purpoſes; for, while it would ſufficiently guard the purity of the faith, it would withdraw that temptation which too many eſtabliſhments throw in the way of men, to ſubſcribe to the truth of what they do not really believe; and it would effectually baniſh from the Chriſtian church every thing which can be called by the name of *perſecution*.

The ſin of ſchiſm, as ſuch, is by no means the object of temporal coercion and puniſhment. If through weakneſs of intellect, through miſdirected piety, through perverſeneſs and acerbity of temper, or (which is often the caſe) through a proſpect of ſecular advantage in herding with a party, men quarrel with the eccleſiaſtical eſtabliſhment, the civil magiſtrate has nothing to do with it; unleſs their tenets and practice are ſuch as threaten ruin or diſturbance to the ſtate. He is bound indeed to protect the eſtabliſhed church; and, if this can be better effected by admitting none but its genuine members to offices of truſt and emolument, he is certainly at liberty ſo to do; the diſpoſal of offices being matter of favour and diſcretion. But, this point being once ſecured, all perſecution for diverſity of opinions, however ridiculous or abſurd they may be, is contrary to every principle of ſound policy and civil freedom. The names and ſubordination of the clergy, the poſture of devotion, the materials and colour of the miniſter's garment, the joining in a known or unknown form of prayer, and other matters of the ſame kind, muſt be left to the option of every man's private judgment.

With regard therefore to *proteſtant diſſenters*, although the experience of their turbulent diſpoſition in former times occaſioned ſeveral diſabilities and reſtrictions to be laid upon them by abundance of ſtatutes; yet at length the legiſlature, with a true ſpirit of magnanimity, extended that indulgence to theſe ſectaries, which they themſelves, when in power, had held to be countenancing ſchiſm, and denied to the church of England. The penalties are conditionally ſuſpended by the ſtatute 1 W. & M. c. 18, "for exempting their majeſties proteſtant ſubjects, diſſenting from the church of England, from the penalties of certain laws," commonly called the *toleration-act*; which declares, that neither the laws above mentioned, nor the ſtatutes 1 Eliz. c. 2. § 14. 3 Jac. I. c. 4 and 5. nor any other penal laws made againſt popiſh recuſants (except the *teſts-acts*), ſhall extend to any diſſenters, other than papiſts and ſuch as deny the Trinity: provided, 1. That they take the oaths of allegiance and ſupremacy, (or make a ſimilar affirmation, being Quakers), and ſubſcribe the declaration againſt popery. 2. That they repair to ſome congregation certified to and regiſtered in the court of the biſhop or archdeacon, or at the county ſeſſions. 3. That the doors of ſuch meeting-houſe ſhall be unlocked, unbarred, and unbolted; in default of which, the perſons meeting there are ſtill liable to all the penalties of the former acts. Diſſenting teachers, in order to be exempted from the penalties of the ſtatutes 13 and 14 Car. II. c. 4. 17 Car. II. c. 2. and 22 Car. II. c. 1. are alſo to ſubſcribe the articles of religion mentioned in the ſtatute 13 Eliz. c. 12. (viz. thoſe which only concern the confeſſion of the true Chriſtian faith, and the doctrine of the ſacraments,) with an expreſs exception of thoſe relating to the government and powers of the church, and to infant baptiſm. And by ſtat. 10 Ann. c. 2. this toleration is ratified and confirmed; and it is declared, that the ſaid act ſhall at all times be inviolably obſerved for the exempting ſuch proteſtant diſſenters as are thereby intended from the pains and penalties therein mentioned. Thus, though the offence of non-conformity is by no means univerſally abrogated, it is ſuſpended, and ceaſes to exiſt with regard to theſe proteſtant diſſenters, during their compliance with the conditions impoſed by the act of toleration; and, under theſe conditions, all perſons, who will approve themſelves no papiſts or oppugners of the Trinity, are left at full liberty to act as their conſciences ſhall direct them in the matter of religious worſhip. And, if any perſon ſhall wilfully, maliciouſly, or contemptuouſly, diſturb any congregation, aſſembled in any church or permitted meeting-houſe, or ſhall miſuſe any preacher or teacher there, he ſhall (by virtue of the ſame ſtatute) be bound over to the ſeſſions of the peace, and forfeit 20l. But, by ſtatute 5 Geo. I. c. 4. no mayor or principal magiſtrate muſt appear at any diſſenting meeting with the enſigns of his office, on pain of diſability to hold that or any other office: the legiſlature judging it a matter of propriety, that a mode of worſhip, ſet up in oppoſition to the national, when allowed to be exerciſed in peace, ſhould be exerciſed alſo with decency, gratitude, and humility.

In order the better to ſecure the Engliſh eſtabliſhed church againſt perils from nonconformiſts of all denominations, Infidels, Turks, Jews, Heretics, Papiſts, and Sectaries, there are, however, two bulwarks erected; called the *corporation* and *teſt acts*: by the former of which, no perſon can be legally elected to any office relating to the government of any city or corporation, unleſs, within a twelvemonth before, he has received the ſacrament of the Lord's ſupper according to the rites of the church of England; and he is alſo enjoined to take the oaths of allegiance and ſupremacy at the ſame time that he takes the oath of office; or, in default of either of theſe requiſites, ſuch election ſhall be void. The other, called the *teſt-act*, directs all officers civil and military to take the oaths and make the declaration againſt tranſubſtantiation, in any of the king's courts at Weſtminſter, or at the quarter-ſeſſions, within ſix calendar-months after their admiſſion; and alſo within the ſame time to receive the ſacrament of the Lord's ſupper, according to the uſage of the church of England, in ſome public church, immediately after divine ſervice and ſermon; and to deliver into court a certificate thereof ſigned by the miniſter and church-warden, and alſo to prove the ſame by two credible witneſſes; upon forfeiture

ture of 500l. and diſability to hold the ſaid office. And of much the ſame nature with theſe is the ſtatute 7 Jac. I. c. 2. which permits no perſons to be naturalized or reſtored in blood, but ſuch as undergo a like teſt; which teſt, having been removed in 1753, in favour of the Jews, was the next ſeſſion of parliament reſtored again with ſome precipitation.

But, though the diſſenters have not been able to procure a direct repeal of the corporation and teſt acts, their condition has been extremely ameliorated (if the inconveniences which they complain of have not indeed been totally removed) by the annual *indemnity-bills*, which, ſince the year 1743, have conſtantly paſſed, in favour of all offences againſt theſe ſtatutes. Each bill of indemnity pardons all paſt offences, if the teſt is taken before a certain day; and then another indemnity-act ſucceeds, covering afreſh offenders from the laſt-mentioned day; ſo that the original teſt and corporation acts, the exiſtence of which is conſidered by both ſides to be of ſuch extreme importance, (which by one is complained of as ſo intolerable a grievance, and by the other cheriſhed as ſuch an impregnable bulwark of ſafety,) have really had no ſort of operation, nor been once carried into effect, for more than ſeventy years. From one of the greateſt evils which grew out of the corporation and teſt acts, the diſſenters have been relieved by the deciſion of a court of juſtice. They uſed, for a long time, to be nominated to corporate offices, becauſe it was known they could not qualify to execute them; and by-laws, inflicting penalties on thoſe who refuſed to ſerve, were expreſsly made to enrich corporations at their expenſe. The produce of theſe unjuſt exactions ſerved, or nearly ſerved, to build the manſion-houſe of the city of London. In 1736, it appears that no leſs a ſum than 20,700l. had been raiſed from fines paid by perſons to be excuſed ſerving the office of ſheriff; and out of that money it was reſolved to erect the manſion-houſe, the firſt ſtone of which was laid in 1739. At length, this ſyſtem of oppreſſion was overthrown. An action was brought by the chamberlain of London againſt Allen Evans, eſq. a diſſenter, for the penalty of 600l. for refuſing to ſerve the office of ſheriff of the city of London; but the houſe of lords, to whoſe tribunal it was carried in the laſt reſort, determined, *unanimouſly*, in 1767, that diſſenters who could not conſcientiouſly take the ſacrament, in obedience to the teſt-laws, were excuſed from ſerving corporate offices. Upon that occaſion, lord Mansfield did himſelf the higheſt honour, by his defence of religious liberty. Speaking of the revocation of the edict of Nantes, as introductory to perſecutions in France, his lordſhip ſaid, there was no occaſion for that meaſure; "the Jeſuits needed only to have adviſed a plan ſimilar to what is contended for in the preſent caſe; make a law to render them incapable of office; make another to puniſh them for not ſerving. If they accept, puniſh them, (for it is admitted on all hands, that the defendant, in the cauſe before your lordſhips, is proſecutable for taking the office upon him;) if they accept, puniſh them; if they refuſe, puniſh them; if they ſay Yes, puniſh them; if they ſay No, puniſh them. My lords, this is a moſt exquiſite dilemma, from which there is no eſcaping; it is a trap a man cannot get out of; it is as bad a perſecution as that of Procruſtes: if they are too ſhort, ſtretch them; if they are too long, lop them." Since that period, the diſſenters have ſuffered little or no practical oppreſſion. A ſeries of amneſties has made them quite regardleſs of the penalties of taking office. Several corporations are in their hands; and the deciſion in Evans's caſe has eſtabliſhed, that they are not puniſhable for declining the performance of duties to which they cannot conſcientiouſly ſubmit.

As to *papiſts*, what has been ſaid of the proteſtant diſſenters would hold equally ſtrong for a general toleration of them, provided their ſeparation was founded only upon difference of opinion in religion, and their principles did not alſo extend to a ſubverſion of civil government. If once they could be brought to renounce the ſupremacy of the pope, they might quietly enjoy their ſeven ſacraments; their purgatory, and auricular confeſſion; their worſhip of relics and images; nay, even their tranſubſtantiation. But, while they acknowledge a foreign power ſuperior to the ſovereignty of the kingdom, they cannot complain, if the laws of that kingdom will not treat them upon the footing of good ſubjects, and admit them into civil offices of importance.

As to the expediency of teſts in any caſe, it has not been doubted, nor is there reaſon to doubt yet, but that an eſtabliſhed religion is neceſſary, in conjunction with civil government, to preſerve the peace of ſociety; and therefore in every well-regulated ſtate an eſtabliſhed religion muſt be ſupported, not becauſe it is the duty of the civil magiſtrate to conduct his ſubjects to future happineſs, but becauſe he cannot without ſuch an eſtabliſhment preſerve among them preſent tranquillity. The eſtabliſhment which muſt beſt anſwer this purpoſe, is that which, teaching the great and unchangeable duties of morality, is moſt acceptable in its government and forms of worſhip to the majority of the people; and therefore, in giving a legal eſtabliſhment to one conſtitution of the church in preference to all others, it is only this circumſtance, and not the comparative purity of the rival churches, viewed merely as eccleſiaſtical corporations, to which it is the buſineſs of the legiſlature to pay attention. At the time when the *teſt-act* paſſed the two houſes of parliament, the eſtabliſhed church of England was certainly more acceptable to the great body of the people and to all ranks in the ſtate, than any one of the ſects, whether catholic or proteſtant, which diſſented from her; and therefore it was the duty of the legiſlature to preſerve to that church all her privileges and immunities, and to prevent thoſe hoſtile ſectaries from doing her injury in the diſcharge of any civil office with which they might be entruſted. It was with this view that the *teſt-act* was formed; and it is with the ſame view that the legiſlature has hitherto rejected every petition for its repeal. In doing ſo, it deprives no man of his *rights*, far leſs of rights which *conſcience* calls upon him to maintain at every hazard; for the rights of individuals to hold civil offices are not inherent, but derived from the legiſlature, which of courſe muſt be the judge upon what terms they are to be held. The legiſlature of England has excluded from many offices, civil and military, every man who will not give ſecurity, that in the diſcharge of his public duty he will ſupport the church eſtabliſhed by law; and, as the teſt of his intention, it requires him, before he enters upon his office, to renounce the doctrine of tranſubſtantiation, and receive the ſacrament of the Lord's ſupper in ſome public church, according to the liturgy of the church of England. Whether this be the moſt proper teſt that could have been enacted, may perhaps be queſtioned; but that, in a country abounding with ſectaries of various denominations, who agree in nothing but venomous hoſtility to the religious eſtabliſhment, *ſome* teſt is neceſſary, ſeems incontrovertible, if it be the buſineſs of the legiſlature to preſerve the public peace.

At this moment, however, we are invited to lay aſide all teſts; and to admit papiſts into both houſes of parliament, into conſiderable rank in the navy and army, and, in ſhort, into every office of ſtate with the exception of lord-chancellor (and vice-chancellor we ſuppoſe) and maſter of the rolls, commander-in-chief of the army, lord-high-admiral, and lord-lieutenant of Ireland. Such are the intended enactments of Mr. Grattan's bill, now before the houſe of commons.

It would be very improper in us to anticipate what may be the fate of a meaſure at preſent under the immediate conſideration of the legiſlature, or what modifications that bill may undergo before (if ever) it ſhall paſs into a law. Our remarks therefore muſt be upon the general queſtion of what is called "catholic emancipation," which has been lately agitated with no little warmth.

To the exerciſe of religious worſhip ſhould be given

the utmoſt liberty which can be compatible with the excluſion of heatheniſm, with the obſervance of pure morality, with the preſervation of ſocial order, with perfect ſecurity to the conſtitution in all its branches civil and eccleſiaſtical. A mind impreſſed with this opinion muſt experience regret on being compelled to ſelect, for particular conſideration, the proceedings and ſentiments of any one collective body, which is ſincerely and confeſſedly Chriſtian. When however a claſs of our own countrymen, repreſenting itſelf to be numerous, has thought proper to ſtand forth in public view, for the expreſs purpoſe of engaging attention; when from an adjacent part of the united empire a ſimilar claſs, with appearance of co-operation, has purſued the ſame line of conduct; feelings of reluctance muſt be ſacrificed to a ſenſe of duty. For it would be deemed a mark of criminal indifference, if with unconcern we could hear, and with ſilence diſregard, complaints unreaſonable, reproaches unmerited, claims inadmiſſible, principles untrue; all directed againſt ſtatutes of the realm in the continuance of which we are deeply intereſted; all fraught with conſequences pernicious to inſtitutions for the ſpiritual and temporal welfare of which we are bound to be ſolicitous; all calculated to injure our brethren in the proteſtant cauſe, with whom, in matters of the higheſt moment, we are inſeparably connected.

I. We ſhall, therefore, in the firſt place, extract a few paragraphs from the Petition of the Engliſh Roman Catholics, Feb. 1810. and comment upon them as we proceed.

1. "The Roman catholics form more than one fourth of the whole maſs of the united empire. Their creed is the actual creed of four-fifths of Ireland, and of much the greater part of Europe." What ſhould be the inference from theſe ſtatements? Not ſurely that we ſhould be intimidated, and concede power which ultimately may be employed for our own ſubverſion; but that all proteſtants ſhould unite in ſupport of reformed religion. If the ſpiritual light, which illumines this empire, be indeed ſo threatened with a return of mental darkneſs, from the catholics of England, from the catholics of Ireland, from much the greater part of Europe; proteſtants, awake to a ſenſe of your danger! As catholics make it a common cauſe to ſtrive for the predominance of Romaniſt Chriſtianity; proteſtants likewiſe, reſigning to a higher concern the ſubordinate conſideration of ſect or party, ſhould make it a common cauſe to labour for the aſcendancy of Proteſtant Chriſtianity. And, warned by the examples which hiſtory preſents to them, may our proteſtant brethren of every denomination learn, before it is too late, that endeavours to erect the church of Rome on the ruins of the church of England cannot poſſibly tend either to enlarge the bounds or ſtrengthen the ſecurity of religious freedom to thoſe, whoſe doctrines and diſcipline can never coincide with the doctrines and diſcipline of Romaniſts, on many eſſential points of faith and practice.

2. It is affirmed by the petitioners, that "none of the principles which occaſion their refuſal (of teſts, oaths, and declarations) affect their moral, civil, or *political*, integrity." The moral and civil integrity of the catholics, in diſcharging the duties of private life, we admit with unqualified approbation. But that their *political integrity* is unimpaired, we cannot ſo unreſervedly and unexceptionably grant. Political integrity unimpaired, in the full ſenſe of thoſe words, ſhould mean entire acceptance and complete obſervance of the conſtitution. Our conſtitution embraces polity eccleſiaſtical as well as civil; and, in the ſupreme government conſigned to the king, it combines ſpiritual with temporal power. The propriety of the laws, which inveſt the ſovereign with authority in external circumſtances relative to the church, the Romaniſts diſallow in principle; and, as far as they can venture, oppoſe in practice. Acting therefore, as they do, on opinions which prohibit entire obedience to our conſtitutional polity, they can ſcarcely be ſaid to maintain their political integrity unimpaired. On the eccleſiaſtical polity of the conſtitution, their avowed ſentiments and their open conduct infringe; their political integrity therefore we muſt conſider as defective.

3. We are next to meet the abſtract poſition, that "No principle, which leaves moral or political integrity unimpaired, is a proper object of religious perſecution." Having previouſly begged the queſtion on the ſubject of their political integrity; they now mean to aſſume, that, becauſe they are excluded from power, they are conſequently perſecuted; as if excluſion from power and religious perſecution were convertible terms. But they are not convertible; they differ in their proceedings and characters. Perſecution would attain the end propoſed by poſitive infliction of puniſhment: excluſion from power would effect its purpoſe by the operation of diſcouragement only. Perſecution compels men to adopt certain opinions: excluſion from power leaves all perſons free to follow their own opinions. Perſecution is an evil in itſelf, and always: excluſion from power may be an evil; but it is not ſuch in itſelf, and under all circumſtances: it is therefore only a contingent and occaſional evil. When we have thus diſcriminated between excluſion from power and religious perſecution; and when we have objected to the propriety of tolerating either heatheniſm which leads to vicious practices, or atheiſm which is the bane of human ſociety; then, in the true ſpirit of proteſtantiſm, we ſhall glory in maintaining, that, if public decency, public morality, and public laws, are duly regarded; conſiſtently with the unalienable right which belongs to every man, and which empowers him to adore almighty God in ſuch a manner as in the beſt of his judgment he conceives moſt expreſſive of real devotion, no ſet of religious opinions, no forms of religious worſhip, can be proper objects of religious perſecution. The very word *perſecution* is deteſted; the exerciſe of it in acts of violence is abhorred by a genuine proteſtant. But after this avowal; in duty to ourſelves we muſt confidently maintain, that, unleſs the catholics can prove they experience either direct injury done to their property, or direct force applied to their perſons, on account of their faith and diſcipline, whilſt they remain in the relations and intercourſe of ordinary life, they are not warranted in complaints of ſuffering perſecution, and we deny the fact that they are perſecuted. The true ſtate of the caſe is this: The law does indeed withhold from them rewards, which it would beſtow on them if they would ſupport the eſtabliſhment; but it does not puniſh them for refuſing to give that ſupport. Puniſhment for refuſal would juſtify their charge; but withholding rewards for ſervices not rendered, is neither an act of oppreſſion in civil caſes, nor of perſecution in religious concerns.

4. "The creed of your petitioners was the creed of thoſe who founded Britiſh liberty at Runnymeade; who conquered at Creſſy, Poictiers, and Agincourt." The mention of Runnymeade, Creſſy, Poictiers, and Agincourt, will always excite the moſt lively ſenſations in the hearts of Engliſhmen. It was not therefore without good judgment, that the petitioners brought thoſe places to our recollection. We ſhall never ceaſe to honour the memory of thoſe illuſtrious perſons, who there ſignalized themſelves. Nor can we ceaſe to venerate their creed, ſo far as we acknowledge it to be founded on ſcripture. Beyond that, we cannot, we dare not, hold it in veneration. And it is ſcarcely poſſible for any one, who is acquainted with the hiſtory of the church of Rome, to conſider the Romaniſt creed, and at the ſame time detach from his mind all remembrance of opinions and proceedings connected with that creed. The creed profeſſed by the catholics petitioning, was indeed that of their forefathers, who in the thirteenth, fourteenth, and fifteenth, centuries, acted nobly at Runnymeade, Creſſy, Poictiers, and Agincourt. But we cannot forget that it was alſo the creed of thoſe, who maſſacred the proteſtants on the day of St. Bartholomew. It was the creed of Mary, who on principles of conſcience devoted Cranmer, Ridley, Latimer, and Bradford,

to

to the flames. It was the creed of thoſe, who at one exploſion would have ſacrificed the three eſtates of the realm. It was the creed of thoſe inſurgents, who in the reign of Charles I. went far towards obliterating the name of Engliſhmen in the kingdom of Ireland; and who againſt proteſtants exerciſed cruelties, which an eminent hiſtorian aſſerts "would ſhock the leaſt delicate humanity." It was the creed of the ſecond James; who, under the ſemblance of mildneſs and of equality in privileges to all his ſubjects, (the very plea now urged by the advocates for Romaniſts,) diſpenſed with laws, impriſoned biſhops, and filled the higheſt departments with men of his own perſuaſion. It was the creed of thoſe, who, in the year 1732, occaſioned thirty thouſand proteſtants to withdraw from Saltzburgh; and who, in 1725, inflicted puniſhments of a barbarous nature on the proteſtant magiſtrates and people of Thorn. (Hiſtorical Regiſter, vol. x. and xvii.) It was the creed of thoſe, who, but fifteen years before the reign of his preſent majeſty, within this kingdom encouraged a war, which had for its object the total overthrow of the proteſtant government, and the utter excluſion of the proteſtant ſovereign then exiſting, on whoſe head a price was ſet by the foreign enemy whoſe cauſe they favoured. It was the creed of thoſe, who within our own memory, within the ſhort period of eleven years paſt, in Ireland inſtigated a rebellion, which a writer of that country declares to have been "eminently deſtructive;" and which he affirms "maſſacred, without mercy, all proteſtants, men, women, and children."

5. We are now brought to the ſummary clauſe alluded to in a former part of this article, which at one ſtroke would ſweep away the whole body of ſtatutes enacted for ſecuring his majeſty's prerogative in eccleſiaſtical concerns; and at one blow would demoliſh the ſyſtem eſtabliſhed on the king's ſupremacy in the external circumſtances of the church. The "petitioners humbly pray for a total repeal of every teſt, oath, declaration, or proviſion, which has the effect of ſubjecting them to any penalty or diſability whatſoever, on account of their religious principles."

In this requeſt, whether the want of moderation, or the want of reaſon, be the greater, it is difficult to determine. The requeſt is *immoderate*, becauſe in fact it goes to nothing leſs, than to an entire change of the Britiſh conſtitution in all its laws introduced for the ſupport of the proteſtant religion. And, in truth, effecting that entire change is the chief object in view. It would indeed be laſt in accompliſhment; but undoubtedly it is firſt in contemplation. We muſt be infatuated and blind if we did not diſcover the end propoſed. The method moſt conducive to final ſucceſs is the acquiſition of power, particularly of legiſlative power. That therefore is their aim. And wiſely ſo. For they well know, that the day which ſhall ſee them enter the houſe of commons in a legiſlative capacity as profeſſed catholics, will be the day from which to date the degradation of the proteſtant religion in the Britiſh empire. "Grant me but one ſtep, and we ſhall conquer," ſaid the Theban general to his ſoldiers. *Mutatis mutandis*, ſuch is the language and ſuch the perſuaſion of the catholics: "Give us but one ſtep in the houſe of commons: equality in England, aſcendancy in Ireland, will certainly follow."

The requeſt made in the ſummary clauſe is *unreaſonable*. For, it is in contradiction to the plain dictate of common ſenſe. What is that dictate? It is this: if you would admit any perſon into your confidence, and conſign to him the direction of an important buſineſs, on the right management of which your welfare materially depends; you ſhould previouſly require of him ſome kind of ſecurity for his being faithful in the diſcharge of his duty and true to your intereſt. This is the principle on which individuals proceed in the weighty negotiations of common life. And under whatever forms or names it may be modified, whether of teſts, oaths, declarations, or proviſions, it is, after all, the principle into which may be reſolved the ſeveral meaſures, adopted by ancient and modern ſtates, for the purpoſe of enſuring complete and unqualified obedience to the laws.

If we were to form our judgment from the catholic petition only, we might be led to imagine the introduction of teſts and oaths was, comparatively ſpeaking, novel in politics, and ſanctioned by law under no other government than that of the Britiſh empire. An appeal to hiſtory will give us more ample information, and ſuggeſt to us more correct ideas. Let us refer to the uſages of antiquity. Let us, firſt, recollect the oaths which were taken by the young men of Greece, by the archons, by the ſenators, by the heliaſtic judges, at Athens. At an early age, the Athenians ſwore to defend the ſacred rites and holy inſtitutions of their country. On admiſſion into office, the archons, ſenators, and judges, bound themſelves by oath to obſerve the laws, and be directed by them in their deciſions. What do we learn from theſe facts? In the firſt we ſee an inſtance of ſolemn engagement immediately applicable to the religion of the ſtate. From the three others we collect, that ancient legiſlators did not conceive there was any infringement on natural right in preſcribing conditions to thoſe who were to be intruſted with the exerciſe of public power. What was the practice at Rome? The ſenators performed a ritual ceremony, which in itſelf amounted to a ſacramental teſt. During the commonwealth, the magiſtrate, by whom the ſenate was called, commenced with offering ſacrifice. And by a decree of Auguſtus, every ſenator, before he took his ſeat, was with frankincenſe and wine to make ſupplication at the altar of that ſuppoſed deity in whoſe temple the ſenate was convened. Let us look to modern times. The proceedings of the national aſſembly in France were not only marked with ſavage ferocity, but alſo betrayed conſummate ignorance of human nature: yet amidſt all their atrocities and all their phrenſies there was ſenſe enough to diſcern, that fidelity to the exiſting ſtate was to be ſecured by the obligation of an oath, impoſed on perſons filling certain offices which would create influence. How do our brethren in America provide? "The ſenators, and repreſentatives, and the members of the ſeveral ſtate-legiſlatures, and all executive and judicial officers, both of the United States and of the ſeveral ſtates, ſhall be bound by oath or affirmation to ſupport the conſtitution." Such are the expreſs words of the laſt clauſe in the 6th article of the American conſtitution. But here it will be urged, the ſame clauſe proceeds with ſaying, "No religious teſt ſhall ever be required as a qualification to any office or public truſt under the United States." Granted. The remark, however, is not appoſite. For, the queſtion on the caſe before us is not this; "Whether America introduces or excludes a religious teſt?" The queſtions are theſe; "Does America bind her ſenators, repreſentatives, and magiſtrates, by oath to ſupport the *whole of the conſtitution?*" Or, "Does America allow her ſenators, repreſentatives, and magiſtrates, to ſay, We will ſwear to ſupport the conſtitution in ſome parts, which we think proper; but we will not ſwear to ſupport the conſtitution in other parts, which we think improper?" The oath leaves no pretext for exception to this or that branch; it extends its meaning and obligation to the whole of the conſtitution. And, in the requiſition of that totality in ſolemn engagement, America proceeds as Great Britain proceeds. For, both alike expect ſecurity from the perſon, who is to be commiſſioned, that he will maintain all the laws of the legiſlature, whatever may be their character or deſcription. If in framing its conſtitution America has thought it prudent to omit religion, it was free to do ſo. If our anceſtors judged it ſalutary that our conſtitution ſhould embrace religion, they were free to incorporate religion in our laws. Each country is competent to ſettle its own conſtitution. Having ſettled it, according to the ideas of propriety reſpectively entertained by each, they are ſeverally compe-

tent to demand, and each accordingly does demand, from candidates for power, a ſacred pledge of obedience to the laws; not partially, but completely; not to ſome only, but to all the laws of the conſtitution under which they would exerciſe power. So that, with regard to the point in which we are immediately concerned, American and Britiſh ſubjects are on an equality; for it is required of both, if they would fill offices and be inveſted with public authority, that they ſhould previouſly be bound by an oath to ſupport the whole of the conſtitution in all its branches. The catholics will not ſubmit to be ſo bound. They will accede only to an imperfect obligation. They will promiſe and pay obedience to the king and legiſlature in temporalities alone. The conſtitution preſcribes more extenſive obedience. They refuſe compliance beyond temporalities. They plead religious ſcruples. In matters of religion they are at liberty to conſult their own conſcience. But it is conſiſtent neither with moderation nor with reaſon, to requeſt that for their ſake we ſhould ſo newly model the conſtitution, as totally to diſregard religion; though religion is the baſis of morality and of order among the people; and though, in the Britiſh empire particularly, the firm eſtabliſhment of the proteſtant religion is eſſential to the exiſtence of a proteſtant government.

We have now gone through ſome material parts of the petition preſented by the body of Engliſh catholics. The remarks made on them have been offered in vindication of our legiſlature, and in defence of thoſe precautions which ſecure to us the ſtability and permanence of the proteſtant religion. It would be happy for this empire, if obſervations on other ſubjects of difference between us and the catholics were quite unneceſſary. Such however is the language and ſuch the tone of writings diſſeminated among the Romaniſts in Great Britain and Ireland, that, unleſs we are content their aſſertions ſhould be deemed incontrovertible; unleſs we are prepared to ſee our own cauſe overborne by the unceaſing and undiſguiſed efforts of the catholics to prejudice the reformed religion in the opinion of all to whom they can have acceſs as authors or miniſters; we are compelled to proceed farther, and to declare without reſerve, that we conceive it is neither compatible with expediency, nor reconcileable with conſcience, that, in addition to the rights already enjoyed, more ample conceſſions ſhould be made to them, and greater encouragement be given to the adoption of their doctrines and worſhip.

Our reaſons are theſe: They exult in vilifying the tranſlation of the holy ſcriptures appointed to be read in our churches; and, by endeavouring to vitiate the conſecration of a metropolitan at an early period of the reformation reſtored, they labour to deſtroy the foundation on which reſts the validity of our ſacerdotal functions. Witneſs the late republication and continued notoriety of Ward's Errata; the character and objects of which work need not here be deſcribed, as they have been ably drawn and juſtly expoſed by Dr. Ryan among the Iriſh, and by Dr. Kipling among our Engliſh divines; men, both eminent; and both entitled to our grateful thanks for ſucceſsful exertion of their abilities in our behalf. A popular tract pronounces this judgment of catholics on proteſtants: "We are convinced that they are *ſchiſmatics*, by ſeparating themſelves from the communion of the church of Chriſt; and *heretics*, by diſſenting from her doctrine in many ſubſtantial articles; and conſequently that they have no part in the church of Chriſt, no lawful miſſion, no ſucceſſion from the apoſtles, no authority at all to preach the word of God, or adminiſter the ſacraments; in fine, no ſhare in the promiſes of Chriſt's heavenly kingdom, (excepting the caſe of invincible ignorance,) from which the ſcripture in ſo many places excludes heretics and ſchiſmatics." The Rhemiſh tranſlators affirm, "that in matters of religion, in praying, hearing their ſermons, preſence at their ſervice, partaking of their ſacraments, and all other communicating with them in ſpiritual things, it is a great and damnable ſin to deal with them." What ſhall we ſay to theſe facts? What inferences are immediately deducible from the writings juſt mentioned; writings not diſavowed by the catholics as obſolete and virtually rejected; but recognized as ſtandards of catholic principles, and at this day induſtriouſly recommended by them? What but theſe are the obvious inferences? Your miniſtry is holden in contempt; your churches are conſidered as profane; your rites are branded with condemnation; you are ſhut out from all participation of God's mercy in Chriſt! Such are the ideas the catholics entertain, and ſuch the boldneſs with which they ſcruple not to avow and propagate their ideas concerning you, even though they are in a ſtate of political inequality. And can we think it expedient, that men ſo perſuaded and ſo diſpoſed ſhould be inveſted with political authority over us? Can we think it expedient, that opinions thus uncharitable and inimical towards us ſhould be ſtrengthened with power to carry their operation into full effect? Impoſſible; unleſs, for the puniſhment of our inſenſibility to the bleſſings of pure religion, the time is come when in our own perſons ſhall be verified the adage, *Deus dementat, quos vult perdere.—Petition of the Engliſh Roman Catholics conſidered, by Huntingford biſhop of Glouceſter*; *Sept.* 1810.

Lord Somers, however, (Speech and Obſervations, Sept. 1812.) thinks the *propriety* of admitting catholics into the houſes of parliament but a ſecondary conſideration. He calls for their admiſſion, in the firſt inſtance, as for a meaſure imperative on the legiſlature, a meaſure of obligation on the principles of *juſtice and right*. But his lordſhip ſeems not to have diſtinguiſhed ſufficiently between rights natural and rights poſitive, and the claims which reſpectively grow out of them. To life and liberty man has an abſolute claim; they are his natural rights, indefeaſible, unalienable. To protection of his perſon, ſecure poſſeſſion of his property, impartial adminiſtration of law on occaſions of appealing to it, every man who lives inoffenſively in civil ſociety has an abſolute claim; they are his ſocial rights, for the enjoyment of which he contributes his ſhare towards promoting the chief ends of ſociety. But ſuperior authority, and more eſpecially that kind and degree of authority which ſhall enable him to legiſlate for others, and thus in effect bind others to obedience, no ſubject of a free conſtitution can claim as a right natural. If he has any claim to it, the authority can be due to him only as a right poſitive, originating in ſome law recognized by the conſtitution. Now where is the law, which gives to catholics, who will not qualify, the poſitive right of voting in parliament? That no ſuch law, and conſequently no ſuch right emanating from law, at preſent exiſts, is evident; for, "Whether or not the legiſlature ſhall enact a law conferring ſuch poſitive right?" is the very point on which we are at variance in our opinions. Until ſuch law is enacted, catholics can have no poſitive right, and aſſuredly they have no natural right, to be our legiſlators. The idea therefore of their right to admiſſion into the houſes of parliament muſt be relinquiſhed as founded in miſconception.

His lordſhip's pamphlet has been moſt ably anſwered by the biſhop of Glouceſter, who aſks, "What will be the inquiries of that ſtateſman, who is firmly attached to the exiſting conſtitution, and who, in his profeſſion of Chriſtianity as taught by the church of England, is ſerious and ſincere; when he deliberates on the expediency of admitting catholics to legiſlate for proteſtants? It will be natural for him to aſk; Has it ariſen only from prejudice, vulgar and unfounded in any juſt cauſe, that the names of Philip, of Mary, of James the Second, ſhould have been ſo deteſted by Britiſh proteſtants? Was it merely from caprice and deſire of change, that, after the monarchy had deſcended in the old line of ſucceſſion for ſix hundred years, the legiſlature departed from that line, and veſted the royal dignity where it would be accepted on the expreſs condition, that whoever wore the crown ſhould be a proteſtant member of the church of England? Did the jealouſy, which prompted enlightened and wiſe

legiſlators

legiſlators to annex ſuch a condition, proceed from ideal fears? Were they but trivial, inſignificant, unimportant, errors in religion, which Bradford, Cranmer, Ferrar, Hooper, Latimer, Philpot, Ridley, Rogers, Rowland Taylor, having oppoſed and renounced, refuſed to embrace again, even though refuſal was to be puniſhed by a painful death? Are not the grounds, on which we ſeparated from the church of Rome, the very ſame now, which originally juſtified ſeparation, ſo far as they relate to articles of faith? From the decrees paſſed by the council of Trent, has the church of Rome rescinded any one canon pointed in its anathemas againſt us proteſtants? Does the church of Rome concede any one tenet or uſage, with a view to eſtabliſhing a religious union between us? If truth and fact demand a negative anſwer to all theſe queſtions, he will then aſk,—Conſiſtently with the ſenſe in which he underſtands the doctrines of the goſpel; conſiſtently with the ſacred duty which, morally ſpeaking, obliges him to act conformably with that ſenſe; can a proteſtant Chriſtian encourage a meaſure calculated for the aſcendancy of catholiciſm in a part of the Britiſh empire, ſo nearly ſituated, and ſo immediately connected with us, as the kingdom of Ireland? Can it be equally ſafe for a proteſtant church to have for its legiſlators ſome catholics and ſome proteſtants, as to have them all proteſtants? And, to the catholics, who will not for our ſatisfaction concede one ſingle principle, is it reaſonable that we ſhould ſurrender our conſtitution? He will be told, The catholics "diſclaim, diſavow, and ſolemnly abjure, any intention to ſubvert the preſent church-eſtabliſhment, for the purpoſe of ſubſtituting a catholic eſtabliſhment in its ſtead." (Oath and Declaration of Catholics, 33 Geo. III.) This he will hear, and will give them full and unqualified credit for the *preſent* ſincerity of their hearts and the preſent purity of their deſigns. It will be aſked; Why then heſitate about making them legiſlators? For theſe reaſons; It is natural for man to favour his own cauſe, if opportunity be given him. The poſſeſſion of power to effect a meaſure has often created, what did not before exiſt, a will to effect that meaſure; to effect it too by means not antecedently conceived in the mind. Succeſs, attained in one degree, ſtimulates a deſire of attaining ſucceſs in farther degrees. As the approach to a great and deſirable object is more near, the exertions uſed for ſecuring that object are proportionably more ſtrenuous, and the efforts more bold. A beginning once made, in itſelf apparently unimportant, has often terminated in diſaſtrous conſequences, which on no calculations of probability, on no grounds of conjecture, could have been expected. Therefore, although he will entertain not the ſlighteſt miſtruſt of honour and veracity in catholics, ſo far as they mean and can promiſe for themſelves according to circumſtances exiſting at the time of making their unfeigned declaration; yet, knowing and lamenting the flexibility with which, even in men of the beſt intentions, whether proteſtants or catholics, the judgment is warped; and having experienced the ſucceſs with which, through refined conſtruction of words, political debate can miſlead even the moſt upright perſons; he will conclude, that the ſafer mode by which to guard againſt future and unforeſeen contingencies, will be that the power of legiſlating for proteſtants ſhould be delegated to none but proteſtants." *Proteſtant Letter*, 1813.

II. We now come to ſpeak more particularly of the Iriſh catholics. Purſuing the idea of *juſtice and right*, lord Somers proceeds thus; "It is but fair to the catholics of Ireland to add, that if their claims are founded on this broad baſis, and it ſhould alſo turn out, as I have been informed is the fact, that they were induced to promote the union between Great Britain and Ireland not merely on implied but on expreſs intimations from high authority, that both as the price and reward of their ſupport, and as the natural and legitimate conſequence of ſucceſs in the cauſe to which that ſupport was requeſted, their then and preſent claims ſhould be accorded; if this is ſo, my lords, as I have been confidently aſſured, and we have all ſtrong reaſon to believe, why then ſurely the reſult of our inveſtigation of theſe points muſt be, that the Iriſh Roman catholics are entitled to the admiſſion of their claims, as a matter of ſtricteſt juſtice." *Speech*, p. 4.

The biſhop replies: "Your concluſion would be good, if your premiſes were ſound; but, before we admit the one, we muſt examine the other. The negociation, to which you refer as having actually paſſed, muſt have been extraordinary in its nature. No words can too fully expreſs our conviction that you have ſtated it preciſely as it was communicated to you. Since, however, you mention it, not as a fact concerning which you can ſpeak from your own perſonal knowledge and perſonal engagement in it, but as one of which you have *been informed*; we are at liberty, without intending or giving cauſe for offence, to receive the circumſtance as a matter reported only. Now although the authority, from which a report emanates, may be highly creditable, yet it is poſſible there might have been ſome degree of miſconception in the author. In a caſe too, where the production of ſome written document, ſubſtantiated and atteſted, might reaſonably be required in proof, report alone is not ſufficiently valid to be allowed as evidence inconteſtable. The tranſaction, to which you allude, is a caſe in which we might be juſtified in requiring the production of ſome written document, ſubſtantiated and atteſted. For it is not probable that, when a propoſal of ſuch magnitude as the tranſferring of its parliament was made to the kingdom of Ireland, there ſhould be no written ſpecification of terms from this to that country; nor, if ſuch ſpecification of terms ever exiſted, and the granting of legiſlative power to catholics was one of thoſe terms, is it probable that no well-authenticated copy of it, containing that among other terms, ſhould ſtill exiſt among ſtate-papers. Such copy however has never yet been laid before the public, nor even has appeal to it ever been made; although the promiſe, reported to have been given, has repeatedly been diſcuſſed.

"But, to grant you every advantage poſſible, it ſhall be admitted as certain, that, as a condition of their acceding to the propoſed union, there was given to the catholics a promiſe of admiſſion into the Britiſh legiſlature. By whom could ſuch promiſe be given? By none but the miniſters of public affairs for the time being. My lord, with every diſpoſition to pay miniſters the utmoſt reſpect which perſonally and officially is due to them, an independent mind cannot acknowledge the word of miniſters to be the law of the land, nor the promiſe of miniſters to be binding on the nation. Until they have been ſubmitted to the judgment, and ſanctioned by the approbation, of parliament, they are without force in the contemplation of the public. Produce to us, my lord, any formal act of the legiſlature, by which, in conſequence of a miniſterial promiſe, and becauſe the catholics of Ireland had promoted the union of the two kingdoms, it was ordained that henceforth catholics ſhould be admitted into the houſes of parliament, equally as proteſtants; then without a moment's heſitation we will ſay, For the honour of Britiſh faith, admit the catholics into parliament, according to the ſolemn covenant of the legiſlature. But you can produce no ſuch act; no act with any clauſe of ſimilar import. On the nation, therefore, the miniſterial promiſe, even if made, could not be deemed obligatory, becauſe not ſanctioned by the nation through its parliament.

"The ſureſt mode by which to aſcertain what really was or was not promiſed at the period of forming the union, will be by reference to the act of union. The deſign of every act may beſt be collected from its preamble. The preamble of the union act is this; 'Whereas, in purſuance of his majeſty's moſt gracious recommendation to the two houſes of parliament in Great Britain and Ireland reſpectively, to conſider of ſuch meaſures as might beſt tend to ſtrengthen and conſolidate the connection between the two kingdoms, the two houſes of the parliament of Great Britain and the two houſes of the parliament of Ireland have ſeverally agreed and reſolved, that, in order to promote and ſecure the eſſential intereſts of Great Britain

tain and Ireland, and to conſolidate the ſtrength, power, and reſources, of the Britiſh empire, it will be adviſable to concur in ſuch meaſures as may beſt tend to unite the two kingdoms of Great Britain and Ireland into one kingdom, in ſuch manner, and on ſuch terms and conditions, as may be eſtabliſhed by the acts of the reſpective parliaments of Great Britain and Ireland'—&c. &c. You have here the ſubſtance of what his majeſty recommended; the ſubjects on which the Engliſh and Iriſh parliaments deliberated; the purpoſes which they had in view, and for the attainment of which they agreed on certain ſtipulated articles. Did his majeſty recommend, was it a ſubject of deliberation, was it among the purpoſes to be attained, that catholics ſhould be admitted to legiſlate for proteſtants?

"But let us proceed to the article which requires compliance with certain conditions from thoſe who would be legiſlators. In the fourth article then it is enacted, 'That every one of the lords of parliament of the united kingdom, and every member of the houſe of commons of the united kingdom, in the firſt and all ſucceeding parliaments, ſhall, until the parliament of the united kingdom ſhall otherwiſe provide, take the oaths, and make and ſubſcribe the declaration, and take and ſubſcribe the oath, now by law enjoined to be taken, made, and ſubſcribed, by the lords and commons of the parliament of Great Britain.'

"If there be any thing remarkable in this enactment, it is the reſerve, *Until the parliament of the united kingdom ſhall otherwiſe provide.* But what can fairly be deduced from that clauſe, ſaving though it be? No ingenuity can thence extract any thing like a *promiſe*, that there certainly ſhould be a change of parliamentary qualifications. The utmoſt, which can be elicited from thoſe words, is an intimation of *poſſibility*, that there might be ſome change. That poſſibility however is contingent in its nature, becauſe it is left dependent on the will of parliament. It is alſo indefinite as to time; for no period, at which even an attempt ſhould be made for carrying the poſſibility into effect, is in the moſt diſtant manner ſpecified. In truth, if the whole tranſcript from the fourth article be taken together and duly examined, it will be evident that in its general tenor it meant to maintain and confirm the requiſites, preſcribed by the laws already exiſting, as qualifications for admiſſion into parliament.

"To the act itſelf let us again appeal; and tranſcribe from it an article, which deſerves more cloſe and ſerious attention, than what has commonly been given to it by the parliamentary advocates of catholiciſm. It is this; 'That it be the fifth article of union, that the churches of England and Ireland, as now by law eſtabliſhed, be united into one proteſtant epiſcopal church, to be called, *The United Church of England and Ireland*; and that the doctrine, worſhip, diſcipline, and government, of the ſaid united church, ſhall be, and ſhall remain, in full force for ever, as the ſame are now by law eſtabliſhed for the church of England; and that the continuance and preſervation of the ſaid united church, as the eſtabliſhed church of England and Ireland, ſhall be deemed and taken to be an eſſential and fundamental part of the union.' Mark the expreſſions; *ſhall remain in full force for ever*; and *the continuance and preſervation of the ſaid united church ſhall be deemed and taken to be an eſſential and fundamental part of the union.* Can words be more plain, unequivocal, ſtrong, direct, abſolute? How then, ſo ſoon after paſſing an act thus explicit, guarded, circumſpect, can the Britiſh parliament, conſiſtently with public faith, encourage and ſanction a meaſure, the obvious tendency of which is to impair the force, to ſhorten the continuance, to counteract the preſervation, of all that is eſſentially conducive to the tranquillity and permanency of the united church? The *juſtice and right*, which you think demand fulfilment of a miniſterial promiſe never proved to have been given, and even if given not binding on the nation, in reality ſupport our claim to a ſcrupulous obſervance of thoſe conditions which were ſolemnly ratified by law. If to the letter and to the ſpirit of thoſe conditions the legiſlature adheres not, the *proteſtants of Ireland* may with reaſon accuſe us of having practiſed on them the groſſeſt deception. Can your lordſhip forget that memorable and intereſting debate of the Iriſh parliament, (anno 1795.) which was protracted for nearly twenty hours? Can you forget that the propoſal for admitting catholics into the Iriſh legiſlature was negatived? And what induced the proteſtants of Ireland to blend themſelves ſo entirely with the Engliſh parliament as that the ſummoning of an Iriſh parliament ſhould thenceforth be ſuperſeded? It was the hope, that the cauſe of proteſtantiſm would thence receive a great and powerful acceſſion of parliamentary ſtrength, which might render ineffectual any future deſigns of admitting catholics to legiſlate for proteſtants. If that hope be fruſtrated, through conceſſions made by the very legiſlature with which they coaleſced for a contrary purpoſe, and on which they relied for protection againſt catholics; how ſadly will Iriſh proteſtants be diſappointed in their juſt and reaſonable expectation!" *Proteſtant Letter*, p. 26–36.

"In order to ſatisfy us, that there can ariſe no miſchief from the admiſſion of catholics to vote in parliament, you tell us, the catholic peers will be very few in number; the catholic members, Iriſh and Engliſh, in the houſe of commons, not more than ſixty or ſixty-two; of whom fifty will be returned for Ireland, and twelve for England. It has been calculated, that for Ireland alone would be elected ſixty-ſix catholic members, even according to the ſtate of property which now exiſts in that kingdom. We will however take your own number, and compute the whole at ſixty-two. Doubtleſs, many of them would be moderate men. We cannot however ſuppoſe that all would be of that deſcription; becauſe you inform us, there are in Ireland 'moſt violent demagogues, whoſe object is miſchief really, and who by their miſchievous influence produced the laſt rebellion.' (Speech, p. 8, 9, 10.) Now, if thoſe demagogues have ſuch aſcendancy, and if to them 'the leading and guiding of the popular maſs has fallen,' (Speech, p. 16.) it is more than probable that ſome of them would enſure ſucceſs at the election of repreſentatives. If that ſhould be the caſe, then among the ſixty-two we ſhould find ſome gentlemen, who according to your account would not be very moderate; perhaps they might be ſome of the *incorrigibly reſtleſs*, to whom your Obſervations allude. We will conceive the parliament aſſembled. Buſineſs would proceed for ſome time without much interruption; it is not good policy to begin at once with conduct intemperate and ſuſpicious. But, in due ſeaſon, the turbulent would open and unmaſk; and even in the moderate would be wrought a change. It would then be ſeen, that new ſituations ſuggeſt new projects; that the very idea of having obtained political ſtrength will call forth energies before inactive, and give reality to ſuch ſtrength; that however men may differ on other topics, and on other occaſions, yet when the raiſing of their religion, and with their religion exalting of themſelves into a higher degree of public eſtimation, is the object in view, they will coaleſce, and be united by the ſtrongeſt of all poſſible bonds. The laſt remark is particularly applicable to catholics; for, much to the praiſe and credit of their fidelity, they are true to their own religious profeſſion, and co-operate in advancing the intereſts of their church. Your ſixty-two catholics will form a compact phalanx, which even of itſelf muſt carry weight. Its weight however will receive acceſſion of force, derived from Engliſh and Iriſh proteſtant members who will join the catholics. For, that Engliſh and Iriſh proteſtant members will join them may be collected from this circumſtance; the catholics already, though not in parliament, have great influence on Engliſh and Iriſh members; chiefly indeed on the Iriſh, becauſe Iriſh catholics have the elective franchiſe. Far greater then might they be expected to have, if they were themſelves conſtituent members, preſent to ſee and hear what was paſſing in parliament, active in application to all around them, competent to exerciſe their own perſonal power, many by delivering

delivering ſuitable ſpeeches, and all by giving effective votes.

"On a queſtion of religion, even your ſixty-two members, with their connexions in both houſes (for the catholic peers would be neither dormant nor inſignificant), might be enabled to create embarraſſment. But can you conceive, if the catholics were once admitted into the legiſlature, that their intereſt in Ireland would be ſtationary? that only fifty would continue long to be the number of catholic repreſentatives returned from that kingdom? Do you quite exclude from your calculation of future events, the poſſibility and the probability of an increaſing intereſt and of proportionate repreſentatives, reſulting from an expectation, ſo well founded as to be little ſhort of abſolute certainty, that the catholics, when members of the legiſlature, will advance in their claims? will make their firſt claim, for a catholic lord lieutenant; their ſecond, for a catholic government in Ireland; their third, for placing the catholic church in Ireland on an equality, *at leaſt*, with the church now eſtabliſhed? Succeſs to theſe claims would indeed be gradual; but in the mean time the very proſpect of their being in contemplation, and progreſſively to be advanced, would accelerate the attainment of ſucceſs. For, whilſt opportunity yet remained, and advantageous ſales could be made by transfer to catholic purchaſers, who for the ſake of concomitant influence would give more than the intrinſic value of what they bought; the proteſtant gentlemen of Ireland would diſpoſe of their eſtates; and like prudent navigators, who make for the port before the ſtorm burſts, would leave that kingdom, and ſettle in England. The zeal which is ſhown for the Iriſh catholics, and the comparative apathy for Iriſh proteſtants, would be continually operating as a ſentence of exile pronounced on the proteſtant gentlemen; and, in the interval, the landed intereſt would be paſſing into the hands of catholics, who would naturally employ whatever means are attached to that intereſt for the return of catholic repreſentatives. Gentlemen of their church have not yet imbibed that generaliſing ſpirit, which ſhall prompt them to prefer thoſe, who widely differ from them, to thoſe who agree with them in religious opinion; thoſe, who are of another communion, to thoſe who are of their own. Steady and warm in their attachment, they will think (and as honeſt catholics they ought to think) a catholic more eligible for their purpoſe than a proteſtant. Thence your fifty Iriſh catholic members would at every vacancy in a borough or county be acquiring additional ſtrength; and the end would be, that nearly the whole of the Iriſh repreſentatives would be catholics. The artful and deſigning among the catholics know this. It is one of the points at which they are aiming. Do not ſuppoſe the clamour raiſed by the demagogues about admiſſion into parliament is merely for the name and honour of the thing; there is in view an ulterior object, which in the preſent ſtage it is wiſe to conceal. Seat in the houſe of commons nearly a hundred catholic members, and mark the effect. In all great and extenſive empires there muſt be times of difficulty. Difficult times require ſtrong meaſures. The carrying of propoſals for ſtrong meaſures can often be accompliſhed only by parliamentary conceſſions. Theſe will be the ſeaſons for the catholic body to offer its terms to the leading men, who may be either friendly, or adverſe, to the meaſures propoſed. Accordingly as conceſſions are made to their demand (for ſuch it will be) in favour of catholiciſm, ſo will be the ſucceſs, or failure, of propoſed meaſures. To whatever ſide ſuch a body ſhall throw its weight, that ſide will preponderate. Retroſpect on tranſactions in the thirty years paſt, will warrant conception of the events, in which the admiſſion of catholics into the legiſlature will terminate, within the compaſs of thirty years future. And as thoſe events will be detrimental, if not to the whole Britiſh empire, yet certainly to the proteſtant ſubjects in Ireland, a very material and eſtimable part of the Britiſh empire; the hope of averting from them baniſhment, if they muſt leave their native country; or degradation and deterioration, if they muſt remain in it; will juſtify precaution taken in a way the moſt mild, yet the moſt firm poſſible; taken where it can and while it can be adopted; that is, by voting in parliament againſt your meaſure whenever it is again propoſed.

"At our fears, apprehenſions, and horrors, your lordſhip is diſpoſed to laugh, when you call the danger of acceding to your propoſal, for admitting catholics into the legiſlature, the ſhadow of a ſhade. We have our fears moſt certainly; but they are of a deſcription not quite ſo evaneſcent, and proceed from a cauſe not quite ſo unſubſtantial, as you ſeem to imagine. Our fears are, leſt by a vote, indiſcreet according to our views of the ſubject in all its branches and bearings, we ſhould do wrong; wrong to the conſtitution, to the Britiſh empire, to the proteſtants of England, to the proteſtants of Ireland; wrong in the ſight of man; wrong to the purity of the Chriſtian religion; wrong before God! Theſe are fears which inſpire political courage; courage neither to be abaſhed by your very innocent raillery; nor to be intimidated by the menacing language of certain catholic writers, who do every thing but tell the catholics, in plain terms, they ſhould force their way into the houſes of parliament as legiſlators.

"Your idea of king James the Second's character, and of his devotedneſs to the Roman-catholic religion, is more correct, becauſe more conſonant with the general teſtimony of hiſtorical writers, than the novel opinion that he became catholic with a view of being thereby deſpotic. Either perſuaſion however will militate againſt inveſting catholics with legiſlative power. For; if on the one hand he was ſincerely a catholic, he gives us reaſon to ſuppoſe catholics will uſe their power in favour of catholics rather than in favour of proteſtants. If, on the other hand, he aimed at deſpotiſm under the cloak of catholiciſm, it is evident he thought catholiciſm better ſuited than proteſtantiſm for imperious domination. It is remarkable that king James ſhould have covered his real deſign with the ſpecious pretext, that, 'ſince the ſervice of all his ſubjects was due to him by the laws of nature, he declared them all equally capable of employments, and ſuppreſſed all oaths or teſts that limited this.' When in favour of catholics a ſimilar doctrine of equal capability is again advanced, it cannot be entitled to a haſty reception.

"The chief object claimed by the catholics, and more eſpecially by the catholics of Ireland, is participation of legiſlative power. The chief ſource of their diſcontent is the exiſtence of thoſe conſtitutional laws, which, by requiring an oath of abjuration to be taken and a declaration ſolemnly to be made, impede attainment of the object claimed. And it is to that alleged grievance principally, though not altogether, your ſpeech adverts, when it aſks, 'Is it no benefit to our country, to do away a juſt cauſe of diſſatisfaction from upwards of four millions of your fellow-ſubjects, a great proportion of whom are now ſhedding their blood in your cauſe, and fighting your battles by land and by ſea; to whom therefore not only gratitude is due in point of juſtice, but alſo confidence in point of policy?' Your queſtion ſhall be conſidered and met. The feelings and language of diſſatisfaction are then only juſtifiable, when the cauſe of it is reaſonable; that is, when the object ſought may with reaſon be required and in reaſon be expected. Now we deny it may with reaſon be required and in reaſon be expected by the catholics, that to them, who are inflexibly determined not to concede one tittle for accommodation with proteſtants, proteſtants ſhould ſurrender their conſtitution. For if the laws, which relate materially and eſſentially to the eccleſiaſtical ſupremacy of the ſovereign, the preſent ſtate of the legiſlature, and the ſecurity of proteſtantiſm, are to be altered at the will of the catholics, it is a ſurrender of the conſtitution. When the alliance was formed between church and ſtate in the days of Conſtantine, the civil and religious intereſts were united by compromiſe. In the

inſtance

inſtance before us, one party is to grant every thing; the other, nothing. This is not treating with us on fair terms, nor in that ſpirit of conciliation with which the Chriſtians of the fourth century conceded to their Chriſtian emperor much power in eccleſiaſtical concerns. If the proteſtants were no more than equal to the catholics in number and influence, they would be warranted in expecting ſome condition ſhould be proffered, to compenſate the ſacrifice of legal ſecurities. But in population the proteſtants of the empire far exceed the catholics; and in political weight undeniably preponderate. Yet a demand is made on them without any condition proffered. It is therefore unreaſonable; and, as ſuch is its nature, diſinclination to comply with it ought not to be conſidered as a juſt cauſe of diſſatisfaction.

"It ſhall be allowed, that the catholics are four millions in number. For the greater part of this aggregate body we muſt look to the natives of Ireland. What is the diſpoſition of thoſe natives? and in what degree of eſteem is Ireland to be holden? Truth ſhall ſpeak. A writer of hiſtory would not do them juſtice, if he did not deſcribe the natives of Ireland, catholics and proteſtants, as a people generous, open-hearted, brave; in the relations of private life much to be loved; in their national character much to be reſpected. And of Ireland itſelf he would be bound to aſſert, that it is one of the brighteſt gems in the crown of the Britiſh ſovereign; it is infinitely more than Corinth was to Greece, it is one of the brighteſt luminaries in the wide hemiſphere of the Britiſh dominions. Solemnly and ſeriouſly; Ireland and its people are endeared to us by every tie, which can bind heart to heart; and no Briton of right mind and right affections will ever ceaſe from devoutly wiſhing them proſperity and happineſs. The catholics however are entreated to conſider, that, being incorporated into the whole body of Britiſh ſubjects, they bear to the population of the Britiſh empire the proportion only of four millions to twelve millions. It is therefore no diſparagement, no mark of diſreſpect, no act of diſregard towards them; if whilſt we hope that whatever can be ſaid in praiſe and favour of catholics, can be ſaid with equal truth of Iriſh and Britiſh proteſtants; if whilſt we conceive more is due to a larger than to a ſmaller number of Britiſh ſubjects; we think it reaſonable, in calculating the intereſts and adjuſting the claims of catholics and proteſtants reſpectively, to decide on what is beneficial to four millions, certainly ſo far as that number goes in its relative proportion; but not ſo far as that the benefit of four millions ſhall ſuperſede what is owing to twelve millions. Unhappily, the advocates of catholiciſm reverſe this principle of calculation, adjuſtment, and deciſion. They ſay in effect, Gratify the four millions to the fulleſt extent of their demands, at all adventures; and leave the preſent happineſs and future ſecurity of the twelve millions to hazardous uncertainty. On this point, the ſupporters of proteſtantiſm and the advocates of catholics are not agreed. In their variance, both are entitled to the credit of the beſt intentions; but both have not the ſame grounds on which to reſt their arguments. For, we reaſon from conſideration of the maxims and uſage commonly adopted by mankind in civil ſociety; from the occaſions which made neceſſary the laws enacted by our forefathers; and from experience of facts within our own remembrance. You can argue from nothing but ſpeculation and hope; guides of conduct not ſo infallible as thoſe which we take for our directors.

"Be the event what it may, 'one and common ſhall be our danger, one and common ſhall be our ſafety,' is the principle on which the united kingdoms ſhould ever cooperate againſt a foreign enemy. Indiſſoluble is our connexion; inſeparable is our welfare. When therefore your lordſhip is ſpeaking of the catholics, who are in the army and navy; would it not have been more correct, becauſe more conſonant with the relation ſubſiſting between Great Britain and Ireland, if your mode of expreſſion had been, 'ſhedding their blood in the *common cauſe*, and fighting the battles of the Britiſh empire by land and by ſea?' From the manner in which you now mention them to the parliament and people of England, as 'ſhedding their blood in *your* cauſe, fighting *your* battles by land and by ſea,' a reader unacquainted with our cloſe union might be led to ſuppoſe they were mercenary troops and mercenary ſailors, without concern, without intereſt, in the final iſſue of their military engagement. Whereas, in fact, there is not a ſingle man indifferent; there are many thouſands moſt deeply concerned, moſt deeply intereſted; all are anxious that the termination of the war ſhould be ſucceſsful conjointly to Ireland and Great Britain. Perhaps however the word *your* may have been deſignedly introduced, for the purpoſe of giving your ſentence a rhetorical turn calculated to excite emotion and to ſwell the meaſure of gratitude in your audience. With honeſt pride and thankfulneſs we may aver, the ſterling ſenſe and generous diſpoſition of a Britiſh ſenate require nothing more than a plain ſtatement of valorous deeds, to call forth its gratitude. Britiſh ſubjects give cordially, reward liberally, ſo far as may be conſiſtent with national prudence. Beyond the extent of national prudence, neither ſhould parliament be expected to confer, nor ſhould an individual wiſe, good, and patriotic, wiſh to be compenſated with remuneration.

"That there are in his majeſty's army and navy many thouſand catholics, is a fact which needs not be diſputed; it is rather a ſource of gratulation to the empire. To whatever part of the continent, or of the ocean, may be their deſtination, thither our hopes and fears, our anxieties and affections, will always attend them. We read of their victories, with exultation; of their diſtreſſes, with regret; of their wounds, with ſorrow; of their deaths, with affliction. Longer could we have dwelt on the many circumſtances, which being connected with recollection of our army and navy come home to the boſom of every Briton; but we are compelled to defend ourſelves againſt the charge of being ungrateful and unjuſt towards our gallant fellow-ſubjects. We proceed, then, by obſerving; as the military and naval catholics form part of the four millions, ſo the military and naval proteſtants form part of the twelve millions. If the former are noble and meritorious for their exploits, the latter are equally noble and meritorious on the ſame account. Whatever repreſentation you can make in favour of catholic ſoldiers and ſailors, the ſame without diminution of force will apply to proteſtant ſoldiers and ſailors. Whatever may be required of us in token of gratitude, or dictated to us as a line of policy, in conſideration of ſervices rendered by the catholics; the ſame may be required, the ſame dictated, in conſideration of the ſervices rendered by the proteſtants in army and navy. Thus your argument gains nothing by the introduction of that extrinſic point. Diſproportion between four millions and twelve millions ſtill remains. And the queſtion, 'Is it juſtice, that to the ſolicitation of four millions ſhould be yielded up the happineſs and ſecurity of twelve millions?' recurs and meets you at every turn. Does any one aſk, 'What motives then can induce the catholics to brave dangers, if to their body is not conceded capability of admiſſion into the legiſlature?' This queſtion is put, becauſe really ſome perſons talk as if they thought the catholics neither would continue, nor ought to continue, braving dangers, unleſs capability of ſitting in parliament be conceded to their body. Let ſuch perſons know; the catholics will enter the army or navy, will acquit themſelves in their ſeveral duties with fidelity and zeal, actuated by the impulſe of very different, and one might almoſt ſay ſuperior, motives; motives to which no one, (be his religious perſuaſion what it may,) no one who feels like a man, will be inſenſible; motives, by the force of which no mind would be ſtimulated more powerfully than the mind of your lordſhip. They are, natural affection for parents, wives, children, friends; invincible love of liberty, honour, king, and country.

"Whoever

"Whoever would live in civil ſociety, ſhould endeavour to adapt his thoughts and wiſhes to the circumſtances inſeparable from that ſtate. In the polity of a numerous and widely-extended people there muſt unavoidably be intermixed ſome diſadvantages. But if the benefits are prepollent, in conſideration of enjoying thoſe benefits, and for the ſake of the whole community, a rational, prudent, and moderate, mind ſhould be content to bear the diſadvantages. One diſadvantage in civil ſociety is the introduction of diſqualification. And yet, for the greater improvement of arts, for the more effectual diſcharge of duty, for the more conſtant preſervation of order, for the more permanent ſtability of government; diſqualification, in ſome ſhape or another, always has pervaded, and always will pervade, a ſyſtem of polity well arranged; nor will it be uniformly excluded from a ſyſtem of polity ill arranged. Even in revolutionary France, the national aſſembly decreed, 'No deputy to the national aſſembly ſhall be admiſſible into the miniſtry, until four years after the expiration of the legiſlature of which he is a member.' Licentiouſneſs itſelf reſorted to diſqualifying proviſions. Theſe remarks were ſuggeſted by your queſtion, 'Is it not the nature of man to be diſſatisfied and mortified with a diſqualification?' You aſk the queſtion in a way ſo general, that your interrogation ſeems intended to lay it down as a maxim univerſally acknowledged to be true. The poſition however, that diſqualification, merely in itſelf abſtractedly taken, is or ſhould be a ſource of vexation, may well be controverted. If you would ſee the extent of diſqualification, and be convinced that it attaches not to catholics only, look into our four profeſſions, army, navy, law, church. Whoever continues to purſue any one of theſe lines, is diſqualified for holding rank in the other three. Again; Whence is it that thouſands cannot follow the diverſions of the field? That thouſands cannot give an elective ſuffrage? That thouſands cannot propoſe themſelves as candidates for the parliamentary repreſentation of boroughs? and are ſtill farther removed from capability of repreſenting counties? Why cannot parliamentary members of one houſe be at the ſame time admitted as members of the other houſe? Diſqualification is the impediment through all theſe caſes. In fact; gravitation and attraction do not operate more generally or neceſſarily in the frame of the univerſe, than diſqualification does and muſt operate in the arrangements of civil ſociety. Let not the catholics be encouraged to think diſqualification lies on them only. To a greater or leſs degree, we all participate in excluſion ariſing from the principle of diſqualification, ſome in this way, ſome in another. Yet, the wiſe and good complain not. Wherefore? becauſe they are convinced theſe maxims are true; 1. It is the duty of a citizen to ſacrifice private to public good. And, 2. He hath advanced far towards the attainment of happineſs, who has learnt not to deſire things incompatible.

"The catholics hold tenets which in effect diſqualify them for admiſſion into the legiſlature. They have a right to hold ſuch tenets, if their option is to hold them. But then they are not to expect, that for their gratification the law of the land ſhould abrogate diſqualifications enacted and continued for public good. Where is the reaſonableneſs in making ſuch a demand? You will ſay, 'But here is a diſqualification on account of religion.' True; and why not on account of religion, which man *does* chooſe; as well as on account of inſufficient property, which man does *not* chooſe for himſelf? Why is diſqualification on account of religion more mortifying than diſqualification on account of inſufficient property? You would find it a difficult taſk, if you undertook to prove there was more of grievance in the former than in the latter caſe. On the contrary, if this were the place in which to diſcuſs that point fully, it were eaſy to demonſtrate that the latter hath more of grievance in it than the former. Yet the laws, by which perſons of inſufficient property are affected, continue in force. And for this beſt of reaſons; becauſe on a view of all circumſtances connected with thoſe laws, and of all conſequences which would follow a repeal of them, the legiſlature judges it moſt expedient and moſt conducive to public good, that no alteration ſhould be made in them.

"Enactment of laws originates in ſome occaſion requiring thoſe laws: application of them co-exiſts with that occaſion: when the occaſion ceaſes, enforcement of them ceaſes. Thence it is, that in your ſtatute-books are many laws which are become dead letters. The teſt-act is nearly ſuch. At a period almoſt fifty years antecedent to the preſent time it was ſaid with truth, 'If he (i. e. a diſſenter) behaves modeſtly, prudently, and quietly, there ſeems to be no diſpoſition in the governors, either civil or eccleſiaſtical, to encourage informations or legal proceedings againſt him. He may continue in his opinions, and yet enjoy his property, his liberty.' Since the age in which that obſervation was made, our civil and eccleſiaſtical governors have ſhown a gradually-increaſing diſpoſition to protect all perſons indiſcriminately, in the free exerciſe of their religious worſhip. The fact aſſerted appears evident, from the various laws ſucceſſively paſſed, in favour of all who ſeparate from the eſtabliſhment. You will perhaps aſk, 'Why then is not the teſt-act repealed?' That queſtion ſhall be met by others. When the morning has brought back clear light, do you throw away the locks of your doors, and bars of your gates? When the flood has ſubſided, do you remove your ſea-banks? When peace is proclaimed, does the nation break up all its ſhipping? Virtually however, the teſt-act is repealed every year, before the cloſe of each parliamentary ſeſſion, by the bill of indemnity. What, in effect, do our legiſlators ſay by that bill? They ſay this; 'Our object, in ſtill retaining the teſt-act, is not that it ſhall injure any one; but that it ſhall continue, as heretofore, to ſecure the proteſtant eſtabliſhment civil and religious from poſſible contingencies. You, gentlemen diſſenters, have neither by your conduct nor by your principles evinced any thing incompatible with the ſecurity propoſed; and therefore we ſhall provide, that, although the teſt-act is not abrogated, yet it ſhall not injure you.'

"You urge the propriety of admitting catholics into our proteſtant legiſlature, by appealing to a country where proteſtants may be admitted into a catholic ſenate or council. 'When a proteſtant layman in deſpotic France and its vaſt dependencies enjoys the ſame privileges as a catholic, muſt not a catholic in free Britain repine, when he finds himſelf under diſqualifications?' If the government of France and the government of England were ſimilar, there would be more force in your analogical reaſoning. But, as they are very diſſimilar, your analogy fails; becauſe the things compared are in their nature, and in the conſequences reſulting from that nature, entirely unlike. The government of France is deſpotic. Under a deſpotic government, it is very immaterial what religious opinions a member may carry with him into a conſervative ſenate, or deliberative council. He cannot, by debate corresponding with thoſe opinions, produce any influence on public meaſures. He is required, at the peril of loſing his rank, and perhaps his liberty, to conſult the will of the ruler; to ſpeak as the ruler ſpeaks; to act as the ruler dictates. In the ruler, a word is law; in the ſubject, paſſive obedience is the duty. Thanks be to Divine Providence! not ſuch is the caſe in England. The government of England is free. Whoever ſhall go into the Britiſh parliament, will claim for himſelf the ancient and allowed privilege of parliament; and, ſo long as he confines himſelf to decorous language, he will ſpeak unreſervedly on all topics whatever. If into parliament he carries with him catholic opinions, by arguments deduced from thoſe opinions he will contend for meaſures partial to thoſe of his own communion; he will endea-

vour to work on the public mind, by every legitimate effort which he can poſſibly exert, in favour of his own religious perſuaſion, and for the greater benefit of all who agree with him in that perſuaſion. On queſtions of religion, he will labour to promote an intereſt, ſeparate from that of proteſtants; he will be zealous for a cauſe, which, in many eſſential points, is at leaſt unfavourable, if not decidedly adverſe, to the cauſe of proteſtants. In England, therefore, will be occaſioned material difference, by the admiſſion of catholics into the Britiſh proteſtant legiſlature. In France, no difference can ariſe from the admiſſion of proteſtants into a catholic conſervative ſenate, or deliberative council. Hence the caſes are not alike; and, being not alike, they afford you no ground on which to argue from what is done in France, to what, as you conceive, ought to be done in England.

"You contend, that the principle which on paſt occaſions induced the legiſlature to make conceſſions, ſhould now lead to an unqualified grant of every thing claimed by the catholics. The principle, to which you allude, is found in this paſſage; 'You have avowed to your country and to all the world, that the reaſons which rendered the old diſqualifying ſyſtem requiſite, exiſt no more; for you have yourſelves broken its barriers down.' (Speech, p. 21.) If, according to your idea, the legiſlature proclaimed to the world, there was no longer occaſion for the *old* diſqualifying ſyſtem; did it proclaim there was no occaſion for continuing diſqualification in *any* mode whatever? If ſo, how comes it to paſs that ſome diſqualifications are ſtill remaining? that ſome barriers are ſtill ſtanding? If the legiſlature had heretofore meant to ſay, 'No degree of reſtriction whatever will henceforth be neceſſary,' it would at that time have repealed *all* diſqualifying laws. Some, however, it did not repeal; and of courſe it never meant to ſay *no* reſtriction was neceſſary. It meant to ſay this; 'Although the *ſame degree* of reſtriction is not now neceſſary which was once neceſſary, yet *ſome degree* is ſtill requiſite, and therefore *ſome* diſqualifying laws muſt remain unrepealed.' Your argument will apply to the laws which were abrogated; but it will not apply to laws ſtill retained. The reaſons, for extending diſqualification into ſo many branches, might ceaſe to exiſt; but yet there might remain, there did remain, reaſons for continuing diſqualification on a more contracted ſcale. It is not a neceſſary conſequence, that becauſe reſtriction could be removed in *part*, it could therefore be removed *altogether*. It is not a neceſſary conſequence, that becauſe partial conceſſions were made, conceſſions unbounded ſhould be made. It might be wiſe to concede ſomething; but highly injudicious and improvident to concede every thing.

"You caution us againſt 'continuing unneceſſary diſqualifications.' The diſqualification, which excludes catholics from the legiſlature, is continued as neceſſary. Neceſſary, for preſerving uniformity in our conſtitution, which in every feature and character, in every proviſion and appointment, is altogether proteſtant. Neceſſary, for promoting unanimity in the parliament, and in the councils of the ſovereign. Neceſſary, for removing ſolicitude from the minds of Engliſh proteſtants. Neceſſary, for ſecuring the exerciſe of religious worſhip and the undiſturbed enjoyment of their poſſeſſions, to the proteſtants in Ireland. Neceſſary, for upholding a proteſtant government in Ireland. Neceſſary, for perpetuating the connexion and union between Ireland and Great Britain.

"When you profeſs you 'know not whether there are more proteſtants or Roman catholics among Chriſtians,' you muſt of courſe be underſtood as ſpeaking with reference to the ſtate of Chriſtianity throughout the world at large. But our caſe lies within a more narrow compaſs. It limits us to the conſideration either of the Britiſh empire in general, or of Ireland in particular. In the Britiſh empire, the proteſtants are ſo much more numerous, that an endeavour to obtrude on them catholic legiſlators is irreconcilable with every idea of propriety. In Ireland, the catholics far exceed in number. But, for that very reaſon, juſtice, policy, affection, demand it of the Britiſh government, that a proportionate degree of attention ſhould be paid towards ſecuring the happineſs of the proteſtants in Ireland. That ſecurity will be greater or leſs, according to the greater or leſs diſtance at which catholic domination is removed from them. For, however correct may be your obſervation, according to circumſtances at preſent exiſting, 'that humanly ſpeaking there are much too many of each perſuaſion ever to be forced into ſubjection or converted by the other;' yet from catholic domination may ariſe an evil, which does not ſeem to have entered into your conception. The condition of the Iriſh proteſtants may be ſo much altered to their diſadvantage, that thoſe who have competency for changing their place of reſidence, may think voluntary exile preferable to continuance in Ireland. If the protection, which is now given by the more opulent and powerful proteſtants, ſhould thus be withdrawn from proteſtants of the middle and lower orders; and if catholic domination ſhould ſuperſede proteſtant government in Ireland, which moſt aſſuredly will be the caſe if catholics are admitted into the legiſlature; then, if we may not doubt the correctneſs of your obſervation in its full extent, yet at leaſt we may doubt whether ſome attempts would not be made to 'force' the proteſtants 'into ſubjection.' Our apprehenſions for the middle and lower orders of proteſtants, when deprived of the protection now given them by the ſuperior order, are not viſionary forebodings. They originate in your own ſpeech; are raiſed by your own language; are juſtified by your own deſcription. We cannot forget that you tell us, the catholics 'have ſometimes been violent, and ſometimes unreaſonable'—that men 'the higheſt in rank and weight have loſt much of their moſt uſeful influence by their want of moderation'—that, 'in order to retain the remainder of their almoſt loſt weight and authority, they have been obliged, in great meaſure, to follow, inſtead of to lead and guide'—that 'the conſequence has been, the leading and guiding of this mighty popular maſs has fallen into the hands of the worſt of men, the moſt violent demagogues, whoſe object is miſchief really.' If the catholic demagogues are already ſo prevalent, that even catholic gentlemen yield to their violence; what may we not fear for the middle and lower orders of Iriſh proteſtants, when there ſhall be a catholic lord lieutenant, a catholic government, a catholic church-aſcendancy, in Ireland?

"You bid us not 'rake the embers,'—nor, 'rouſe the ſleeping ſerpent.' We have been ſcrupulous, almoſt to an exceſſive degree, leſt we ſhould ſay or do any thing contrary to your advice. The information, however, which you give us, creates a ſuſpicion, that, whenever they can find an opportunity for gratifying their 'inflamed paſſions,' the 'popular maſs,' of which you have been ſpeaking; the catholics, who, not by us, but by you, are ſtigmatized as 'needy and deſperate men, rebels and traitors,' will rekindle your 'embers' till they burſt into a flame; will awaken your 'ſerpent,' and direct it to the infliction of a deadly wound.

"It was an inſinuating way by which the ancients conveyed inſtruction under the envelopement of fable. Your alluſion to the embers and the ſerpent ſeems to beſpeak a partiality for that mode of ſuggeſting advice. Perhaps you may not be diſpleaſed with the following apologue; though after the faſhion of our age, which would have every thing new-fangled, it has been forced to depart from the ſimplicity of the original, that by change of character and inſertion of ſpeeches it might be more cloſely adapted to modern times. The apologue is this: An ingenious woodman formed ſome metal into an axe, the edge of which was well ſharpened. He wanted a handle. He petitioned the trees of an adjacent wood to grant him a ſtick ſufficient for his purpoſe. The veteran oaks were not inclined to favour his petition: 'We have heard,' ſaid they, 'from tradition, and we know

by our own experience, what devaſtation former woodmen have made in the foreſts.' The younger trees were not much diſpoſed to profit by the wiſdom and counſel of the elder. Their language was, 'The veterans are bigotted to antiquated notions, in conceiving it poſſible for an enlightened woodman to act as others did in paſt years. They are narrow-minded and illiberal in conſulting the ſafety of themſelves; and in their precaution for us, who are confident our petitioner is more generous than ever to injure us for his own benefit. They are unjuſt in withholding what the woodman may claim as a right. He, like us, is a production of nature: he may aſk for what he chooſes; and, if it is not conceded, he has a right to take it by force.' The aged oaks were out-voted by numbers. A ſtick was granted. A handle was prepared. After no long time the woodman laid about him. The younger trees would have remonſtrated, but they perceived it would be in vain, for it was now too late. Oak after oak was felled to the ground; and the woodman ceaſed not till he had cut down all his oppoſers; and threatened even his friends if they murmured at his proceedings.

"Your Supplemental Obſervations are enlargements on your Speech. Your ſpeech was delivered in the houſe of lords; conſequently the lords, who diſſented from your meaſure, muſt be conſidered as the perſons to whom you direct this apoſtrophe; 'Beware, therefore, ye religious alarmiſts, ye abhorrers of popery, leſt by your *madneſs and folly* ye change this ſo natural, ſo praiſeworthy, a deſire, into the moſt furious and rancorous hatred.' It is the part of thoſe, who have done an act of kindneſs, to forget that they have conferred a favour. It is the duty of thoſe, who have experienced ſuch act, to remember the favour. The former province ſhall be left for your lordſhip; the latter ſhall belong to us. We thank you for having placed us on a ground which gives us an advantage over you. The advantage is, that, in return for reproach, we ſhall ſay to your lordſhip nothing but what is reſpectful. Some, however, perhaps may be diſpoſed to think, you have endeavoured to make us as odious as poſſible to the catholics. Some may obſerve, 'If the advocates of proteſtantiſm are thus aſſailed even before the catholics are admitted into the legiſlature, what words will they not hear, if they oppoſe catholiciſm, when the legiſlature ſhall have in it a hundred catholics?' Others may ſuggeſt, that, when a controverſial opponent deſcends to the language of exacerbation, it is commonly a proof that ſound argument begins to be exhauſted. Others may remark, there is a ſimilarity between the ſtyle of your lordſhip and that of biſhop Milner, who exclaims, 'Do not tell me, as many do, of the *wiſdom* of the legiſlature in deviſing thoſe teſts for ſhutting catholics out of both its houſes, and for preventing them from ſerving their country in other reſpects. For it is a notorious fact, that theſe teſts were enacted, not in the wiſdom, but in the *folly and downright madneſs*, of the legiſlature and of the nation.'

"In the well-grounded hope of receiving approbation from correct judges, a poet, familiar to both of us in our youth, (Horace,) diſregarded cenſure which he had not deſerved. The ſame hope may conſole thoſe, whom your lordſhip addreſſes in terms of reprehenſion. Each of them will have the ſatisfaction of recollecting, that with his opinion concurred the ſentiments of innumerable perſons, all competent to decide properly on the catholic queſtion. Such, for inſtance, were the great officers of ſtate, and the ableſt lawyers, who in both houſes of parliament were adverſe to your propoſal, and all who ſhowed their diſſent by ſpeaking and voting. Such too as authors, equally as legiſlators, were the biſhops Barrington, Burgeſs, and Tomline; and ſuch was a temporal peer, lord Kenyon, whoſe Obſervations demonſtrate, that preponderance of argument, drawn from law, fact, and expediency, neither is on your ſide of the queſtion; nor can it be, till law and fact are totally altered. Such alſo, as writers, whoſe works are before the public, and are therefore open to the criticiſm which pronounces their authors to be men diſtinguiſhed for much knowledge of catholiciſm, for ſtrong underſtanding, for ſound reaſoning; ſuch are theſe gentlemen; by name, Churton, Coker, Daubeny, Elrington, Faber, Freſton, Kett, Kipling, Le-Meaſurier, Nares, Napleton, Reeves, Rennell, Ryan, Granville Sharp, and Van-Mildert. All the perſons, to whom reference has been made, whether in parliament or out of parliament, whether directly or indirectly, are competent to decide properly on the catholic queſtion, conſidered either in a political or religious point of view. And, if in confuting the doctrines of catholiciſm; if in anxiety for the undiſturbed enjoyment of proteſtantiſm in England and among their brethren in Ireland; if in maintaining it is unreaſonable to ſay, imperfect allegiance is entitled to full participation of privileges, which are rather to be ſought as matters of favour, than claimed as matters of right; rather grantable by the power enabled to give, than demandable by the party wiſhing to receive; if in adherence to the principles on which was founded the union between Great Britain and Ireland, to the principles of the revolution, to the principles of the reformation, to that which combines the principles of the union, revolution, and reformation, the Britiſh conſtitution; if in theſe things there is blame, if in theſe things there is crime; all to whom we have referred, and millions of others in the Britiſh empire, are prepared to take their ſhare with the members of adminiſtration in ſuch blame and crime; and with them ſtand reſponſible for whatever may be occaſioned by a calm and ſerious denial, that the admiſſion of catholics as legiſlators for proteſtants can be a meaſure either wiſe or expedient. Such confeſſion of our equal culpability, and ſuch declaration of our readineſs to participate in the reſult, have been rendered neceſſary by your telling us, 'the beſt of the Iriſh Roman catholics look with animoſity to the adminiſtration only.' (Obſ. p. 38.) Why to them alone? There is a hoſt of proteſtants involved in the ſame guilt, ſupporters of miniſters on the catholic queſtion, and equally determined to abide the conſequence. Valuable indeed and deſirable would be the good-will of thoſe catholics. But, if they are diſpleaſed becauſe we chooſe not, for their accommodation, to alter the whole ſyſtem of the empire civil and religious, we can but lament. 'To the conſtitution we cling; with it we commit ourſelves to ſtand or fall.'

"Your next paragraph reads us a lecture on 'kindneſs and moderation.' Are then the members of the eſtabliſhed church to be deemed unkind, and cenſured as intemperate, becauſe they vindicate proteſtantiſm? But ſo it happens. If we do not defend our religion, we are reproached as ſupine: if we do defend it, we are ſtigmatiſed as bigots. Conceive rightly, my lord; this is mentioned only as an obſervation on fact; do not miſtake it as though it were the effuſion of a querulous mood. Complaint is weakneſs. Difficulties ſhould ſtimulate reſolution. We muſt ſtand firm to proteſtantiſm, and ſupport it by all the arguments, which truth and fair reaſoning will warrant; and by all the exertions, which law and charity will authoriſe. 'If the reformation was worth eſtabliſhing, it is worth maintaining.'

"Mildneſs will be ſhown in the manner moſt compatible with public welfare, if the legiſlature gives the catholics every aſſurance of protection to their worſhip; it will be ſhown in a manner moſt friendly to the catholics, if the legiſlature diſſuades them from offering violence to the public mind by preſſing claims diſallowed by the empire at large. Under the idea of policy will it be ſaid, 'Grant their claims, and they will be quiet towards you, but diſunited among themſelves?' It is the very propoſal of our enemy; 'Reſcind and renounce your maritime laws, and the continental confederacy ſhall be diſſolved.' An unreaſonable demand impoſes the neceſſity of a poſitive refuſal.

"Let us put the caſe of two writers on the Britiſh conſtitution,

ſtitution. Both ſhall agree in repreſenting the component parts of our legiſlature to be king, lords, and commons. They ſhall agree in maintaining that the Great Charter is the baſis of Engliſh liberty. But let us ſuppoſe one of them inclined to ſtretch the royal prerogative farther than could correſpond with the Act of Settlement and Bill of Rights; and, in his partiality for the houſes of Stuart and Tudor, defending the exaction of ſhip-money and benevolences, the inſtitution of the ſtar-chamber and high-commiſſion court. It would not be unreaſonable to conclude, that however you might have admired ſuch a writer's abilities, whilſt he was dwelling on the foundation of the Britiſh conſtitution; yet you could not poſſibly admit his erroneous opinions concerning points incompatible with our liberty. Between us and the catholics the caſe is ſomewhat ſimilar. We agree in aſſerting the Goſpel to be the baſis of our religion. We agree in twelve articles as confeſſedly ſcriptural. Would that we agreed farther! but here we part. For, they would obtrude on us ſuperadditions, which we can no more allow to be conſonant with the charter of our faith, than you can allow the obnoxious acts of arbitrary extortion and the odious inſtruments of deſpotic oppreſſion to be conſiſtent with the charter of our liberty. And, becauſe we cannot allow them, you intimate that we deſire 'to revive animoſities between ſyſtems of religion grafted on the ſame ſtock and agreeing in the moſt eſſential articles of belief.' *Obſ.* p. 36.

"To this we anſwer, that, if the catholics would acknowledge twelve articles only to be eſſential, then we ſhould be agreed. But, if you will conſult the moſt approved writers among them, they will tell you the articles ſuperadded by ſynods and councils, more eſpecially by the council of Trent, are alſo eſſential. In acknowledging them to be eſſential we are not agreed. And, ſince for that reaſon we are ſolemnly anathematized, it is evident our unanimity on articles moſt eſſential does not avail ſufficiently for our being regarded by them with Chriſtian affection. Yet we hold not the catholics in diſeſteem. As proofs of that aſſertion may be adduced theſe inſtances: We affirm they have all the eſſentials of a Chriſtian church. We admit the validity of their conſecration to epiſcopacy; of their ordination for prieſthood; of their marriage as a contract ſacred before God; of their baptiſmal initiation into the Chriſtian church. Then in private life; no proteſtant of common ſenſe ever diminiſhes thoſe civilities and that intercourſe, which ſhould obtain between perſons living in vicinity; or leſſens confidence and eſteem where friendſhip has been contracted; merely becauſe catholiciſm creates difference of opinion. But, as a farther proof of our reſpect, you demand for them competency to exerciſe legiſlative authority over proteſtants. To this we demur; and aſk, Has the aggregate body of catholics, in the kingdom of Ireland, ſhown towards us a diſpoſition, which ſhould induce us to concede legiſlative power? Did the conduct of the catholic laity in 1811, though palliated by your lordſhip as an ebullition from 'feelings of diſappointment and anger;' did the language of the catholic laity in 1812, beſpeak a cordiality towards the proteſtant government of Ireland, and ſentiments of duty towards a quarter where ſuch duty ought to have been paid? Have their clergy deſcended one ſtep from their high pretenſions to ſuperiority over proteſtants? Have they 'abjured infallibility in man,' or do they ceaſe to charge it on us 'as a fault and crime,' that we have abjured what we know belongs not to man? You tell us otherwiſe in your Obſervations; and their own biſhop Chaloner, in a popular tract, which is circulated among the lower claſſes of people, aſks this queſtion; 'What ſecurity can ſhe (i.e. the church of proteſtants) give her followers, that ſhe is not actually leading them on in the way of eternal damnation?' Have they ſoftened their language when ſpeaking of occurrences and of perſons coeval with centuries now ſo remote, that a mind diſpoſed to forget and forgive might have imagined all words of aſperity on the original cauſes of our paſt diſcordance had long ſince grown into diſuſe? Hear biſhop Milner; 'If the catholic clergy were not deeply perſuaded that the change of religion and breach with the ancient church, effected by Henry VIII. and Elizabeth, were undertaken upon unjuſtifiable grounds, and that their church ſtill continues to be the true church of Chriſt, they would certainly be, not only the moſt wretched, but alſo the moſt fooliſh, of men, to ſuffer what they do ſuffer, for adhering to it and ſerving it.'——'In this (i.e. the Code of Catholic Inſtitutes) there is no mention of the numerous and revolting blaſphemies and immoralities with which the works of Luther and Calvin abound; no notice of the perfidy, treaſon, and rebellion, taught and practiſed by Cranmer, Ridley, Knox, and every other patriarch of the reformation in the ſeveral countries where it has prevailed.' On theſe paſſages ſuffice it to remark, they were publiſhed not longer ago than in 1810; and they demonſtrate the juſtneſs with which, by changing only a ſingle word, to catholics of the generation now exiſting may be applied your obſervation made in behalf of their anceſtors; 'What we conſider as reformation of religion, they imagine to be rebellion againſt the moſt ſacred rights.'

"It was in 1810 that the father of our Engliſh prelacy, biſhop Barrington, ſtated the grounds, on which he conceived might be effected a catholic union. They reſted on the hope, that after calm diſcuſſion the catholics would accord with us in diſallowing the civil and religious propriety of urging thoſe points on which the churches of England and Rome have materially differed. In 1811, what ſays biſhop Milner? 'We would give our lives to unite in religion with our countrymen on the plan of Boſſuet.' And what account does the biſhop give of Boſſuet's plan? 'This plan was never propoſed to them (i.e. the proteſtants) upon any other footing, than that they ſhould admit the authority of the catholic church; the pope's ſupremacy; the ſeven ſacraments; the ſacrifice of the maſs; the invocation of ſaints, &c.' This declaration does not very ſtrongly invite us to a great conſtitutional change in their favour; becauſe we cannot forget that zeal for theſe articles of belief has been the occaſion of deeds very unfriendly to proteſtantiſm. It would be inſulting to the catholics of the preſent day, if we were to ſuppoſe them actuated by leſs ardent zeal than the catholics of former years; and it would be irrational in ourſelves if we did not think it poſſible and probable, that from the ſame principle, applied for the attainment of the ſame object, would reſult ſimilar conduct. Zeal is a moſt powerful incentive to energy. Laudable, or illaudable, it is in character, according to the circumſtance in which it is engaged, the manner in which it is directed, the end which it propoſes to accompliſh. Of what character muſt be that zeal, which could inculcate this doctrine? 'The ſouls of all proteſtants, immediately on their departure from their bodies, are plunged into hell, there to ſuffer eternal torments.' Of what deſcription muſt be that zeal, which, in the true ſpirit of thoſe who maintained it was a damnable ſin to be preſent at the divine ſervice of proteſtants, ordains it ſhould be a queſtion put by the prieſt to the perſon confeſſing, put if not in expreſs words yet at leaſt in ſubſtantial meaning, 'Since your laſt confeſſion, have you entered an heretical houſe of worſhip?' Is there nothing of indignity offered to proteſtants in deeming it thus criminal to hear our public prayers? Have proteſtants nothing to apprehend from the workings of a principle, which holds it ſinful for catholics even to aſſemble in the ſame room with us, and to unite with us in devotional worſhip to the ſame great Creator! the ſame gracious Protector of us all? If not towards the perſons, yet certainly towards the religion, of proteſtants, ſuch indignity and ſuch a principle muſt excite contempt and abhorrence in the maſs of the people; and muſt create ſtrong prejudices in the minds of the well-educated. If from any portion of thoſe prejudices carried into the legiſlature your lordſhip is confident there can ariſe nothing unfavourable

vourable to proteſtants; in your ſpeculations on cauſe and effect, in your conceptions of human perfectibility, there muſt be a degree of refinement more conſonant with French than with Engliſh philoſophy.

"Not to dwell on what, throughout your work, is the moſt ſtriking feature in your mode of argumentation, viz. the aſſumed right of taking for granted what ought to be proved; a right which you do aſſume in ſix paſſages, where you either gratuitouſly aſſert or clearly intimate there is no longer any neceſſity for diſqualifications or reſtrictions; we will remind you of ſome preceding words in your ſpeech. In them you obſerve, the *veto* would 'have conſtituted an indecorous union in the appointment of Roman-catholic biſhops, between our proteſtant king and that perſon (potentate he cannot now be called) to whom the Roman catholics look up as the head of their church.' Evidently then, by your own confeſſion, the catholics do look up to another perſon, diſtinct from our ſovereign, and alſo a foreigner, as to their ſpiritual director. It is alſo their own acknowledgment, recently avowed in this declaration; 'As we are at preſent precluded from any intercourſe with our ſupreme paſtor, we feel ourſelves utterly incompetent to propoſe or agree to any change in the long-eſtabliſhed mode of appointing Iriſh Roman-catholic biſhops.' Now the oath of abjuration is purpoſely framed for the excluſion of *that perſon* from all 'juriſdiction, power, and authority, eccleſiaſtical or ſpiritual, within this realm.' This clauſe, however, material though it be, ſeems to have eſcaped your recollection, when you contend the oath of abjuration is now not neceſſary, becauſe there is now no popiſh pretender. Pretender to ſovereignty in temporalities there is indeed none; but a pretender to ſovereignty in ſpiritualities there unqueſtionably is, according to your own ſtatement. It is becauſe we cannot think it conſiſtent with the prerogative of the crown, or with the ſecurity of proteſtantiſm, more eſpecially in Ireland, that we feel ourſelves bound, in allegiance to our ſovereign and in vigilance for our religion as contradiſtinguiſhed from the catholic ſyſtem, to reſiſt the pretenſions made by that foreign perſon to power of any ſort or kind, in any ſhape or degree, over Britiſh ſubjects. And, that we may reſiſt it the more effectually, we maintain it is neceſſary that thoſe who legiſlate for us ſhould be bound to unite with us in reſiſtance. The very act of ſolemn abjuration is in itſelf a ſtrong act of reſiſtance; with that oath therefore proteſtants cannot judge it wiſe to diſpenſe.

"Your lordſhip commands ample poſſeſſions and a numerous retinue. What might you not naturally and reaſonably ſay, if any neighbouring gentleman were to aſſume the privilege of intermeddling with your œconomical arrangements, and of preſcribing to thoſe around you the line of duty which they ſhould follow, the meaſure of obedience which they ſhould pay, towards you their maſter? Change but the terms, and it is the caſe of our ſovereign, his ſubjects, and the perſon who conſiders himſelf as the head of catholics in Ireland and England. He is a foreigner. Now putting religion out of the queſtion, and taking the matter abſtractedly; that a foreigner ſhould arrogate to himſelf the power of interfering in the government of Britiſh ſubjects, and of dictating to them 'in this you may, in that you ſhall not, obey your king, or queen, on pain of my anathema,' is in itſelf an act of preſumption; and to the ſovereign it is an inſult. Being an inſult; who beſt ſupport their ſovereign's independence, who are moſt zealous for their ſovereign's honour? thoſe who reſent, or thoſe who conduce towards perpetuating, that inſult? The ſtateſmen of the ſeventeenth century averted ſuch indignity from the houſe of Naſſau. Loyalty, gratitude, national pride, demand it of ſtateſmen in the age now preſent, to avert the ſame indignity from the houſe of Brunſwick.

"To conclude: Many more arguments ſeem requiſite for proving, that the catholics may demand admiſſion into the legiſlature, as a matter of right. Nothing yet ſaid has been ſufficiently cogent to produce conviction, that it will be a meaſure of ſound policy to admit the catholics into the legiſlature; or, that proteſtants will enjoy the ſame degree of ſecurity, tranquillity, and happineſs, under a legiſlature partly catholic and partly proteſtant, as that with which they are now bleſſed under a legiſlature entirely and purely proteſtant. On the contrary, it is to be feared, that, if legiſlative power ſhould be conceded to the catholics, it would operate to the introduction of perplexing difficulties in the cabinet, and of diſcordant confuſion in the parliament; it would tend to diſturb proteſtantiſm in England, and erect catholiciſm in Ireland; it would indirectly baniſh the ſuperior, it would certainly entail miſery on the middle and lower, orders of Iriſh proteſtants. All this evil the admiſſion of catholics into the Britiſh legiſlature is calculated to create; and ſuch admiſſion would moreover ſeem to be in defiance of the Union-act between Great Britain and Ireland;—in defiance of national faith pledged by that act of union to the Iriſh proteſtants;—in defiance of the claim which the Iriſh proteſtants have on us for our utmoſt and undiminiſhed ſupport;—in defiance of the proviſions circumſpectly and intentionally made for perpetuating the connexion between the two countries;—in defiance of the reformation;—in defiance of the revolution;—in defiance of every principle civil and religious interwoven as eſſential, incorporated as vital, in the conſtitution of theſe realms."

Intending only to make a few extracts from Dr. Huntingford's excellent "Proteſtant Letter," we have been inſenſibly led into a great length of detail. The importance, the *immediate importance*, of the ſubject, we hope will plead our excuſe. The tracts quoted in the courſe of this article are the following: Petition of the Engliſh Roman Catholics; Petition of the Engliſh Roman Catholics conſidered; Hiſtorical Regiſter; Nature and Extent of the Demands of the Iriſh Roman Catholics; A Roman Catholic's Reaſons why he cannot conform to the Proteſtant Religion; Sincere Chriſtian inſtructed; Lord Somers's Speech and Supplemental Obſervations; Biſhop Huntingford's Proteſtant Letter, addreſſed to Lord Somers; Milner's Inſtructions, addreſſed to the Catholics; Milner's Inquiry into certain Vulgar Opinions; Oath and Declaration taken by the Catholics, according to the Iriſh act of 1793; Burnet's Hiſt. of his own Time; Hooker's Eccleſiaſtical Polity; Hiſtorical Epochs of the French Revolution; Spiritual and Temporal Liberty in England; Reſolutions of the Proteſtants of Sligo, Aug. 1812; Hints calculated to aid the Roman Catholics; &c.

LIB'ERTY OF THE PRESS'. "On account of the great eaſe," ſays Mr. Putter, "with which, after the invention of printing, copies of books could be multiplied and diſperſed, it was neceſſary that ſome means ſhould be deviſed to prevent a bad uſe from being made of this art, and to guard againſt its being employed to the prejudice of either religion or good morals, or to the injury of ſtates. For this reaſon it was every where laid down as a general maxim, that no one ſhould be allowed to eſtabliſh a printing-office at pleaſure, but by the permiſſion and under the inſpection of government; and that no work ſhould be ſuffered to go to preſs until it had been examined by a cenſor appointed for that purpoſe, or declared by a particular order to be of a harmleſs nature." *Buchernachdruck*, 1774, 4to.

But we have evidence that, many centuries prior to the invention of printing, authors ſubmitted their works, before they were publiſhed, to the judgment of their ſuperiors. This was done principally by the clergy; partly to ſecure themſelves from cenſure or puniſhment, and partly to ſhow their reſpect to the pope or to biſhops. It, however, does not appear that this was a duty, but a voluntary act. In the year 768, Ambroſius Autpert, a Benedictine monk, ſent his Expoſition of the Book of Revelation to pope Stephen III. and begged that he would publiſh the work and make it known. On this occaſion he ſays expreſsly, that he is the firſt writer who ever requeſted ſuch a favour; that liberty to write belongs to every one

who does not wiſh to depart from the doctrine of the fathers of the church; and he hopes that this freedom will not be leſſened on account of his voluntary ſubmiſſion.

As to the cenſuring and deſtroying of manuſcripts at various times under the ancient Greeks and Romans, theſe were arbitrary acts of the ruling powers, and not the effect of any fixed regulations. See the article BOOK, vol. iii. p. 180, 1. But, ſoon after the invention of printing, laws began to be made for ſubjecting books to examination; a regulation propoſed even by Plato; and which has been wiſhed for by many ſince. It is very probable that the fear under which the clergy were, leſt publications ſhould get abroad prejudicial to religion, and conſequently to their power, contributed not a little to haſten the eſtabliſhment of book-cenſors. Thus the art of printing, ſoon after its introduction, was looked upon in England, as well as in other countries, as merely a matter of ſtate, and ſubject to the coërcion of the crown. It was therefore regulated with us by the king's proclamations, prohibitions, charters of privilege and licenſe, and finally by the decrees of the court of ſtar-chamber, which limited the number of printers, and of preſſes which each ſhould employ, and prohibited new publications unleſs previouſly approved by proper licenſers. On the demolition of this odious juriſdiction in 1641, the long parliament of Charles I. after their rupture with that prince, aſſumed the ſame powers as the ſtar-chamber had exerciſed with reſpect to the licenſing of books; and in 1643, 1647, 1649, and 1652, iſſued their ordinances for that purpoſe, founded principally on the ſtar-chamber decree of 1637. In 1662 was paſſed the ſtatute 13 and 14 Car. II. c. 33. which, with ſome few alterations, was copied from the parliamentary ordinances. This act expired in 1679; but was revived by ſtatute 1 Jac. II. c. 17. and continued till 1692. It was then continued for two years longer by ſtatute 4 W. and M. c. 24. but, though frequent attempts were made by the government to revive it in the ſubſequent parts of that reign, (Com. Journ. 11 Feb. 1694, 26 Nov. 1695, 22 Oct. 1696, 9 Feb. 1697, 31 Jan. 1698,) yet the parliament reſiſted it ſo ſtrongly, that it finally expired in 1694.

Sir Roger L'Eſtrange was the laſt licenſer of the preſs. He wrote a pamphlet, which he dedicated to the king (Charles II.) to recommend himſelf to the office of licenſer, in which he ſucceeded. The work is entitled, "Conſiderations and Propoſals in order to the Regulation of the Preſs, &c. June 1663." Conſiderable extracts from this ſcarce and curious publication are given in the Monthly Magazine for June 1811. There is little doubt but Mr. Pitt had it before him, when, in the years 1793, 4, and 5, he laid ſo many reſtrictions on the liberty of the preſs. It appears, that at the time of L'Eſtrange's publication there were not above ſixty preſſes in London; theſe he propoſed to reduce to twenty, and to ſubject them to the following (among other) regulations:

"Firſt; The number of printers and preſſes being reſolved upon, let the number of their journeymen and apprentices be likewiſe limited; and, in like manner, the number of maſter-founders, and of their journeymen, and their apprentices; all which to be allow'd of and approv'd by ſuch perſon or perſons as ſhall be authoriſ'd for that purpoſe; neither let any joyner, carpenter, or ſmith, preſume to work for or upon any printing-preſs, without ſuch allowance as aforeſaid, according to the direction of the late act for printing.

Secondly, Let all ſuch printers, letter-founders, joyners, carpenters, and ſmiths, as ſhall hereafter be allow'd, as aforeſaid, be reſpectively and ſeverally interrogated before their admittance, in order to the diſcovery of ſupernumerary printers and preſſes.

This may ſerve as to the diſcovery of private printers and preſſes already in employment; now to prevent underhand-dealing for the future, and to provide againſt certain other abuſes in ſuch as are allow'd.

Firſt; Let a ſpecial care be taken of card-makers, leather-guilders, flock-workers, and quoyf-drawers; either by expreſsly inhibiting their uſe of ſuch preſſes as may be apply'd to printing of books, or by tying them up to the ſame termes and conditions with printers; and let no other tradeſman whatſoever preſume to make uſe of a printing-preſs, but upon the ſame conditions, and under the ſame penalties, with printers.

2dly. Let no preſſe or printing-houſe be erected or lett, and let no joyner, carpenter, ſmith, or letter-founder, work for a printing-houſe, without notice.

3dly. Let no materialls belonging to printing, no letters ready founded or caſt, be imported or bought without the like notice, and for whom.

4thly. Let every maſter-printer be bound at leaſt, if not ſworn, not to print, cauſe or ſuffer to be printed in his houſe, or preſs, any book or books without lawful licence.

5thly. Let no maſter-printer be allow'd to keep a preſs but in his own dwelling-houſe; and let no printing-houſe be permitted with a back-dore to it.

6thly. Let every maſter-printer certifie what warehouſes he keeps, and not change them without giving notice.

7thly. Let every maſter-printer ſet his name to whatſoever he prints, or cauſes to be printed.

12thly. Let no journeyman be employ'd, without a certificate from the maſter where he wrought laſt.

13thly. Let no maſter diſcharge a journeyman, nor he leave his maſter, under fourteen dayes notice, unleſſe by conſent." We have quoted this laſt regulation, merely becauſe it gave riſe to a cuſtom which ſubſiſts among printers to this day; and we do not know that it obtains in any other mechanical employment.

Mr. Juſtice Blackſtone is of opinion, however, that the liberty of the preſs, ſo eſſential to the nature of a free ſtate, conſiſts not ſo much in freedom from cenſure for any criminal matter that may be publiſhed, as in laying *no previous reſtraints* upon publications. Every freeman (ſays he) has undoubtedly a right to lay what ſentiments he pleaſes before the public; to forbid this, is to deſtroy the freedom of the preſs; but, if he publiſhes what is improper, miſchievous, or illegal, he muſt take the conſequence of his own temerity. See LIBEL. To ſubject the preſs to the reſtrictive power of a licenſer in the manner abovementioned, is to ſubject all freedom of ſentiment to the prejudices of one man, and make him the arbitrary and infallible judge of all controverted points in learning, religion, and government. But to puniſh (as the law does at preſent) any dangerous or offenſive writings which, when publiſhed, ſhall, on a fair and impartial trial, be adjudged of a pernicious tendency, is neceſſary for the preſervation of peace and good order, of government and religion, the only ſolid foundations of civil liberty. Thus the will of individuals is ſtill left free; the abuſe only of that free will is the object of legal puniſhment. Neither is any reſtraint hereby laid upon freedom of thought or inquiry; liberty of private ſentiment is ſtill left; the diſſeminating or making public of bad ſentiments, deſtructive of the ends of ſociety, is the crime which ſociety corrects. A man (ſays a fine writer on this ſubject) may be allowed to keep poiſons in his cloſet, but not publicly to vend them as cordials. And to this we may add, that the only plauſible argument heretofore uſed for reſtraining the juſt freedom of the preſs, "that it was neceſſary to prevent the daily abuſe of it," will entirely loſe its force, when it is ſhown (by a ſeaſonable exertion of the laws) that the preſs cannot be abuſed to any bad purpoſe without incurring a ſuitable puniſhment; whereas it can never be uſed to any good one when under the controul of an inſpector. So true will it be found, that to cenſure the *licentiouſneſs* is to maintain the *liberty* of the preſs. 4 *Comm.* c. 11.

The above obſervations deſerve the ſerious attention of every juryman, who wiſhes well to the conſtitution and happineſs of his country. We ſhall next add the remark of another celebrated writer on this ſubject. The danger of ſuch unbounded liberty, (of unlicenſed printing,) and the danger of bounding it, have produced a problem in the ſcience of government, which human underſtanding

ſeems hitherto unable to ſolve. If nothing may be publiſhed but what civil authority ſhall have previouſly approved, power muſt always be the ſtandard of truth; if every dreamer of innovations may propagate his projects, there can be no ſettlement; if every murmurer at government may diffuſe diſcontent, there can be no peace; and, if every ſceptic in theology may teach his follies, there can be no religion. The remedy againſt theſe evils is *to puniſh the authors*; for it is yet allowed that every ſociety may puniſh, though not prevent, the publication of opinions which that ſociety ſhall think pernicious. But this puniſhment, though it may cruſh the author, promotes the book; and it ſeems not more reaſonable to leave the right of printing unreſtrained, becauſe writers may afterwards be cenſured, than it would be to ſleep with doors unbolted, becauſe by our laws we can hang a thief. *Johnſon in vitâ Milton.*

The reader will be curious to have the ſentiments of a king upon this difficult problem. "It appears to me, (ſays Guſtavus III.) on attentively conſidering the ſubject, that the liberty of the preſs is not injurious in general, and that it cannot become dangerous but by the abuſe of it, which ſometimes is diſplayed. Abuſes are the conſequence of human frailty, which blends with the beſt inſtitutions; and, if we muſt oppoſe thoſe which are in themſelves beneficial, through the fear of abuſes which might be introduced, we ſhould never eſtabliſh any thing uſeful to the public. In a diſunited nation, divided by opinions, principles, and intereſts, as the Swediſh nation has been, [this was in the year 1792, a ſhort time before the king was murdered,] a ſubject cannot be always conſidered under the ſame aſpect by different parties, or at leaſt it will appear in a doubtful light. In England, the liberty of the preſs was prohibited when Charles I. loſt his head on the ſcaffold, and when the fugitive James II. abandoned the throne of his anceſtors to his ambitious ſon-in-law. That people were legally in poſſeſſion of this right at the end of the reign of William III. or at the commencement of that of the houſe of Hanover; a family who have occupied the throne with more glory and ſecurity than any of their predeceſſors. If Wilkes excited ſome ſeditious movements, we ought rather to attribute them to the imprudent notice which the government took of his writings, than to the momentary ſenſation which they produced, and which would have left no more durable impreſſion than other writings of the ſame kind. It is by the liberty of the preſs that kings learn the truth, which is ſo carefully hidden from them, and often with too much ſucceſs. Miniſters there find the advantage of receiving ſincere and merited praiſe, or the opportunity of explaining to the public the falſe interpretations which are given of their meaſures. By the ſame channel, in ſhort, the nation can at one time enjoy the conſolation of complaint, and at another be convinced that its murmurings are ill-founded." *Works of Guſtavus III. king of Sweden.*—A better defence of the liberty of the preſs could not have proceeded from the pen of a ſubject.

Thus far as to the diſputed point how far the preſs *ought to be* free. We come now to the main point, how far it *is* free. The editor of the Edinburgh Review obſerves, that our law in favour of the liberty of the preſs conſiſts in mere general expreſſions, and thoſe not engroſſed in ſtatutes, but inſerted in the works of individual lawyers, and there accompanied with qualifying clauſes altogether vague and comprehenſive. Thus, Blackſtone tells us, "Every perſon has an undoubted right to lay what ſentiments he pleaſes before the public:—*but*, if he publiſhes what is improper, miſchievous, or illegal, he muſt take the conſequence of his own temerity." Now, where are we to look for the authentic definition of theſe important words, *improper, miſchievous, illegal?* Alas! we know not. That the qualifying clauſe is of a moſt comprehenſive nature, we may appeal to the ſentiments of the moſt celebrated judges and authorities. The lord chief-baron Comyns, in his juſtly-admired Digeſt of the Engliſh Law, defines a libel to be, "a contumely or reproach, publiſhed to the defamation of the government, of a magiſtrate, or of a private perſon." Now, *contumely, reproach,* and *defamation*, include every thing that can be conſtrued into cenſure. No cenſure, therefore, of the government, or even of a public functionary, is ſafe in England. We ſhall produce only one other authority, as being more recent, and a very high one. On the trial in the cauſe entitled The King againſt Cobbett, 24th May, 1804, lord Ellenborough ſaid, "It is no new doctrine, that if a publication be calculated to alienate the affections of the people, *by bringing the government into diſeſteem*, whether the expreſſion be ridicule or obloquy, the perſon ſo conducting himſelf is expoſed to the inflictions of the law: it is a crime." Now, to point out any fault in the government undoubtedly tends to bring, ſo far, the government into diſeſteem. Therefore, to point out any fault in the government, is a liberty not allowed to the preſs by the law of England.

The liberty of the preſs is, indeed, the moſt ineſtimable ſecurity of that of a people, becauſe it gives that tone to the public feelings on which all liberty muſt ultimately reſt. But how is it that we have learned to deem it one of our conſtitutional rights? A great deal is ſaid about it in pamphlets; a great deal is ſaid about it in eſſays on government; it is an acknowledged privilege every-where but in Weſtminſter-Hall. M. de Lolme tells us, that he was ſtruck at not being able to hear of any law which enacted the liberty of the preſs, till it occurred to him that it exiſted becauſe it was not forbidden. But, with a little more inquiry, this ingenious foreigner might have found law enough *againſt* this *ſoi-diſant* right, though none *for* it. The truth is, the liberty of the preſs *does not exiſt*, nor ever did exiſt, in England, but by connivance; and by the actual practice of the Engliſh courts, the indulgence itſelf (viz. the connivance) has been reduced within very narrow limits. It is as difficult for the moſt adroit pamphleteer to arraign public meaſures, without blaming public men, as for Shakeſpeare's Jew to take his pound of fleſh without a drop of blood; and, if this is the fulleſt extent of the privilege, we may ſafely pronounce, that *fari quæ ſentias* will be as much a phantom of right *in practice*, as it has always been in law. *Ed. Rev.* ix. 365.

And indeed authors moſt inclined to ſtrengthen to exceſs the ſprings of authority have not, when men of diſcernment, failed to come to the ſame concluſion. "That the *letter* of the law," ſays Mr. Hume, "as much as the moſt flaming court-ſermon, inculcates paſſive obedience, is apparent." "The laws of this country," ſays Mr. Burke, "are for the moſt part conſtituted, and wiſely ſo, for the general ends of government, rather than for the preſervation of our particular liberties. Whatever, therefore, is done in ſupport of liberty, by perſons not in public truſt, or not acting merely in that truſt, is liable to be more or leſs out of the ordinary courſe of the law; and the law itſelf is ſufficient to animadvert upon it with great ſeverity. Nothing, indeed, can hinder that ſevere letter from cruſhing us, except the temperaments it may receive from a trial by jury." Theſe paſſages merit no ordinary attention. In the latter, more is meant, by a great deal, than meets the ear. The letter of the law would cruſh liberty, ſays Burke, but juries ſave it. They can only do ſo, then, by counteracting the law; by breaking it. And the ſum of the matter is, that juries ſave liberty from being cruſhed, by delivering verdicts contrary to law. But, is this actually the caſe? or, if it were, is it deſirable or neceſſary that it ſhould be ſo? The nation, as lord Liverpool on a recent occaſion very juſtly obſerved, had the protection of juries in the time of Henry VIII. and Charles II. but found them a very feeble obſtacle to the inroads of arbitrary power. And, with regard to the protection which it is pretended that the liberty of the preſs receives from juries, another circumſtance of deciſive influence is to be conſidered. It is not by common juries, ſelected under extraordinary ſecurities for impartiality of choice, but by *ſpecial juries*, ſelected under no adequate

ſecurities for impartiality of choice, that all cauſes for libel are tried.

But the power of puniſhing for libel, aſſumed and exerciſed by the court of King's Bench, is neither founded upon, nor guided by, any proviſion of the legiſlature whatſoever. The aſſent of parliament to it is merely negative. We aſſert, that there is not within the ſtatute-book a ſingle form of words, by which it is attempted to declare what libelling is, by which any form or degree of puniſhment is appointed for it, or by which it is ſo much as forbidden. There is no written ſtandard, according to which the deciſions of the courts are pronounced. The power reſts on the ſole foundation of the practice of the court of Star-chamber, in which proſecutions for libel firſt commenced; and the judges of the court of King's Bench have all along had no other rule whatſoever for their conduct, but the deciſions pronounced by that arbitrary court, and the deciſions of preceding judges who followed its example. Yet the puniſhments awarded in the caſe of libel, fine, and impriſonment for any number of years, not to mention the pillory, cannot be regarded as light ones. They may happen, and every now and then muſt happen, to be equal to the greateſt; to involve the utter ruin and death of the individual; death, not inſtantaneous, and therefore eaſy; but death by the ſlow poiſon and protracted torture of a dungeon. Seldom, indeed, can it happen, that the injury to a man's health, the detriment to his affairs, the pains of confinement, do not amount to ſubſtantial confiſcation and torture. To many men, the pains of confinement alone, for any conſiderable time, are hardly leſs terrible and ſhocking than execution itſelf. Leſs capital in appearance than that for high treaſon, the puniſhment for libel is on every occaſion liable to become more than capital in reality; and, under the ſevere ſentences which have been pronounced in our own remembrance, muſt very often indeed, in point of actual ſuffering, approach to it.

It is unfortunate that the Britiſh legiſlature has adopted a very different conduct with regard to treaſon, and with regard to libel. The one it has defined. It has declared, in expreſs and ſolemn words, what ſhall be puniſhed as treaſon, and what ſhall not. The other it has not defined. It has left, as yet, altogether undeſcribed by words, what ſhall be puniſhed as libel, what ſhall not. The judge, without a ſhadow of a law given him by the legiſlature, looking only to the practice of the ſtar-chamber, and of his predeceſſors who followed the example of the ſtar-chamber, makes up a rule, according to his own views, for each particular occaſion.

The law of libel in this country preſents, indeed, a phenomenon, to which we know not that a parallel is to be found in the hiſtory of mankind. Although founded entirely upon recent and practical authority, and claiming no reverence for antiquity or legiſlative ſanction, it is a law at utter variance with the ſentiments of every claſs and denomination of men, both public and private, in the kingdom. Even attorneys-general themſelves, in the very act of arraigning ſome unfortunate man for a libel, never fail to declare themſelves friends to the liberty of the preſs. Not a man, probably, could be found in the nation capable of underſtanding the meaning of the terms, who would not declare the freedom of the preſs to be one of the firſt of political bleſſings; to be that ſort of ſecurity for our liberties, without which all other ſecurities would prove vain and ineffectual. In the celebrated trial of John Stockdale in 1789, for a libel on the houſe of commons, the attorney-general endeavours to perſuade the jury to bring in a verdict of guilty, "leſt a prejudice, on account of its licentiouſneſs, ſhould be raiſed againſt the preſs; and leſt ſomething," ſaid he, "ſhould be done, in that paroxyſm of diſguſt, which might be the gradual means of ſapping the foundation of that *beſt of our liberties*, a free preſs." In the trial of Mr. Perry, in 1793, the attorney-general, (now lord Eldon,) after a panegyric upon the conſtitution, as "a model nearly approaching to perfection, a conſtitution under which a greater degree of happineſs has been enjoyed than by the ſubjects of any other government whatever," adds, "theſe bleſſings have, in a great meaſure, ſprung from the properly-regulated *freedom of the preſs*; and on maintaining that freedom, on its proper principles, chiefly depends our ſecurity for the enjoyment of thoſe bleſſings." "I never will," he ſays, "diſpute the right of any man fully to diſcuſs topics reſpecting government, and honeſtly to point out what he may conſider as a proper remedy of grievances." The judge himſelf, (lord Kenyon,) in the opening of his charge to the jury on the ſame trial, ſaid, "The liberty of the preſs has always been, and has juſtly been, a favourite topic with Engliſhmen. Gentlemen," he continued, "it is placed as the ſentinel to alarm us, when any attempt is made on our liberties." Even ſir Vicary Gibbs himſelf declared, and we doubt not with perfect ſincerity, on the trial of Mr. Perry, February 24th, 1810, "a free, full, and open, diſcuſſion of every meaſure connected with the public affairs of the country, and into the conduct and meaſures of government, he was far from refuſing to the conductors of the public prints. An attempt to control the free exerciſe of this right, he ſhould admit, would be improper and unjuſt. On that liberty, ſome of our beſt privileges depended. It had been inſtrumental, in former days, in eſtabliſhing and ſecuring our free conſtitution; and it might, when properly directed, be the means of preſerving to us the ſame invaluable bleſſings in time to come."

Honourable, however, as theſe declarations are to the eminent perſons who pronounced them, we cannot heſitate in ſaying, that they are all of them at variance with the law. That liberty of the preſs, ſo uniformly extolled, the law entirely diſallows. There is not a conceivable expreſſion, paſſing cenſure upon any inſtitution, any meaſure, or any member, of government, which the all-comprehending law of libel places not within the verge of puniſhment; of puniſhment ſhort of life, and liable to *any degree of ſeverity the judges pleaſe*. The author of the Digeſt of Libel Law, quoting for his authorities Bacon's Abridgement and Hawkins's Pleas of the Crown, ſtates it as *the law*, "that words, if publiſhed in writing, and tending in any degree to *the diſcredit* of a man, are libellous, whether ſuch words defame private perſons only, or perſons employed in a public capacity; in which latter caſe, they are ſaid to receive an aggravation, as they tend to ſcandalize the government, by reflecting on thoſe who are entruſted with the adminiſtration of public affairs." But if every thing that *reflects* on thoſe entruſted with the adminiſtration of public affairs, if every thing tending to the *diſcredit* of any one of them be an *aggravated* libel, it is abſurd and ridiculous to ſpeak of the liberty of the preſs. Under the preſſure, however, of this law, lord Ellenborough found himſelf conſtrained, in the caſe of Cobbett to which we have already alluded, not only to declare, that every thing which tends to bring the government into diſeſteem is libellous, but to ſay, that, "by the law of England, there is no impunity to any perſon publiſhing any thing that is injurious to the feelings and happineſs of an individual;" and, in perfect conformity with this principle, to enumerate among the different libellous paſſages which the writing in queſtion contained, that which queſtioned the fitneſs of lord Hardwicke for the ſituation of lord-lieutenant of Ireland: "He admits (ſays his lordſhip) this noble perſon to be celebrated for underſtanding the modern method of fatting a ſheep as well as any man in Cambridgeſhire. Now, gentlemen, what does this mean? Does it not clearly mean to infer, that lord Hardwicke is ill-placed in his high ſituation, and that he is only fit for the common walks of life?" There can be no doubt, that to pronounce a man in a high ſituation unfit for his office, would be diſagreeable to his feelings; but, if the preſs muſt not ſo much as inſinuate that any public functionary is only fit for the private walks of life, it is but an idle mockery to tell us we have a free preſs. We are far, however, from blaming lord Ellenborough for theſe declarations; for, upon the only ground of law,

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or ſuppoſed law, on which he had to proceed, we know not what elſe it was poſſible for him to declare; unleſs he had declared, that, though ſuch was the law, it was a law which juries and judges had very often taken the liberty of diſregarding; that, as often as they had done ſo, they had done their country good ſervice; and that, in general, by executing it, they had done nothing but miſchief.

Can any contradiction, then, be greater than that which exiſts between this law and the ſentiments and practice of the nation? Is there any man, however inclined to ſcrew up the ſprings of authority, who reckons it criminal to lay before the public, expreſſions reflecting upon the qualifications or practices of public men? Hear Mr. Windham himſelf, ſpeaking directly to this very point: "With reſpect to the abuſe of patronage, one of thoſe by which the intereſts of countries will in reality moſt ſuffer, I perfectly agree, that it is likewiſe one, of which the government, properly ſo called, that is to ſay, perſons in the higheſt offices, are as likely to be guilty, and from their opportunities more likely to be guilty, than any others. Nothing can exceed the *greedineſs*, the *ſelfiſhneſs*, the *inſatiable voracity*, the profligate diſregard of all claims from merit or ſervices, that we often ſee in perſons in high official ſtations, when providing for themſelves, their relations or dependants. I am as little diſpoſed as any one to defend them in this conduct. Let it be reprobated in terms as harſh as any one pleaſes, and much more than it commonly is." Does Mr. Windham here teach the legal doctrine of not touching the feelings of public men? Does he not, in oppoſition to it, ſay, that they cannot be touched too harſhly, when by the abuſe of patronage they have acted wrong? Did Mr. Burke think it criminal to publiſh any thing having a tendency to bring the government into diſeſteem, when he thus wrote? "No man, I believe, will conſider it merely as the language of ſpleen or diſappointment, if I ſay, that there is ſomething particularly alarming in the preſent conjuncture. There is hardly a man in or out of power who holds any other language. That government is at once *dreaded and contemned*; that the laws are deſpoiled of all their reſpected and ſalutary terrors; that their *inaction is a ſubject of ridicule*, and their *exertion* of *abhorrence*; that rank, and office, and title, and all the ſolemn plauſibilities of the world, have loſt their reverence and effect; that our foreign politics are as much deranged as our domeſtic economy; that our dependencies are ſlackened in their affection, and looſened from their obedience; that we know neither how to yield nor how to enforce; that hardly any thing above or below, abroad or at home, is ſound and entire; but that diſconnexion and confuſion, in offices, in parties, in families, in parliament, in the nation, prevail beyond the diſorders of any former time! Theſe are facts univerſally admitted and lamented." Did he regard the feelings or reputation of miniſters as a body, when he printed theſe words? "The miniſters, inſtead of attending to a duty that was ſo urgent on them, *employed themſelves*, AS USUAL, *in endeavours to deſtroy the reputation of thoſe who were bold enough to remind them of it.*" Did he think it wrong to defame the government, when he declared, as in the following words, that the houſe of commons had become ſo corrupt, that he felt degraded by being placed in it? "But, when I found," ſays he, "that the houſe, ſurrendering itſelf to the guidance, not of an authority grown out of experience, wiſdom, and integrity, but of the accidents of court favour, had become the ſport of the paſſions of men, at once raſh and puſillanimous; that it had even got into the habit of refuſing every thing to reaſon, and ſurrendering every thing to force; all my power of obliging either my country or individuals was gone; all the luſtre of my imaginary rank was tarniſhed, and I felt degraded even by my elevation." Did he think it wrong to pour forth the moſt unmeaſured accuſations againſt the higheſt men, when he printed and publiſhed the following expreſſions relating to Mr. Pitt and lord Melville? "With a knowledge of this diſpoſition, a Britiſh chancellor of the exchequer, and treaſurer of the navy, impelled by no public neceſſity, in a ſtrain of the *moſt wanton perfidy* which has ever ſtained the annals of mankind, have delivered over to plunder, impriſonment, exile, and death itſelf, according to the mercy of ſuch execrable tyrants as Amir al Omra and Paul Benfield, the unhappy and deluded ſouls, who, untaught by uniform example, were ſtill weak enough to put their truſt in Engliſh faith." Or, when, in the ſame ſpeech, he declared, by one of the moſt cutting expreſſions which the language afforded, that Mr. Pitt, by a ſpecific attraction, gravitated to every intriguing and rapacious character? Or, when he accuſed the ſame celebrated miniſter of ſacrificing all the natural intereſts of this kingdom to an intriguing connexion with Mr. Benfield? "A ſingle Benfield," he ſays, "outweighs them all; a criminal, who long ſince ought to have fattened the region kites with his offal, is, by his majeſty's miniſters, enthroned in the government of a great kingdom, and enfeoffed with an eſtate, which in the compariſon efaces the ſplendour of all the nobility of Europe." And laſtly, only a few weeks ago, (March 5.) in a debate, in the houſe of commons, upon the uſage the princeſs of Wales had experienced almoſt ever ſince her arrival in this country, Mr. Wortley expreſſed himſelf "very ſorry that we had a family on the throne who do not take warning from what is ſaid and thought concerning them. They ſeemed to be *the only perſons in the country who were wholly regardleſs of their own reſpectability*. He would not have the regent lay the flattering unction to his ſoul, and think his conduct will bear him harmleſs through all theſe tranſactions."

It ſeems to have been generally underſtood, that nothing ſpoken by a barriſter in defence of his client, or by a member of parliament in his place, could be made the ſubject of a criminal proſecution; and that the liberty of the preſs extended to the *publiſhing* of all ſuch ſpeeches. However, at the laſt Lancaſter aſſiſes, (March 1813.) a caſe occurred which we cannot help noticing in this place. It was an indictment for a libel, preferred by Mr. Kirkpatrick, a collector of taxes for Lancaſter. The libel, it appears, was contained in the Liverpool Mercury, in the ſhape of a *ſpeech*, ſaid to have been made by Mr. Creevey in the houſe of commons. It ſtated the ſudden converſion of an attorney in the town to the character of an inſpector of taxes; that he was not the moſt eminent of his profeſſion; that he had ſuggeſted to the chancellor of the exchequer a new department, equally beneficial to the ſtate and to himſelf: this new profeſſion was, that he ſhould turn informer againſt his neighbours, and, by ſcrewing up their aſſeſſments, he ſhould obtain an annuity as a recompence; &c. &c. After Mr. Parke had ſpoken of the propriety of protecting the collectors of the revenue againſt attacks which held them up to ridicule and odium, the editor of the Mercury proved his having received the ſpeech from Mr. Creevey himſelf, with a requeſt to inſert it in his paper. Mr. Brougham, for the defendant, contended, that any perſon had a right to publiſh correct accounts of proceedings in parliament; that a member of the houſe of commons had a ſtill more clear right to give the county which he repreſented an account of what he ſaid and did in the diſcharge of his delegated duty; and that in the preſent caſe the object was proved in evidence to have been a correction of former miſrepreſentations of defendant's ſpeech. Mr. B. obſerved, that, if ſuch proceedings as theſe ſucceeded, there would be an end of all publication of parliamentary debates; that then parliament would only be known by the taxes they inflicted; and, that the ſyſtem of cloſed doors and increaſing taxes could not long be proceeded in. Was it to be endured that any portion of the public prints, under the influence and in the actual pay, ſuppoſe of the government, was wilfully to miſrepreſent the ſpeech of any member of parliament, the ſubſtance of which was

likely to be offenſive or injurious to the government; was it to be endured that ſuch a member, meaning only, as is proved in the preſent caſe, to correct ſuch miſrepreſentation, was not to publiſh ſuch correction in his own defence, without incurring the riſk of fine or a gaol? It was indeed eſſential to the liberties of all members of parliament, to have this vital queſtion rightly underſtood; to have it proclaimed from the higheſt authorities in the ſtate, whether it be the law of the land or the law of parliament, that any reporter may print, as the ſpeech of a member of parliament, that which he did not ſpeak, and that members of parliament alone are to be interdicted by the terrors of fine and impriſonment from publiſhing what they DID ſay. He ſaid ſuch proſecutions as theſe had never been carried on before; that all good parliamentary men would have been liable; that Mr. Burke and Mr. Windham, particularly the former, had publiſhed all their ſpeeches; that Mr. Burke would have been proſecuted for public libels over and over again, as well as for private ones. He inſtanced many of Mr. Burke's attacks on individuals, amongſt others, one of a *tax-gatherer*, in his ſpeech on reform, and which ſpeech he publiſhed. The jury found the defendant *guilty*; but we underſtand the verdict is certain to undergo every kind of reviſion that the ſuperior courts, or even parliament itſelf, can give.

One thing there is which, in the preſent ſtate of proſecutions for libel, cannot fail to command attention, viz. that the miniſterial prints abound, to fully as great a degree as their antagoniſts, in all the vices which can adhere to the mode of cenſuring public men; yet it is a rare caſe, indeed, to ſee any of them puniſhed. And what concluſion can the fair, the diſintereſted, and intelligent, part of the community form? What elſe, than that the law of libel is a law to puniſh all thoſe who dare to ſpeak ill of the miniſter; and that the liberty of the preſs is a liberty to ſpeak ill of all thoſe who are the miniſter's enemies?

It is ſufficiently obvious, that, with regard to political ſubjects, and public men, the liberty of the preſs may be abuſed in two ways. The one is, when good public meaſures, and good public men, are blamed; the other is, when bad public meaſures, and bad public men, are praiſed. Of theſe two, we ſhould conſider the laſt as being infinitely the worſt. It is not only, beyond all compariſon, the moſt prevalent, as being the beſt paid, and not at all puniſhed; but it is infinitely the moſt dangerous and fatal in its operation. It is the ſkreen by which, more effectually than by any thing elſe, power is concealed in that *gradual* progreſs to deſpotiſm, which the diſtinguiſhed authors above quoted deſcribed as its moſt dangerous, and almoſt its only dangerous, approach.

Wherever real incapacity in a public man is pointed out; wherever the real impolicy or miſchief of a wrong meaſure is ſtript of its diſguiſe, and made to appear in its own ſhape; we conceive that the nation is ſerved in the higheſt inſtance; and any thing rather than an abuſe has been effected by the preſs. But we readily grant, that when, by the influence of falſe cenſure, a nation is made to diſapprove of a good meaſure, or a good miniſter, and to defeat the one, or deprive itſelf of the other, the preſs has been the ſource of miſchief. There are, however, two remedies againſt this, whoſe united virtue can ſeldom fail to be effectual. There is, in the firſt place, refutation of the cenſure by the ſame channel; a grand and appropriate cure, and which, conſidering the force of truth, will generally prevail. And there is puniſhment, which, as often as a man brings an accuſation which he cannot ſupport, may be inflicted in meaſure and proportion.

There is, however, another danger, real or imaginary, of which certain claſſes of men hold up to their own eyes a coloſſal and hideous picture; and labour earneſtly with it to appal the hearts of other men; that is, the danger of anarchy, ariſing from exceſſive cenſure of meaſures of government and public men. Now, of thoſe countries which have enjoyed the moſt of the power of cenſure by the preſs, and thoſe which have enjoyed the leaſt; in which has there appeared the greateſt diſpoſition to anarchy, and in which the leaſt? The anſwer which the experience of hiſtory preſents to us, will ſurpriſe thoſe who have credulouſly lent their faith to the men who have lately been ſo active in traducing the application of cenſure by the preſs. The only countries in which any tolerable degree of the liberty of the preſs has ever been enjoyed, have been a few of the proteſtant countries of modern times; England, Holland, Swiſſerland, and the United States of North America. Now, ſo far from ſhowing the greateſt tendency to anarchy, of all countries that ever exiſted, theſe have been the fartheſt removed from that tendency. In what country in Europe is there ſo much tendency to inſurrection, as in Turkey? And what other countries of Europe have the moſt nearly reſembled Turkey in that particular? We anſwer—Italy; and whatever country has ſhared the moſt in that deſpotiſm which Italy exerciſed upon the thoughts and expreſſions of the people.

There is another grievous miſtake involved in this prejudice with regard to the matter of fact. It was not the abuſe of a *free* preſs which was witneſſed during the French revolution; it was the abuſe of an *enſlaved* preſs. The preſs was at all times the excluſive inſtrument of the domineering faction, who made uſe of it to calumniate their enemies and agitate the people; but prevented, by the terrors of extermination, all other men from making uſe of the preſs to expoſe their machinations and character. It was exactly that ſpecies of abuſe which is committed, in different degrees, by every ſet of rulers in France, in England, or any where elſe, who allow more latitude to freedom of expreſſion on their own ſide, than on that of their opponents. Had real freedom of the preſs been enjoyed; had the honeſt men whom France contained been left a channel by which to lay their ſentiments before the public; had a means been ſecured of inſtructing the people in the real nature of the deluſions which were practiſed upon them; the enormities of the revolution would have been confined within a narrow compaſs, and its termination would have been very different.

It is the natural effect of a free preſs, ſo to harmonize together the tone of the government and the ſentiments of the people, that no jarring oppoſition between them can ever ariſe. By the free circulation of opinions, the government is always fully appriſed, which by no other means it ever can be, of the ſentiments of the people, and feels a decided intereſt in conforming to them. As it muſt thus, in ſome degree, mould itſelf upon the ſentiments of the people, ſo it feels an intereſt in faſhioning the ſentiments of the people to a conformity with its views. In a word, the government and the people are under a moral neceſſity of acting together; a free preſs compels them to bend to one another; and any contrariety of views and purpoſes liable to ariſe, can never come to ſuch a head as to threaten convulſions. We may ſafely affirm, that more freedom of the preſs granted to our own country, would have the ſalutary effect of harmonizing, to a much greater degree, the tone of government and the ſentiments of the people, and of rendering all violent oppoſition between them ſtill more improbable than even at preſent it is. That the preſs, too, though calculated to produce important effects in the ſlow progreſs of ages, is an inſtrument with which no violent and ſudden changes can ever be effected, we ſhould think abundantly evident, upon a little conſideration of its very nature. This is a circumſtance which did not eſcape the ſagacity of Mr. Hume, and which, though cautious and timid with reſpect to government, even to a degree, as Mr. Fox juſtly remarks, of womaniſh imbecility, he heſitated not to expreſs in ſeveral of the firſt editions of his Eſſays. The point is ſo well handled by him, and his authority is ſo high, that we prefer delivering our ſentiments upon it, in his words, to our own. "Since, therefore, the liberty of the preſs

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is ſo eſſential to the ſupport of our mixed government, this ſufficiently decides the queſtion, whether this liberty be advantageous or prejudicial; there being nothing of greater importance in every ſtate than the preſervation of the ancient government, eſpecially if it be a free one. But I would fain go a ſtep further, and aſſert, that ſuch a liberty is attended with ſo few inconveniences, that it may be claimed as the common right of mankind, and ought to be indulged them almoſt in every government; except the eccleſiaſtical, to which indeed it would be fatal. We need not dread, from this liberty, any ſuch ill conſequences as followed from the harangues of the popular demagogues of Athens, and tribunes of Rome. A man reads a book or pamphlet alone and coolly. There is none preſent from whom he can catch the paſſion by contagion. He is not hurried away by the force and energy of action; and, ſhould he be wrought up to never ſo ſeditious a humour, there is no violent reſolution preſented to him, by which he can immediately vent his paſſion. The liberty of the preſs, therefore, however abuſed, can ſcarcely ever excite popular tumults or rebellion. And, as to thoſe murmurs or ſecret diſcontents it may occaſion, it is better they ſhould get vent in words, that they may come to the knowledge of the magiſtrate before it be too late, in order to his providing a remedy againſt them. Mankind, it is true, have always a greater propenſion to believe what is ſaid to the diſadvantage of their governors, than the contrary; but this inclination is inſeparable from them, whether they have liberty or not. A whiſper may fly as quick, and be as pernicious, as a pamphlet. Nay, it will be more pernicious, where men are not accuſtomed to think freely, or diſtinguiſh betwixt truth and falſehood." Hume's Eſſays, p. 11. as quoted in the *Edinburgh Review*, vol. xviii.

It being thus painfully uncertain, where the liberty of the preſs ends, and where the law of libel begins to attach, Mr. Hart, the inſtitutor of a new weekly paper, has thought fit (ſarcaſtically perhaps) to put himſelf under the protection of the law, by dedicating his work "To the Attorney and Solicitor General for the time being." To underſtand one of the paſſages we ſhall quote, it will be neceſſary to premiſe, that Mr. H. while printer of another paper, had ſmarted under the laſh of a former attorney-general. Now therefore he craves advice from the fountain-head, how he may avoid ſuch calamities in future:

"Gentlemen, If remembrances be as warnings to lead to ſafety, you will doubtleſs do juſtice to my preſent feelings and intentions in humbly dedicating to you, and recommending to your moſt eſpecial care and protection, my preſent undertaking in the public ſervice. Gentlemen, I know your power; I mean the power of your office, as well what it is as what it ought to be; experience has taught me to regard though not to fear it; I do not wiſh to brave that power needleſsly, or to incur the heavy penalty it has laid upon me. I therefore throw myſelf upon your juſtice, or, if that be too preſumptuous, upon your indulgence, that, as I have conſtituted you the patrons of my paper, you will at leaſt impart to me the *ſecret of ſecurity*. Gentlemen, in claiming the countenance of the law, it will readily be ſuppoſed I do not ſeek its violation: but in the preſent *uncertainty of what is law*, that is, of what is made to conſtitute offence, without ſome better guide than common reaſon, there is no definition of duty, no ſafety for exertion, no incitement or encouragement to induſtry or public ſpirit. Under ſuch circumſtances, it muſt be owned, the perplexity is great, as well to aſcertain what to tolerate as what to avoid; and, if your official obligation lead as much to explain as to puniſh, I call upon you to impart the neceſſary information. I ſhall proceed, therefore, to tell you, what I conceive I may lawfully perform, and call upon you thus publicly to intimate the objection; to tell me *what is the rule of libel*, the ſtandard whereto we may ſhape our cenſure or animadverſion. In the firſt place, I profeſs to hold every public character in reſpect, ſo long as he reſpects his public character; and never to vilify the great becauſe of their exaltation, but only when, forgetting their high ſtation, they ſhall be found to debaſe themſelves: thus, gentlemen, you will perceive my hoſtility will not be againſt the perſon or his office, but ſimply againſt his malverſation; which I take to be the true line of duty, both in law and reaſon. That the liberty of the preſs is a national bleſſing I have never heard officially diſputed; it is its *licentiouſneſs* alone againſt which the legal thunders are directed; conſequently, as truth cannot be deemed licentious, ſo neither can it reaſonably be held in abhorrence or treated with ſeverity. A public truſt is a public property, and its violation a general grievance; but, as ſuch abuſes are the effect of ſecret contrivance and deceptious machinations, to unveil the myſtery and diſplay the public wrong muſt ſurely be the reverſe of reprehenſible. Of the policy of government, the capacity of miniſters, the condition of ſociety, and the general feature of the empire; to ſpeak of theſe as we find them can never be conſtrued an offence, provided the picture apply to the general feeling for confirmation. With theſe plain ſubjects, then, I truſt I have leave to meddle; and, as I never mean to ſhelter myſelf under the veil of ambiguity, ſo do I enter my public proteſt againſt the power of inuendo, or the ingenuity of interpretation. I will not ſo preſume as to ſay I ſhall not err, or be the dupe of impoſition, perhaps of malice; the firſt being the common fate of man, the latter too often the attempt of envy or revenge; but, whatever may betide, I ſhall not ſhrink from my reſponſibility, or ſeek to ſhelter my folly or my fault by any ſubterfuge, by meanly ſhifting off the blame to others, or diſavowing what I had approved. What I dare promulge, I truſt I ever dare defend; as I aſk no patronage at the expenſe of integrity, ſo I aſk no favour at the ſacrifice of truth, of private honour, or of public principle. If you receive this as a defiance to authority, a contempt of power, you do me wrong; I venerate authority when governed by principle, and not warped by prejudice or paſſion; and thus it is I dedicate my labours to your high conſideration, not perſonally but officially; and call upon the world to note, that The Whig, or Public Guardian, ſtands now, and for ever, moſt reſpectfully dedicated to his majeſty's attorney and ſolicitor-general for the time being, by their moſt devoted and obedient ſervant, J. H. HART."

April 18, 1813.

LIB'ETEN, a town of Hungary: fifty-four miles eaſt-north-eaſt of Leopoldſtadt, and 112 eaſt of Vienna. Lat. 48. 47. N. lon. 19. 37. E.

LIBE'THRA, in ancient geography, the fountain of ſong, was ſituated in Magneſia, a diſtrict of Macedonia annexed to Theſſaly; diſtinct from the town of Libethra, which ſtood on Mount Olympus, where it verges towards Macedonia; hence the muſes are called *Libethrides*: (Virgil.) Strabo places on Helicon, not only Hippocrene, and the temple of the Muſes, but alſo the cave of the nymphs Libethrides.

LI'BEWALDE, a town of Pruſſia, in Oberland: twenty miles ſouth of Elbing.

LIB'IA. See LIBYA.

LIB'ICI, LIBE'CII, or LI'BRI, a people of Gaul who paſſed into Italy A. U. C. 364.

LIBID'INIST, *ſ.* [from *libidinous*.] A ſenſualiſt; one who gives himſelf up to his luſts.

LIBID'INOUS, *adj.* [*libidinoſus*, Lat.] Lewd; luſtful. —None revolt from the faith becauſe they muſt not look upon a woman to luſt after her, but becauſe they are much more reſtrained from the perpetration of their luſts. If wanton glances and *libidinous* thoughts had been permitted by the goſpel, they would have apoſtatized nevertheleſs. *Bentley*.

LIBID'INOUSLY, *adv.* Lewdly; luſtfully.

LIBID'INOUSNESS, *ſ.* Lewdneſs; luſtfulneſs. *Scott*.

LIB'IDO, *ſ.* [Latin.] Luſt, a ſtrong inclination. *Scott*.

LIB'ILITZ, a town of Sweden, in the government of Kuopio: fifty-five miles eaſt-ſouth-eaſt of Kuopio.

LI'BISCH, a town of Bohemia, in Leitmeritz: two miles north-north-weſt of Leypa.

LIB'ISCHAU, a town of Bohemia, in Chrudim: thirteen miles north of Chrudim.

LIBITI'NA, in the Roman mythology, a goddeſs which preſided over funerals. This goddeſs was the ſame with the *Venus infera*, or *Epithymbia* of the Greeks. She had a temple at Rome, where was lodged a certain piece of money for every perſon who died, whoſe name was recorded in a regiſter called *Libitinæ ratio*. This practice was eſtabliſhed by Servius Tullius, in order to obtain an account of the number of annual deaths in the city of Rome, and conſequently the rate of increaſe or decreaſe of its inhabitants.

LIBITINA'RIAN, *ſ.* [from *Libitina*.] One who aſſiſted in carrying a dead corpſe to the grave. *Cole.*

LIBITNA'RII, *ſ.* The perſons who were to provide what was neceſſary for funerals. *Phillips.*

LIB'ITUDE, *ſ.* The will; the pleaſure. *Not much uſed. Cole.*

LIB'ITUM, *ſ.* [Latin.] The will; the pleaſure.

Ad LIBITUM, in muſic, beſides the meaning affixed to it vol. i. p. 117. ſignifies the contrary to *obligato*; namely, that the inſtrument to which it is applied has no ſolo paſſages that will be miſſed. In piano-forte pieces, there is often "an accompaniment for a violin *ad libitum*;" meaning that the violin-part may be played or not, as may be moſt convenient.

LIB'LE, a town of Bohemia, in Konigingratz: thirteen miles eaſt-ſouth-eaſt of Konigingratz.

LIB'NAH, in ſcripture-geography, a city of Judah, in the ſouthern part, *Joſh.* xv. 42. given to the prieſts, and declared a city of refuge; 1 *Chron.* vi. 54, 57. Euſebius and Jerome ſay, it was in the diſtrict of Eleutheropolis. It was one of the reſting places (between Rimmon-Parez and Riſſah) of the Iſraelites on their journey through the wilderneſs. *Numb.* xxxiii. 20.

LIB'NAH, or SHIHOR-LIBNAH, a city of Aſher. *Joſh.* xix. 26. Perhaps the whole promontory between Ecdippa and Tyre. *Plin.* lib. v. cap. 19. The meaning of *Shihor-libenah* is "the rivulet of foul water which is on the white promontory." *Calmet.*

LIB'NI, [Hebrew.] A man's name.

LIB'NITE, *ſ.* A deſcendant of Libni. A native or inhabitant of Libnah.

LIBO'BO, a ſmall iſland in the Eaſtern Indian Sea, on the ſouth-eaſt coaſt of Gilolo. Lat. 10. 48. S. lon. 128. 25. E.

LI'BOCH, a town of Bohemia, in Leitmeritz: fourteen miles ſouth-eaſt of Leitmeritz.

LIBOCH'ONITZ, a town of Bohemia, in Leitmeritz: eight miles ſouth of Leitmeritz.

LI'BON, a Greek architect who built the famous temple of Jupiter Olympius. He flouriſhed about 450 years before the Chriſtian era.

LIBONA'TI, a town of Naples, in principato Citra: four miles eaſt-north-eaſt of Policaſtro.

LIBON'GO, a town of Africa, in the kingdom of Locango, on the Lufana, near the ſea: fifty miles ſouth-ſouth-weſt of Bombi.

LIBONO'TUS, one of the thirty-two winds of the ancients; called alſo Notolibycus and Auſtro-africus; by us, ſouth-ſouth-weſt.

LIBO'RA, in ancient geography, a town of Spain, in the Tarragonenſis, in the country of the Carpetanians; ſituated on the Tagus, north-eaſt of Auguſtobriga, and almoſt bordering on Luſitania.

LI'BOS, a town of France, in the department of the Lot and Garonne, on the Lot: nine miles eaſt of Monflanquin, and twenty two north-eaſt of Agen.

LIBOU'RNE, a town of France, and principal place of a diſtrict, in the department of the Gironde, containing about 5000 inhabitants: five poſts eaſt of Bourdeaux. Lat. 44. 55. N. lon. 0. 9. W.

LI'BRA, the BALANCE, one of the mechanical powers. See BALANCE and MECHANICS.

LI'BRA, the BALANCE, one of the 48 old conſtellations, and the 7th ſign of the zodiac, being oppoſite to Aries, and marked like a part of a pair of ſcales, thus ♎. The figure of the balance was probably given to this part of the ecliptic, becauſe when the ſun arrives at this part, which is at the time of the autumnal equinox, the days and nights are equal, as if weighed in a balance. The ſtars in this conſtellation are, according to Ptolemy, 17; Tycho, 10; Hevelius, 20; Flamſteed, 51.

LI'BRA alſo denotes the ancient Roman pound, which was divided into 12 unciæ, or ounces, and the ounce into 24 ſcruples. It ſeems the mean weight of the ſcruple was nearly equal to 17⅝ grains Troy, and conſequently the libra, or pound, 5049 grains. It was alſo the name of a gold coin, equal in value to 20 denarii. *Phil. Tranſ.* vol. lxi. The diviſions of the libra were, the *uncia*, one twelfth; the *ſextans*, one ſixth; the *quadrans*, one fourth; the *triens*, one third; the *quincunx*, five ounces; the *ſemis*, ſix; the *ſeptunx*, ſeven; the *bes*, eight; the *dodrans*, nine; the *dextrans*, ten; the *deunx*, eleven; laſtly, the *as* weighed twelve ounces, or one libra.

The French livre is derived from the Roman libra, and was uſed in France for the proportions of their coin till the time of Charlemagne, or perhaps till that of Philip I. in 1093, their ſols being ſo proportioned, as that twenty of them were equal to the libra. By degrees it became a term of account; and every thing of the value of twenty ſols was called a *livre*.

LIBRA PENSA, in our law-books, denotes a pound of money in weight. It was uſual in former days, not only to tell the money, but to weigh it; becauſe many cities, lords, and biſhops, having their mints, coined money, and often very bad too; for which reaſon, though the pound conſiſted of twenty ſhillings, they always weighed it.

LI'BRAL, *adj.* [from *libralis*, Lat.] Of a pound weight.

LIBRA'RIAN, *ſ.* [*librarius*, Lat.] One who has the care of a library.—It was his inconceivable knowledge of books, that induced the great duke Coſmo the Third to do him the honour of making him his *librarian*. *Spence.*—One who tranſcribes or copies books.—Charybdis thrice ſwallows, and thrice refunds, the waves; this muſt be underſtood of regular tides. There are indeed but two tides in a day, but this is the error of the *librarians*. *Broome.*—*Librarians* (librarii), among the ancients, were a ſort of copyiſts who tranſcribed, in beautiful or at leaſt legible characters, what had been written by the *notarii* in notes and abbreviatures. *Chambers.*

LI'BRARY, *ſ.* [*librairie*, Fr.] A collection of books, public, or private.—I have given you the *library* of a painter, and a catalogue of ſuch books as he ought to read. *Dryden's Dufreſnoy.*

Then as they 'gan his *library* to view,
And antique regiſters for to aviſe,
There chanced to the prince's hand to riſe
An ancient book, hight Briton's Monuments. *Fairy Queen.*

A place furniſhed with books, or adapted to receive them.—Magliabechi had a local memory of the places where every book ſtood; as in his maſter's ſhop at firſt, and in ſeveral other *libraries* afterwards. *Spence.*—The denomination of the Radcliffe *library* at Oxford is a ſtill ſtronger proof, that the ſignification of this word is not limited to a *collection of books*, ſince that edifice had the ſame title from its conſtruction, before there was a ſingle book in it. *Maſon's Suppl.*

Some authors refer the origin of libraries to the Hebrews; and obſerve, that the care theſe took for the preſervation of their ſacred books, and the memory of what concerned the actions of their anceſtors, became an example to other nations, particularly to the Egyptians. Oſmanduas, king of Egypt, is ſaid to have taken the hint firſt; who, according

ing to Diodorus, had a library built in his palace, with this inſcription over the door; ΨΥΧΗΣ ΙΑΤΡΕΙΟΝ, "Phyſic for the Mind." Nor were the Ptolemies, who reigned in the ſame country, leſs curious and magnificent in books.

The Scripture alſo ſpeaks of a library of the kings of Perſia, Ezra v. 17. vi. 1. which ſome imagine to have conſiſted of the hiſtorians of that nation, and of memoirs of the affairs of ſtate; but, in effect, it appears rather to have been a depoſitory of laws, charters, and ordinances of the kings. The Hebrew text calls it the *houſe of treaſures*, and afterwards the *houſe of the rolls*, where the treaſures were laid up. We may, with more juſtice, call that a *library*, mentioned in the ſecond book of Eſdras to have been built by Nehemiah, and in which were preſerved the books of the prophets, and of David, and the letters of their kings.

The firſt who erected a library at Athens was the tyrant Piſiſtratus; and yet Strabo refers the honour of it to Ariſtotle. That of Piſiſtratus was tranſported by Xerxes into Perſia, and was afterwards brought back by Seleucus Nicanor to Athens. Long after, it was plundered by Sylla, and re-eſtabliſhed by Hadrian. Plutarch ſays, that under Eumenes there was a library at Pergamus, containing 200,000 books. Tyrannian, a celebrated grammarian, contemporary with Pompey, had a library of 30,000 volumes. That of Ptolemy Philadelphus, according to Aulus Gellius, contained 700,000, all in rolls, burnt by Cæſar's ſoldiers. See vol. i. p. 273, 274.

Conſtantine, and his ſucceſſors, erected a magnificent one at Conſtantinople; which in the eighth century contained 300,000 volumes, all burnt by order of Leo Iſaurus; and, among the reſt, one wherein the Iliad and Odyſſey were written in letters of gold, on the guts of a ſerpent.

The moſt celebrated libraries of ancient Rome, were the Ulpian and the Palatine. They alſo boaſt much of the libraries of Paulus Æmilius, who conquered Perſeus; of Lucilius Lucullus, of Aſinius Pollio, Atticus, Julius Severus, Domitius Serenus, Pamphilius Martyr, and the emperors Gordian and Trajan.

Anciently, every large church had its library; as appears by the writings of St. Jerome, Anaſtaſius, and others. Pope Nicholas laid the firſt foundation of that of the Vatican, in 1450. It was deſtroyed by the conſtable Bourbon, in the ſacking of Rome, and reſtored by pope Sixtus V. and has been conſiderably enriched with the ruins of that of Heidelburg, plundered by count Tilly in 1622. One of the moſt complete libraries in Europe, was ſaid to be that erected at Florence by Coſmo de Medicis, over the gate whereof is written LABOR ABSQUE LABORE; though it has been ſince exceeded by that of the French king begun by Francis I. augmented by Richelieu, Colbert, &c. and now ſo much enriched by the ſpoils of Venice, Florence, Rome, and all Italy, beſides Holland, that it is ſcarcely in the power of words to convey an idea of its value. This library is open every morning from ten till two; during which time every perſon who has acceſs to it is indulged with the uſe of whatever books or manuſcripts he requires.

The emperor's library at Vienna, according to Lambecius, conſiſts of 80,000 volumes, and 15,940 curious medals.

The Bodleian library at Oxford, built on the foundation of that of duke Humphrey, exceeds that of any univerſity in Europe, and even thoſe of all the ſovereigns of Europe, except the emperor's and the French king's, which are each of them older by one hundred years. It was firſt opened in 1602, and has ſince found a great number of benefactors; particularly ſir Robert Cotton, ſir H. Savil, archbiſhop Laud, ſir Kenelm Digby, Mr. Allen, Dr. Pococke, Mr. Selden, and others. The Vatican, the Mediçean, that of Beſſarion at Venice, and thoſe juſt mentioned, exceed the Bodleian in Greek manuſcripts; which yet outdoes them all in Oriental manuſcripts. As to printed books, the Ambroſian at Milan, and that of Wolfenbuttle, are two of the moſt famous, and yet both inferior to the Bodleian.

The king's library, at St. James's, was founded by Henry, eldeſt ſon of James I. and made up partly of books, and partly of manuſcripts, with many other curioſities, for the advancement of learning. It has received many additions from the libraries of Iſaac Caſaubon and others.

The Cottonian library originally conſiſted of 958 volumes of original charters, grants, inſtruments, letters of ſovereign princes, tranſactions between this and other kingdoms and ſtates, genealogies, hiſtories, regiſters of monaſteries, remains of Saxon laws, the book of Geneſis, thought to be the moſt ancient Greek copy extant, and ſaid to have been written by Origen in the ſecond century, and the curious Alexandrian copy or manuſcript in Greek capitals. This library is kept in the Britiſh Muſeum, with the large and valuable library of ſir Hans Sloane, amounting to upwards of 42,000 volumes, &c.

There are many public libraries belonging to the ſeveral colleges at Oxford and Cambridge, and the univerſities in North Britain. It has been remarked, that the univerſity of Cambridge has of late-years become unuſually ſtrict in enforcing the laws relative to the uſe of books in the public library. Even a member of the ſenate may not take a manuſcript to his room, without a grace; and no member of the univerſity can now read in the library, who is not alſo a member of the ſenate, unleſs accompanied by one who is. Theſe circumſtances may, perhaps, bring to ſome people's remembrance the waggery of a certain clergyman at the reformation. He was preaching againſt the Romiſh church for denying the people the free uſe of the Scriptures, and exclaimed, "See here," opening the book wide, "a divine book, able to make you wiſe unto ſalvation; but," continued he, (claſping the book faſt, and holding it up in his hand,) "you are allowed only to admire it; you muſt not read it." Others may vindicate this ſtrictneſs of the univerſity, on the principle by which Bentley, when king's librarian, vindicated his refuſal of the uſe of a manuſcript to Boyle; "A manuſcript is of no further ſervice, when you have ſqueezed out the juice."

The principal public libraries in London, beſides that of the Muſeum, are thoſe of the College of Heralds, of the College of Phyſicians, of Doctors Commons, to which every biſhop, at the time of his conſecration, gives at leaſt 20l. ſometimes 50l. for the purchaſe of books; thoſe of Gray's Inn, Lincoln's Inn, (ſee vol. xi. p. 80.) Inner Temple, and Middle Temple; that of Lambeth, founded by archbiſhop Bancroft in 1610, for the uſe of ſucceeding archbiſhops of Canterbury, and increaſed by the benefactions of archbiſhops Abbot, Sheldon, and Tenniſon, and ſaid to conſiſt of at leaſt 15,000 printed books, and 617 volumes in manuſcript; that of Red-Croſs ſtreet, founded by Dr. Daniel Williams, a preſbyterian divine, and ſince enriched by many private benefactions; that of the Royal Society, called the Arundelian or Norfolk library, becauſe the principal part of the collection formerly belonged to the family of Arundel, and was given to the ſociety by Henry Howard, afterwards duke of Norfolk, in 1666, which library has been increaſed by the valuable collection of Francis Aſton, eſq. in 1715, and is continually increaſing by the numerous benefactions of the works of its learned members, and others; that of St. Paul's, of Sion college; the Queen's library, erected by Queen Caroline in 1737; and the Surgeons library, kept in their newly-erected hall in Lincoln's-Inn ſquare; the Weſtminſter library, the library of the Royal Inſtitution, incorporated in 1800; the library of the London Inſtitution, eſtabliſhed in 1805; thoſe of the Surrey Inſtitution and Ruſſell Inſtitution, &c. &c.

Where a library is erected in any pariſh, it ſhall be preſerved for the uſes directed by the founder; and incumbents and miniſters of pariſhes, &c. are to give ſecurity for it, and make catalogues of the books, &c. None of the books ſhall be alienable without conſent of the biſhop,

and then only when there is a duplicate of ſuch books. If any book ſhall be taken away and detained, a juſtice's warrant may be iſſued to ſearch for and reſtore the ſame; alſo, action of trover may be brought in the name of the proper ordinary, &c. And biſhops have power to make rules and orders concerning libraries, appoint perſons to view their condition, and enquire of the ſtate of them in their viſitations. 7 *Anne*, c. 14.

Bray's Inſtitution for parochial libraries (1696) is under the management of a number of aſſociates, a treaſurer, and a ſecretary. See Highmore on Public Charities, p. 935.

Circulating Libraries, now ſo general and uſeful, are of no greater ſtanding than about ſeventy years. The firſt in London was commenced at No. 132 in the Strand, by a bookſeller of the name of Wright, about the year 1740; he was ſucceeded in the ſame concern by Batho, who was ſucceeded by Mr. John Bell. Among the earlieſt and moſt ſucceſsful rivals of Wright were the Nobles, in Holborn and St. Martin's court; and Lowndes in Fleet-ſtreet. The number of circulating libraries in Great Britain was, in the year 1810, not leſs than a thouſand.

Muſical Library. Dr. Burney complains, in the ſecond vol. of his General Hiſtory of Muſic, p. 444, that in his travels through France, Italy, Germany, Holland, and the Netherlands, in ſearch of materials for his work, he was able to find no complete *muſical library*. "Something like a chain or ſeries of muſical theoriſts (he ſays) may perhaps be found at Vienna, where the emperor Leopold I. began to form a muſical library; and the elector of Bavaria another at Munich in the ſeventeenth century. But both have been long neglected, and are now in a very confuſed and imperfect ſtate. Nor is a complete ſeries of muſical compoſitions by the beſt maſters, from the earlieſt period of counterpoint to the preſent time, to be found in any public or private library in Europe to which I have ever had acceſs. Indeed the collectors of books for royal, collegiate, or public, libraries, ſeem never to have had an idea of forming any regular plan for making ſuch a collection; and, though many individuals have been poſſeſſed of a rage for accumulating muſical curioſities, it has ſeldom happened that they have extended their ideas to muſical productions in *general*; ſo that no more than one claſs or ſpecies of compoſition has been completed by them, and even this, at the death of the proprietor, is uſually diſperſed.

"In a library, formed upon ſo large a ſcale as that of the king of France at Paris, the Bodleian and Muſeum in England, it ſeems as if muſic ſhould be put on a level with other arts and ſciences, in which every book of character is procured. In a royal or ample collection of pictures, ſpecimens at leaſt of every great painter are purchaſed; and no private library is thought complete while the writings of a ſingle poet of eminence are wanting."

As the author, in a note upon this paſſage, has given a ſketch of ſuch a muſical library as he thinks wanting, and which has been inſerted in the Encyclopédie Methodique, we ſhall give it a place here, in his own words.

"In forming ſuch a muſical library as would aſſiſt the ſtudent, gratify the curious, inform the hiſtorian, and afford a comparative view of the ſtate of the art at every period of its exiſtence, it were to be wiſhed that the books, when collected, were claſſed in a way ſomewhat like the following:

Maſſes and motets, to Latin words,
Madrigals, ſongs in parts, and ſingle ſongs, in modern languages,
} From the infancy of counterpoint to the year 1500.

The ſame continued to the year 1600; to which ſhould be added:

Services and full anthems,
Verſe and ſolo anthems,
Pſalmody in parts,
} To Engliſh words, as well as thoſe of other modern languages.

The ſame claſſes completed to the year 1700, with the addition of maſques, intermezzi, ſerenatas,

Operas, ſerious and comic.
Oratorios, cantatas.
Fantaſias and recercari, for various inſtruments.

All the above continued to the preſent time, with an addition of full

Concertos, ſymphonies, and overtures.
Concertos, with ſolo parts for particular inſtruments.
Quintets, quatuors.

Sonatas, or trios, duets and
Solos for every inſtrument for which muſic has been compoſed, including voluntaries for the organ, and leſſons for every ſpecies of keyed inſtrument.

The muſic publiſhed in ſingle parts ſhould be ſcored, and that publiſhed in partition tranſcribed in ſingle parts; to be alike ready for the eye or the ear, for the theoriſt to examine, or the practical muſician to perform.

And, in order that ſcience and criticiſm may keep pace with the mechaniſm and practice of the art, all the treatiſes, tracts, and eſſays, both in the dead and living languages, ſhould be collected, arranged chronologically, and aſſigned a particular portion of the library.

The Bodleian library, the Muſeum, and Royal Society, with ſome other libraries, have copies of new books ſent to them by the Stationers' Company, and by individuals, either by law or by courteſy; and, when once ſuch a foundation of old muſic is laid as we have here ſketched out, it would ſoon become a cuſtom, or might be made one by the legiſlature, for copies of all muſic that is publiſhed in England, as well as books on the ſubject, to be preſented by the authors or editors to the public library. And the ſame means ſhould be uſed for procuring all foreign muſical publications as are employed in accumulating books from all parts of the globe where the preſs is at work.

The librarian, or keeper of theſe books, ſhould be a good practical muſician, as well as theoriſt and ſcholar, in order to know the worth of the productions he has in charge, and to be enabled to give inſtructions at leaſt how to draw ſingle parts from a ſcore, and ſcore ſingle parts; to explain difficulties to the ignorant, and diſplay curioſities to the learned; to know the rank each compoſer ſhould hold in every claſs, and perhaps record the degree of reſpect that has been paid to him by his contemporaries, and which is due to him from poſterity."

LIBRA'TA, a river of Naples, which runs into the Adriatic in lat. 42. 53. N. lon. 14. E.

LIBRA'TA TER'RÆ, a portion of ground, containing four oxgangs, and every oxgang thirteen acres. It was anciently ſo much land as was yearly worth 20s. and in Henry III's time, he that had *quindecim libratas terræ* was to receive the order of knighthood. Some ſay, that, as money is divided into pounds, ſhillings, pence, and farthings, the ſame degrees are to be obſerved in the diviſion of lands; and, therefore, as *quadrans* ſignifies a farthing, ſo *quadrantata* is the fourth part of an acre; *obolata*, a half; *denariata*, a whole acre; *ſolidata*, 12 acres; and *librata*, 20 times 12 acres; *i. e.* 240 acres.

This is the ſame with what in Scotland is called *pound-land* of old extent.

To LI'BRATE, *v. a.* [*libro*, Lat.] To poiſe; to balance; to hold in equipoiſe.

LIBRA'TION, *ſ.* [Fr. from *libratio*, Lat.] The ſtate of being balanced.—This is what may be ſaid of the balance, and the *libration* of the body. *Dryden's Dufreſnoy.*

Their pinions ſtill
In looſe *librations* ſtretch'd, to truſt the void
Trembling refuſe. *Thomſon's Spring.*

In aſtronomy, the balancing motion or trepidation in the firmament, whereby the declination of the ſun, and the latitude of the ſtars, change from time to time. Aſtronomers likewiſe aſcribe to the moon a libratory motion, or motion of trepidation, which they pretend is from eaſt to weſt, and from north to ſouth, becauſe that at full moon they

they ſometimes diſcover parts of her diſk which are not diſcovered at other times. Theſe kinds are called, the one a libration in longitude, and the other a libration in latitude. Beſides this, there is a third kind, which they call an apparent *libration*, and which conſiſts in this, that when the moon is at her greateſt elongation from the ſouth, her axis being then almoſt perpendicular to the plane of the ecliptic, the ſun muſt enlighten towards the north pole of the moon ſome parts which he did not before, and that, on the contrary, ſome parts of thoſe which he enlightened towards the oppoſite pole are obſcured; and this produces the ſame effect which the *libration* in latitude does. *Dict. Trev.*—Thoſe planets which move upon their axis, do not all make entire revolutions; for the moon maketh only a kind of *libration*, or a reciprocated motion on her own axis. *Grew.*—See the article ASTRONOMY, vol. ii.

LI'BRATORY, *adj.* Balancing; playing like a balance.

LIB'SHAUSEN, a town of Bohemia, in Leitmeritz: fifteen miles ſouth-weſt of Leitmeritz.

LI'BUN, a town of Bohemia, in Boleſlaw: ſixteen miles north-eaſt of Jung Buntzel.

LIBUR'NIA, now CROATIA, a country of Illyricum, between Iſtria and Dalmatia, whence a colony came to ſettle in Apulia in Italy. There were at Rome a number of men whom the magiſtrates employed as public heralds, who were called *Liburni*, probably from being originally of Liburnian extraction.

Liburna, or *liburnica*, (Horace,) denoted a kind of light and ſwift ſkiff, uſed by the Liburnians in their ſea-roving or piracies, for which they were noted. *Liburnum* (Juvenal) was a ſpecies of litter made in form of Liburnian ſkiffs, wherein the noblemen of Rome were carried, and where they ſat at their eaſe, either reading or writing.

LIBUR'NUS, in ancient geography, a mountain of Campania.—Alſo a port of Tuſcany, now *Livorna* or Leghorn. Lat. 43. 30. N. lon. 11. E.

LIB'YA, in fabulous hiſtory, a daughter of Epaphus and Caſſiopea, who became mother of Agenor and Belus by Neptune.

LIB'YA, in general, according to the Greeks, denoted Africa. An appellation derived from *lub*, "thirſt," being a dry and thirſty country. See AFRICA.

LIBYA, in a more reſtrained ſenſe, was the middle part of Africa, extending north and weſt, (Pliny,) between the Mediterranean to the north, and Ethiopia to the eaſt; and was twofold; the Hither or Exterior Libya, and the Farther or Interior. The former lay between the Mediterranean on the north, and the Farther Libya and Ethiopia beyond Egypt on the ſouth. The Farther or Interior Libya was a vaſt country, lying between the Hither Libya on the north, the Atlantic ocean on the weſt, the Ethiopic on the ſouth, and Ethiopia beyond Egypt on the eaſt. *Ptolemy.*

LIBYA, in a ſtill more reſtrained ſenſe, called, for diſtinction's ſake, *Libya Propria*, was a northern diſtrict of Africa, and a part of the Hither Libya; ſituated between Egypt to the eaſt, the Mediterranean to the north, the Syrtis Major and the Regio Tripolitana to the weſt, the Garamantes and Ethiopia beyond Egypt to the ſouth. Now the kingdom and deſert of *Barca*. This Libya was again ſubdivided into *Libya* taken in the ſtricteſt ſenſe of all, and into Marmarica and Cyrenaica. *Libya* in the ſtricteſt ſenſe, otherwiſe the *Exterior*, was the moſt eaſtern part of *Libya Propria*, next to Egypt, with Marmarica on the weſt, the Mediterranean on the north, and the Nubi, now called *Nubia*, to the ſouth. *Ptolemy.*

LIB'YAN, *adj.* [from *Libya.*] Belonging to Libya, produced in Libya.

LIB'YAN, *ſ.* An inhabitant of Libya, a native of Libya.

LIBYS'SA, a river of Bithynia, with a town of the ſame name, where was the tomb of Hannibal ſtill extant in the age of Pliny.

LICARA'BRA, a river of Spain, in the province of Guipuſcoa, which runs into the Orio a little above Toloſa.

LICA'VO, a town of the iſland of Corſica: twenty miles eaſt of Ajazzo.

LICE, the plural of *louſe*:

Red bliſters riſing on their paps appear,
And flaming carbuncles, and noiſome ſweat,
And clammy dews, that loathſome *lice* beget;
Till the ſlow creeping evil eats his way. *Dryd. Vir.*

LICE'A, *ſ.* in botany, a genus of the claſs cryptogamia, order fungi, the ſpecies of which have been, ſome of them, referred to Trichia, Sphærocarpus, (not the true Sphærocarpus of Micheli, which belongs to the order of algæ) and Didymium. Its generic eſſential character is thus given by Perſoon—Peridium (or caſe) naked, roundiſh, or ſomewhat indeterminate in ſhape, brittle; internal membrane wanting; ſeminal powder deſtitute of fibres. The ſpecies he enumerates are five, all very minute productions, ſcarcely bigger than pins' heads, found chiefly on rotten wood of the fir kind.

Species. 1. Licea bicolor: peridium rather dotted with ſpecks than furrowed with wrinkles; ſcabrous, neat, dark, with a tint of green; general colour inky, or blue-black; filaments rare, and iſolated; the inner peridium, which contains a colourleſs pollen, could not be diſcovered. There are two varieties: the one may be found, either diſperſed or aggregated, on white-waſhed mud walls; and is called *calcicola*. The other variety, *lignatilis*, differs but little from the firſt: it riſes a little higher, has hemiſpherical peridia, of a dark cheſnut colour, or nearly black; and is found on rotten wood. In other reſpects, both varieties are ſo alike, chiefly for the nature and colour of their duſt, that it is impoſſible to ſeparate them. This laſt was found but once, and in great quantity, and both diſperſed and aggregate, upon timber made of fir-tree. Both varieties flouriſh in the middle of June.

2. Licea circumſciſſa. Of this we have alſo two varieties; that of the poplar, and that of the fir. The firſt has larger peridia, and is of a deeper hue: it is to be found on the bark and wood of the Populus tremulus, or aſpen; at the end of autumn, in winter, and in ſpring. The variety which inhabits the *fir* has the peridium dark brown, with a ſtrong membrane ſemi-tranſparent and yellowiſh; and therefore rejects the generic character, of having no internal membrane. Time, September.

3. Licea puſilla: the peridium turns from deep yellow to brown, and then aſſumes a beautiful cheſnut-colour; in like manner the pollen of a duſky colour turns to black, exhibiting the different ſhades which we remark in ſeveral ſorts of ſnuff. It grows on the rotten wood of the pine-tree; and is found in April, May, and June.

4. Licea variabilis: various in figure and colour, reddiſh-brown; the powder dirty yellow

5. Licea flexuoſa, is deſcribed by Perſoon as creeping or oblong, ſhining red brown, ſomewhat wavy, with ſaw-like inciſions. Theſe two laſt are found on fir-wood.

Albertini and Schweiniz, in their Conſpectus Fungorum, have deſcribed two new ſpecies.

6. Licea ſtrobilina: cloſe, aggregate, oblong, regular, and ſomewhat round; peridia duſky, between fawn and tawny, cut around; powder, dirty yellow. The peridia of this ſpecies inhabit ſmall cells cut in wood, and cloſe to each other; they are numerous, talliſh, regular, hemiſpherical, and flattiſh at top. Their bark uncommonly hard, and tough; darkening from fawn-colour to brown; opaque, ſmooth, and cleft. It often appears as if cut round; ſometimes the top opens unequally: it contains a farinaceous duſt, ſomewhat compact and coarſe, with hardly any filaments, of a dirty-yellow hue, yet at times whitiſh. It differs from the Licea circumſciſſa by being twice or three times as large; by its colour, chiefly that of the powder; and by inhabiting cloſer cells, &c. and from L. variabilis by the regularity of its form, by its ſimple and robuſt peridium, by its different place of growth, &c. having choſen a ſite to which it generally moſt pertinaciouſly adheres, namely, the old half-putrid cones of the Pinus picea, or ſilver fir, where they neſtle in great number, ſwelling and dividing by their preſence the ſquamous follicles of the fruit. It is found in autumn and ſpring.

This

This ſpecies is ſhown on the Plate of LERNÆA, &c. at fig. 19. *a*, natural ſize of the fungi as they lie aggregated; *b*, the ſame magnified, with part of the lamina of the *ſtrobilus*, or pine-apple; *c*, the peridium opened, to ſhow the farina; *d*, the peridium irregularly cleft; *e*, an entire peridium by itſelf; *f*, profile of a peridium opened; *g*, ſection of the peridium, to ſhow the contents.

7. Licea incarnata: crowded; fleſh-coloured, with a ſteely gloſs; powder at firſt white, then fleſh-coloured, and at length deep roſe-colour. This ſpecies ſeems to ſtand midway between the Licea and Trichia, (another of Albertini's genera;) as its filaments, not very numerous, riſe above the opened peridium; yet they do not conſtitute a true compact head of hair, nor do they expand with elaſticity at the opening of the mouth. Its place, however, was aſſigned among the Licea on account of its form, habits, and colour. The young fungi exhibit different ſhapes, hemiſpherical, oval, underlined, fluxuous, &c. either diſperſed or aggregated, and confluent. The elegant peridium is fleſhy, lucid, thin, yet hard, brittle, and breaking into fragments. The powder is farinaceous; at the firſt bloom it is white with a little mixture of pink; but, when in free contact with air, reddening more intenſively, it turns into a beautiful roſe-colour. It is very rare; having been met with but once, upon naked fir-wood, felled and rotting in a damp thicket, about the end of October. Fig. 20, on the ſame Plate, exhibits this ſpecies: *h*, natural ſize; *i*, magnified, ſome unopened, ſome opened, with the farina; *k*, a ſingle fungus more highly magnified, ſhowing the capillitium and farina; *l*, the peridium ready to break, and cracked round the circumference previous to the fungus emitting its pollen.

LICEGNA'NO, a river of Naples, which runs into the gulf of Gaeta two miles north-weſt of the Volturno.

LI'CENCE. See LICENSE.

LI'CENSE, or LICENCE, *ſ.* [*licentia*, Lat. *licence*, Fr.] Exorbitant liberty; contempt of legal and neceſſary reſtraint.—Some of the wiſer, ſeeing that a popular *licence* is indeed the many-headed tyranny, prevailed with the reſt to make Muſidorus their chief. *Sidney.*

They baul for freedom in their ſenſeleſs moods,
And ſtill revolt when truth would ſet them free;
Licence they mean, when they cry liberty. *Milton.*

The privilege that ancient poets claim,
Now turn'd to *licenſe* by too juſt a name. *Roſcommon.*

A grant of permiſſion.—We procured a *licence* of the duke of Parma to enter the theatre and gallery. *Addiſon on Italy.*—Liberty; permiſſion.—It is not the manner of the Romans to deliver any man to die, before that he which is accuſed have the accuſers face to face, and have *licence* to anſwer for himſelf. *Acts.*—Licenſe is alſo applied to the letters, or certificates, taken out in univerſities, whether in law, phyſic, or divinity. Thus, a licenſe in the Sorbonne, denotes a period of two years, which the bachelors are obliged to paſs in aſſiſting at acts, and diſputing in them, to qualify themſelves for being admitted doctors.

LICENSE, in law, is a power or authority given to another to do ſome lawful act. A licenſe is a perſonal power, and cannot be transferred to another: though a licenſe may be granted to a man and his aſſigns. 12 *Hen.* VII. 25. There may be a parol licenſe, as well as by deed in writing; but, if it be not for a certain time, it paſſes no intereſt. 2 *Neſ. Abr.* 1123. By licenſe a man may practiſe phyſic and ſurgery in London: licenſes are alſo neceſſary for carving on various trades and profeſſions, on which a duty is laid, for the purpoſe of raiſing a revenue to government. See EXCISE.

LICENSE (Letter of). See LETTER, p. 540.

LICENSE of MARRIAGE. Biſhops have power to grant licenſes for this purpoſe; and parſons marrying any perſon without publiſhing the banns of matrimony, or without licenſe, incur a forfeiture of 100l. &c. by 7 & 8 W. III. c. 35. See alſo ſtat. 26 Geo. II. c. 33. See the article MARRIAGE.

LICENSE, in MUSIC, PAINTING, and POETRY, are the liberties which are taken in diſpenſing with the common rules and laws of thoſe arts. See the reſpective articles.

To LI'CENSE, *v. a.* [*licencier*, Fr.] To permit by a legal grant:

Wit's Titans brav'd the ſkies,
And the preſs groan'd with *licens'd* blaſphemies. *Pope.*

To diſmiſs; to ſend away. *Not in uſe.*—He would play well, and willingly, at ſome games of greateſt attention; which ſhowed, that when he liſted he could *licenſe* his thoughts. *Wotton.*

LI'CENSER, *ſ.* A granter of permiſſion.

LICENSER of BOOKS. See LIBERTY of the PRESS, p. 602.

LI'CENSING, *ſ.* The act of giving a licenſe.

LICEN'TIATE, *ſ.* [*licentiatus*, low Lat.] A man who uſes licenſe. *Not in uſe.*—The *licentiates*, ſomewhat licentiouſly, leſt they ſhould prejudice poetical liberty, will pardon themſelves for doubling or rejecting a letter, if the ſenſe fall aptly. *Camden.*—A degree in Spaniſh univerſities.—A man might, after that time, ſue for the degree of *licentiate* or maſter in this faculty. *Ayliffe.*—Moſt of the officers of judicature in Spain are known by no other name than that of *licentiates*. To paſs *licentiate* in the common law, civil law, or phyſic, they muſt have ſtudied ſeven years; in divinity, ten. *Chambers.*—Licentiate, among us, is uſually underſtood of a phyſician, who has a licenſe to practiſe, granted him by the college of phyſicians. A perſon practiſing phyſic without ſuch licenſe, in caſe his patient dies under his hands, is guilty of felony in the eye of the law.

To LICEN'TIATE, *v. a.* [*licentier*, Fr.] To permit; to encourage by licenſe.—We may not hazard either the ſtifling of generous inclinations, or the *licentiating* of any thing that is coarſe. *L'Eſtrange.*

LICEN'TIATING, *ſ.* The act of giving power by licenſe. *L'Eſtrange.*

LICEN'TIOUS, *adj.* [*licentieux*, Fr. *licentioſus*, Lat.] Unreſtrained by law or morality:

How would it touch thee to the quick,
Should'ſt thou but hear I were *licentious?*
And that this body, conſecrate to thee,
With ruffian luſt ſhould be contaminate? *Shakeſpeare.*

Preſumptuous; unconfined;

The Tyber, whoſe *licentious* waves
So often overflow'd the neighbouring fields,
Now runs a ſmooth and inoffenſive courſe. *Roſcommon.*

LICEN'TIOUSLY, *adv.* With too much liberty; without juſt reſtraint.—The licentiates, ſomewhat *licentiouſly*, will pardon themſelves. *Camden's Remains.*

LICEN'TIOUSNESS, *ſ.* Boundleſs liberty; contempt of juſt reſtraint.—One error is ſo fruitful, as it begetteth a thouſand children, if the *licentiouſneſs* thereof be not timely reſtrained. *Raleigh.*

LICE'TO (Fortunio), a phyſician and philoſopher, was born in 1577 at Rapallo, in the ſtate of Genoa, where his father was a phyſician. He ſtudied at Bologna, and was during nine years profeſſor of philoſophy at Piſa. The great reputation he acquired cauſed him in 1609 to be invited to the chair of philoſophy at Padua, which he occupied till 1636. He then removed to Bologna, where he was profeſſor till 1645. In that year he returned to Padua, to the firſt chair of the theory of phyſic, which he held, at an advanced ſalary, till his death in 1657. He was an extremely voluminous writer; and a liſt is given of fifty-four of his publications, upon medical, philoſophical, moral, antiquarian, and hiſtorical, topics, very few of which are now remembered. In philoſophy he was a moſt zealous Ariſtotelian; and in all points was more diſtinguiſhed by erudition than by original reſearch or ſagacity. In a work *De Lucernis Antiquarum Recondilis*, he ſtrongly argues in favour of the ſuppoſed ſecret of inconſumable lamps poſſeſſed by the ancients, and relates many pretended diſcoveries of ſepulchral lamps of this kind.

As a phyſician he is beſt known for his work on monſters, entitled *De Monſtrorum Cauſis, Natura, et Differentiis*, of which the beſt edition is that of Blaſius, Amſt. 1665, 4to. In this piece he claſſifies monſtrous productions, and aſſigns cauſes to each, according to the principles of his philoſophy, but without anatomical deſcriptions, or experiments of his own. *Halleri Bibl. Anatom.*

LICH, *adj.* [lic, Sax.] Like or alike.—For both to be, and ſeeme, to him was labor *lich. Spenſer.*

LICH, *ſ.* [lice, Sax.] A dead carcaſe; whence *lichwake*, the time or act of watching by the dead; *lichgate*, the gate through which the dead are carried to the grave; *Lichfield*, the field of the dead, a city in Staffordſhire, ſo named from martyred Chriſtians; *lichowl*, a ſort of owl by the vulgar ſuppoſed to foretel death. *Lichwake* is ſtill retained in Scotland in the ſame ſenſe. *Johnſon.*

LICH, a town of Germany, in the principality of Hohen Solms, on the Wetter: twelve miles eaſt-ſouth-eaſt of Wetzlar, and thirty-ſix north-eaſt of Mentz. Lat. 50. 31. N. lon. 8. 49. E.

LI'CHADES, ſmall iſlands near Cæneum, a promontory of Eubœa; ſo called from Lichas.

LICHA'IA, a river of Ruſſia, in the country of the Coſſacs, which runs into the Donetz near Biſtraia.

LICHA'NOS, *ſ.* in the ancient muſic, the name of the third ſound of the two loweſt tetrachords in the ſyſtem of the Greeks; as this ſound was produced by the index or fore-finger, which was called *lichanos*. The third ſound of the loweſt tetrachord aſcending, was that of the *hypate*, and called lichanos-hypaton, ſometimes hypaton-diatonos, enharmonic, or chromatic, according to the genus. That of the ſecond, or mean tetrachord, was called lichanos-meſon, or meſon-diatonos.

LI'CHAS, a ſervant of Hercules who brought him the poiſoned tunic from Dejanira. He was thrown by his maſter into the ſea with great violence; and changed into a rock in the Eubœan Sea, by the compaſſion of the gods. *Ovid. Met.*

LI'CHEN, *ſ.* LIVERWORT; in botany, a genus of the claſs cryptogamia, order algæ, natural order of algæ. The generic characters are—I. Male flowers? Veſicles conglomerated, extremely ſmall, crowded or ſcattered on the diſk, margin, or tips of the fronds. II. Female flowers? on the ſame or on a diſtinct plant. Receptacle roundiſh, flattiſh, convex (tubercle), concave (ſcutella), ſubrevolute affixed to the margin (pelta), often differing from the frond in colour, within containing the ſeeds diſpoſed in rows. The powder adhering to ſome lichens ſeems rather to be of the nature of buds than of male fructifications.

Of this very numerous genus, Dr. Withering, in the third edition of his Arrangements, has enumerated no fewer than 216 ſpecies, beſides a great number of varieties. The ſpecies defined in the 14th edition of the Syſtema Vegetabilium amount to 130; but the inſufficiency of this catalogue, to compriſe all the Lichens in the world, will be ſtrikingly evident, when we conſider that about 345 Britiſh ſpecies have already appeared in Engliſh Botany, and that ſeveral more remain to be publiſhed there. The ſpecies enumerated by Dr. Turton, in his tranſlation of Gmelin's edition of Linnæus, are no fewer than 579. It can therefore, we think, only be expected of us to ſelect for deſcription a few of the moſt remarkable and uſeful ſpecies. For ſome general obſervations on the genus, and an illuſtration of the mode of fructification, ſee the article BOTANY, vol. iii. p. 282, 3. and Plate XV. fig. 15, 16, 17.

The moſt minute ſpecies of this great genus hold a much more important place in the economy of nature than is apparent to ſuperficial obſervers. They are the firſt beginning of vegetation on ſtones of all kinds expoſed to the air, whoſe decompoſing ſurfaces are the receptacle of their imperceptible ſeeds, and ſoon afford nouriſhment to the ſprouting plants, whoſe minute fibrous roots ſtill farther inſinuate themſelves. The larger ſpecies take poſſeſſion of every cavity and fiſſure, both of ſtones and the decaying external bark of trees. In time they all decay, and furniſh a portion of vegetable mould capable of nouriſhing moſſes, or ſtill larger plants. The reſiduum of theſe, being ſtill more conſiderable, is waſhed by rains into larger cavities, where even foreſt-trees can ſcatter their ſeeds, by the penetrating power of whoſe roots great maſſes are diſlodged from the moſt lofty rocks. Thus the vegetable kingdom exerciſes dominion over the tributary foſſil world, and, in its turn, affords the ſame no leſs neceſſary aid to animal exiſtence.

Species. 1. Lichen Iſlandicus, or Iceland moſs: a native of Britain, particularly on the mountains of Wales and Scotland. In Iceland this is uſed as food. For this purpoſe, a diſh of it is prepared by chopping it ſmall, boiling it in three or four ſucceſſive portions of water to take off its natural bitterneſs, and then for an hour or two in milk. When cold, this preparation has the form of a jelly, which is eaten with milk or cream, and makes a very palatable diſh. The medicinal qualities of this lichen have of late been ſo well eſtabliſhed at Vienna, that the plant is admitted into the Materia Medica of the Edinburgh Pharmacopeia, and into the London Pharmacopeia of the year 1809. It is extremely mucilaginous, and to the taſte ſomewhat bitter and aſtringent; but its bitterneſs, as well as the purgative quality which it manifeſts in its recent ſtate, are in a great meaſure diſſipated by drying, or, as we have already obſerved, may be extracted by infuſion in water. An ounce of this lichen boiled a quarter of an hour in a pint of water, yielded ſeven ounces of a mucilage as thick as that procured by the ſolution of one part of gum arabic in three pints of water. Lord Dundonald has given the following directions for preparing the mucilage from the lichen: The lichen has an outer ſkin, covering a green reſinous ſubſtance; and the remainder of the plant conſiſts chiefly of gum and of fibrous matter, on which water does not act. In order to ſeparate the outer ſkin from the reſinous matter, the plant muſt be ſcalded two or three times with boiling water, which cauſes the ſkin to crack, ſwell, and peel off. It is then put into a boiler with about three quarts of water for every pound of the plant, and about half an ounce of potaſh or ſoda, and the boiling ſhould be continued till the liquor acquires a conſiderable degree of gummy conſiſtence. The liquor is then to be taken out and ſtrained from the plant, and freſh water added to the ſame material, for the purpoſe of farther exhauſting the gum. The ſeveral liquors, after ſtanding ſome hours to ſettle, and then removing the dregs, are to be boiled down in a regulated heat to the conſiſtence which is required for uſe, but not farther, leſt it ſhould burn and become coloured. Two or three boilings will be neceſſary for entirely exhauſting the lichen of its mucilage or gum; which, when produced, is affirmed by his lordſhip to be equal to the beſt gum ſenegal. *Phil. Mag.* x. 293–299.

The editor of the Annales des Arts having inſerted in that journal an account of lord Dundonald's proceſs for extracting a gum from lichens, Dr. Robert, of the univerſity of Montpellier, ſent him ſome remarks relative to that ſubject; from which it appears, that a ſimilar diſcovery was made ſeveral years ago by MM. Hoffmann and Amoreux, who publiſhed it in their Treatiſe on Lichens, which gained the prize offered by the Academy of Lyons in 1786, and from which it is evident, that they prepared a true gum from lichens. Nor were they the firſt diſcoverers: they followed and cited the experiments made by Dr. Georgi, (in the Memoirs of the Academy of Peterſburg, 1779,) who aſſerts, that he had obtained from Lichen farinaceus, glaucus, phyſodes, and pulmonarius, a mucilage, which, on drying, becomes tranſparent, and poſſeſſes the other properties of gum arabic. Four ſpecies are here ſaid to have yielded gum; and lord Dundonald does not ſeem to have obtained it from the ſame ſpecies, as he tells us, that the lichen is ſometimes from twelve to thirteen feet in length; ſo that theſe trees bend under their weight; which cannot be underſtood of any other

ſpecies but the filamentous lichens. This however (adds Dr. Robert) does not detract from the merit of lord Dundonald, who had never ſeen the works quoted above.

The medical virtues of this lichen were probably firſt learned from the Icelanders, who employ it in its freſh ſtate as a laxative; but, deprived of this quality and properly prepared, it is ſaid to be an efficacious remedy in conſumptions, coughs, dyſenteries, and diarrhœas. Dr. Crichton informs us, (Med. Journ. vol. x.) that, during a reſidence of ſeven months at Vienna, he had frequent opportunities of ſeeing the Lichen Iſlandicus tried in phthiſis pulmonalis at the general hoſpital; and he confeſſes, "that it by no means anſwered the expectation he had formed of it." That this lichen ſtrengthens the digeſtive powers, and proves extremely nutritious, there can be no doubt; but the great medicinal efficacy attributed to it at Vienna will not readily, ſays Dr. Woodville, be credited at London. It is commonly given in the form of a decoction, an ounce and a half of the lichen being boiled in a quart of milk. Of this a tea-cup full is directed to be drunk frequently in the courſe of the day. If milk diſagree with the ſtomach, a ſimple decoction of the lichen in water is to be uſed. Care ſhould be taken to boil it over a ſlow fire, and not longer than a quarter of an hour. In the London Pharmacopeia the decoction is directed to be prepared by boiling down an ounce of the lichen in a pint and a half of water to a pint, and then ſtraining it.

Mr. Richard Reece recommends the farina of the lichen, inſtead of the decoction, in thoſe caſes in which it may be neceſſary to employ that remedy. Little advantage, he thinks, can be obtained from its uſe, unleſs two or three ounces are exhibited in the courſe of twenty-four hours; and as this quantity, given in the uſual way, muſt ſoon produce diſguſt in the patient, he prefers the employment of the farina; which, he ſays, is exempt from this objection, and "may be adminiſtered, without diſguſting the patient, to the extent of three, or even four, ounces a-day." This preparation is free from the cortical and fibrous parts of the herb. It poſſeſſes, in perfection, both the medicinal and dietetic properties; and, to form the jelly, does not require that long coction which proves deſtructive to its bitter quality. It may be exhibited in the quantity of three drams for a doſe, boiled with half an ounce of chocolate or cocoa in a morning for breakfaſt. The true Spaniſh cocoa is found to anſwer beſt; it approaches nearly to the flavour of the chocolate of this country, and, being free from ſugar, is leſs liable to diſagree with the patient than the manufactured chocolate, which, from the milk, butter, and ſugar, uſed in its compoſition, is generally found more or leſs acid or rancid. This powder may likewiſe conveniently be made into a kind of pottage, (a form much recommended by Bergius,) either in milk, water, or both, as may appear moſt ſuitable to the caſe of the patient, in the following manner: To a deſert-ſpoonful of the farina, add as much cold water as will make it into a ſoft paſte; then pour on by degrees half a pint of boiling water, broth, or warm milk, ſtirring it briſkly rhe whole time: after boiling for about ten minutes, it will become a ſmooth thin jelly. A little ſugar, currant-jelly, liquorice, raiſins, cinnamon, butter, wine, or any aromatic, may be added, to render it palatable. *Obſ. on the Anti-phthiſical Properties of L. Iſlandicus*, Lond. 1804. We have given a figure of this ſpecies on the annexed Plate, at fig. 1.

2. Lichen caninus, or aſh-coloured ground liverwort: coriaceous, dilated, aſcending, furrowed, grey; white, with brown veins and fibres beneath; lobes very broad, with marginal fruit-bearing proceſſes. Targets in front, vertical, revolute, roundiſh, red-brown with a pale border. The largeſt, moſt common, and moſt famous, of its tribe. It grows on heaths, dry paſtures, and woods; has a weak faint ſmell, and a ſharpiſh taſte. It was for a long time extolled as a medicine of ſingular virtue in preventing and curing that dreadful diſorder which is produced by the bite of rabid animals. The *pulvis antilyſſus*, a powder compoſed of equal parts of this lichen and black pepper, was firſt recommended as a preſervative againſt the hydrophobia by Mr. Dampier, brother of the celebrated circumnavigator; and, by the authority of ſir Hans Sloane, it was publiſhed in the Phil. Tranſ. vol. xx. p. 49. The quantity of pepper having been found to render the medicine too hot, the powder was afterwards prepared of two parts of the lichen and one of pepper. This powder was afterwards adopted in the London Pharmacopeia in 1721, at the deſire of Dr. Mead, who ſeems to have had repeated experience of its good effects, and who declares that he had never known it to fail, where it had been uſed, with the aſſiſtance of cold-bathing, before the hydrophobia came on. He directs the patient to be blooded to the extent of nine or ten ounces; afterwards a dram and a half of the powder is to be taken in the morning faſting, in half a pint of cow's milk warm, for four mornings ſucceſſively. After theſe four doſes are taken, the patient is directed to go into the cold-bath every morning for a month, and then three times a week for a fortnight longer. On the character of Mead, the pulvis antilyſſus was long retained in the London Pharmacopeia; but, on the reviſion of that book in 1788, it was deſervedly expunged.

3. Lichen ſcriptus: leprous, whitiſh, bearing ſmall, black, branched, letter-like, lines. Common on the ſmooth bark of young trees. The cruſt is a fine, inſeparable, whitiſh, film. The fructification conveys an idea of Hebrew or Chineſe writing, in a very ſtriking manner.

4. Lichen geographicus: leprous, yellowiſh, with black lines reſembling a map. Frequent on the hard rocks of mountainous countries, and almoſt as hard itſelf, at leaſt to the touch, forming broad inſeparable patches, of a vivid greeniſh-yellow, or lemon-colour, curiouſly ſtreaked and dotted with black marks, compoſed of the tubercles, which are flat, not elevated above the cruſt, frequently confluent or crowded.

5. Lichen ſanguinarius: cruſt tartareous, white, poliſhed, uneven. Tubercles black, without a border; bright red within. Found on granite rocks; copiouſly upon Cromford Moor, Derbyſhire; very rarely on the rugged barks of trees. This is extremely remarkable for the internal ſtains of bright red, perceived when the tubercles, and even ſome parts of the cruſt, are broken; which, reſembling blood, gave occaſion to the name.

6. Lichen ventoſus: cruſt tartareous, rugged, pale ſulphur-coloured; ſhields irregular, a little ſwelling, blood-red, with a narrow pale border. Found on large expoſed granite or ſand-ſtones, in mountainous places, forming patches as broad as the hand, eaſily pared from the rock when moiſt. The cruſt is of an elegant pale lemon or ſulphur colour, turning white the ſecond year; but in either caſe it is ſtrikingly contraſted with the crimſon ſhields.

7. Lichen tartareus: cruſt tartareous, rugged, granulated, whitiſh; ſhields tawny buff-coloured, with a white margin. The largeſt of the cruſtaceous lichens; and important as an article of commerce. The diameter of the cruſt is ſix, eight, or ten, inches; and its thickneſs a quarter or half an inch. The ſhields are frequently half an inch wide, conſpicuous for their full buff-colour, and white, ſmooth, wavy, border. This ſpecies is much uſed in dying, being ſcraped from the rocks when fully grown, which is about the fifth year of its age, and mixed with volatile alkali and alum. It is ſold to the dyers in the form of a purple powder, called *cudbear*, a corruption of Cuthbert, the name of the inventor. This powder being boiled with woollen yarn, communicates a purple colour to it; but not to vegetable ſubſtances. The colour is far from permanent.

8. Lichen perellus: is like tartareus on a ſmaller ſcale, with ſhields of the ſame white colour as the cruſt, and is uſed likewiſe for dying purpliſh colours, chiefly in the ſouth of France. *Litmus* is prepared from this ſpecies; for which purpoſe it is gathered from the rocks in the north of England, and ſent to London in caſks.

LICHEN.

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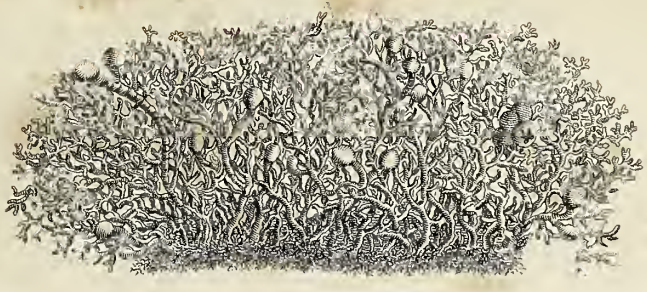

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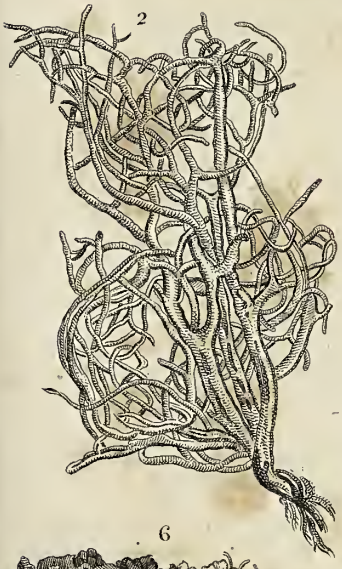

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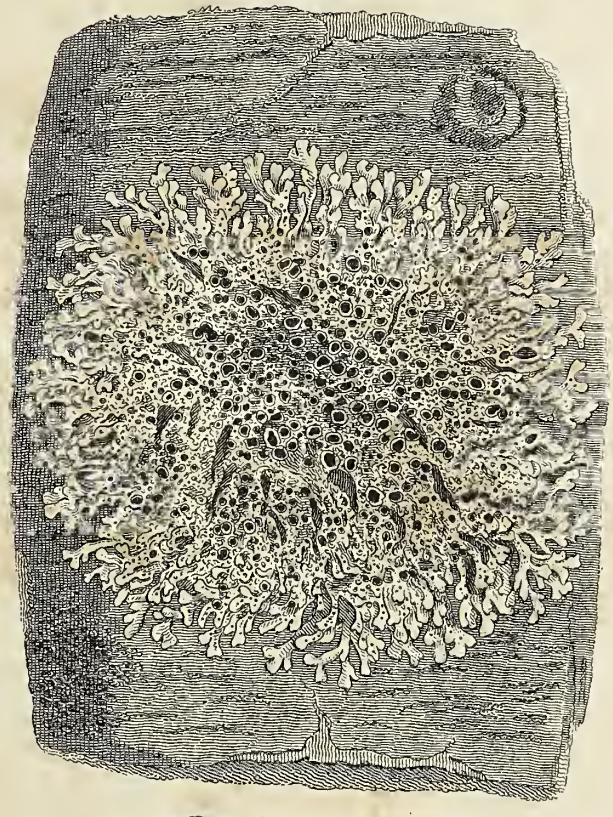

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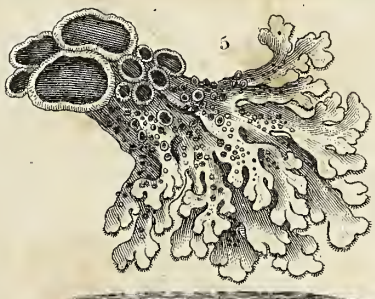

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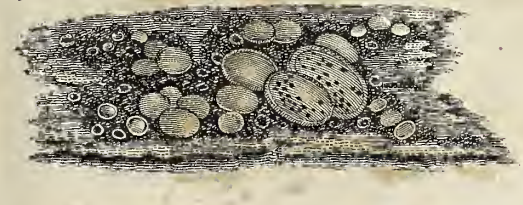

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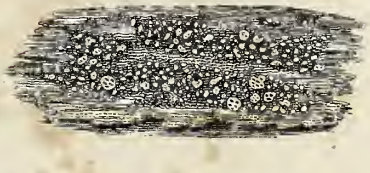

Several Species of Lichen.

London, Published as the Act directs, June 7, 1819. by G.Jones.

J. Lodge sc

9. Lichen roccella, or orchal; as an article of commerce is of very great importance, being extremely valuable for dying wool or ſilk any ſhade of purple or crimſon. For this purpoſe it is ſteeped in volatile alkali, commonly diſtilled from urine. In times of ſcarcity, it has been ſold for a thouſand pounds ſterling the ton. It comes chiefly from the Levant; and has lately been diſcovered to grow in the Britiſh dominions.

10. Lichen omphalodes; dyes wool of a brown reddiſh colour, or a dull but durable crimſon, paler but more laſting than that of orchal. It is prepared by the country people in Ireland by ſteeping it in ſtale urine, adding a little ſalt to it, and making it up into balls with lime. Wool dyed with it, and then dipped in the blue vat, becomes of a beautiful purple. With rotten oak it makes a good dark brown frize. Wool dyed with red wood or ſanders, and afterwards in this, which is called *cork*, *corker*, or *arcell*, becomes of a dark reddiſh brown. It has been uſed as a ſtyptic; as has alſo L. plicatus; but theſe have long ſince given way to more active medicines.

11. Lichen vulpinus. In Norway they mix this ſpecies with powdered glaſs, and ſtrew it upon dead carcaſes to poiſon wolves. It dyes wool yellow. See fig. 2.

12. Lichen prunaſtri; has a remarkable property of imbibing and retaining odours, and is therefore the baſis of many perfumed powders.

13. Lichen pulmonarius; dyes woollen cloth of a durable orange. In Herefordſhire they dye ſtockings with it of a durable brown.

14. Lichen caperatus. In the north of Ireland and in the Iſle of Man they dye wool with this of an orange-colour. Serge dyed with it became of a lemon-colour; but, if previouſly infuſed and boiled in urine, of a ruſſet brown. It is probably what the people in the north of Ireland call *ſtone-crottles*. It is alſo called *arcel*, from its being put to the ſame uſe with orchal.

15. Lichen puſtulatus. Linnæus ſays that a beautiful red colour may be prepared from this. It may be converted into an exceedingly black paint.

16. Lichen aphthoſus. The country people make an infuſion of it in milk, and give it to children who have the thruſh. In large doſes it operates by purging and vomiting, and deſtroys worms.

17. Lichen ſubfuſcus: cruſt thin, continued, ſmoothiſh, browniſh-white; ſhields ſeſſile, ſlightly convex, reddiſh-brown, with a tumid whitiſh entire border. This is very common on the ſmooth barks of trees, being diſtinguiſhed by its copious bay or cheſnut ſhields, whoſe white ſmooth border renders them conſpicuous.

18. Lichen centrifugus: imbricated, membranous; greeniſh-white and ſmooth above; white, with browniſh fibres, beneath; ſegments linear, divaricated, bluntiſh; ſhields ſcattered towards the circumference, reddiſh-brown, with an inflexed, almoſt-entire, border. This is, according to Linnæus, extremely common on large ſtones throughout Lapland, where lichens that grow on ſtones are more rare than in other places. It is of all others moſt remarkable for its centrifugal mode of growth, forming circles a foot or two in diameter, and indeed ſometimes, as we are told, eight or ten feet, conſiſting of a whitiſh band two or three inches broad, while the central part is quite decayed and obliterated.

19. Lichen parietinus: imbricated, membranous, ſtellated, roundly lobed and criſped, orange-coloured; pale and fibrous beneath; ſhields of the ſame colour, with a thin entire border. One of the moſt common of its genus, very conſpicuous on old walls, as well as on rocks, wooden buildings, trees, and buſhes. Its rich golden colour is moſt vivid in expoſed ſituations; aſſuming an olive, greeniſh, or greyiſh, caſt in the ſhade and damp.

20. Lichen ſtellaris: imbricated; leaflets oblong, laciniated, narrow, aſh-coloured. Shields brown. Very common on the birch-tree. Under this a great number of varieties are included. Some are green when wet; others continue grey, whether moiſt or dry. The ſhields in all of them are of a greyiſh-black, not verging towards red, and are uſually plentifully produced. Fig. 3 is a variety of this ſpecies; another is ſhown at fig. 4. and magnified at fig. 5.

21. Lichen Burgeſſii: gelatinous, membranous, criſped and fringed, of a dark glaucous green; ſhields depreſſed, dark brown, with a leafy, criſped, elevated, border. Found on the trunks of old trees in Scotland and Wales. One of the moſt elegant of its tribe, conſiſting of dark-green patches as broad as the hand, of delicate pellucid curled and wavy leaves, bearing numerous ſhields, very remarkable on account of their leafy, complicated, wreath-like, borders. When dry, the whole frond becomes more opaque, verging towards a lead-colour. This belongs to a tribe called *gelatinous lichens*, all which agree in their peculiar dark-green colour, ſemi-pellucid pulpy texture, and reddiſh or tawny olive, generally ſmall, ſhields.

22. Lichen fuciformis: leafy, divided, pointed, flat, nearly upright, tapering at each end, greyiſh-white, obſcurely downy, with white mealy warts; ſhields convex, blackiſh. This is found on granite rocks upon the Corniſh coaſt, but more plentifully in the Mediterranean, the Canary Iſlands, and the Eaſt Indies, in which laſt climate it grows to the length of a foot. It is extremely important as an article of commerce, being uſed indiſcriminately with, and according to ſome preferred to, the famous L. roccella, for dying.

23. Lichen reſupinatus: coriaceous, creeping, lobed, browniſh-grey; targets oblong, at the under ſide of each ſmall aſcending lobe. Native of moiſt ſhady rocks, or of the moſſy roots of trees in mountainous countries. The fronds are imbricated, ſmooth, of a dull browniſh lead-colour, compoſing broad depreſſed patches; the targets reddiſh-brown, concave, plentifully produced, but each ſolitary at the concave extremity of its own ſmall lobe.

24. Lichen ſaccatus: ſlightly coriaceous, roundiſh, creeping; green above; white beneath; targets ſcattered, blackiſh, ſunk in pits. Found on the ground among rocks in mountainous countries.

25. Lichen croceus: coriaceous, creeping, rounded at the extremities; green above; orange and veiny beneath; targets ſcattered, brown, flat. Found only in the moſt alpine ſituations, near the limits of perpetual ſnow, growing on the ground. See fig. 6.

26. Lichen aurantiacus: granular, cracked, pale lemon-colour; ſhields crowded, becoming a little convex, orange with a paler waved margin. This beautiful ſpecies grows in Norway, on the bark of the Betula alba, or white birch-tree. It is repreſented under its natural appearance at fig. 7. and magnified at fig. 8.

27. Lichen velleus: umbilicated, ſtalked, dilated, wavy; browniſh-grey, and ſmooth above; covered beneath with black, branched, crowded, fibres; tubercles cluſtered, flat. Native of rocks in Lapland and North America. Often as broad as both the hands, tough and leathery, remarkable for its denſe, black, hairy, clothing beneath.

28. Lichen cocciferus: cup-ſhaped, leathery, pale greeniſh-grey, mealy; cups dilated, ſomewhat toothed; tubercles fungous, ſcarlet. Leaves minute, lobed and crenate. A beautiful ſpecies, not uncommon in woods, or on heaths among ling, or in various dry ſandy places. The large ſcarlet tubercles render it very conſpicuous. Several other ſpecies indeed have the ſame-coloured fructification, but ſmaller, and they differ in other reſpects. The cups in this are ſhorter, broader, and more perfect, than in any other with ſcarlet tubercles.

29. Lichen pyxidatus: cup-ſhaped, leathery, greyiſh-green, ſcaly, often proliferous; cups dilated, nearly entire; tubercles brown; leaves minute, imbricated, crenate. The moſt common of this tribe, occurring everywhere, in broad patches, on heaths, ſandy banks, and under hedges. Its cup-like ſhape is uſually pretty regular, at leaſt before the tubercles appear; but the edges of the cup, or its centre, occaſionally throw up others, even

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to four or five ranks or ſtages, one upon another, in beautiful luxuriance. More frequently the firſt cup bears unequal and imperfect cups, or tubular ſtalks, crowned with the brown tubercles. The ſtalks of all are frequently leafy or ſcaly, eſpecially their lower part.

30. Lichen gracilis: cup-ſhaped, long, ſlender, ſmooth, cartilaginous, greeniſh-brown; at length ſomewhat branched; cups conical, ſharply toothed. Tubercles brown; leaves minute. In heathy dry mountainous places, or in woods, in the north, not unfrequent. The character of this is widely different from the two preceding, diſplayed in its brown hue, tall ſlender form, and ſharp teeth or terminal branches. The tubercles are dark brown; leaves very minute, and frequently obliterated.

31. Lichen rangiferinus: buſhy, tubular, very much branched, white and hoary; the little branches divaricated and drooping; tubercles terminal, globoſe, moſtly cluſtered, dark-brown. This is the rein-deer lichen, ſo celebrated by Linnæus, in his Flora Lapponica and Lapland Tour, as the food of that animal. In the wide heathy tracts and foreſts of thoſe northern regions, it covers the ground like ſnow, riſing to the height of a foot or more; with us it is much humbler, and more diſperſed; always chooſing the moſt ſterile heathy ſoil, and not very generally producing fruit. Its texture is thin and brittle, ſoft to the graſp of the hand, and excellent for package, the only uſe for which it can ſerve in this climate. The branches are occaſionally, not always, perforated at their divarications. The ſurface is hoary, or rough with minute warts; tubercles very ſmall, terminal, abundant when they occur at all. See fig. 9.

32. Lichen globiferus: ſhrubby, ſolid, much branched, cylindrical, browniſh and poliſhed; branches with minute divaricated terminations. Fruit globular, ſmoothiſh, encloſing a ball of black powder. This very pretty coral-like production occurs on mountainous rocky heaths, or in dry ſtony woods. Its ſtems compoſe looſe entangled tufts, of a tawny light poliſhed brown, and are white and ſolid within; the ultimate branches are innumerable, ſhort, ſlender, tufted, and divaricated. The fructification is altogether different from every thing we have hitherto deſcribed, conſiſting of terminal ſolitary balls, the ſize of a vetch-ſeed, ſmooth, of the ſubſtance of the ſtem, opening by a wide irregular perforation at the top, and containing a globular maſs of black condenſed powder, preſumed to be the ſeeds. Sections of this magnified are ſhown at fig. 10 and 11. and cluſtered, according to the natural appearance, at fig. 12.

33. Lichen fragilis: ſhrubby, ſolid, brittle, aſhy-brown; branches level-topped, cylindrical, crowded, naked; fruit globular, rugoſe, encloſing a ball of black powder. Found in ſimilar places with the preceding, with which moſt botaniſts, in Britain and elſewhere, have confounded it, taking the following for the true fragilis.

34. Lichen compreſſus: ſhrubby, ſolid, cartilaginous, white, branched, compreſſed; branches cluſtered, ſomewhat palmate; fruit depreſſed, containing a cake of black powder. An elegant ſpecies, remarkable for its white coral-like appearance, having the ſplendour of porcelain when freſh. The fruit is rare, produced in moiſt ſhady ſituations only. This ſpecies ſeems to prefer limeſtone rather than granite rocks.

35. Lichen paſchalis: ſhrubby, ſolid, clothed with minute cruſtaceous leaves; tubercles terminal, prominent, brown. This lichen, found on micaceous alpine rocks, is deſtined to perform an important office in the economy of nature, being the firſt vegetable that takes root upon lava, whoſe porous ſurface will admit no cruſtaceous ſpecies. Thus it compoſes in decaying a portion of vegetable mould, fit for the reception of the ſeeds of other plants. Its roots and ſtem are very tough and ſtrong, and the aſſemblage of minute greyiſh-brown leaves, that cover the whole, gives it a peculiar and diſtinct aſpect. The tubercles are ſolid, white within, convex, without any border. See fig. 13, Plate II. and the tubercles magnified at fig. 14.

36. Lichen plicatus: filamentous, cylindrical, pendulous, whitiſh; branches entangled; ſhields (ſpurious) whitiſh green, radiated; tubercles yellowiſh. Found in ancient woods. The fronds are exceſſively and finely branched, a foot or two long, pendent in denſe cluſters from the trees; their ſurface is minutely warty.

37. Lichen floridus: filamentous, with a central thread, buſhy, erect, greeniſh-grey; branches round, fibrous, warty, with radiated ſpurious ſhields; tubercles on the branches, lateral, fleſh-coloured, rugged. Not uncommon on dead branches of oaks in old woods. This ſpecies boiled with wool, without alum, dyes it of a rich tawny yellow.

38. Lichen exanthematicus: leprous, aſh-colour; cup very ſmall, fleſhy, immerged in the bark. Found on chalk-hills in the ſouth of France, not far from Avignon. The bark is very tender, ſcarcely enduring the touch; it is grey, ſprinkled with white ſpots, a little indented; integument white, rough, at firſt cloſed, but afterwards expands from the centre. Cup ſmall, fleſh-coloured, furniſhed on the margin with exactly the ſame colour, concealed in the centre of the dent. Its cup being broken aſunder by age, the hollow remains white, empty, and excavated like ſtone itſelf. This is ſhown at fig 15, according to its natural appearance; the ſame magnified at fig. 16.

39. Lichen gypſaceus: cruſtaceous, lobated, white within, green outſide; ſhields difform, yellow. Found in the mountains of Montpellier and Genoa. The ſhield is very thick, lobated on the margin, and the inſide very white, the outſide green. Scutella numerous, large, and varying much in form. See fig. 17. Much like L. lentigero, but a diſtinct ſpecies.

40. Lichen tumidulus: cruſtaceous, white, lobated; lobes tumid, bent in with black tubercles, black, deformed. Occurs in the fiſſures of rocks in the ſouth of France. Shield white, with rounded lobes, appearing inflated; above minutely teſſellated, rimous; with black irregular tubercles on the interſtices of the lobes. See fig. 18.

41. Lichen ſaxifragus: cruſtaceous, lobed, long-rooted, grey; tubercle red, ſize of muſtard-ſeed. It is found in the clefts of rocks at Montpellier, in France. Roots white, branching, running deep in the fiſſures of the rocks. Shield lobed, ſomewhat leafy, thickiſh: colour grey or ſea-green. See fig. 19.

42. Lichen chryſoleucus: imbricate, leafy, with blunt lobes; above pale brimſtone colour; underneath dark green, ſhields numerous, gold-yellow. Found on the rocks of Mount Cenis. It reſembles the L. craſſo of Hudſon; but is more tender, has larger leaves, and not white underneath. It is of a dark-green colour underneath the leaves, without any roughneſs or moſs. See fig. 20. *a*, *b*.

43. Lichen tiliaceus: imbricate; leaves ſinuate, ſmooth, whitiſh aſh-colour; ſhields brown, on the margin whitiſh. Found on the bark of the olive-tree in France and Genoa. Similar to L. ſaxatilis and omphalodes; but differs in that the leaves are ſmooth above, pale grey, and bright; though underneath, like L. ſaxatilis, black and hirſute; ſhields numerous, brown, ſhining; margin ſmooth, white; external baſe black, and very rough.

44. Lichen encauſtus: imbricate; leaves linear, dichotomous; above white and ſhining; underneath black, opake; ſhields brown. Found on the alpine rocks of Savoy, and on the top of Montanvert near Chamouni. Fronds buſhy, branching out, widely, more or leſs narrow; margin turned back; above white, ſhining like enamel: the apex brown; underneath black and dark. Shields bright, brown; margin white, in age often lobed. See fig. 21. *c*, *d*.

45. Lichen corrugatus: foliaceous, creeping, lobed, green; ſhields teſtaceous, ferruginous, concave, red without;

Newly discovered Species of Lichen.

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without; leaves of the ſame colour. Inhabits the trunks of trees in the north of France. This lichen is green above, blackiſh underneath; lead-coloured when dry: external leaves of an uniform colour. The varieties are rough, warty, and often mealy; by which marks the ſpecies may be eaſily known.

46. Lichen ſaturninus: foliaceous, membranaceous, lobed, dark-green; underneath hairy, pale; ſhields ſprinkled with dark-grey ſpots. Found on the trunks of trees on the banks of the Rhone near Valentia, and in Savoy. Reſembles the L. cochleatus of Dickſon; but differs from it in being hairy underneath. The dry leaves are of a plumbeous hue, with white hairs. Shields numerous, ſcattered, iron-grey; younger ones bordered with a margin of the ſame colour; when the diſk riſes, the margin diminiſhes by degrees; and is at length obliterated.

47. Lichen cucullatus: foliaceous, erect, with a white border, ſhields hooded at the back part, and brown. Found on the heathy hills of Savoy, and on Mount Cenis. A medium as it were between L. Iſlandicus and L. nivalis; but diſtinct from each. Fronds erect, white, ſmooth; borders much laciniated; margins involuted, channelled, often tubular. The lacinia become much branched, rough, hooded at the back part. Shields between the hoods, brown. Dillenius, who did not ſee the fructification, confounded it with L. orivalis. See fig. 22. *e*, *f*, *g*.

48. Lichen pilularis, or pill-lichen: cruſtaceous, whitiſh aſh-coloured, tubercles orbicular, black. This and the three following were diſcovered by the Rev. Hugh Davies, F. L. S. and communicated by him to the Linnæan Society in February 1793. The preſent appears to be an entirely-new ſpecies. "In examining it attentively, (ſays Mr. Davies,) I find ſome of the younger fructifications perfect ſcutellæ, with elevated margins of the ſame colour; theſe are but few, and ſeem ſoon to loſe that form. The fructification in decay changes into different ſhades of brown. Found in Bodowen-park, Angleſea." See fig 23.

49. Lichen ſimplex, or ſimple lichen. "This hitherto-undeſcribed ſpecies has no ground, but conſiſts of bare ſmall tubercles, which, examined with a microſcope, appear black, wrinkled, and of various irregular forms. It ſeems to affect growing upon a kind of grey ſlate, which it covers to the extent of many inches together. Since the drawing of it was taken, I have likewiſe found it on a ſand-ſtone; and then, owing to the unevenneſs of the ſurface, the fructification aſſumes a ſtill more irregular form, ſometimes appearing in ſimple lines, and ſometimes coiled; in ſome degree reſembling the fructification of Lichenoides. Found with the former." See fig. 24.

50. Lichen concentricus, or concentric lichen. The ſcutellæ are ſcarcely raiſed above the ground, depreſſed in the centre, and have a margin which varies in colour, being ſometimes white, ſometimes black. It has confluent fructifications, which invariably form concentric ſegments of a circle, affording a moſt diſtinguiſhing characteriſtic. Ground white. Found in Whitford pariſh, Flintſhire.

51. Lichen varians, or changeable lichen. This plant varies exceedingly in reſpect of colour; and, with an inattentive obſerver, might paſs for different ſpecies. "Its ſtate of perfection is when the ground is a fine poliſhed white, and the fructification a bright ſhining black, with a white margin, as at fig. 25. In its ſecond ſtate, it loſes that gloſſy black, and appears as at fig. 26. In its more advanced ſtage, it becomes ſtill paler; and in this ſtate I have ſeen it in a collection under the name of L. rupicola; fig. 27. As it approaches nearer decay, the ſcutellæ aſſume an ochreous or buff-colour, very different from either of its former appearances; fig. 28. Beyond this ſtage, it aſſumes a ſtill very different appearance; the diſks of the ſcutellæ diſappear, and there ſucceeds a black duſt, giving it in ſome meaſure the reſemblance of a Sphæria. The ſingularly-various appearances of this plant afford an opportunity of obſerving how liable perſons are to be deceived by plants of this tribe, which they have not an opportunity of examining in their places of growth; and may ſerve as a caution, that our zeal for diſcovering new ſubjects ſhould not hurry us to create new ſpecies out of imperfect ſpecimens. Found on the ſouth-weſt ſide of Angleſea.

52. Lichen aromaticus, or ſweet-ſmelling lichen; ſo denominated from the highly-aromatic fragrance which both the cruſt and ſhields, but eſpecially the former, give out when rubbed between the fingers in a recent ſtate, and which, though in a leſs degree, the plant often retains for ſome years. In this circumſtance not any Britiſh lichen reſembles it, excepting only L. cœruleo-nigricans, in which a ſimilar ſmell may ſometimes, but by no means always, be perceived. This is one of the lateſt ſpecies diſcovered; and is deſcribed, with ſeven others, in the Linn. Tranſ. vol. ix.

53. At the meeting of the Linnæan Society, on the 16th of February, 1813, a letter was read from Mrs. Taylor, accompanied with ſpecimens of a gelatinous plant, conceived to be a new ſpecies of Lichen, which grew for two ſucceſſive years near her houſe in Devonſhire. Genera bearing ſome reſemblance to Lichen are ANTHOCEROS, BYSSUS, JUNGERMANNIA, MARCHANTIA, MUCOR, RICCIA, TARGIONIA, and TREMELLA; which ſee.

LI'CHEN AGARI'CUS. See CLAVARIA.

LICHENAS'TRUM. See JUNGERMANNIA, MNIUM, and RICCIA.

LICHENOI'DES. See LICHEN, LYCOPERDON, and TREMELLA.

LICH'FIELD, or LITCH'FIELD, an ancient city, in the county of Stafford. The more ancient name of this city was *Lichenfield*, which, according to ſome antiquaries, ſignifies the "field of dead bodies," from a maſſacre of the Chriſtians, ſaid to have taken place here during their conteſts with the Pagans in the reign of the emperor Diocleſian. Dr. Stukeley, however, expreſſes his opinion againſt the truth of this tradition; and with greater probability conſiders it as deriving its name from its marſhy or watery ſituation; the word *Leccian*, from which *lick* comes, ſignifying, in Saxon, land covered with water. Lichfield is ſuppoſed to have ariſen on the ruins of a Roman ſtation called *Etocetum*, which lies about a mile from the preſent city. Whether this idea be correct it is not eaſy to determine; but it ſeems to be clear that Lichfield was totally unknown, or, more properly ſpeaking, had no exiſtence, either in the time of the Britons or Romans. The origin of it, according to the beſt authorities, is attributed to the Saxons; and Mr. Shaw ſays, it was the firſt eſtabliſhed ſeat of that people in England. In the year 669, when St. Chad was biſhop of Lichfield, it was little more than a trifling village. Even after the Norman conqueſt, it was conſidered by the ſynod, then held at London, as too mean a place for the reſidence of a biſhop; for till this time the biſhops lived in an obſcure manner, and ſeem to have done little towards adorning or extending the town. However, trifling as it was, it received great honours and privileges from ſeveral of the Saxon kings. Borrocaphill, in the neighbourhood of this city, was in all probability one of the camps, or chief reſidences, of ſome Saxon princes; for, though no traces of building remain, the ſituation is too fine and commanding to have eſcaped the notice of that warlike people. In the reign of Henry I. Lichfield was encompaſſed with a ditch, and the caſtle was fortified by biſhop Clinton. No part of the fortifications of the latter are now viſible; but the field in which it ſtood is ſtill denominated *Caſtle-field*, and the ditch around the city may be eaſily traced by an attentive obſerver.

Lichfield was very early the ſeat of a biſhop. The firſt prelate who preſided over this ſee was Dwina, who was appointed biſhop by Oſwy king of Northumberland, on his conqueſt of Mercia. Among its early prelates, it boaſts of St. Chad, Cedda, or Ceadda; who ſucceeded to

the epiſcopal ſeat in this place in 669. He firſt retired to Lichfield for the purpoſe of religious ſolitude, where he led (as legends tell us) an eremetical life, in a cell, by the ſide of a ſpring, near the place upon which the church of his name now ſtands, and ſupported himſelf upon the milk of a doe. Here, attended by Ovin, and a few other pious men, he was accuſtomed to preach and pray. The ſpot thus choſen by St. Chad for his habitation was well adapted to inſpire ſentiments of devotion. It was in the midſt of a wood, and a little river ran by the ſide of it. The church was ſmall, according to the age in which it was erected; and here St. Chad was buried. During the epiſcopacy of Winfrid, who was the ſucceſſor of St. Chad, and about 674 or 680, this ſee, which contained all Mercia, or Mid-England, was, by Theodore archbiſhop of Canterbury, at a council held at Hatfield, divided into five biſhoprics, Cheſter, Worceſter, Lichfield, Leiceſter, and Hereford; or, according to others, Leiceſter, Worceſter, Lichfield, Sidnaceſter, and Dorcheſter. Winfrid, diſapproving of this diminution of his authority, was deprived of his epiſcopal functions for contumacy. In the time of Witta, who ſucceeded to this ſee in 737, it was again curtailed. Lichfield enjoyed for a ſhort time the dignity of being a metropolitan ſee; for, although the primacy was, by the papal authority, from time to time confirmed and eſtabliſhed in the church of Canterbury, yet it was not without meeting with ſtrong oppoſition. An attempt againſt the dignity of that ſee was made by Offa king of the Mercians, about the year 790, who contracted the limits of the archbiſhop's province, by procuring a pall from pope Adrian for Adulph biſhop of Lichfield, and with it alſo the title of *archbiſhop*. He obtained likewiſe a decree, that the four biſhops of the kingdom of Mercia, and two biſhops of Eaſt Anglia, which were the dioceſes of Worceſter, Leiceſter, Sidnaceſter, Hereford, Helmham, and Dunwich, ſhould become ſuffragans, and be ſubject to the new metropolitan. This acceſſion of honour to the ſee of Lichfield, Lambert, then archbiſhop of Canterbury, was not able to oppoſe; but his ſucceſſor archbiſhop Athelard, after the death of king Offa, ſoon regained his whole juriſdiction; and the new pope, Leo, pronounced all that Offa had done null and void; for which the ſaid pope received a large ſum of money from the archbiſhop of Canterbury.

In 1067, Peter its biſhop removed the epiſcopal ſeat to Cheſter; and it was not reſtored to Lichfield till the year 1128, when Roger de Clinton ſucceeded to the ſee. He is ſaid to have appointed the firſt canons in this church, and to have increaſed the number of prebendaries; to have fortified the caſtle, to have made a rampart round the village, and to have enrolled and muſtered the ſoldiers. In 1296, Walter de Langton ſucceeded to this ſee. He enjoyed at different times the higheſt offices of the ſtate, and was highly favoured by Edward I. but felt the reſentment of the prince, who meanly revenged on him a ſhort impriſonment he had ſuffered in the time of his father, for rioutouſly deſtroying his deer. After a confinement of above two years, Langton was reinſtated in his paſtoral duties; and may well be called another founder of this church. He cleaned the ditch around the Cloſe, and ſurrounded it with a ſtone wall; he built the cloiſters, and laid the foundation of St. Mary's chapel, in the cathedral, an edifice of uncommon beauty, in which he was interred; but, dying before it was finiſhed, he bequeathed a ſufficient ſum of money in his will to complete it. He built bridges over the Minſter pool, which made an eaſy communication with the city. He obtained a grant from the crown to lay an impoſt, for twenty-one years, upon the inhabitants to pave the ſtreets. He improved the condition of the vicars choral, by augmenting their income, and by conferring upon them great privileges. He gave his own palace at the weſt end of the Cloſe to them, and erected a new epiſcopal palace at the north-eaſt end. This palace was ſpacious and ſplendid; the great hall of which was an hundred feet long, and fifty-ſix broad, painted with the coronation, marriages, wars, and funeral, of his patron, king Edward I, and theſe coſtly decorations were remaining ſo late as the time of Erdeſwicke, in 1603. He preſented to the church large quantities of plate, and many valuable veſtments. He erected that noble gate at the weſt entrance into the Cloſe, a beautiful ſtructure, worthy of its munificent founder; and which, in April 1800, was, with a barbarous taſte, pulled down, and the materials applied to lay the foundation of a pile of new buildings, for the reſidence of neceſſitous widows of clergymen. He alſo built another beautiful gate at the ſouth entrance, which was removed about fifty years ago. In 1541, Henry VIII. erected a biſhopric, in the city of Cheſter; and, in fixing its boundaries, leſſened thoſe of this dioceſe. He took away from the church the archdeaconry of Cheſter, united with the prebend of Bolton, and added it to Cheſter. This archdeacon was heretofore deemed the chief of that order in the dioceſe of Lichfield; by ancient right, he had a ſtall in the choir of Lichfield, a vote in the chapter, and a good houſe in this city. In the ſame year, when the images and ſhrines of ſaints were removed from the churches, with all the jewels and valuable ornaments, and conveyed into the king's treaſury; at the requeſt of biſhop Lee, the king gave the ſhrine of St. Chad for the neceſſary uſes of the cathedral-church. But the ſame biſhop had not ſufficient influence to preſerve the cathedral-church of Coventry, far exceeding the church of Lichfield in magnificence, and ſumptuous ornaments, from deſtruction. During the minority of Edward VI. and the protectorate of the duke of Somerſet, Beaudeſert, and the ſpacious foreſt of Cannock, on which there is now a tree ſcarcely to be ſeen, and which was given to this ſee by Edward I. were alienated from it. This extenſive manor was the property of the ſee in the time of the Saxons, and in the 20th of William the Conqueror. Biſhop Sampſon, by a deed, enrolled in chancery, dated Sept. 29, 38th of Henry VIII. ſurrendered into the king's hands his manors of Longdon and Heywood, and accepted certain impropriations of inadequate value, as a compenſation for them. On the 26th of October, in the ſame year, the king, by letters patent, granted the ſame to William Paget, knight, an anceſtor of the preſent earl of Uxbridge; in the poſſeſſion of whoſe family it yet remains.

Property to the amount of 29,180l. 6s. 9d. belonging to this ſee, was alienated during the common-wealth. Under queen Mary, Bayne, the biſhop of this dioceſe, adjudged two perſons to be guilty of hereſy; and they were committed to the ſecular power, and ſuffered death in the flames at Coventry on the 25th of September, 1555. The city of Lichfield has ſince been diſgraced by a ſimilar horrid inſtance of perſecution, under a proteſtant prince: In 1611, 9 James I. Edward Wightman, of Burton-upon-Trent, was tried in the conſiſtory-court of Lichfield, upon ſixteen charges of hereſy, and condemned. An account of the charges, with the writ for his execution, under the great ſeal of England, to the ſheriff of this city, was publiſhed in a curious tract, intituled, "Truth brought to Light, and diſcovered by Time, or a Diſcourſe and hiſtorical Narrative of the firſt xiiij yeares of King James' Reign," 1651. The determination of this cauſe of hereſy againſt Edward Wightman was, "concerning the wicked hereſies of the Ebionites, Corinthians, Valentinians, Arrians, Macedonians, of Simon Magus, of Manes, Manichees, of Photinus, and Anabaptiſts, and of other heretical, execrable, and unheard-of, opinions;" in which he maintained "the ſaid moſt perilous and dangerous opinions," as appeared by his own confeſſion, and from a book written and ſubſcribed by him. For which he was, "*by divine ſentence*, declared by the ſaid reverend father, the biſhop of Coventry and Lichfield, with the advice and conſent of learned divines, and others learned in the laws aſſiſting him in judgment, juſtly adjudged, pronounced, and declared, to be an obſtinate and incorrigible heretic, and was left by them under the ſentence of the great excommunication," and to be puniſhed by the ſecular power as a heretic.

a heretic. The king's writ to the ſheriff for his execution was dated the 9th of March, 1611, at Weſtminſter; by which he was commanded, "to be burnt in ſome public place within the city of Lichfield;" which barbarous ſentence was ſoon afterwards executed.

It would appear that in Lichfield the church has not had reaſon to complain of numerous ſeparatiſts; for in 1743 the bailiffs and juſtices certified that "there was no papiſt (ſave only two or three women) or nonjuror in the city; neither have we among us any quaker, or above two diſſenters from the eſtabliſhed church of England, under any denomination whatever."

Lichfield ſtands in a very pleaſant and healthful valley, almoſt in the centre of England, at the diſtance of 120 miles from the metropolis. It is ſurrounded by hills of a moderate ſize, eaſy of aſcent, and of very agreeable appearance. It is chiefly inhabited by gentry, being of little importance in a mercantile point of view. The buildings of this city have generally aſſumed the air and taſte of modern times, and the ſpirit of improvement, ſo conſpicuous in the preſent age, is plainly manifeſted in many alterations which have taken place within theſe few years. This city was formerly divided into two portions, by three lakes or pools of water, one of which is now dried up. It contains three pariſhes; but part of the lands of St. Chad's and St. Michael's lie without the boundaries of the city.

Lichfield is adorned with a number of buildings well worthy of notice, both on account of their antiquity and the ſplendid ſtyle of their architecture. Of theſe the moſt conſpicuous in every reſpect is the cathedral, which ſtands in the Cloſe, and is ſaid to have been fortified by biſhop Clinton; though Dr. Shaw thinks he only repaired the fortifications which had exiſted there from the time of the Saxons. Some are of opinion, that the cathedral was firſt founded by king Oſwy, in the year 655; but others attribute it to Peada, his ſon-in-law. The buildings of this cathedral, which was then called the Mercian church, were probably at firſt only conſtructed of wood. The whole of them were pulled down, in the year 1148, by biſhop Clinton, and another of enlarged dimenſions, and more elegant deſign, commenced in the place of the Saxon ſtructure. To this prelate the cathedral is indebted for that noble ſtone vault, which is at this day the admiration of architects, and is undoubtedly one of the fineſt works of its kind extant in England. The next benefactor to this cathedral was Walter de Langton, who laid the foundation of the choir. He expended the ſum of two thouſand pounds on a ſhrine for the reliques of St. Chad, and obtained many privileges for the vicars and canons; one of which was the right of hanging upon the next gallows, *without trial*, divers perſons who withheld their lands from the church. This beautiful ſhrine continued in its full glory till the diſſolution. During the ſieges which it ſuſtained in the time of the civil wars, this noble building ſuffered much, being the firſt cathedral that fell into the hands of the parliament. The roof was ſtripped of its lead; and many of the curious ſtatues, monuments, and other carved works, were demoliſhed with axes and hammers. The coſtly and beautiful painted windows were battered to pieces. In ſhort, little of this ſplendid ſtructure eſcaped ruin, except the noble vaulted roof already mentioned. What did remain was ultimately deſtroyed in 1651, when colonel Danvers, by authority of the rump-parliament, employed workmen in order to effect this purpoſe. At this time, the remarkable bell, called *Jeſus bell*, was knocked to pieces by a pewterer named Nicklin. During this perſecution of the eſtabliſhed church, Dr. John Hacket rendered himſelf remarkable by his courage and reſolution. When a ſerjeant with a trooper were ſent to ſtop the performance of the daily ſervice, and, putting a piſtol to his head, threatened to ſhoot him inſtantly if he did not deſiſt, this noble prelate calmly, but reſolutely, replied, "Soldier, I am doing my duty; do you your's:" a ſentence which may juſtly be reckoned among the remarkable inſtances of the ſublime, and which ſo impreſſed the minds of the ſoldiers, that they left him to the free exerciſe of the duty he thus evinced himſelf ſo worthy to perform. No ſooner was he nominated to the biſhopric of Lichfield, than he vigorouſly ſet himſelf to reſtore the ancient ſplendour of the cathedral. By his large contributions, the benefactions of the dean and chapter, and the money ariſing from his aſſiduity in ſoliciting aid from the gentlemen of his dioceſe, he ſucceeded in reſtoring this building to the admiration of the country. The whole underwent a thorough repair in the biſhopric of Dr. James Cornwallis, when it received its laſt finiſh by the addition of a painted window at the eaſt end of the choir, through the generous aſſiſtance of ſir Brooke Boothby. This gentleman, travelling through the biſhopric of Liege, viſited the diſſolved abbey of Herckenrode; he bargained for its glaſs, conſiſting of 340 pieces, each about 22 inches ſquare, (beſides a large quantity of tracery and fragments,) for 200l. and generouſly transferred the purchaſe to the dean and chapter of the cathedral. The peace of Amiens afforded an opportunity of ſafely importing this treaſure; which (accounting by the rate at which ſuch glaſs, taken from the ruined convents of France, has been ſince ſold in England) may be valued at 10,000l. whereas the total expence of purchaſing, importing, arranging, and repairing, this glaſs, and of fitting the windows to receive it, coſt only about 1000l. It contains three ſcriptural ſubjects, all entire; viz. Chriſt appearing to the apoſtles and Thomas; The deſcent of the Holy Ghoſt on the apoſtles; and The day of judgment. The date is 1534; and it is accounted one of the fineſt ſpecimens of this art now in the kingdom. This cathedral is 411 feet in length, and 153 in breadth. From the centre riſes a ſpire 256 feet high, of the moſt elegant proportions. At the weſt front are two towers, terminated by ſpires 66 feet in height. The portico can hardly be equalled by any thing of the kind in England: the chancel is paved with alabaſter and channel-ſtone, in imitation of black and white marble. The north door is particularly rich in ſculpture. On the weſtern front are a number of images, beautifully executed and arranged; the ſubjects of which are taken from the ſacred writings. The ſtatue of king Charles II. ſtands between the two weſtern ſpires, where a figure of Adam, or of Chriſt, was alſo formerly placed, beneath which the other ſtatues are ranged. Theſe figures were originally all richly gilt and painted; but the embelliſhments have ſuffered much injury from the action of the elements. The interior ornaments of this church are very numerous. Every part is filled with ſtatues and tombs, both ancient and modern. The nave, ſixty feet in height, is ſupported by pillars formed from a number of ſlender columns, with neat foliated capitals. Along the walls of the aiſles are rows of arcades, with ſeats underneath. The upper windows in the nave are of uncommon appearance, being triangular, and including three circles in each; and over the weſtern door is a very beautiful one, raiſed by the duke of York, afterwards James II. and ſince beautifully painted by a gift of the benevolent dean Akenbrooke. Behind the choir was the chapel of St. Mary, which contained a ſtone ſcreen of the moſt elegant and ſplendid workmanſhip, embattled at the top, and adorned with ſeveral rows of niches moſt exquiſitely finiſhed: each of theſe formerly contained a ſmall ſtatue. The ſtone ſcreen was taken down during the late alteration, and the materials employed to fix the organ upon, and form pillars for the entrance into the choir. This chapel now forms part of the body of the choir. It is neatly pewed, and contains, beſides, forty-eight ſtalls, which are richly carved, and appropriated for the uſe of the members of the church. The altar is of free-ſtone very neatly ſculptured. The cathedral library contains ſeveral valuable books and manuſcripts; the moſt remarkable among the latter of which, is the work which has been ſo long known to antiquaries by the name of St. Chad's Goſpels; it is written in the plain Saxon character,

and

and is illuminated. James the Second, we find, in 1687, in the middle choir of the cathedral touched for the evil, as we know queen Anne did afterwards; the form of the certificate for which may be ſeen twice over in Harwood's Hiſt. of Lichfield, p. 309 and 476.

The government of the cathedral is veſted in a dean and four reſidentiary canons. The dioceſe of Lichfield, joined to Coventry, contains all the county of Stafford (with the exception of Brome and Clent), all Derbyſhire, and nearly one half of Shropſhire. The archdeaconries are thoſe of Coventry, Stafford, Derby, and Salop. The biſhop's palace is ſituated at the north-eaſt ſide of the Cloſe. The original building is ſaid to have been founded by biſhop Clinton, but it was probably of earlier date. This palace was quite deſtroyed in the civil wars; when biſhop Hacket, having expended 1000l. on the prebendal houſe, fixed upon it as his reſidence. Whether the preſent palace is the ſame, or another wholly erected by his ſucceſſor biſhop Wood, is uncertain. It is now inhabited by different families; the biſhop's reſidence having been for many years at Eccleſhall caſtle.

The next building worthy of notice is the church of St. Chad, now called Stowe-church, and generally conſidered as the oldeſt foundation in or near the city. By ſome writers it is even ſuppoſed to have been erected by the Romans, towards the end of the ſecond century. The interior of this fabric has been lately repaired and beautified. It contains a number of neat monuments. The church of St. Mary's ſtands in the market-place, near the Guild-hall. The body of the preſent building is very neat, and is adorned with a handſome altar-piece, and a few ancient monuments to the memory of the family of the Dyotts. St. Michael's church is ſtationed at the ſouth-eaſt extremity of the city, on the ſummit of Greenhill; and is remarkable for the extent of its burial-ground, which is ſcarcely to be paralleled in England. It contains within its limits not leſs than ſix or ſeven acres of excellent paſture land. This hill is remarkable for a court held here annually on Whit-monday, in a temporary ſtand of wood erected for the purpoſe. This court was anciently called the *Court of Array*, or view of men and arms. The high conſtables having aſſembled all the inhabitants, they perambulate the city; and the whole concludes with a proceſſion through the principal ſtreets to the market place, where the town-clerk, in the name of the bailiffs and citizens, delivers an oration or charge to the high conſtables, thanking them for their attendance, and urging them to the due execution of their office. The origin of this remarkable cuſtom is uncertain. On the top of the ſame hill, a ſmall edifice has been erected by ſubſcription, with ſeats; from this ſpot there is a very beautiful and extenſive view of the circumjacent country, and of the many intereſting objects it affords. South of Greenhill is Folly-hall, which alſo commands a very fine proſpect. Not far from hence is the hoſpital and chapel of St. John, which was originally a monaſtery. When it was firſt founded is unknown. The front of the preſent building is remarkable for the number and antique form of its chimneys. According to an inſcription over the door, it was erected by biſhop Smith, who was alſo the founder of Brazen-noſe College, Oxford. The free grammar-ſchool, built at the ſame time with the hoſpital, ſtands nearly oppoſite to it.

This city is uninfluenced in the election of its members of parliament. The right of election is of a very complex kind, being in the bailiff, magiſtrates, freeholders of forty ſhillings a-year, and all that hold by burgage-tenure, together with ſuch freemen only as are inrolled. Having ſent to parliament anno 33 Edw. I. 4, 5, 6, 7, 20, Edw. II. and 1, 14, 27, Edw. III. it intermitted ſending till the reign of Edw. VI. who reſtored it, and conſtituted it a city by charter in the year 1549. This charter gave the corporation power to appoint bailiffs and other chief officers, who ſhould be entitled to hold all pleas within the precincts of the city. Queen Mary, with the authority of parliament, confirmed theſe privileges in the year 1553, and added ſeveral others of importance. The city, which before that time formed a member or parcel of Staffordſhire, was then declared to be a county of itſelf for ever, from and after the enſuing feaſt of St. Thomas. All actions of whatever denomination ariſing within the city, were ordained to be held by the bailiffs and citizens, if they could determine them, and if not by the juſtices next coming into the city, and not on any account by any authority out of the city. Theſe great privileges were conferred in conſequence of the faithful ſervices of the citizens in the time of rebellion. Both theſe charters were ratified by queen Elizabeth, and afterwards confirmed by her ſucceſſor James I. who granted ſtill further immunities to this city. Charles II. confirmed all the privileges of this city, by a charter dated the 5th of November, 1664. The government at preſent is veſted in two bailiffs, elected from the common council, one of whom is named by the biſhop, and the other by the council themſelves, a recorder, a ſheriff, a ſteward, and other inferior officers. The burgeſſes are twenty-four in number. Lichfield ſends two members to parliament; the number of voters is eſtimated at 620. The returning officers are the ſheriff and the bailiffs.

Lichfield may boaſt of having been the place at which ſome of the brighteſt ornaments of the two laſt centuries were educated: among others, the unrivalled Garrick, and his friend Dr. Johnſon, the Hercules of literature: the latter was born in a ſtuccoed houſe ſituated at the corner of Market-ſtreet, where his father kept a bookſeller's ſhop. In the year 1793, a monument was erected to the doctor's memory in the wall of the dean's ancient conſiſtory-court; it is of mixed marble, with a buſt not much like the original, and a ſhort inſcription.

The market-days at Lichfield are Tueſday and Friday; fairs, the three firſt Thurſdays after Twelfth-day, Aſh-Wedneſday, May-day, and the Friday before St. Simon and St. Jude. The Guild-hall, the theatre, and the free Engliſh ſchool, are ſituated in Broad-ſtreet: the latter is an ancient building, erected and endowed by Thomas Minors about the year 1670. At the back of the Guild-hall is a gaol for the confinement of debtors and felons apprehended within the boundaries of the city.

To the weſt of Bird-ſtreet is a very pleaſant ſeat called the Friary, having been formerly a monaſtery of Franciſcan or Grey friars, founded about the year 1229. The reſidence of the late celebrated Dr. Darwin is ſituated in a ſtreet called Beacon-ſtreet, which was nearly burnt to the ground during the civil wars. Oppoſite to the ſhrubbery which ſurrounds Dr. Darwin's houſe is an hoſpital, built by Dr. Milley in the year 1504, for the ſupport of fifteen poor women. Contiguous to this ſpot there formerly ſtood a very ſtately edifice, once the reſidentiary-houſe of the archdeacon of Cheſter. Lichfield contains, beſides theſe, many objects which deſerve the attention of the inquiſitive and curious. The muſeum and the botanic garden of Dr. Darwin are particularly intereſting to all who have the ſlighteſt taſte for the ſubjects of natural hiſtory. Lichfield was long the reſidence of Miſs Seward. By means of canals this city communicates with a variety of rivers, ſome of which diſcharge themſelves into the German Ocean, and others into the Iriſh Sea and St. George's Channel.

At Elmhurſt, near Lichfield, is an echo, which returns a hum, or clap with the hands, if the weather be calm, ten or twelve times; yet ſo thick and cloſe, that it admits of nothing articulate but a monoſyllable. In this pariſh is a Roman tumulus.

Longdon is a village four miles from Lichfield, in the road to Cheſter, on a brook that runs into the Trent.

Wall, ſouth of Lichfield, has the remains of walls encompaſſing two acres of ground, called Caſtle-crofts, wherein have been found two ancient pavements of Roman bricks. The inhabitants have had a tradition, time out of mind, that by this field there was a city, but demo-

ſiſhed before William the Conqueror, which is judged the more probable, from the ſeveral Roman coins found here, and from the plain appearance of the Roman military way, called Watling-ſtreet, from hence to Penkridge.

Yoxhall, four miles north from Lichfield, and weſt from Burton, had a market on Saturdays, and a fair on St. Swithin's day. The market and fair have been long diſcontinued; but once a-year here is a wake upon a Sunday. *Harwood's Hiſt. and Antiq. of Lichfield*, 1806.

LICH'FIELD, a village in Hampſhire, with a Roman military way running by it, between Pamber and the foreſt of Chute.

LICH'STALL, a town of Swiſſerland, in the canton of Bâle: ſeven miles ſouth-eaſt of Bâle.

LICH'TEMBERG, a town of France, in the department of the Lower Rhine: nineteen miles weſt-ſouth-weſt of Weiſſemburg, and twenty-two north-north-weſt of Straſburg.

LICH'TENAU, a town of Auſtria: twelve miles weſt of Crems.

LICH'TENAU, a town of Auſtria: ſix miles ſouth-eaſt of Aigen.

LICH'TENAU, a town of Weſtphalia, in the biſhopric of Paderborn: nine miles ſouth-eaſt of Paderborn. Lat. 51. 32. N. lon. 8. 58. E.

LICH'TENAU, a town of Heſſe Caſſel: thirteen miles ſouth-eaſt of Caſſel, and twenty-four eaſt of Naumburg. Lat. 51. 12. N. lon. 9. 24. E.

LICH'TENAU, a town of Germany, in the principality of Hanau Lichtenberg: eleven miles north-north-eaſt of Willſtadt, and twelve north-eaſt of Straſburg.

LICH'TENAU, a town of Germany, in the territory of Nuremberg, with a fortreſs on the Retzat, inſulated in the margravate of Anſpach: twenty-two miles ſouth-weſt of Nuremberg, and ſix eaſt of Anſpach. Lat. 49. 17. N. lon. 10. 12. E.

LICH'TENAU, an iſland near the weſt coaſt of Eaſt Greenland. Lat. 60. 30. N. lon. 45. 15. W.

LICH'TENAU, a town of Pruſſia, in the province of Ermeland: twelve miles north-weſt of Heilſberg.

LICH'TENBERG, a town of Pruſſian Pomerelia: fifty miles ſouth-weſt of Dantzic.

LICH'TENBERG, a town of Germany, in the county of Henneberg: eight miles ſouth-eaſt of Meinungen.

LICH'TENBERG, a town of France, in the department of Mont Tonnerre, which gave the title of lord of Hanau-Lichtenberg to the houſe of Heſſe-Darmſtadt, to which it belonged. It is twenty-five miles north of Deux Ponts, and nine weſt-ſouth-weſt of Lautereck.

LICH'TENBERG, a town of Sileſia, in the principality of Neiſſe: three miles north-north-weſt of Grotkau.

LICH'TENBERG, a town of Germany, in the principality of Culmbach, on the Selnitz. In the neighbourhood are quarries of marble, and mines of copper and iron. It is twenty-two miles north of Bayreuth, and twenty-ſix eaſt of Coburg. Lat. 50. 22. N. lon. 11. 48. E.

LICH'TENBERG, a town of Saxony, in the circle of Erzgebirg: five miles ſouth-ſouth-eaſt of Freyberg.

LICH'TENBURG, a town of Saxony: ſix miles ſouth-weſt of Annaburg.

LICH'TENECK, a town of the duchy of Carniola: ten miles eaſt-ſouth-eaſt of Stein.

LICH'TENFELS, a town of Auſtria, on the river Kamp: ſeven miles eaſt of Zwetl.

LICH'TENFELS, a town of Bavaria, late belonging to the biſhopric of Bamberg, ſituated on the Maine: twenty miles north-north-eaſt of Bamberg, and twelve weſt-north-weſt of Culmbach. Lat. 50. 10. N. lon. 11. 8. E.

LICH'TENFELT, a town of Pruſſia, in the province of Pomerelia: twelve miles eaſt-ſouth-eaſt of Marienburg.

LICH'TENHAGEN, a town of Pruſſia, in the circle of Natangen: eight miles ſouth-ſouth-weſt of Königſberg.

LICHTENHAN'NA, a town of Saxony, in the circle of Erzgebirg: four miles ſouth-weſt of Zwickau.

LICH'TENHAYN, a town of Saxony, in the margravate of Meiſſen: nine miles eaſt-north-eaſt of Konigſtein, and four eaſt of Pirna.

LICH'TENSTEIG, a town of Swiſſerland, and capital of the county of Tockenburg, on the Thur: the reſidence of a bailiff. It has places of worſhip for Roman catholics and Proteſtants. It is twenty-ſeven miles eaſt of Zurich, and twenty-one ſouth of Conſtance. Lat. 41. 17. N. lon. 9. 6. E.

LICH'TENSTEIN, a caſtle and village of Auſtria: two miles north-weſt of Mödling.

LICH'TENSTEIN, a principality of Germany, conſiſting of the ancient imperial county, and lordſhip of Vadutz and Schellenberg, lying on the eaſt ſide of the lake of Conſtance, on the Rhine, betwixt the lordſhips of Pludenz and Feldkirch. In the fifteenth century, theſe territories deſcended from the barons of Schellenberg to the barons of Brandis; and from them, in 1507, by marriage, to the counts of Sulz; but, in the year 1614, Caſpar Hohenhembs purchaſed them for 200,000 florins; and in 1699 a ſecond purchaſe was made of them by prince John Adam of Lichtenſtein. The contingency in the imperial matricula was formerly eighteen florins; and to the imperial chamber at Wetzlar this principality paid eighteen rix-dollars ſixty kruitzers.

LICH'TENSTEIN, a town of Saxony, and principal place of a lordſhip belonging to the counts of Schonburg: five miles north-eaſt of Zwickau, and thirty-ſix ſouth of Leipſic. Lat. 50. 44. N. lon. 12. 31. E.

LICH'TENTANEN, a town of Germany, in the principality of Culmbach: ſeven miles north-weſt of Bayreuth.

LICH'TENVORD, a town of Holland, in the county of Zutphen: ſix miles ſouth-ſouth-weſt of Groll.

LICH'TENWALD, a town of the duchy of Stiria: twelve miles ſouth-eaſt of Cilley.

LICH'TENWALDE, a town of Saxony, in the circle of Erzgebirg: three miles ſouth-ſouth-weſt of Frankenberg.

LICH'TENWALT, a town of Pruſſia, in the province of Ermeland: twenty-three miles north-weſt of Heilſberg.

LICH'TENWART, a town of Auſtria: five miles north-north-eaſt of Ziſterſdorf.

LICH'VIN, a town of Ruſſia, in the government of Kaluga, on the Oka: twenty-eight miles ſouth of Kaluga. Lat. 54. N. lon. 35. 44. E.

LICH'WE, a town of Bohemia, in the circle of Konigingratz: ſix miles weſt of Geyerſberg.

LICIN'IO (Giovanni Antonio). See PORDENONE.

LICIN'IUS CAIUS, a Roman tribune, of a plebeian family, roſe to that rank by his own aſpiring temper; he was the firſt plebeian who was raiſed to the dignity of maſter of horſe to the dictator. He was ſurnamed *Stolo*, or uſeleſs ſprout, on account of the law which he cauſed to be enacted during his tribuneſhip, that no perſon ſhould hold more than five hundred acres of land; it being alleged that, when more was held by one proprietor, he would not have leiſure to pull up the uſeleſs ſhoots (*ſtolones*) which grew from the roots of trees. He afterwards carried a law which permitted the plebeians to ſhare the conſular dignity with the patricians, and was himſelf one of the firſt plebeian conſuls, in the year 364 B.C.

LICIN'IUS TEG'ULA, a comic Latin poet, flouriſhed about 200 years before the Chriſtian era. His fragments have been publiſhed by H. Stephens, and in the Corpus Poetarum by Maittaire.—There was an orator and poet of this name, who lived at the ſame time with Cicero, and who has been compared with Catullus. His orations are highly commended by Quintilian: he is ſuppoſed to have written annals quoted by Dionyſius of Halicarnaſſus.

LICIN'IUS VALERIA'NUS, a Roman emperor, a native of Dacia, of an obſcure origin, and accuſtomed from his infancy to the toils and hardſhips of rural life, became a Roman ſoldier, and roſe through all the gradations of the ſervice. He was raiſed to the rank of Auguſtus in the year 307. When the civil war broke out between Conſtantine and Maxentius, the former ſecured the friend-

ſhip of Licinius by promiſing him in marriage his ſiſter Conſtantia, which alliance took place in 313, when the two emperors had an interview at Milan, and joined in an edict in favour of the Chriſtians. In the ſame year Maximin invaded the territories of Licinius, and took Byzantium and Heraclea; his ſucceſs was very ſhort-lived; for Licinius advanced to meet him, and by his military ſkill obtained a complete victory. Maximin died ſoon after, and Licinius ſucceeded to his authority over the provinces of the Eaſt. The conqueror, who was harſh, ignorant, and brutal, knew not how to uſe his ſucceſs with generoſity, or even with humanity: he put to death a great number of perſons, and among others Valeria, the widow of Galerius, who had been a great benefactor to Licinius. This lady had taken refuge at his court; but, terrified with his ſavage conduct, ſhe took flight, and with her aged mother wandered long in diſguiſe through the provinces; but, being at length diſcovered, they were both beheaded, and their bodies thrown into the ſea. After the diſplay of theſe barbarities, the two emperors did not live long in peace. A civil war broke out between them, in which the firſt battle was fought in 315: Licinius was vanquiſhed, and, after another attempt or two to maintain his ground againſt his rival, he was obliged to ſue for peace, which he obtained on the condition of putting to death Valens, whom he had lately created Cæſar, and of reſigning all his European provinces. In 317 he created his own ſon Cæſar, and peace was maintained during the eight following years. About this period, Licinius, growing ſuſpicious of his Chriſtian ſubjects, who ſeemed to be attached to his rival, began to baniſh them from about his perſon and palace, and to prohibit biſhops from viſiting each other, and from holding councils and aſſemblies. By degrees the reſtrictions that were laid upon them were exchanged for direct and cruel perſecution, which produced another civil war in 323. The rivals met near Adrianople; and, after ſome time ſpent in ſkirmiſhes, a general engagement was brought on, in which the ſuperior ſkill of Conſtantine, and valour of his European ſoldiers, gained a very deciſive victory over the much more numerous but leſs warlike hoſt of Licinius. The vanquiſhed emperor ſhut himſelf up within the walls of Byzantium, while his fleet was deſtroyed in the Helleſpont by Criſpus, the ſon of Conſtantine. Licinius eſcaped to Chalcedon, and, collecting a new army, made one more effort to oppoſe his foe; but, being again defeated, he retired to Nicomedia, rather with a view of gaining time for negociation than with the hope of effectual oppoſition. His wife Conſtantia, the ſiſter of Conſtantine, interceded with her brother in favour of her huſband, and obtained a ſolemn promiſe, confirmed by an oath, that, after the reſignation of the purple, Licinius ſhould be permitted to paſs the remainder of his days in peace and affluence. Licinius accordingly laid himſelf and the inſignia of his office at the feet of the conqueror; and ſoon afterwards was ſent to Theſſalonica, which had been choſen as the place of his confinement. His impriſonment was ſoon terminated by death, but whether this was occaſioned by a tumult of the ſoldiers, or by a decree of the ſenate, is uncertain: however, his memory was branded with infamy, his ſtatues were thrown down, and, by a raſh edict, all his laws, and the judicial proceedings of his reign, were at once aboliſhed. By this victory of Conſtantine, the Roman world was again united under the authority of one emperor. *Gibbon.*

LICI'NUS, a barber and freedman of Auguſtus, raiſed by his maſter to the rank and dignity of a ſenator, merely becauſe he hated Pompey's family. *Horat. Art. P.* 301.

LIC'IO, one of the ſmaller Lipari Iſlands. Lat. 38. 54. N. lon. 15. 20. E.

LICITA'TION, *ſ.* [from the Lat. *licco*, to ſet a price for ſale.] The act of expoſing to ſale to the higheſt bidder. *Scott.*

LICK, a town of Pruſſia, with a caſtle built in the year 1272. It received the privileges of a town in the year 1662. The country ſuffered extremely by the Tartars in the year 1656, till they were defeated at Warſaw. It is eighty miles ſouth-eaſt of Königſberg. Lat. 53. 39. N. lon. 22. 38. E.

LICK, a name given to the ſalt-ſprings in the weſtern parts of the United States.

To LICK, *v. a.* [licean, Sax. *lecken*, Dut.] To paſs over with the tongue.—Æſculapius went about with a dog and a ſhe-goat, both which he uſed much in his cures; the firſt for *licking* all ulcerated wounds, and the goat's milk for the diſeaſes of the ſtomach and lungs. *Temple.*—I have ſeen an antiquary *lick* an old coin, among other trials, to diſtinguiſh the age of it by its taſte. *Addiſon.*

A bear's a ſavage beaſt;
Whelp'd without form, until the dam
Has *lick'd* it into ſhape and frame. *Hudibras.*

To lap; to take in by the tongue:

At once pluck out
The multitudinous tongue; let them not *lick*
The ſweet which is their poiſon. *Shakeſpeare.*

To LICK *up.* To devour.—Now ſhall this company *lick up* all that are round about us, as the ox *licketh up* the graſs. *Numbers.*

When luxury has *lick'd up* all thy pelf,
Curs'd by thy neighbours, thy truſtees, thyſelf:
Think how poſterity will treat thy name. *Pope.*

LICK, *ſ.* A taſte. A blow; rough uſage. *A low word.*—He turned upon me as round as a chafed boar, and gave me a *lick* acroſs the face. *Dryden.*

LICK'ER, *ſ.* One that licks.

LICK'ERISH, LICK'EROUS, or LIQ'UORISH, *adj.* [liceþa, a glutton, Sax. The firſt ſeems to be the proper way of ſpelling the word, which has no affinity with *liquor*, but with *like* or *lick.*] Nice in the choice of food.—Voluptuous men ſacrifice all ſubſtantial ſatisfactions to a *liquoriſh* palate. *L'Eſtrange.*—Eager; greedy to ſwallow; eager not with hunger but guſt.—It is never tongue-tied, where fit commendation, whereof womankind is ſo *lickeriſh*, is offered unto it. *Sidney.*—Certain rare manuſcripts, ſought in the moſt remote parts by Erpenius, the moſt excellent linguiſt, had been left to his widow, and were upon ſale to the jeſuits, *liquoriſh* chapmen of all ſuch ware. *Wotton.*—In ſome provinces they were ſo *liquoriſh* after man's fleſh, that they would ſuck the blood as it run from the dying man. *Locke.*

Strephon, fond boy, delighted, did not know
That it was love that ſhin'd in ſhining maid;
But *lick'rous*, poiſon'd, fain to her would go. *Sidney.*

In vain he proffer'd all his goods to ſave
His body, deſtin'd to that living grave;
The *liquoriſh* hag rejects the pelf with ſcorn,
And nothing but the man would ſerve her turn. *Dryden.*

Nice; delicate; tempting the appetite. This ſenſe is doubtful:

Would'ſt thou ſeek again to trap me here
With *lickeriſh* baits, fit to enſnare a brute? *Milton.*

LICK'ERISHNESS, *ſ.* Niceneſs of palate.

LICK'ING, *ſ.* The act of paſſing over with the tongue; a beating.

LICK'ING, a navigable river of America, in Kentucky, which riſes on the weſtern confines of Virginia, interlocks with the head-waters of Kentucky-river, runs in a north-weſt direction upwards of 180 miles, and by a mouth 150 yards wide through the ſouth bank of Ohio-river, oppoſite to Fort Waſhington. On this river are iron-works and numerous ſalt-ſprings. Its chief branch is navigable nearly ſeventy miles. From Limeſtone to this river the country is very rich, and covered with corn, rye-graſs, and natural clover. *Morſe.*

LICKING CREE'K, a river of Maryland, which runs into the Potomack in lat. 39. 38. N. lon. 78. 5. W.

LICKING

LICKING HO'LE CREEK, a river of Virginia, which runs into James River in lat. 37. 42. N. lon. 78. 5. W.

LICKNE'NA, a town of Spain, in Arragon: eighteen miles ſouth-ſouth-weſt of Hueſca.

LICK'Y, a river of Ireland, in the county of Waterford, which runs into the Blackwater four miles north of Youghall.

LIC'NON, *ſ.* [Greek.] In the Dionyſian ſolemnities, the myſtical van of Bacchus; a thing ſo eſſential to all the ſolemnities of this god, that they could not be duly celebrated without it. See DIONYSIA, vol. v. p. 839.

LICNOPH'ORI, *ſ.* in the Dionyſian ſolemnities, thoſe who carried the licnon.

LICO'DIA, a town of Sicily, in the valley of Noto: eighteen miles ſouth-weſt of Lentini.

LICO'LA, or LAGO DI LICOLA, a lake in the kingdom of Naples, formerly famous for plenty of excellent fiſh; but in the year 1538 an exploſion of a volcano changed one part of it into a mountain of aſhes, and the other into a moraſs. It was anciently known by the name of the Lucrine Lake.

LICON'DA, a town of Africa, in the country of Tripoli, on the ſea-coaſt. Lat. 30. 36. N. lon. 18. 10. E.

LICO'RICE. See LIQUORICE.

LICOSTA'MO, a town of European Turkey, in Theſſaly; the ſee of a biſhop, ſuffragan of Lariſſa: ſixteen miles eaſt-ſouth-eaſt of Lariſſa.

LIC'QUES, a town of France, in the department of the Straits of Calais: thirteen miles eaſt-north-eaſt of Boulogne, and ten ſouth of Calais.

LIC'TOR, *ſ.* [Latin.] An officer that attended the magiſtrates of Rome to apprehend and puniſh criminals, or for ſtate:

Saucy *lictors*
Will catch at us like ſtrumpets. *Shakeſpeare.*

Proconſuls to their provinces
Haſting, or on return, in robes of ſtate,
Lictors and rods the enſigns of their power. *Milton.*

The lictors were eſtabliſhed by Romulus. The duty of their office conſiſted in the three following particulars: 1. *Submotio*, or clearing the way for the magiſtrate they attended; this they did by word of mouth; or, if there was occaſion, by uſing the rods they always carried along with them. 2. *Animadverſio*, or cauſing the people to pay the uſual reſpect to the magiſtrate; as to alight, if on horſeback, or in a chariot; to riſe up, uncover, make way, and the like. 3. *Præitio*, or walking before the magiſtrates: this they did not confuſedly or all together, nor by two or three abreaſt, but ſingly, following one another in a ſtraight line. They alſo preceded the triumphal car in public triumphs; and it was alſo part of their office to arreſt criminals, and to be public executioners in beheading, &c. Their enſigns were the *faſces* and *ſecuris*. As to the number of lictors allowed each magiſtrate; a dictator had twenty-four, a conſul twelve, a prætor ſix, a maſter of the horſe, ſix; and each veſtal virgin, when ſhe appeared abroad, had one.

LICTO'RIAN, *adj.* Belonging to the officer who attended the Roman conſuls to apprehend or puniſh criminals.

LICUA'LA, *ſ.* [the vernacular name of this palm in Macaſſar.] In botany, a genus of the claſs hexandria, order monogynia, natural order of palms. The generic characters are—Calyx: perianth three-parted, outwardly hairy, permanent. Corolla: three-parted almoſt to the baſe; diviſions ovate, acute, concave, deciduous. Nectary ſertiform, truncated, as ſhort again as the corolla. Stamina: filaments ſix, inſerted into the nectary, upright, very ſhort; anthers oblong, twin. Piſtillum: germ ſuperior, convex, three-parted, ſulcated, ſmooth; ſtyle ſimple; ſtigmas two. Pericarpium: drupe globoſe, the ſize of a pea, one-celled. Seed a hard nut.—*Eſſential Character.* Flowers all hermaphrodite; calyx and corolla three-parted; nectary ſertiform.

Licuala ſpinoſa, a ſingle ſpecies. The trunk is but an ell in height, and ſcarcely ſo thick as the human arm, jointed, dividing at top into about ſix branches, each ſix ells long, hardly a finger in thickneſs, triangular, grooved above, flat beneath, the lower half ſharply ſerrate at the angles, and the teeth or ſpinules cloſely joined. Each of theſe has a leaf at top, ſpreading like a fan, and divided into rays, all ſeparated to the baſe; the lateral ones (fourteen) are narrow, blunt and jagged at the end, with four ſtrong nerves meeting at bottom; the middle ray is twenty-four or even twenty-ſeven inches long, and a foot wide at top; it has thirteen or fourteen ribs, alternately prominent on the upper and lower ſide, ſo that it may be folded up, like a fan. When the plant is mature, the flower-ſtalk emerges from the middle, as long as the branches or leaf-ſtalks, involved in ſheaths at the bottom, dividing into five ſmaller flower-ſtalks at top, about a hand in length, bearing green heads in three rows expanding into flowers. The fruit is a fleſhy, ſmall, oval, drupe, retaining the calyx at ſome little diſtance; rind membranaceous, very thin, blackiſh brown; fleſh very little, pulpy, fugacious; ſhell bony, thin, brittle, whitiſh, elliptic-globular, finiſhing at top in a very ſharp ſhort dagger-point; it is alſo pointed at bottom, and ſtriated, with a few bony nerves ſomewhat branching; within it is very ſmooth, and one-celled. Rumphius compares the fruit with thoſe of the bay for ſize and figure, except that it is rounder; he adds, that it continues long green, but finally turns brown or blackiſh. Seed elliptic, aſh-coloured, moderately convex on one ſide, and towards the baſe keeled with a very blunt angle in which the umbilical chord is immerſed; on the other ſide gibbous, and marked in the middle with a large teat covering the embryo, which is placed in the middle of the back. Rumphius ſays, that the nut is oblong, very hard, and ſtriated longitudinally. Native of Macaſſar and Celebes; where they make much uſe of the narrow leaves for tobacco-pipes, and of the middle broad one for wrapping up fruit, &c. The wood is of little uſe, being not durable.

LICZ, a town of Auſtrian Poland, in Galicia: thirty miles weſt of Przemyl.

LID, *ſ.* [plıð, Sax. *lied*, Germ.] A cover; any thing that ſhuts down over a veſſel; any ſtopple that covers the mouth, but not enters it.—Hope, inſtead of flying off with the reſt, ſtuck ſo cloſe to the *lid* of the cup, that it was ſhut down upon her. *Addiſon.*—The membrane that, when we ſleep or wink, is drawn over the eye.—Our eyes have *lids*, our ears ſtill ope we keep. *Davies.*

That eye dropp'd ſenſe diſtinct and clear,
As any muſe's tongue could ſpeak;
When from its *lid* a pearly tear
Ran trickling down her beauteous cheek. *Prior.*

LID. See LYDD.

LID, or LYD, a river of England, which runs into the Tamar four miles north-north-weſt of Taviſtock.

LI'DA, a river of Sweden, which runs into the Wener Lake at Lidkioping.

LI'DA, a town and caſtle of Lithuania, in the palatinate of Wilna, where a provincial diet is held: 168 miles eaſt-ſouth-eaſt of Königſberg, and forty-eight ſouth of Wilna. Lat. 53. 52. N. lon. 25. 35. E.

LIDBECK'IA, *ſ.* in botany. See COTULA.

LID'BURY, a village in Shropſhire, near Biſhop's Caſtle; with a charity-ſchool.

LID'DEL, a river of Scotland, which riſes in Roxburgſhire, and joins the Eſk, three miles ſouth of Longholm, in the county of Dumfries. The valley in which it flows is called Liddeſdale, or Lithdale.

LID'DEL, a village in Cumberland, at the conflux of the Lid and Eſk. Here was formerly a caſtle.

LID'DEL (Dr. Duncan), profeſſor of mathematics and of medicine in the univerſity of Helmſtadt, was born in the year 1561 at Aberdeen, where he received the firſt part of his education in languages and philoſophy.

About the age of eighteen he repaired to the univerſity of Frankfort, where he ſpent three years in a diligent application to mathematics and philoſophy. From Frankfort he proceeded to Wratiſlaw, or Breſlaw, in Sileſia, where he ſtudied for the ſpace of one year. He returned to Frankfort, and remained there three years more, paying the moſt intenſe application to the ſtudy of phyſic. A contagious diſtemper having broken out at that place, the ſtudents were diſperſed, and Liddel retired to the univerſity of Roſtock. In 1590 he returned once more to Frankfort. But, having there heard of the increaſing reputation of the Academia Julia, eſtabliſhed at Helmſtadt by Henry duke of Brunſwick, Mr. Liddel removed thither; and ſoon after his arrival was appointed to the firſt or lower profeſſorſhip of mathematics. From thence he was promoted to the ſecond and more dignified mathematical chair, which he occupied for nine years, with much credit to himſelf and to the academy. In 1596 he obtained the degree of M.D. was admitted a member of that faculty, and began publicly to teach phyſic. By his teaching and his writings he was the chief ſupport of the medical ſchool at Helmſtadt; was employed as firſt phyſician at the court of Brunſwick, and had much practice among the principal inhabitants of that country. Having been ſeveral times elected dean of the faculties both of philoſophy and phyſic, he had in the year 1604 the honour of being choſen protector of the univerſity. But neither academical honours, nor the profits of an extenſive practice abroad, could make Dr. Liddel forget his native country. In the year 1600 he took a final leave of the Academia Julia; and, after travelling for ſome time through Germany and Italy, he at length ſettled in Scotland. He died in the year 1613, in the 52d year of his age. By his laſt will he beſtowed certain lands purchaſed by him near Aberdeen upon the univerſity there, for the education and ſupport of ſix poor ſcholars. Among a variety of regulations and injunctions for the management of this charity, he appoints the magiſtrates of Aberdeen his truſtees, and ſolemnly denounces the curſe of God on any perſon who ſhall abuſe or miſapply it. His works are, 1. Diſputationes Medicinales, Helmſtadt, 1603, 4to. 2. Ars Medica ſuccinctè et perſpicuè explicata, Hamburghi, 1607, 8vo. 3. De Febribus Libri tres, Hamburghi, 1610, 12mo. 4. Tractatus de Dente aureo, Hamburghi, 1628, 12mo. This performance Dr. Liddel publiſhed in order to refute a ridiculous ſtory then current, of a poor boy in Sileſia, who, at ſeven years of age, having loſt ſome of his teeth, brought forth, to the aſtoniſhment of his parents, a new tooth of pure gold. Jacobus Horſtius, doctor and profeſſor of medicine in the Academia Julia at the ſame time with our author, had publiſhed a book, which he dedicated to the emperor Rudolphus II. to prove that this wonderful tooth was a prodigy ſent from heaven to encourage the Germans then at war with the Turks; and foretelling, from this golden tooth, the future victories of the Chriſtians, with the final deſtruction of the Turkiſh empire and Mahometan faith, and a return of the golden age in 1700, preparatory to the end of the world. The impoſture was ſoon after diſcovered to be a thin plate of gold, ſkilfully drawn over the natural tooth by an artiſt of that country, with a view to excite the public admiration and charity. 5. Artis conſervandi Sanitatem, libri duo, Aberdoniæ, 1651, 12mo. a poſthumous work.

LID'DEN, a river of England, which runs into the Severn at Glouceſter.

LI'DEN, a town of Sweden, in Angermanland: ſixty miles north-north-weſt of Hernoſand.

LI'DEN (John-Henry), a learned and benevolent Swede, who died at Nordkoping on the 28th of April, 1798. He preſented to the univerſity of Upſal, or rather to the ſtudents of Eaſt Gothland, who frequented it, nearly the whole of his library, conſiſting of about 6000 volumes, on condition of its being made public; he likewiſe endowed the univerſity with the intereſt of a capital of 2333 rix-dollars, (330l.) for the acquiſition of new works. His ſtep-mother, Hedwig-Sophia Liden, a woman replete with reſpectability, and who ſeemed to rival him in acts of beneficence, ſunk a capital of 2777 rix-dollars, the intereſt of which was to ſerve as a ſalary to a librarian. He and his ſtep-mother left a ſalary for an amanuenſis, to be employed in the library of the univerſity of Upſal; and the intereſt of a capital to form a purſe of rix-dollars, every year, for two ſtudents not opulent, that ſhould diſcover talents. Liden likewiſe gave the ſum of 1000 rix-dollars to the Royal Academy of Stockholm, and a like ſum to the Academy of Belles Lettres, Hiſtory, and Antiquities, of the ſame city, of which he was a member. He alſo gave 500 rix-dollars to the library of the Academy of Abo, to purchaſe new books; and a like ſum, with the profit of two works which he had printed at his own expenſe, to the library of Linkoping. He added a number of his own valuable books to the library of the Swediſh Academy; as alſo to the library of the univerſity of Lund, to that of Abo, and to the library of the Gymnaſium of his own city. In 1791, on the death of his ſtep-mother, he gave 200 rix-dollars to the cheſt of the poor of the city of Linkoping. The king confirmed theſe different diſpoſitions of Liden, and inſured their duration. It would be difficult to enumerate all the beneficent gifts which he diſtributed in his life-time; which, however, did not amount to leſs than 11,622 rix-dollars; and he never let ſlip any opportunity of doing good. Liden languiſhed under a complaint of the joints for twenty-one years, ſeventeen of which he paſſed without being able to quit his bed. As his pain and the obligation of remaining always bed-ridden, gave him no little uneaſineſs, to calm his mind in the moments of ill-humour, he placed before his eyes, on his bed, the two words, PATIENCE and MEEKNESS: and theſe he practiſed to the end of his life. As he never could be uſeful to his country in the employ which had been entruſted to him, that of adjunct in the chair of hiſtory in the univerſity of Lund, he demanded to reſign it, which he obtained in the moſt honourable manner, October 29, 1776, retaining the title of profeſſor. His bed was every day ſurrounded by the moſt intereſting perſons of both ſexes, who found the greateſt pleaſure in his converſation, and which made him forget, for a time, the ſtate of ſuffering in which he was. The preſent (exiled) king, while hereditary prince, the duke of Sudermannland, the duke of Oſtrogothland, and many diſtinguiſhed lords of the court of Sweden, went to viſit him; and, in general, no traveller of diſtinction quitted Nordkoping without calling upon him, and without admiring his imperturbable patience and good-humour. When not engaged with viſitors, he was employed in literary labours; he read, he dictated and publiſhed many works during his malady, but their titles have not reached us. In the firſt years of his ſufferings he kept up a very extenſive correſpondence with a number of learned foreigners. His ſolid erudition, joined to great refinement of underſtanding, rendered his ſociety extremely agreeable; and his probity, his love for his country, his qualities, and his virtues, ſecured him the general eſteem of all his fellow-citizens; this eſteem exiſts to this day. He was a model of beneficence. His memory is ſtill dear to a great number of diſtinguiſhed learned men of Sweden, whom he ſupported in their youth, and was their counſellor in their ſtudies. He lived in a very œconomical manner, in order to have the pleaſure of doing good to others.

LI'DENS, a town of Sweden, in the province of Medelpadia: twenty-four miles north-north-weſt of Sundſwal.

LID'FORD, a village of England, in the county of Devon, near the foreſt of Dartmoor. It was formerly a town, fortified, ſurrounded with walls, and moated: there were three gates, of which no remains are viſible. It is ſuppoſed to have been deſtroyed by the Danes in the year 997. Here is an ancient caſtle, in which courts are held for the duchy of Cornwall, and offenders againſt the ſtannary-laws uſed to be confined in a dungeon, ſo dreary and diſmal, that it gave riſe to a proverb, "Lyd-

ford law; puniſh a criminal firſt, and try him afterwards." It was made uſe of by ſir Richard Grenville, Charles I's general; and its merits are celebrated in a humorous ſong, written by Mr. Brown, who went to viſit his friend confined there. It is ſaid to be the largeſt pariſh in England, including almoſt the whole of Dartmoor. The village, however, contains not above fifteen houſes; and the ſituation is bleak and dreary. It is twenty-eight miles weſt of Exeter.

LID'FORD, Eaſt and Weſt, villages in Somerſetſhire, lying on the oppoſite banks of a river that runs from Burton to Glaſtonbury: fair Aug. 1.

LID'HULT, a town of Sweden, in the province of Smaland: ſixty miles ſouth of Jonkioping. Lat. 56. 50. N. lon. 13. 14. E.

LID'GATE. See LYDGATE.

LID'KIOPING, a town of Sweden, in Weſt Gothland, ſituated on the ſouth ſide of the Wenner Lake, at the mouth of the Lida: forty-two miles eaſt-north-eaſt of Uddevalla, and eighty ſouth-weſt of Orebro. Lat. 58. 33. N. lon. 12. 54. E.

LID'LYNCH, a village in Dorſetſhire, weſt of Sturminſter, three miles and a half from Biſhop's Candal.

LID'NEY, a mean inconſiderable town in Glouceſterſhire, on the border of Monmouthſhire; although deſcribed in our topographical ſurveys as a market-town, it has long loſt all appearance of a market. The market was formerly on a Wedneſday. Here are two annual fairs, May 4, and November 8. The road from Glouceſter to Chepſtow paſſes through here. Lidney is diſtant from Glouceſter twenty miles, Monmouth twelve, Chepſtow eight, Newnham eight, Dean ten, and from London 118. It is ſeated on the weſt bank of the river Severn. Here are the remains of a large Roman encampment, with foundations of many ancient buildings, among which are the ruins of a Roman hypocauſt or bath of an oval form; a great number of Roman antiquities and coins are found here. Contiguous to this place are the iron-forge, furnace, and collieries, of Meſſrs. Pidcock, of Stourbridge. There is no coach or regular conveyance to or from Lidney.

Contiguous to Lidney is the fine ſeat of Thomas Bathurſt, eſq. called Lidney Park.—Hewelsfield is a village, the vicarage of which is annexed to Lidney.

LI'DO DI MALAMOC'CO, a ſmall iſland in the Adriatic, defended by a fort: two miles from Venice.

LI'DO DI PADESTRI'NA, a long iſland in the Adriatic, with a fort to defend the city of Venice.

LI'DO DI SOTTOMARI'NO, a town on the iſland of Chioggia, and as it were the ſuburbs of that city. It is ſituated on a bank which ſeparates the lagunes from the ſea; and is protected by a remarkable pier, called *Molo di Paleſtrina*, or *Murazzi*, compoſed of Iſtrian freeſtone thirty-two feet in thickneſs, and conſtructed at a vaſt expenſe.

LIDS, a ſmall iſland in the Baltic, near the ſouth coaſt of Laaland. Lat. 54. 41. N. lon. 11. 20. E.

LIE, a town of Arabia, in Yemen: twenty miles ſouth of Abu Ariſch.

LIE, *ſ.* [*lie*, Fr.] Any thing impregnated with ſome other body; as, ſoap or ſalt.—Chamber-*lie* breeds fleas like a loach. *Shakeſpeare.*—All liquid things concocted by heat become yellow; as *lye*, wort, &c. *Peacham on Drawing.*

LIE, *ſ.* [liȝe, Sax.] A criminal falſehood.—When I hear my neighbour ſpeak that which is not true, and I ſay to him, This is not true, or this is falſe, I only convey to him the naked idea of his error; this is the primary idea; but, if I ſay It is a *lie*, the word *lie* carries alſo a ſecondary idea; for it implies both the falſehood of the ſpeech, and my reproach and cenſure of the ſpeaker. *Watts's Logic.*

Thou lieſt, abhorred tyrant; with my ſword
I'll prove the *lie* thou ſpeak'ſt. *Shakeſpeare's Macbeth.*

A charge of falſehood:

That *lie* ſhall lye ſo heavy on my ſword,
That it ſhall render vengeance and revenge;
Till thou the lie-giver, and that *lie*, reſt
In earth as quiet as thy father's ſkull. *Shakeſpeare.*

A fiction. *This ſenſe is ludicrous:*

The cock and fox, the fool and knave imply;
The truth is moral, though the tale a *lie*. *Dryden.*

LIE-GIVER, one who charges another with falſehood:

That lie ſhall lye ſo heavy on my ſword,
That it ſhall render vengeance and revenge;
Till thou the *lie-giver*, and that lie, reſt
In earth as quiet as thy father's ſkull. *Shakeſpeare.*

To LIE, *v. n.* [leȝan, Sax. *liegen*, Dut.] To utter criminal falſehood.—I know not where he lodges; and for me to deviſe a lodging, and ſay, He lies here, or he lies there, were to *lie* in mine own throat. *Shakeſpeare.*—To exhibit falſe repreſentation:

Inform us, will the emp'ror treat?
Or do the prints and papers *lie?* *Swift.*

To GIVE THE LIE, *v. a.* To contradict.—It is a contradiction to ſuppoſe, that whole nations of men ſhould unanimouſly *give the lie* to what, by the moſt invincible evidence, every one of them knew to be true. *Locke.*—Men will *give* their own experience *the lie*, rather than admit of any thing diſagreeing with theſe tenets. *Locke.*

To LIE, *v. n.* pret. *I lay*; *I have lain*, or *lien*: [liȝan, Sax. *liggen*, Dut.] To reſt; to preſs upon:

Death *lies* on her like an untimely ſhow'r
Upon the ſweeteſt flow'r of all the field. *Shakeſpeare.*

Lie heavy on him, earth, for he
Laid many a heavy load on thee. *Epitaph on Vanbrugh.*

To be repoſited in the grave.—All the kings of the nations *lie* in glory, every one in his own houſe. *Iſa.* xiv. 18.—I will *lie* with my fathers, and thou ſhalt carry me out of Egypt, and bury me in your burying-place. *Gen.* xlvii. 30.—To be in a ſtate of decumbiture.—How many good young princes would do ſo; their fathers *lying* ſo ſick as yours at this time is? *Shakeſpeare.*—To paſs the time of ſleep; to lodge.—I know not where he lodges; and for me to deviſe a lodging, and ſay, He *lies* here, or he *lies* there, were to lie in mine own throat. *Shakeſpeare.*

Forlorn he muſt and perſecuted flie;
Climb the ſteep mountain, in the cavern *lie*. *Prior.*

To be laid up or repoſited.—I have ſeen, where copperas is made, great variety of them, divers of which I have yet *lying* by me. *Boyle.*—To remain fixed.—The Spaniards have but one temptation to quarrel with us, the recovering of Jamaica; for that has ever *lien* at their hearts. *Temple.*—To reſide.—If thou doeſt well, ſhalt thou not be accepted? and, if thou doeſt not well, ſin *lieth* at the door. *Gen.* iv. 7.—To be placed or ſituated, with reſpect to ſomething elſe.—There *lies* our way, and that our paſſage home. *Dryden.*—Envy *lies* between beings equal in nature, though unequal in circumſtances. *Collier of Envy.*

I go to happy climes that *lie*
Where day never ſhuts his eye. *Milton.*

To preſs upon afflictively.—Thy wrath *lieth* hard upon me, and thou haſt afflicted me with all thy waves. *Pſalms.*

He that commits a ſin ſhall find
The preſſing guilt *lie* heavy on his mind,
Though bribes or favour ſhall aſſert his cauſe. *Creech.*

To be troubleſome or tedious.—I would recommend the ſtudies of knowledge to the female world, that they may not be at a loſs how to employ thoſe hours that *lie* upon their hands. *Addiſon's Guardian.*—To be judicially imputed.—If he ſhould intend his voyage towards my wife, I would turn her looſe to him; and what he gets more of her than ſharp words, let it *lie* on my head. *Shakeſpeare.*—To be in any particular ſtate.—The highways *lie* waſte, the wayfaring man ceaſeth.—Do not think that the knowledge of any particular ſubject cannot be improved, merely becauſe it has *lain* without improvement. *Watts.*—To be in a ſtate of concealment.—Many things in them *lie* concealed to us, which they who were concerned underſtood at firſt ſight. *Locke.*—To be in priſon;

Your imprisonment shall not be long;
I will deliver you, or else *lie* for you. *Shakespeare.*

To be in a bad state.—The generality of mankind *lie* pecking at one another, till one by one they are all torn to pieces. *L'Estrange's Fables.*—To be in a helpless or exposed state.—To see a hated person superior, and to *lie* under the anguish of a disadvantage, is far enough from diversion. *Collier.*—To consist.—He that thinks that diversion may not *lie* in hard labour, forgets the early rising and hard riding of huntsmen. *Locke.*—To be in the power; to belong to.—Do'st thou endeavour, as much as in thee *lies*, to preserve the lives of all men? *Duppa's Rules for Devotion.*

Mars is the warrior's god; in him it *lies*
On whom he favours to confer the prize. *Dryden.*

To be valid in a court of judicature: as, An action *lieth* against one.—To cost: as, It *lies* me in more money.

To LIE *at.* To importune; to tease.

To LIE *by.* To rest; to remain still:

Ev'ry thing that heard him play,
Ev'n the billows of the sea,
Hung their heads, and then *lay by*;
In sweet music is such art,
Killing care, and grief of heart,
Fall asleep, or hearing die. *Shakespeare's Henry* VIII.

To LIE *down.* To rest; to go into a state of repose.—The leopard shall *lie down* with the kid. *Isaiah*, xi. 6.—To sink into the grave.—His bones are full of the sin of his youth, which shall *lie down* with him in the dust. *Job*, xx. 11.

To LIE *in.* To be in childbed.—Hysterical affections are contracted by accidents in *lying in*. *Arbuthnot on Diet.*

When Florimel design'd to *lie* privately *in*;
She chose with such prudence her pangs to conceal,
That her nurse, nay her midwife, scarce heard her once squeal. *Prior.*

To LIE *under.* To be subject to; to be oppressed by.—A generous person will *lie under* a great disadvantage. *Smalridge's Sermons.*—Europe *lay* then *under* a deep lethargy, and was no otherwise to be rescued but by one that would cry mightily. *Atterbury.*

To LIE *upon.* To become the matter of obligation or duty.—These are not places merely of favour, the charge of souls *lies upon* them; the greatest account whereof will be required at their hands. *Bacon.*

To LIE *with.* To converse in bed:

Pardon me, Bassanio,
For by this ring she *lay with* me. *Shakespeare.*

It may be observed of this word in general, that it commonly implies something of sluggishness, inaction, or steadiness, applied to persons; and some gravity or permanency of condition, applied to things.

LIEBAU', a town of Silesia, in the principality of Schweidnitz, on the river Schwartbach: twenty-two miles south of Schweidnitz, and thirty north-west of Glatz.

LIEBAU', or LIE'BE, or LIBO'WA, a town of Moravia, in the circle of Prerau: thirteen miles north of Prerau, and fourteen north-east of Olmutz. Lat. 49. 38. N. lon. 17. 28. E.

LIE'BE. See LÖBAU.

LIE'BEFELD, a town of Prussia, in Oberland: four miles south-south-west of Deutsch Eylau.

LIE'BENAU, a town of Germany, in the county of Hoya, situated on the Aue: seven miles south-west of Nienburg.

LIE'BENAU, a town of the duchy of Stiria: three miles south-east of Gratz.

LIE'BENAU, a town of Silesia, in the principality of Glogau: five miles north-west of Schwibusin, and forty-eight west-north-west of Glogau. Lat. 52. 25. N. lon. 15. 56. E.

LIE'BENAU, a town of Silesia, in the principality of Neisse; three miles north of Patschkau.

LIE'BENAU, a town of the principality of Hesse, on the Dimel: twenty miles north-west of Cassel, and twenty-seven west of Göttingen. Lat. 51. 30. N. lon. 9. 22. E.

LIE'BENGRUND, a town of Saxony, in the circle of Neustadt: fourteen miles south of Neustadt. Lat. 50. 30. N. lon. 11. 41. E.

LIE'BENOW, a town of the New Mark of Brandenburg: four miles east-south-east of Reitz.

LIE'BENTHAL, a town of the duchy of Stiria: twelve miles south-east of Gratz.

LIE'BENTHAL, a town of Bohemia, in the circle of Chrudim: thirteen miles east of Hohenmaut.

LIE'BENTHAL, or LUBENTHAL, a town of Silesia, in the principality of Jauer: thirty miles west of Jauer, and forty south of Sagan. Lat. 50. 57. N. lon. 15. 37. E.

LIE'BENTHAL, a town of Saxony, in the margravate of Meissen: seven miles south-west of Stolpen.

LIE'BENWALD, a town of Brandenburg, in the Middle Mark, on the Havel: twenty-four miles north of Berlin. Lat. 52. 53. N. lon. 13. 30. E.

LIEBENWAR'DA, a town of Saxony: twenty-two miles north of Meissen, and thirty-three north-north-west of Dresden. Lat. 51. 28. N. lon. 13. 26. E.

LIE'BENZELL, or ZELL, a town of Wurtemberg, on the Nagold. Near it are two warm-baths: seventeen miles west of Stuttgart, and thirty-six east-north-east of Strasburg. Lat. 48. 51. N. lon. 8. 43. E.

LIEBERWOLK'WITZ, a town of Saxony, in the circle of Leipzig: four miles south-east of Leipzig.

LIEB'ERKUHN (J. Nathaniel), an eminent anatomist, was born at Berlin in 1711. He was probably educated at Leyden, where he took the degree of doctor of physic. He became a member of the college of physicians in his native city, where he pursued the study of anatomy with great assiduity and success. Endowed by nature with a very piercing sight, which is said to have been so acute as to enable him to see Jupiter's satellites with the naked eye, he assisted it with microscopes, in the fabrication of which he greatly excelled. He was extremely dextrous in dissection, and surpassed all his contemporaries in the art of injection. Of that kind of preparation which consists of vessels filled with a melted metallic compound, and afterwards corroded by an acid, he was the inventor. He published two dissertations; 1. De Valvula Coli et Usu Processus Vermicularis, 1739, 4to. 2. De Fabrica et Actione Villorum Intestinorum tenuium, 1745, 4to. both which are esteemed as curious and accurate pieces. He also communicated some papers to the Berlin Academy of Sciences, printed in their Memoirs. He was a member of the Royal Societies of London and Berlin, and that of the Naturæ Curiosorum. Lieberkuhn died in 1756, leaving a very valuable anatomical cabinet, of which the catalogue was printed. *Halleri Bibl. Anatom.*

LIE'BEROSE, a town of Lusatia: seventeen miles west of Guben, and sixty-four north of Dresden. Lat. 52. N. lon. 14 16. E.

LIE'BETEN, a town of Hungary: sixty-five miles north-north-east of Gran, and twelve east of Vienna.

LIE'BLACH, a river of Swabia, which runs into the lake of Constance a little to the north of Bregentz.

LIE'BMUHL, a town of Prussia, in the province of Oberland, with a castle built in the year 1337: sixty-six miles south-south-west of Königsberg, and thirty-five south-south-east of Elbing. Lat. 53. 42. N. lon. 19. 45. E.

LIE'BO SE'E, a lake of Brandenburg, in the Ucker Mark, situated to the south of Dolgen See.

LIE'BSCHUTZ, a town of Saxony, in the circle of Neustadt: two miles south of Ziegenbruck.

LIE'BSTADT, a town of Saxony, in the margravate of Meissen: eight miles south-south-west of Pirna, and fourteen south-south-west of Dresden.

LIE'BSTADT, a town of Prussia, in the province of Oberland, with a castle, built in the year 1329, which suffered much in the Swedish wars: forty-eight miles south-south-west of Königsberg, and thirty-two south-east of Elbing. Lat. 53. 57. N. lon. 20. 2. E.

LIE'CHEN, or LYCHEN, a town of Brandenburg, in the Ucker Mark: eighteen miles weſt-ſouth-weſt of Prenzlow, and forty north of Berlin. Lat. 53. 12. N. lon. 13. 24. E.

LIE'CHSTAL, a town of Swiſſerland, in the canton of Bâle, and capital of a bailiwic of the ſame name: ſeven miles ſouth-eaſt of Bâle.

LIE'DBERG, or LIB'ERICH, a citadel of France, in the department of the Roer: five miles weſt-ſouth-weſt of Nuys.

LIE'DERBACH, a river of Germany, which runs into the Fulda four miles north-weſt of Fulda.

LIEF, *adj.* [leop, Sax. *lief*, Dut.] Dear; beloved. *Obſolete:*

My *liefeſt* lord ſhe thus beguiled had,
For he was fleſh; all fleſh doth frailty breed. *Fairy Queen.*

LIEF, *adv.* Willingly: now uſed only in familiar ſpeech.—If I could ſpeak ſo wiſely under an arreſt, I would ſend for certain of my creditors; and yet, to ſay the truth, I had as *lief* have the foppery of freedom as the morality of impriſonment. *Shakeſpeare.*

LIEF'DE BA'Y, a bay on the north coaſt of Spitzbergen. Lat. 79. 32. N. lon. 12. 30. E.

LIE'FKENSHOECK, a fort of France, on the left bank of the Scheldt: ten miles below Antwerp.

LIEGE, late a biſhopric and electorate of Germany; bounded on the north by Brabant; on the eaſt by Limburg, Juliers, and Luxemburg; on the ſouth by Luxemburg and the French department of the Ardennes; and on the weſt by Brabant, Namur, and Hainaut; about eighty miles in length from north to ſouth; its breadth is very irregular. The ſoil is fertile in corn and paſturage, and yields wine, which reſembles the middling wines of Burgundy and Champaigne; together with very conſiderable foreſts, and mine-works of copper, lead, iron, and coal; alſo many good ſtone-quarries, and among them likewiſe ſome of marble. Alſo celebrated for its mineral waters, namely, thoſe at Spa and Chaude-fontaine. The principal rivers are the Meuſe and Sambre. It is now united to France, and forms the department of the Ourthe. The principal exports conſiſted of beer, arms, nails, ſerge, leather, and coal. This biſhopric contained twenty-ſix towns, divided into Walloon and Flemiſh; it was firſt founded in the town of Tongern, and Servatius was the firſt biſhop that can be aſcertained. This prelate quitted Tongern, and went to Maeſtricht, in which alſo was the ſee of his ſucceſſors in the biſhopric, till St. Hubert betook himſelf in the beginning of the eighth century to Liege, where alſo all his ſucceſſors took up their place of reſidence, though the biſhops were ſtill for a long time after ſtyled biſhops of Tongern; and Heraclius, or Eberhard, was the firſt who aſſumed the title of biſhop of Liege. In the council of the princes of the empire, Liege took rank alternately with Munſter, but ſo that Oſnabruck always ſat between them. The evaluation of the empire for the biſhopric was fifty horſe and 170 foot, or monthly 1280 florins; but, complaining of this high evaluation, it was reduced to 826 florins: to the chamber-court it was rated at 240 rix-dollars 41 kruitzers.

LIEGE, a city of France, and capital of the department of the Ourthe, and a biſhopric. It is a large, populous, and rich, city, ſituated on the Meuſe, in a valley ſurrounded by hills, with agreeable and fertile meadows between, watered by the rivers Looſe, Ourte, and Ambleve, which empty themſelves into the Meuſe as it enters this city. It is called the hell of women, the purgatory of men, and the paradiſe of prieſts. It was firſt encompaſſed with walls by St. Hubert, in the beginning of the eighth century; but ſuffered much in the ninth from the incurſions of the Normans. Henry duke of Brabant took it in the year 1212, and pillaged it ſix days. In the 17th century it ſuffered ſeverely on account of the elections of the biſhops. John of Bavaria governed it a long time, although he was not a prieſt; and, as he treated the citizens ill, they drove him from the palace, and beſieged him in Maeſtricht; but his brother-in-law, John duke of Burgundy, and comte of Flanders, coming to his aſſiſtance, a battle was fought in the year 1409, in which 6000 of the Liegeois were killed, and the reſt compelled to ſubmit. Some of the moſt culpable were tied two together, and thrown into the Meuſe. Not long after, Charles the Bold, duke of Burgundy, taking part with Louis of Burgundy, the biſhop, againſt whom the inhabitants had riſen, beſieged the city, with ſuccours from France, and took it by aſſault the 30th of October, 1468; he then ſet it on fire and ſacked it, without ſparing even the churches.

In the beginning of the 17th century, a diſpute relative to the election of the burgomaſters occaſioned great troubles. Anciently twenty-two judges, who formed a celebrated tribunal at Liege, had a cuſtom of appointing thirty perſons to elect the new burgomaſters. In the year 1603, the biſhop, Erneſt of Bavaria, transferred this right to the citizens, who were divided into ſixteen chambers; but, as that gave riſe to many great diſorders, prince Ferdinand, who ſucceeded Erneſt, ſupported by the emperor, changed the right again in favour of the twenty-two. In 1629, the populace roſe, and elected the new burgomaſters, contrary to the direction of the prince, whence came the diviſion of parties, the Chiroux and the Grignoux; the firſt was of the ancient patrician families, for the moſt part men of letters; the other took the part of the populace, and was the more numerous. In the year 1636, the troubles increaſed; the comte Warfuſé, who had been chief of the finances to the king of Spain at Bruſſels, had been accuſed of mal-practices, and condemned by the grand council of Malines, and was hung in effigy; but, eſcaping to Liege, he formed a black conſpiracy, thinking by that means to obtain the favour of the king. On the 16th of April he invited Sebaſtian de Ruelle, burgomaſter of Liege, to dine with him; during the repaſt, a troop of ſoldiers entered, and, drawing the burgomaſter aſide, they killed him on the ſpot, under pretence that he was engaged in the intereſt of France. This horrid murder did not long remain unpuniſhed; for the populace, hearing of it, flew to the houſe, dragged the comte along the ſtreets, and hung him up by the feet to a poſt; they then cut off his head and arms, which they expoſed at the gates of Liege, burned his body, and threw the aſhes into the Meuſe; they likewiſe put to death his ſervants, and the ſoldiers who had been the agents of this treachery; they then took the echevin Theodore Fleron, whom they ſuſpected as the accomplice of Warfuſé, and, without any trial, hung him in the grand market. The body of Ruelle was interred with great magnificence; and the burgomaſters were afterwards accompanied by a body-guard of thirty men, when they appeared in public. In 1648, the prince biſhop Ferdinand returned to Viſet with ſome troops, with a deſign to come to Liege, and put a ſtop to the diſturbances and ſeditious factions between the Chiroux and the Grignoux; but the citizens refuſed him entrance, and the burgomaſter Hennet ordered the cannon to be placed againſt his troops. The prince on this retired to Huy, to wait for ſuccours from the emperor; who ſent ſome Weſtphalian ſoldiers, under the command of general Sparr, to whom the citizens opened their gates, on the 28th of Auguſt, and the prince returned to Liege on the 16th of October following. Hennet and Roland, a former burgomaſter, who had been principally concerned in the troubles, were beheaded, and their heads expoſed on the gates of the city. In the year 1650, prince Maximilian, who ſucceeded his uncle Ferdinand, built a regular citadel on the mount of Ste. Walburg, which had two communications with the city, one of which is by ſix hundred ſteps. On this occaſion the citizens teſtified their diſcontent, by affixing to it the name of *Aceldama*, or Field of Blood, in alluſion to the death of their burgomaſters. In the war with France againſt the empire, Spain, and Holland, the government of the citadel was entruſted to the baron de Vierſet, who, on the 28th of March, 1675, admitted

mitted a detachment from the French garriſon at Maeſtricht; but they abandoned it, after deſtroying the works, in March following. The inhabitants, no longer kept in awe by the citadel, again rebelled, and elected their burgomaſters as they had done before; but the biſhop receiving ſome troops from France, under the command of the comte de Choiſeul, the citizens opened the gates on the 25th of July, 1684, without coming to extremities. The two burgomaſters were beheaded, but the reſt of the citizens pardoned, and a ſtrong garriſon placed in it under the marquis de la Salle. A ſhort time after, the citadel was repaired, and its fortifications increaſed; but the new works were deſtroyed about eight years after. In 1691, prince Jean-Louis d'Elderen was the firſt to declare war againſt France, being ſupported by the emperor, Spain, England, Holland, &c. Louis XIV. ſent the marquis de Boufflers to Liege, who bombarded it, and did conſiderable damage. At the death of Charles II. king of Spain, the prince Joſeph Clement of Bavaria, in the year 1701, declared for his nephew Philip V. and the comte de Berlo, governor of the citadel, received the French troops. On the 14th of October, 1702, the allies, under the command of the duke of Marlborough, made themſelves maſters of the city, and of the citadel on the 23d. The Dutch kept a garriſon of troops in the citadel till the year 1718, at their own expenſe, in virtue of an article in the peace of Aix la Chapelle, concluded four years before, and then quitted it to the ſoldiers of the biſhop of Liege, after deſtroying all the out-works.

Liege is divided into three parts, the City, the Iſland, and the Outer Meuſe. It has ten grand fauxbourgs, and two ſmaller, ſixteen gates, ſeventeen bridges, and 154 ſtreets. There are two very fine quays, planted with rows of trees. Beſides the cathedral, before the revolution, it had within the city and fauxbourgs ſeven collegiate and thirty pariſh churches, and forty-ſix religious houſes. The cathedral of St. Lambert is a vaſt ſtructure, built by St. Hubert in the year 712, on the very ſpot in which his predeceſſor St. Lambert, biſhop of Maeſtricht, had ſuffered martyrdom. It was firſt conſecrated to St. Coſmo and St. Damien; but, the body of St. Lambert being removed thither, it changed its name to that of St. Lambert. St. Hubert founded twenty prebends; St. Floribert, his ſon and ſucceſſor, founded ten more; after which time their number was augmented to ſixty, and their revenues in proportion. It was neceſſary that theſe canons or prebendaries ſhould be of noble extraction; at one time they counted ſeven ſons of kings, thirty ſons of dukes, and twenty-two ſons of comtes. The treaſury of this church was very conſiderable, both in relics and in other riches, particularly an equeſtrian ſtatue of St. George in gold, preſented by the duke of Burgundy, as a mark of his penitence for having pillaged the city in 1468. The biſhop was elected by the canons; he was abſolute, and one of the moſt conſiderable eccleſiaſtical princes in Germany, having in his dioceſe fifty-two baronies, eighteen cities or walled towns, and four hundred villages, with a revenue of 300,000 ducats a year, and was able to keep an army of eight thouſand ſoldiers, without oppreſſing his ſubjects. The houſes are high, and built of bluiſh marble. The manufactures are arms, nails, leather, ſerge, and beer. In St. William's convent, without the city, is the tomb of the famous Engliſh traveller, ſir John Mandeville, with an inſcription in barbarous French, requeſting thoſe who read it to pray for his ſoul: near it are kept the ſaddle, ſpurs, and knife, that he made uſe of in his travels. After having ſeen moſt of the cities of any note in the world, he made choice of this to ſpend the eve of his life in. A little way from the city, on the other ſide of the Maes, ſtands the epiſcopal palace of Seraing, in which the biſhops generally reſide during the ſummer.

Dumourier, at the head of his French troops, made himſelf maſter of Liege the 22d of November, 1792; the March following, the French were compelled to retire, and driven out of Liege and Brabant; but in the year 1794 the French troops again entered Liege, after a ſhort reſiſtance. According to the lateſt accounts, the population of Liege amounted to 50,000. It is 46½ poſts north-north-eaſt of Paris, and fourteen eaſt of Antwerp. Lat. 50. 40. N. lon. 5. 37. E.

LIEGE, *adj.* [*lige*, Fr. *ligio*, Italian; *ligius*, low Lat.] Bound by ſome feudal tenure; ſubject: whence *liegeman* for ſubject.—Sovereign. [This ſignification ſeems to have accidentally riſen from the former, the lord of *liege men* being by miſtake called *liege lord.*]—So much of it as is founded on the law of nature, may be ſtyled natural religion; that is to ſay, a devotedneſs unto God our *liege* lord, ſo as to act in all things according to his will. *Grew's Coſm.*

My lady *liege*, ſaid he,
What all your ſex deſire is ſovereignty. *Dryden.*

LIEGE, *ſ.* Sovereign; ſuperior lord:

O pardon me, my *liege!* but for my tears
I had foreſtall'd this dear and deep rebuke. *Shakeſpeare.*

The natives, dubious whom
They muſt obey, in conſternation wait
Till rigid conqueſt will pronounce their *liege*. *Philips.*

LIE'GEMAN, *ſ.* A ſubject.—Sith then the anceſtors of thoſe that now live, yielded themſelves then ſubjects and *liegemen*, ſhall it not tye their children to the ſame ſubjection? *Spenſer on Ireland.*

This *liegeman* 'gan to wax more bold;
And, when he felt the folly of his lord
In his own kind, he 'gan himſelf unfold. *Fairy Queen.*

Thus the word *liege* is taken to ſignify both maſter and ſervant: *liege-lord* is he that acknowlegeth no ſuperior; and *liegeman* is he who oweth allegiance to his liege-lord. The king's ſubjects are called *lieges*, *liege-people*, becauſe they owe and are bound to pay allegiance to him. 8 *Hen.* VI. c. 10. 14 *Hen.* VIII. c. 2. But in ancient times, private perſons, as lords of manors, &c. had their lieges.

LIE'GER, *ſ.* See LEGER, p. 448.—A reſident ambaſſador:

His paſſions and his fears
Lie *liegers* for you in his breaſt, and there
Negotiate your affairs. *Denham's Sophy.*

LIE'GNITZ, or LIG'NITZ, a town of Sileſia, and capital of a principality of the ſame name, and one of the beſt towns in Sileſia, ſituated on the Katzbach. The old palace of the princes, though within the town, is ſurrounded with a diſtinct moat and high wall. This palace, ſince the fire in 1711, by which it was nearly deſtroyed, has been repaired. The ſtates of the provinces aſſemble here in a very ſtately ſtone edifice. The Lutherans have two churches; the papiſts are in poſſeſſion of the collegiate church of St. John, which, in 1698, was taken from the Lutherans, and, being given to the Jeſuits, was entirely rebuilt; and the ſuperb burial-chapel of the dukes of Lignitz and Brieg, of the Breſlau line, was added to it. Beſides theſe, they have a college of ſuitable magnificence, with other religious popiſh foundations. Here is alſo a ſpacious academy, founded by the emperor Joſeph, for the inſtruction of young gentlemen, of both religions, in military exerciſes. Liegnitz carries on a conſiderable trade in cloth and madder; and is one of the moſt ancient towns in all Sileſia. In 1241, after the unfortunate battle with the Tartars, the inhabitants themſelves ſet the town on fire, and quitted it; but againſt the caſtle the Tartars vented their rage in vain. In 1338, 1411, 1438, 1495, 1532, 1558, 1609, 1639, 1648, and 1672, it was either wholly deſtroyed by fires, or ſuffered variouſly by them. In 1741, the Pruſſians took it, without oppoſition. In the year 1757, while in the hands of the Auſtrians, its works were augmented; notwithſtanding which, towards the end of the ſame year, it capitulated to the Pruſſians. It is thirty-two miles weſt of Breſlaw, and 105 north-eaſt of Prague. Lat. 51. 11. N. lon. 16. 10. E.

LIEN, the participle of *lie*.—One of the people might lightly have *lien* with thy wife. *Gen.* xxvi. 10.

LIEN, *ſ.* [French.] An obligation, tie, or *claim*, annexed to, or attaching upon, any property; without ſatisfying which, ſuch property cannot be demanded by its owner. Thus the coſts of an attorney are a *lien* upon deeds and papers in his hands; a factor has a *lien* on goods in his hands for balance due from his principal, &c.

LIEN-CHAN', a town of China, of the third rank, in Quang-tong: fifteen miles weſt-ſouth-weſt of Tien.

LIEN-CHAN-POU', a town of Chineſe Tartary: twelve miles north-north-eaſt of Ning-yuen.

LIEN-KIANG', a town of China, of the third rank, in Fo-kien: ſeventeen miles north-eaſt of Fou-tcheou.

LIEN-PING', a city of China, of the ſecond rank, in Quang-tong: 100 miles north-eaſt of Canton. Lat. 24. 18. N. lon. 113. 53. E.

LIEN-TCHE'OU, a city of China, of the firſt rank, in Quang-tong, on the river Lien-kiang, which forms a convenient harbour for Chineſe barks: 1195 miles ſouth-ſouth-weſt of Peking. Lat. 21. 40. N. lon. 108. 39. E.

LIEN-TCHING', a town of China, of the third rank, in Fo-kien: twenty-two miles eaſt-ſouth-eaſt of Ting-tcheou.

LIENTER'IC, *adj.* [from *lientery*.] Pertaining to a lientery.—There are many medicinal preparations of iron, but none equal to the tincture made without acids; eſpecially in obſtructions, and to ſtrengthen the tone of the parts; as in *lienteric* and other like caſes. *Grew's Muſæum.*

LI'ENTERY, *ſ.* [from the Gr. λειος, ſmooth, and εντερον, gut; *lienterie*, Fr.] A particular looſeneſs, or diarrhœa, wherein the food paſſes ſo ſuddenly through the ſtomach and guts, as to be thrown out by ſtool with little or no alteration.

LI'ENTZ, or LINTZ, a town of the county of Tyrol, at the conflux of the Iſola and the Drave: forty-three miles eaſt of Brixen, and ſixty-ſix eaſt of Tyrol. Lat. 46. 45. N. lon. 12. 45. E.

LI'EOU-KI'EOU, the name of certain iſlands of Aſia, ſubject to China; but hitherto little known to geographers, who have been ſatisfied with marking their exiſtence and latitude in their charts. They, however, form a powerful and extenſive empire, the inhabitants of which are civilized, and ought not to be confounded with other ſavage nations diſperſed throughout the iſlands of Aſia. Father Gabil, a Jeſuit, has furniſhed us with ſome intereſting details reſpecting theſe iſlanders, which he extracted from a Chineſe relation, publiſhed in 1721, at the end of a voyage that was undertaken on the following account. The emperor Kang-hi, having reſolved, in 1719, to ſend an ambaſſador to the king of Lieou-kieou, choſe for this purpoſe one of the great doctors of the empire, named *Supao-Koang*. This learned man departed from China in 1719, and returned to Peking in 1720, where, in the year following, he cauſed a relation of his voyage to be publiſhed in two volumes. It is in the firſt of theſe that he gives an accurate and particular deſcription of the iſles of Lieou-Kieou; and what he relates appears to be worthy of the greater credit, becauſe, being on the ſpot, he examined, as he himſelf ſays, according to the orders of the emperor, whatever he found curious or intereſting, reſpecting the number, ſituation, and productions, of theſe iſles; as alſo the hiſtory, religion, manners, and cuſtoms, of the people who inhabit them.

Theſe iſles, ſituated between Corea, Formoſa, and Japan, are in number thirty-ſix. The principal and largeſt is called Lieou-Kieou; the reſt have each a particular denomination. This largeſt iſland extends from north to ſouth about 130 miles, and 36 or 40 from eaſt to weſt; but on the ſouth ſide, the extent from eaſt to weſt is not 30. The ſouth-eaſt part of the iſland, where the court reſides, is called Cheou-li; and it is there that *Kint-ching*, the capital city, is ſituated. The king's palace, which is reckoned to be four leagues in circumference, is built on a neighbouring mountain. It has four gates, which correſpond to the four cardinal points; and that which fronts the weſt forms the grand entry. The view which this palace commands is moſt extenſive and delightful; it reaches as far as the port of Napa-kiang, at the diſtance of three miles, to the city of Kint-ching, and to a great number of other cities, towns, villages, palaces, temples, monaſteries, gardens, and pleaſure-houſes. It ſtands in lat. 26. 2. N. lon. 146. 26. E.

If we believe theſe iſlanders, the origin of their empire is loſt in the remoteſt antiquity. They reckon up twenty-five ſucceſſive dynaſties, the duration of which forms a period of more than 18,000 years. It would be uſeleſs to employ a ſingle moment in pointing out the abſurdity of theſe pretenſions. It is, however, certain, that the exiſtence of the country called Lieou-kieou was not known in China before the year 605 of the Chriſtian era. It was in the courſe of that year, that one of the emperors of the dynaſty of Soui, having heard of theſe iſles, was deſirous of knowing their ſituation. This prince at firſt ſent ſome Chineſe thither; but their expedition proved fruitleſs, as the want of interpreters prevented them from acquiring that knowledge which was the object of their voyage. They only brought ſome of the iſlanders with them to Sigan-fou, the capital of the province of Chen-ſi, which was the uſual reſidence of the emperors of the dynaſty of Soui. It fortunately happened, that an ambaſſador of the king of Japan was then at court. This ambaſſador and his attendants immediately knew the ſtrangers to be natives of Lieou-kieou; but they ſpoke of theſe iſles as of a miſerable and wretched country, the inhabitants of which had never been civilized. The emperor of China afterwards learned, that the principal iſland lay to the eaſt of a city called at preſent Fou-tcheou-fou, which is the capital of the province of Fo-kien; and that, in a paſſage of five days, one might reach the large iſland where the king kept his court. On this information, the emperor Yang-ti ſent ſkilful men, accompanied by interpreters, to ſummon the prince to do homage to the emperor of China, and to pay him tribute. This propoſal was very ill-received. The king of Lieou-kieou ſent back the Chineſe, telling them ſternly, that he acknowledged no prince to be his ſuperior. This anſwer irritated the emperor, who, to obtain revenge, cauſed a fleet to be immediately equipped in Fo-kien, in which he embarked 10,000 men. This fleet ſet ſail, and arrived in ſafety at the port of Napa-kiang. The army, in ſpite of every effort made by the natives, landed on the iſland; and the king, who had put himſelf at the head of his troops to oppoſe the enemy, having fallen in battle, the Chineſe pillaged, ſacked, and burnt, the royal city, made more than 5000 ſlaves, and returned to China.

The emperors of the dynaſty of Tang, thoſe of the ſhort dynaſties that followed, and thoſe of the dynaſty of Song, although they were fully informed of every thing reſpecting the Lieou-kieou iſles, made no attempts to render them tributary. In 1291, Chi-tſou, emperor of the dynaſty of Yven, was deſirous of reviving the pretenſions of his predeceſſors; but ſchemes of conqueſt had become diſagreeable to the Chineſe, ſince the diſaſter that befel their army in an expedition againſt Japan; and it was not till the year 1372, under the reign of Hong-you, founder of the dynaſty of Ming, that theſe iſlands ſubmitted to the Chineſe government. Hong-vou had ſent one of the grandees of his court to Tſay-tou, who was then reigning at Lieou-kieou, to inform him of his acceſſion to the throne. The Chineſe nobleman had received particular inſtructions reſpecting this commiſſion, and he acquitted himſelf of it with all the prudence and addreſs of an able miniſter. In a private audience which he had with Tſay-tou, he exhorted this prince to declare himſelf a tributary of the empire, and laid before him the advantages he would derive from this ſtep. His reaſoning, ſupported by the power of his natural eloquence, made ſo much impreſſion on the mind of Tſay-tou, that he embraced the propoſal made him, and ſent immediately to the emperor to demand the inveſtiture of his ſtates. Hong-vou received his envoys in

a magnificent manner, and loaded them with preſents. He ſolemnly declared Tſay-tou a vaſſal of the empire; and, after having received his firſt tribute, (which conſiſted in valuable horſes, aromatic wood, ſulphur, copper, tin, &c.) he ſent to this prince a golden ſeal, and confirmed the choice he had made of one of his ſons for ſucceſſor. The emperor afterwards ſent thirty-ſix families, almoſt all from the province of Fo-kien, to Lieou-kieou. Tſay-tou received them, aſſigned them lands near the port of Napa-kiang, and appointed certain revenues for their uſe, at the ſame time that Hong-vou made them conſiderable remittances. Theſe families firſt introduced into Lieou-kieou the learned language of the Chineſe, the uſe of their characters, and the ceremonies practiſed in China in honour of Confucius. On the other hand, the ſons of ſeveral of the grandees of the court of Tſay-tou were ſent to Nan-king, to ſtudy Chineſe in the imperial college, where they were treated with diſtinction, and maintained at the emperor's expenſe.

The iſles of Lieou-kieou had neither iron nor porcelain. Hong-vou ſupplied this want; he cauſed a great number of utenſils of iron and inſtruments to be made, which he ſent thither, together with a quantity of porcelain veſſels. Commerce, navigation, and the arts, ſoon began to flouriſh. Theſe iſlanders learned to caſt bells for their temples, to manufacture paper and the fineſt ſtuffs, and to make porcelain, with which they had been ſupplied before from Japan.

The celebrated revolution which placed the Tartars on the imperial throne of China, produced no change in the conduct of the kings of Lieou-kieou. Chang-tché, who was then reigning, ſent ambaſſadors to acknowledge Chuntchi, and received a ſeal from him, on which were engraven ſome Tartar characters. It was then ſettled, that the king of Lieou-kieou ſhould pay his tribute only every two years, and that the number of perſons in the train of his envoys ſhould not exceed 150.

The emperor Kang-hi ſeemed to pay more attention to theſe iſles than any of his predeceſſors. He cauſed a ſuperb palace to be erected in honour of Confucius, and a college where he maintained maſters to teach the ſciences and the Chineſe characters. He alſo inſtituted examinations for the different degrees of the literati. He ordained, that the king of Lieou-kieou ſhould never ſend in tribute roſe-wood, cloves, or any other production which was not really of the growth of the country; but that he ſhould ſend a fixed quantity of ſulphur, copper, tin, ſhells, and mother of pearl, which is remarkably pretty in theſe iſlands. He permitted, that, beſides the uſual tribute, he might preſent him horſe-furniture, piſtol-caſes, and other things of the ſame kind, which theſe iſlanders are ſaid to manufacture with great taſte and neatneſs.

The worſhip of Fo is the eſtabliſhed religion. There is in the royal city a magnificent temple, erected in honour of another idol borrowed from the Chineſe named *Tien-fey*, which ſignifies Celeſtial Queen or Lady. Theſe iſlanders reſpect the dead as much as the Chineſe, and are no leſs ceremonious in wearing mourning; but their funerals are neither ſo pompous, nor attended with ſo much expenſe. Their coffins, which are of an hexagonal or octagonal figure, are three or four feet high. They burn the fleſh of their dead, and preſerve only the bones.

Beſides the vaſt domains which the king poſſeſſes, he receives the produce of all the ſulphur, copper, and tin-mines, and of the ſalt-pits, together with what ariſes from taxes. From theſe revenues he pays the ſalaries of the mandarins and officers of his court. Theſe ſalaries are eſtimated at a certain number of ſacks of rice; but under this name is comprehended whatever the king gives in grain, rice, ſilk, cloth, &c. The whole is valued according to the price of the ſacks of rice. There are here, as in China, nine orders of mandarins, who are diſtinguiſhed by the colour of their caps, or by their girdles and cuſhions. The greater part of the titles of theſe mandarins are hereditary in their families; but there are ſome which are only beſtowed upon merit. In the royal city there are tribunals eſtabliſhed for managing the revenue and affairs of the principal iſland, and of all the others which are dependent on it. The latter have agents, who reſide at court. There are alſo particular tribunals for civil and criminal matters; for whatever concerns the families of the grandees and princes; for the affairs of religion: for inſpecting the public granaries, king's revenues, duties; for commerce, manufactures, civil ceremonies, and for navigation, public edifices, literature, and war. The veſſels that are built in this country are greatly valued by the people of China and Japan. In theſe the natives go not only from one iſland to another, but alſo to China, Tong-king, Cochin-China, Corea, Nangaza-ki, Satſuma, the neighbouring iſles, and to Formoſa, where they diſpoſe of their different commodities. Beſides thoſe articles of commerce which their manufactures of ſilk, cotton, paper, arms, copper utenſils, &c. furniſh them, they alſo export mother-of-pearl, tortoiſe and other ſhells, coral and whetſtones, which are in great requeſt both in China and Japan.

Different families are diſtinguiſhed in Lieou-kieou by ſurnames, as in China; but a man and a woman of the ſame ſurname cannot be united in marriage. The king is not permitted to marry but in the three grand families, which always enjoy the higheſt offices. A plurality of wives is allowed. Young men and young women enjoy the liberty of ſeeing one another, and of converſing together; and, their union is always in conſequence of their own choice. The women are very reſerved; they never uſe paint, and wear no pendants in their ears; they collect their hair on the top of their heads in the form of a curl, and fix it in that manner by means of long pins made of gold or ſilver. The natives of Lieou-kieou are, in general, mild, affable, and temperate; they are active and laborious, enemies to ſlavery, and deteſt falſehood and diſhoneſty. Excepting the grandees, bonzes, and Chineſe eſtabliſhed in Lieou-kieou, few of the inhabitants can either write or read. The people are fond of games and diverſions. They celebrate with great pomp and ſplendour, thoſe feſtivals that are inſtituted in honour of their idols, and thoſe which are appointed for the termination and commencement of the year. Suicide is unknown among theſe iſlanders; and they are free from thoſe crimes that are common in the iſles ſituated to the north-eaſt of them, which, being nearer to Japan, have adopted the vices of its inhabitants, as well as their manners and cuſtoms.

LI'EOU-TCHE'OU, a town of Corea: thirty-ſeven miles ſouth-eaſt of King-ki-tao.

LI'EOU-TCHE'OU, a city of China, of the firſt rank, in Quang-ſi, on the river Leng: 1037 miles ſouth-weſt of Pekin. Lat. 24. 12. N. lon. 108. 47. E.

LI'EOU-TCHING', a town of China, of the third rank, in Quang-ſi: fifteen miles north-weſt of Lieou-tcheou.

LI'EOU-YANG', a town of China, of the third rank, in Hou-quang: thirty-five miles eaſt of Tchang-cha.

LIE'PE, a town of Pruſſia, in the palatinate of Culm: fourteen miles eaſt-ſouth-eaſt of Culm.

LIEP'PE, a town of Pruſſia, in Oberland: eight miles from Oſterrod.

LI'ER, *ſ.* [from *to lie.*] One that reſts or lies down, or remains concealed.—There were *liers* in ambuſh againſt him behind the city. *Joſ.* viii. 14.

LIE'RE, a town of France, in the department of the Two Nethes, on the Nethe. Here the French attacked a poſt of the duke of York, on the 28th of November, 1795, but were repulſed with loſs: ten miles ſouth-eaſt of Antwerp, and eighteen north of Louvain.

LIERGA'NES, a town of Spain, in the province of Biſcay: ten miles ſouth-ſouth-eaſt of Santander.

LIEREG'NO, a town of Germany, in the dioceſe of Trent: ſeven miles eaſt of Trent.

LIER'NA, a town of the republic of Lucca: ſeven miles north-north-weſt of Lucca.

LIERNA'IS, a town of France, in the department of the Côte-d'Or, and chief place of a canton, in the diſtrict of Beaune: ten miles north-weſt of Arnay-le-Duc. The place contains 705, and the canton 8602, inhabitants, in 15 communes.

LIER'NE, a town of France, in the department of the Two Nethes, and chief place of a canton, in the diſtrict of Malines, ſeated on the Nethe; ten miles ſouth-eaſt of Antwerp. The place contains 9581, and the canton 13,159, inhabitants, in four communes.

LIE'SER. See LISER.

LIE'SER, a town of France, in the department of the Côte-d'Or: ten miles north-weſt of Arnay-le-Duc.

LIE'SLE, a town of France, in the department of the Doubs: ſix miles ſouth-ſouth-weſt of Quingey.

LIES'SE, or NO'TRE DA'ME DE LIES'SE, a town of France, in the department of the Aiſne: ſeven miles eaſt-north-eaſt of Laon, and four north-weſt of Siſſonne.

LIES'SER, a town of France, in the department of the Doubs: three miles ſouth of Ornans, and ſeven north-north-weſt of Salins.

LIES'SES, a town of France, in the department of Jemappe, on the Heſpres: five miles eaſt of Aveſnes.

LI'ESHORN, a town of Germany, in the biſhopric of Munſter: ſix miles eaſt-ſouth-eaſt of Stromberg.

LIET'TRE, a town of France, in the department of the Straits of Calais: nine miles ſouth of Aire.

LI'ETZEN, a town of the Middle Mark of Brandenburg: fifteen miles ſouth-weſt of Cuſtrin, and thirty-eight eaſt of Berlin. Lat. 52. 28. N. lon. 14. 30. E.

LIEU, a river or canal of Flanders, between Ghent and Damme.

LIEU, *ſ.* [French.] Place; room: it is only uſed with *in*: *in lieu*, inſtead.—God, of his great liberality, had determined, *in lieu* of man's endeavours, to beſtow the ſame by the rule of that juſtice which beſt beſeemeth him. *Hooker.*—*In lieu* of ſuch an increaſe of dominion, it is our buſineſs to extend our trade. *Addiſon's Freeholder.*

LIEU CONU'S, in law proceedings, ſignifies a caſtle, manor, or other notorious place, *well known* and generally taken notice of by thoſe that dwell about it. 2 *Lil. Abr.* 641.

In weſtern clime there is a town
To thoſe that dwell therein *well known*:
Therefore there needs no more be ſaid here;
We unto them refer our reader. *Hudibras.*

LIEVE, *adv.* [See LIEF.] Willingly.—Speak the ſpeech, I pray you, as I pronounced it to you, trippingly on the tongue: but if you mouth it, as many of our players do, I had as *lieve* the town-crier had ſpoke my lines. *Shakeſpeare.*—Action is death to ſome ſort of people, and they would as *lieve* hang as work. *L'Eſtrange.*

LI'EVENS, LIV'ENS, or LY'VYNS (John), a celebrated painter, was born at Leyden in 1617. He diſcovered an early inclination for the arts, and was the diſciple firſt of Joris van Schooten, and afterwards of Peter Laſtman. He excelled principally in painting portraits; but he alſo executed ſeveral hiſtorical ſubjects with great ſucceſs. He came over to England, where he reſided three years, and painted the portraits of Charles I. the queen, the prince of Wales, and ſeveral of the nobility; after which he returned to Antwerp, where he met with full employment for his pencil. We have ſeveral etchings by this maſter, which are performed in a ſlight but maſterly manner. The chiaro-ſcuro is very ſkilfully managed in them, ſo as to produce a moſt powerful effect. His ſtyle of etching bears ſome reſemblance to that of Rembrandt; but it is coarſer in general, and leſs finiſhed.

LIEU'RE, a town of France, in the department of the Straits of Calais: eleven miles ſouth of Calais.

LIEU'REY, a town of France, in the department of the Eure: ſeven miles ſouth of Pont Audemer.

LIEU'TAUD, or LIE'TAUD (Joſeph), an eminent phyſician and anatomiſt, was born in 1703 at Aix in Provence. He was profeſſor of anatomy in his native city; and had made himſelf known by ſeveral publications, when, in 1749, he was called to Verſailles, to occupy the poſt of phyſician to the royal infirmary. He was admitted into the Academy of Sciences in 1752; and in 1755 was nominated phyſician to the royal family. In 1775 he obtained the place of firſt phyſician to the king, Louis XVI. He died at Verſailles in 1780. Lieutaud was a man of induſtry and obſervation, much practiſed in diſſections, as well as in the treatment of diſeaſes. He began in 1735 to communicate papers to the Academy of Sciences, of which ſeveral relative to anatomy and phyſiology are printed in their memoirs. He alſo publiſhed, 1. Eſſais Anatomiques, firſt printed in 1742, 8vo. and reprinted in 1766 and 1772 with enlargements; a valuable work, founded on his own obſervation. 2. Elementa Phyſiologiæ, 1749, 8vo. drawn up for the uſe of his claſs at Aix. 3. Précis de la Medecine Pratique, 1759, ſeveral times reprinted, and tranſlated by himſelf into Latin with the title of *Synopſis univerſæ Praxeos Medicæ*, 2 vols. 4to. 1765. The ſecond volume of this edition appeared ſeparately in French, under the title of *Précis de la Matiere Medicale*, 1766. Theſe volumes afford a complete view of French practice as it then exiſted. 4. Hiſtoria Anatomico-medica, 2 vols. 4to. 1767; the reſult of his laborious morbid diſſections, and contains much important pathological matter. Lieutaud alſo made collections for a natural hiſtory of Provence, in the animal and mineral departments. *Halleri Bibl. Anatom.*

LIEU'TAUD (James), a French mathematician, who flouriſhed in the former part of the eighteenth century, was the ſon of a gunſmith at Arles, and died at Paris in 1733. He particularly attached himſelf to the ſtudy of aſtronomy; and, from the proficiency which he made in it, recommended himſelf to a ſeat in the French Academy of Sciences. He publiſhed twenty-ſeven volumes of the Connoiſſance des Temps, from the year 1703 to 1739; but, for ſome reaſon not communicated to the public, had no eulogium beſtowed upon him by Fontenelle. *Nouv. Dict. Hiſt.*

LIEUTEN'ANCY, *ſ.* [from *lieutenant.*] The office of a lieutenant.—If ſuch tricks as theſe ſtrip you out of your *lieutenancy*, it had been better you had not kiſſed your three fingers ſo oft. *Shakeſpeare.*—The body of lieutenants.—The liſt of undiſputed maſters, is hardly ſo long as the liſt of the *lieutenancy* of our metropolis. *Felton on the Claſſics.*

LIEUTEN'ANT, *ſ.* [Fr. from *lieu*, a place, and *tenant*, holding.] A deputy; one who acts by vicarious authority.—Killing, as it is conſidered in itſelf without all undue circumſtances, was never prohibited to the lawful magiſtrate, who is the vicegerent or *lieutenant* of God, from whom he derives his power of life and death. *Bramhall againſt Hobbes.*

Sent by our new *lieutenant*, who in Rome,
And ſince from me, has heard of your renown,
I come to offer peace. *Philips's Briton.*

In war, one who holds the next rank to a ſuperior of any denomination; as, a general has his *lieutenant*-generals, a colonel his *lieutenant*-colonel, and a captain ſimply his *lieutenant*.—It were meet that ſuch captains only were employed as have formerly ſerved in that country, and been at leaſt *lieutenants* there. *Spenſer on Ireland.*—According to military cuſtom, the place was good, and the *lieutenant* of the colonel's company might well pretend to the next vacant captainſhip. *Wotton.*—The earl of Eſſex was made *lieutenant*-general of the army; the moſt popular man of the kingdom, and the darling of the ſwordmen. *Clarendon.*—His *lieutenant* engaging againſt his poſitive orders, being beaten by Lyſander, Alcibiades was again baniſhed. *Swift.*

Canſt thou ſo many gallant ſoldiers ſee,
And captains and *lieutenants* flight for me? *Gay.*

Of licutenants, ſome are civil; as lords lieutenants of kingdoms; who are the king's viceroys, and govern in his

his ſtead; ſuch as the lord-lieutenant of Ireland, and lords lieutenants of counties. See LORD-LIEUTENANTS. But the term is moſt frequent with military men, among whom there is a variety of lieutenants.

LIEUTENANT is the ſecond commiſſioned officer in every company of both foot and horſe, and next to the captain, who takes the command upon the death or abſence of the captain. Fuſileer corps, grenadiers, and light infantry, have ſecond lieutenants and no enſigns.

LIEUTENANT *of a Ship of War*, is the officer next in rank and power to the captain, in whoſe abſence he is charged with the command of the ſhip, and alſo the execution of any orders which he may have received from the commanders relating to the king's ſervice. The lieutenant, who commands the watch at ſea, keeps a liſt of all the officers and men belonging to it, in order to muſter it, and report to the captain the names of thoſe who are abſent from their duty. During the night-watch he occaſionally viſits the lower deck, or ſends thither a proper officer to ſee that order is obſerved. He is always to be upon deck in his watch, to give orders for trimming the ſails and ſuperintending the navigation, and for preſerving order; but he is never to change the ſhip's courſe without the captain's direction, unleſs it be to avoid an immediate danger. In time of battle he is to ſee that all the men are preſent at their quarters, to order and exhort them to perform their duty, and to inform the captain of any miſbehaviour. The youngeſt lieutenant of the ſhip, who is alſo called lieutenant at arms, is, beſides his common duty, to train the ſeamen to the uſe of ſmall arms, and in time of battle to attend and direct them for this purpoſe.

LIEUTENANT OF ARTILLERY, is an officer of the artillery in each company, of which there are one firſt and three ſecond lieutenants. The firſt lieutenant has the ſame detail of duty with the captain, becauſe, in his abſence, he commands the company. The ſecond lieutenant is the ſame as the enſign in an infantry regiment, being the youngeſt commiſſioned officer in the company, and it is his duty to aſſiſt the firſt lieutenant.

LIEUTENANT-COLONEL, the commander-in-chief of a regiment in the abſence of the colonel.

The dragoons have alſo a lieutenant-colonel; but the horſe have not, properly, any; the firſt captain of the regiment ſupplies the office.

LIEUTENANT-GENERAL, the firſt military dignity after that of a general. One part of their function is to aſſiſt the general with counſel; and, therefore, this officer ought, if poſſible, to poſſeſs the ſame qualities with the general himſelf; and this is the more neceſſary, as he often commands armies in chief, or ſucceeds to the command on the death of the general. Lieutenant-generals have been of late multiplied in Europe, in proportion as the armies have become more numerous. They ſerve either in the field, or in ſieges, according to the dates of their commiſſions. In battle the eldeſt commands the right wing of the army, the ſecond the left wing, the third the centre, the fourth the right wing of the ſecond line, the fifth the left wing, the ſixth the centre, and ſo on. In ſieges the lieutenant-generals always command the right of the principal attack, and order what they judge proper for the advancement of the ſiege, during the twenty-four hours they are in the trenches, except the attacks, which they are not to make without an order from the general-in-chief. Lieutenant-generals are entitled to two aids-de-camp.

In France they have alſo lieutenant-generals of their naval forces, who command immediately under the admirals. In Holland they have a lieutenant-admiral, which is the ſame with what we call a vice-admiral.

LIEUTENANT-GENERAL OF ARTILLERY, is ſuppoſed to be an able mathematician and engineer, to know all the powers of artillery, to underſtand the attack and defence of fortified places, in all their different branches, and how to diſpoſe of the artillery in the day of battle to the greateſt advantage; to conduct its march and retreat; and alſo to be well acquainted with the numerous apparatus belonging to the train, laboratory, &c.

LIEUTENANT-GENERAL OF THE ORDNANCE, he who has the charge of the artillery, batteries, &c. under the maſter-general, or in his abſence. This officer was firſt eſtabliſhed in 1597.

LIEUTEN'ANTRY, *ſ.* [from *lieutenant.*] A word which ſeems as if uſed by Shakeſpeare to denote either ſome ſubordinate or ſome over-cautious military ſkill:

He alone
Dealt on *lieutenantry*, and no practice had
In the brave ſquares of war. *Ant. and Cleopatra.*

LIEUTEN'ANTSHIP, *ſ.* The rank or office of lieutenant.

LIEUVILLE'R, a town of France, in the department of the Oiſe: ſeven miles north-north-eaſt of Clermont.

LI'FAM-PA'O, a town of Corea: 670 miles eaſt-north-eaſt of Pekin. Lat. 42. 28. N. lon. 130. 32. E.

LIFE, *ſ.* plural *lives.* [lipian, to live, Sax.] Union and co-operation of ſoul with body; vitality; animation, oppoſed to an *inanimate ſtate.*—Let the waters bring forth abundantly the moving creature that hath *life.* *Gen.* i. 20.

She ſhows a body rather than a *life*,
A ſtatue than a breather. *Shakeſp. Ant. and Cleopatra.*

Preſent ſtate; as diſtinct from other parts of human exiſtence:

When I conſider *life*, 'tis all a cheat;
Yet, fool'd by hope, men favour the deceit;
Live on, and think to-morrow will repay;
To-morrow's falſer than the former day;
Lies more; and, when it ſays we ſhall be bleſt
With ſome new joy, takes off what we poſſeſt.
Strange coz'nage! none would live paſt years again,
Yet all hope pleaſure in what yet remain;
And from the dregs of *life* think to receive
What the firſt ſprightly running could not give. *Dryden.*

Enjoyment, or poſſeſſion of exiſtence, as oppoſed to *death.*—He entreated me not to take his *life*, but exact a ſum of money. *Broome on the Odyſſey.*

Nor love thy *life*, nor hate; but what thou liv'ſt
Live well, how long or ſhort permit to Heav'n. *Milton.*

Blood, the ſuppoſed vehicle of life.—The blood is the life, and thou mayeſt not eat the *life* with the fleſh. *Deut.* xii. 23.

His guſhing entrails ſmoak'd upon the ground,
And the warm *life* came iſſuing through the wound. *Pope.*

Conduct; manner of living with reſpect to virtue or vice.—I'll teach my family to lead good *lives.* *Mrs. Barker.*

His faith perhaps in ſome nice tenets might
Be wrong; his *life* I'm ſure was in the right. *Cowley.*

Condition; manner of living with reſpect to happineſs and miſery:

Such was the *life* the frugal Sabines led;
So Remus and his brother-god were bred. *Dryden.*

Continuance of our preſent ſtate: as, Half his *life* was ſpent in ſtudy.—Some have not any clear ideas all their *lives.* *Locke.*

Untam'd and fierce the tyger ſtill remains,
And tires his *life* with biting on his chains. *Prior.*

The living form: oppoſed to *copies.*—He that would be a maſter, muſt draw by the *life* as well as copy from originals, and join theory and experience together. *Collier.*—Exact reſemblance: with *to* before it.—I believe no character of any perſon was ever better drawn *to* the *life* than this. *Denham.*

He ſaw in order painted on the wall
The wars that fame around the world had blown,
All *to* the *life*, and every leader known. *Dryden.*

General

General ſtate of man:

Studious they appear
Of arts that poliſh *life*; inventors rare!
Unmindful of their Maker. *Milton.*

All that cheers or ſoftens *life*,
The tender ſiſter, daughter, friend, and wife. *Pope.*

Common occurrences; human affairs; the courſe of things.—This I know, not only by reading of books in my ſtudy, but alſo by experience of *life* abroad in the world. *Aſcham.*

Not to know at large of things remote
From uſe, obſcure and ſubtile; but to know
That which before us lies in daily *life*,
Is the prime wiſdom. *Milton's Paradiſe Loſt.*

Living perſon:

Why ſhould I play the Roman fool, and die
On my own ſword? whilſt I ſee *lives*, the gaſhes
Do better upon them. *Shakeſpeare's Macbeth.*

Narrative of a life paſt:

Plutarch, that writes his *life*,
Tells us, that Cato dearly lov'd his wife. *Pope.*

Spirit; briſkneſs; vivacity; reſolution.—The Helots bent thitherward with a new *life* of reſolution, as if their captain had been a root out of which their courage had ſprung. *Sidney.*—They have no notion of *life* and fire in fancy and in words; and any thing that is juſt in grammar and in meaſure, is as good oratory and poetry to them as the beſt. *Felton.*

Not with half the fire and *life*
With which he kiſs'd Amphytrion's wife. *Prior.*

Animal; animated exiſtence; animal being.—Full nature ſwarms with *life*. *Thomſon.*—Syſtem of animal nature.—Lives through all *life*. *Pope.*—*Life* is alſo uſed of vegetables, and whatever grows and decays.

LIFE is peculiarly uſed to denote the animated ſtate of living creatures, or the ſpace of time that paſſes between their birth and their death.

A new mode of exiſtence commences as ſoon as the child has quitted the uterus: various functions are added to the organic life, and the animal, which has not yet begun, comes into exerciſe, eſtabliſhing relations, hitherto unknown, between the individual and ſurrounding objects. While the organs of the internal life act at once in a perfect manner, thoſe of the external require a kind of education, and arrive only by degrees at that perfection which they exhibit in the ſequel. The ſenſations are at firſt confuſed, and offer only general images: habit gradually deadens theſe firſt impreſſions; and then the particular ſenſations come to be diſtinguiſhed, after long and repeated exerciſe. Thus a man introduced for the firſt time to the magic ſpectacle of an opera, perceives only a whole which pleaſes him; and he gradually ſeparates the ſources of pleaſure ariſing from the dancing, the muſic, the decorations, &c. The education of the brain in this reſpect reſembles that of the ſenſes; all the mental faculties dependent on its action acquire very gradually the degree of preciſion to which they are deſtined. Perception, memory, and imagination, which are always preceded and determined by ſenſation, are enlarged in proportion to their employment. The judgment, of which they are the triple baſis, at firſt aſſociates irregularly notions which are themſelves irregular: its exertions are ſoon diſtinguiſhed by greater clearneſs; and they become at laſt rigorous and preciſe. The voice and locomotion preſent the ſame phenomena; the cries of young animals conſiſt, at firſt, of one unformed ſound, without any diſtinct character. Age gradually modifies them; and, after repeated exerciſe, they acquire the characters peculiar to each ſpecies. It is unneceſſary to mention ſpeech, as that is ſo evidently the reſult of education.

The muſcles of the newly-born animal are in continual action; but progreſſion, or even ſtanding, cannot be effected. Habit muſt teach the art of connecting together particular contractions for the production of certain effects. Until this period has arrived, there is a vacillation in all the motions, particularly the general ones, which almoſt deprives the child of the power of locomotion.

It is obvious, then, that we are obliged to learn the art of extending our exiſtence beyond ourſelves; that the exterior life acquires freſh developement every day, and demands a kind of apprenticeſhip, which is not obſerved in the organic life. Society exerciſes a remarkable influence on this kind of education which the external organs undergo; it enlarges the ſphere of action in ſome, contracts it in others, and modifies it in all. The occupation in which an individual is habitually employed, almoſt always exerciſes one particular organ more than the others. The ear of the muſician, the palate of the cook, the brain of the philoſopher, the muſcles of the dancer, the larynx of the ſinger, &c. have, beſides the general education of the external life, a particular education, which frequent exerciſe carries to a high degree of perfection. Hence, the muſician and painter become able to diſtinguiſh in a harmony, or a picture, what eſcapes vulgar obſervation. In ſome inſtances, this perfection of action in an exerciſed organ is accompanied by an exceſs of nutrition, as in the occupations where particular members are exerted greatly and habitually. It is no leſs true, that, when one organ is conſtantly occupied, the others are inactive, and appear to loſe in capability what the other gains. The philoſopher who ſpends his life in his ſtudy, and devotes himſelf to abſtract meditations, condemns his locomotive organs to inactivity, and hence loſes the facility of exerting them: the dancer is in the oppoſite ſtate. The obſervation of man in ſociety will lead us every moment to ſimilar remarks: perfection of action in the locomotive organs ſcarcely ever coincides with that of the brain or ſenſes; and *vice verſâ*. This obſervation naturally leads to a fundamental principle of ſocial education; viz. that we ſhould never direct the attention to ſeveral ſtudies at once, if we wiſh to ſucceed in each; that it is vain for any individual to cultivate various departments of human knowledge and exertion with an expectation of ſhining in each; and that in general the ſecret of excelling in any one, is, to be inferior in all the reſt.

We have ſaid that the organs of the internal life act at once in a perfect manner. When the child quits the womb of the mother, its organic life undergoes a remarkable developement; ſeveral functions, which did not exiſt before, are now brought into exerciſe; and thoſe which had begun become more enlarged. But the *organs*, in either caſe, require no education; they exhibit at once a degree of perfection, which thoſe of the animal life arrive at only after frequent exerciſe. Digeſtion, reſpiration, a great part of the exhalations, and abſorptions, begin at birth; after the firſt acts in the reſpective organs, they proceed with as great facility as they will ever after poſſeſs. The glands, which had been hitherto inactive, or at leaſt had produced a very ſmall quantity of fluid, are excited by various applications to their excretory ducts. The paſſage of food over the openings of the ſalivary ducts, of the chyme over the pancreatic and biliary tubes, &c. ſtimulates the reſpective glands. The excretions now alſo begin: all theſe phenomena are at once executed with preciſion, and no education is required in the organs which exhibit them.

As all the organs of the internal life act perfectly at once, none can acquire in the ſequel a ſuperiority over the others, as in the animal life. Yet it is common, even here, for one ſyſtem to predominate over the reſt; ſometimes the blood-veſſels, ſometimes the pulmonary ſyſtem, ſometimes the gaſtric organs, and particularly the liver, are exerted beyond their due proportion, and give a peculiar character to the temperament. But the foundation of theſe differences ſeems to be laid in original dif-

ference of ſtructure; and the ſame is the caſe where one ſyſtem is remarkably weak.

"Such, then, (ſays Bichat,) is the leading difference of the two lives, in reſpect to the degree of perfection of the various ſyſtems of functions of which each conſiſts: in the animal, predominance or inferiority of one ſyſtem ariſes from the greater activity or indolence of that ſyſtem; in the organic, the original conformation is the cauſe. Hence, the phyſical temperament and the moral character cannot be changed by education, which has ſo vaſt an effect in modifying the animal life. The character, if I may uſe the expreſſion, is the phyſiognomy of the paſſions; the temperament is that of the internal functions; as both are conſtantly the ſame, and not influenced by habit and exerciſe, they cannot be affected by education. That may, indeed, beſtow ſuch perfection on the judgment and reflection, as to make them more powerful than the paſſions; it may fortify the animal life, and make it ſuperior to the impulſes of the organic. But to attempt altering the character, ſoftening or exalting the paſſions, of which it is the habitual expreſſion, or enlarging or contracting their ſphere, would be an enterpriſe analogous to that of permanently raiſing or diminiſhing the extraordinary force of the heart, or accelerating or retarding the motions of the arteries in the ſtate of health. We ſhould inform any perſon who entertained the latter project, that circulation and reſpiration are not under the influence of the will, and cannot, therefore, be modified by the individual, without the occurrence of diſeaſe. The ſame obſervation will apply to thoſe who think they can change the character, and conſequently the paſſions; ſince the latter are the produce of the actions of all the internal organs, or at leaſt, are eſpecially ſeated in them." *Bichat, Recherches ſur la Vie et la Mort.*

We cannot ſpeak of life but by contraſting it, alas! with death. Let us, for inſtance, contemplate a beautiful female in the prime of youth and health. That elegant voluptuous form, that graceful flexibility of motion, that gentle warmth, thoſe cheeks crimſoned with the roſes of delight, thoſe brilliant eyes, darting rays of love, or ſparkling with the fire of genius, that countenance, enlivened by ſallies of wit, or animated by the glow of paſſion, ſeem all united to form a moſt faſcinating being. A moment is ſufficient to deſtroy this illuſion. Motion and ſenſe often ceaſe without any apparent cauſe. The body loſes its heat; the muſcles become flat, and the angular prominences of the bones appear; the luſtre of the eye is gone; the cheeks and lips are livid. Theſe, however, are but preludes of changes ſtill more horrible. The fleſh becomes ſucceſſively blue, green, and black; it attracts humidity; and, while one portion evaporates in infectious emanations, another diſſolves into a putrid ſanies, which is alſo ſpeedily diſſipated. In a word, after a few ſhort days there remains only a ſmall number of earthy and ſaline principles. The other elements are diſperſed in air, and in water, to enter again into new combinations.

Let us liſten for a moment to the eloquent Boſſuet. "Human life is like a road of which the termination is a frightful precipice. We are warned of it at our firſt ſtep; but the law is paſſed, and we muſt continue to advance. I would willingly retrace my ſteps; but Onward! onward! an invincible weight, an irreſiſtible power, ever hurries us, and we are compelled to advance, without reſting, towards the precipice. A thouſand croſſes, a thouſand pains, trouble us on the road. Yet could I but avoid that frightful precipice! No, no; I am forced to proceed, to run; ſuch is the rapidity of one year rolling after another. We are conſoled, however, becauſe from time to time we meet objects that divert us, limpid ſtreams, and flowers that paſs away. We are anxious to ſtop—Onward! onward! and yet we behold all that we have paſſed falling behind us, in fearful deſolation, inevitable ruin. Still we comfort ourſelves, becauſe we carry off ſome flowers, gathered as we paſs, which we ſee wither between our hands from morning to evening, and ſome fruits which we loſe while we taſte them: enchantment! illuſion all! drawn on for ever, we approach the frightful gulph; already all around begins to be disfigured; gardens are leſs blooming, flowers leſs brilliant, their colours leſs lively, the meadows leſs ſmiling, the waters leſs clear; all is tarniſhed, all is effaced. The ſhade of death preſents itſelf. We begin to feel the approach of the fatal gulph; but it is decreed that we muſt ſtill advance. One ſtep more; already horror agitates the ſenſes, the head ſwims, the eyes are bewildered. We muſt yet advance; moſt eagerly do we deſire to return: but it is not poſſible; all is fallen, all has vaniſhed."

The prolongation of life is made by lord Bacon one of the three branches of medicine; the other two relating to the preſervation of health and the cure of diſeaſes. The theory of prolonging life he numbers among the deſiderata.

The deſire of ſelf-preſervation, and of protracting the ſhort ſpan of life, is ſo intimately interwoven with our conſtitution, that it is juſtly eſteemed one of the firſt principles of our nature, and, in ſpite even of pain and miſery, ſeldom quits us to the laſt moments of our exiſtence. It ſeems, therefore, to be no leſs our duty than our intereſt, to examine minutely into the various means that have been conſidered as conducive to health and long life; and, if poſſible, to diſtinguiſh ſuch circumſtances as are eſſential to that great end, from thoſe which are merely accidental.

All the circumſtances that are moſt eſſentially neceſſary to life, may be compriſed under the ſix following heads: 1. Air and climate; 2. Meat and drink; 3. Motion and reſt; 4. Sleep and watching; 5. Secretions and excretions; 6. Affections of the mind. Theſe, though all perfectly natural to the conſtitution, have by writers been ſtyled the *non-naturals*, by a ſtrange perverſion of language; and have been all copiouſly handled under that improper term. However, it may not be amiſs to offer a few ſhort obſervations on each, as they are ſo immediately connected with the preſent ſubject.

1. It has long been known that freſh air is more immediately neceſſary to life than food; for a man may live two or three days without the latter, but not many minutes without the former. The vivifying principle contained in the atmoſphere, ſo eſſential to the ſupport of flame, as well as animal life, concerning which authors have propoſed ſo many conjectures, is nothing elſe but that pure oxygenated fluid lately diſcovered by the ingenious and lamented Lavoiſier. The common atmoſphere may well be ſuppoſed to be more or leſs healthy in proportion as it abounds with this animating principle. As this exhales in copious ſtreams from the green leaves of all kinds of vegetables, even from thoſe of the moſt poiſonous kind, may we not, in ſome meaſure, account why inſtances of longevity are ſo much more frequent in the country than in large cities; where the air, inſtead of partaking ſo largely of this ſalutary impregnation, is daily contaminated with noxious animal effluvia and azotic gas, formerly called phlogiſton?

With reſpect to climate, various obſervations conſpire to prove, that thoſe regions which lie within the temperate zones are beſt calculated to promote long life. Hence, perhaps, may be explained why Italy has produced ſo many long-livers, and why iſlands in general are more ſalutary than continents; of which Bermudas and ſome others afford examples. And it is a pleaſing circumſtance that our own iſland appears to contain far more inſtances of longevity than could be well imagined. The ingenious Mr. Whitehurſt aſſures us, from certain facts, that Engliſhmen are in general longer-lived than North Americans; and that a Britiſh conſtitution will laſt longer, even in that climate, than a native one. But it muſt be allowed in general, that the human conſtitution is adapted to the peculiar ſtate and temperature of each reſpective climate, ſo that no part of the habitable globe can ſcarcely be pronounced too hot or too cold for its inhabitants. Yet, in order to promote a friendly intercourſe between the

the moſt remote regions, the Author of Nature has wiſely enabled the inhabitants to endure great and ſurpriſing changes of temperature, without material injury.

2. Though foods and drink of the moſt ſimple kinds are allowed to be the beſt calculated for ſupporting the body in health, yet it can hardly be doubted but variety may be ſafely indulged occaſionally, provided men would reſtrain their appetites within the bounds of temperance; for bountiful Nature cannot be ſuppoſed to have poured forth ſuch a rich profuſion of proviſions, merely to tantalize the human ſpecies, without attributing to her the part of a cruel ſtepdame, inſtead of that of the kind and indulgent parent. Beſides, we find, that, by the wonderful powers of the digeſtive organs, a variety of animal and vegetable ſubſtances, of very diſcordant principles, are happily aſſimilated into one bland homogeneous chyle; therefore it ſeems natural to diſtruſt thoſe cynical writers, who would rigidly confine mankind to one ſimple diſh, and their drink to the mere water of the brook. Nature, it is true, has pointed out that mild inſipid fluid as the univerſal diluent, and therefore moſt admirably adapted for our daily beverage. But experience has equally proved, that vinous and ſpirituous liquors, on certain occaſions, are no leſs ſalutary and beneficial, whether it be to ſupport ſtrength againſt ſickneſs or bodily fatigue, or to exhilarate the mind under the preſſure of heavy misfortunes. But, alas! what Nature meant for innocent and uſeful cordials, to be uſed only occaſionally, and according to the direction of reaſon, cuſtom and caprice have by degrees rendered habitual to the human frame, and liable to the moſt enormous and deſtructive abuſes. Hence it may be juſtly doubted, whether gluttony and intemperance have not depopulated the world more than even the ſword, peſtilence, and famine. True, therefore, is the old maxim, *Modus utendi ex veneno facit medicamentum, ex medicamento venenum.*

3, 4. It is allowed on all hands, that alternate motion and reſt, and ſleep and watching, are neceſſary conditions to health and longevity; and that they ought to be adapted to age, temperament, conſtitution, temperature of the climate, &c. but the errors which mankind daily commit in theſe reſpects become a fruitful ſource of diſeaſes. While ſome are bloated and relaxed with eaſe and indolence, others are emaciated, and become rigid through hard labour, watching, and fatigue.

5. Where the animal functions are duly performed, the ſecretions go on regularly; and the different evacuations ſo exactly correſpond to the quantity of aliment taken in, in a given time, that the body is found to return daily to nearly the ſame weight. If any particular evacuation happen to be preternaturally diminiſhed, ſome other evacuation is proportionably augmented, and the equilibrium is commonly preſerved; but continued irregularities, in theſe important functions, cannot but terminate in diſeaſe.

6. The due regulation of the paſſions, perhaps, contributes more to health and longevity than that of any other of the particulars we have noticed. The animating paſſions, ſuch as joy, hope, love, &c. when kept within proper bounds, gently excite the nervous influence, promote an equable circulation, and are highly conducive to health; while the depreſſing affections, ſuch as fear, grief, and deſpair, produce the contrary effect, and lay the foundation of the moſt formidable diſeaſes.

From the light which hiſtory affords us, there is great reaſon to believe, that long-life is in ſome meaſure hereditary; and that healthy long-lived parents would commonly tranſmit the ſame to their children, were it not for intemperance, and the frequent errors in medical advice, which ſo evidently tend to the abbreviation of human life. Whence is it, but from theſe cauſes, and the unnatural modes of living, that, of all the children which are born in the capital cities of Europe, nearly one half die in early infancy! To what elſe can we attribute this extraordinary mortality? Such an amazing proportion of premature deaths is a circumſtance unheard-of among ſavage nations, or among the young of other animals! How few perſons, in theſe times, arrive at that period which nature ſeems to have deſigned! Man is by nature a field-animal, and ſeems deſtined to riſe with the ſun, and to ſpend a large portion of his time in the open air, to inure his body to robuſt exerciſes and the inclemency of the ſeaſons, and to make a plain homely repaſt only when hunger dictates. But art has ſtudiouſly defeated the kind intentions of nature; and, by enſlaving him to all the blandiſhments of ſenſe, has left him, alas! an eaſy victim to folly and caprice. To enumerate the various abuſes which take place from the earlieſt infancy, and which are continued through the ſucceeding ſtages of modiſh life, would carry us far beyond our preſent intention. Suffice it to obſerve, that they prevail more particularly among people who are the moſt highly poliſhed and refined. To compare their artificial mode of life with that of nature, or even with the long-livers in the following liſt, would probably afford a very ſtriking contraſt; and at the ſame time ſupply an additional reaſon why, in the very large cities, inſtances of longevity are ſo very rare.

Immediately after the creation, when the world was to be peopled by one man and one woman, the ordinary age was 900 and upwards. Immediately after the flood, when there were three perſons to ſtock the world, their age was cut ſhorter, and none of thoſe patriarchs, but Shem, arrived at 500. In the ſecond century we find none that reached 240: in the third, none but Terah that came to 200 years; the world, at leaſt a part of it, by that time being ſo well peopled, that they had built cities, and were cantoned out into diſtinct nations. By degrees, as the number of people increaſed, their longevity dwindled, till it came down at length to 70 or 80 years: and there it ſtood, and has continued to ſtand ever ſince the time of Moſes. This is found a good medium; and by means hereof the world is neither overſtocked nor kept too thin; but life and death keep a pretty equal pace.

That the common duration of man's life has been the ſame in all ages ſince the above period, is plain both from ſacred and profane hiſtory. To paſs by others, Plato lived to 81, and was accounted an old man; and the inſtances of longevity produced by Pliny, lib. vii. c. 48. as very extraordinary, may moſt of them be matched in modern hiſtories, as the following liſt will abundantly evince.

Thomas Cockrum, aged 103 years, died at Loweſtoff in Suffolk, in the year 1755.

William Lecomte, a ſhepherd, died ſuddenly in 1776, in the county of Caux in Normandy, at the age of 110.

Cramers, phyſician to the emperor, ſaw at Temeſwar two brothers, the one aged 110 and the other 112, both of whom were fathers at that age.

Saint Paul the hermit was 113 at his death.

Iſwan-Horwarths, knight of the order of St. Louis, died at Sar-Albe in Lorraine, in 1775, aged almoſt 111; he was a great hunter; he undertook a long journey a ſhort time before his death, and performed it on horſe-back.

Roſin Iwiwarouſka died at Minſk in Lithuania, aged 113.

Fockjel Johannes died at Oldeborn in Frieſland, aged 113 years, and 16 days.

Marſk Jones died in the year 1775, at Villejac in Hungary, aged 119.

John Niethen, of Bakler in Zealand, lived to the age of 120.

Eleonora Spicer died in 1773, at Accomack in Virginia, aged 121.

John Argus was born in the village of Laſtua in Turkey, and died the 6th of March, 1779, at the age of 123; his father died at the age of 120.

In December 1777, there lived in Devonſhire a farmer named John Brookey, who was 134 years of age, and had been fifteen times married.

The Philoſophical Tranſactions mention an Engliſhman of

of the name of Eccleſton, who lived to the age of 143. Another Engliſhman, of the name of Effingham, died in 1757, at the age of 144.

Niels Jukens, of Hammerſet in Denmark, died in 1764, aged 146. The ſame year died George Kirton, of Oxnop-hall, near Reath, Yorkſhire, in his 125th year.

Chriſtian Jacob Drakenberg died in 1770 at Archufen, in the 146th year of his age; this old man of the north was born at Stavangar in Norway 1624, and at the age of 130 married a widow of ſixty.

In Norway ſome men have lived to the age of 150.—John Rovin, who was born at Szatlova-Carantz-Betcher, in the bannat of Temeſwar, lived to the age of 172, and his wife to that of 164, having been married to him during the ſpace of 147 years; when Rovin died, their youngeſt ſon was 99 years of age.—Peter Zoten, a peaſant, and a countryman of John Rovin, died in 1724 at the age of 185: his youngeſt ſon was then 97 years of age.—The hiſtory and whole-length pictures of John Rovin, Henry Jenkins, and Peter Zoten, are to be ſeen in the library of prince Charles at Bruſſels.

Hanovins, profeſſor at Dantzic, mentions in his Nomenclature an old man who died at the age of 184; and another ſtill alive at Wallachia, whoſe age, according to this author, amounted to 186.

Thomas Parr, of Shropſhire, died November 16, 1635, aged 152.

Henry Jenkins, of Yorkſhire, died December 8, 1670, aged 169.

Robert Montgomery, of Yorkſhire, died in 1670, aged 126.

James Sands, of Staffordſhire, aged 140, and his wife 120.

The counteſs of Deſmond, of Ireland, aged 140.

J. Sager, of Lancaſhire, died in 1668, aged 112.

One Laurence, of Scotland, aged 140.

Simon Sack, of Triona, died May 30, 1764, aged 141.

Col. Thomas Winſlow, of Ireland, died Auguſt 26, 1766, aged 146.

Francis Conſiſt, of Yorkſhire, died in January 1768, aged 150.

Margaret Forſter, aged 136, and her daughter aged 104, of Cumberland, were both living in 1771.

Francis Bons, of France, died February 6, 1769, aged 121.

James Bowles, of Killingworth, aged 152.

John Tice, of Worceſterſhire, died March 1774, aged 125.

John Mount, of Scotland, died Feb. 27, 1766, aged 136.

A goldſmith, of France, died in June 1776, aged 140.

Mary Yates, of Shropſhire, died in 1776, aged 128.

John Bales, of Northampton, died April 5, 1766, aged 126.

William Ellis, of Liverpool, died Auguſt 16, 1780, aged 130.

Louiſa Truxo, a negreſs of Tucomea, South America, was living October 5, 1780, aged 175.

Margaret Patten, of Lockneugh, near Paiſley, aged 138.

Janet Taylor, of Fintray, Scotland, died October 10, 1780, aged 108.

Richard Lloyd, of Montgomery, aged 133.

Suſannah Hillar, of Piddington, Northamptonſhire, died Feb. 19, 1781, aged 110.

Ann Cockbolt, of Stoke-Bruerne, Northamptonſhire, died April 5, 1775, aged 105.

James Hayley, of Middlewich, Cheſhire, died March 17, 1781, aged 112.

William Walker, who was a ſoldier at the battle of Edgehill, lived to the age of 112.

Hippocrates, phyſician, of the iſland of Cos, aged 104.

Democritus the philoſopher, of Abdera, aged 109.

Galen, phyſician, of Pergamus, aged 143.

Albuna Marc, of Ethiopia, aged 150.

Dumitur Raduly, of Haromſzeck, Tranſylvania, died Jan. 18, 1702, aged 140.

Titus Pollonius, of Bononia, aged 150.

Abraham Paiba, of Charleſtown, South Carolina, aged 142.

L. Tertula, of Arminium, aged 137.

Lewis Cornaro, of Venice, aged 100.

Robert Blackney, eſq. of Armagh, Ireland, aged 114.

Margaret Scott, of Dalkeith, Scotland, aged 125.

W. Gulſtone, of Ireland, aged 140.

J. Bright, of Ludlow, aged 105.

William Poſtill, of France, aged 120.

Jane Reeves, of Eſſex, aged 103.

W. Paulet, marquis of Wincheſter, of Hampſhire, 106.

John Wilſon, of Suffolk, aged 116.

Patrick Wian, of Leſbury, Northumberland, aged 115.

Mr. Laurence, of Orcades, aged 140.

William Wakeley, of Shropſhire, aged 124, was buried at Abbaſton in 1714.

Evan Williams, of Caermarthen work-houſe, was alive in October 1782, aged 145.

John Jacobs, of Mount Jura, aged 121. This man, in 1789, aged 120, quitted his native hills, and from the ſummit of Mount Jura undertook a journey to Verſailles, to behold and return thanks to the national aſſembly for the vote which had freed him and his poor countrymen from the feudal yoke. In the early part of his life, he was a ſervant in the family of the prince de Beaufremont. His memory continued good to the laſt day of his life; and the principal inconveniencies which he felt from his great age were, that his ſight was weakened, and the natural heat of his body was ſo diminiſhed, that he ſhivered with cold in the middle of the dog-days if he was not ſitting by a good fire. This old man was received in the body of the houſe by the national aſſembly, indulged with a chair, and directed to keep on his hat, leſt he ſhould catch cold if he were to ſit uncovered. A collection was made for him by the members, which exceeded 500l. ſterling; but he lived not to return to Mount Jura: he was buried on Saturday the 31ſt of January, 1790, with great funeral pomp, in the pariſh-church of St. Euſtace, at Paris.

Donald Macleod, of the Iſle of Sky, was living in May 1793, aged 105. This old gentleman, for it appears that he really was a gentleman both by birth and behaviour, was born in the year of the revolution, in the pariſh of Bracadill, in the Iſle of Sky, and county of Inverneſs, North Britain. He was a cadet of the family of Uliniſh in Sky; and deſcended, through his mother, from Macdonald of Slate, the anceſtor of the preſent lord Macdonald. The earlier part of his life coincided with the famine of ſeven years in Scotland; which was ſo great as to ſuggeſt, even to the patriotic Mr. Fletcher, the idea of the people ſelling themſelves as ſlaves for immediate ſubſiſtence. He was bred in the midſt of want and hardſhips, cold, hunger, and, for the years of his ſervitude with a maſon and ſtone-cutter in Inverneſs, in inceſſant fatigue. He inliſted, when a boy, in the Scottiſh ſervice, in the town of Perth, in the laſt year of the reign of king William. The regiment into which he inliſted was the Scots Royals, commanded by the earl of Orkney. That old military corps, at that time, uſed bows and arrows as well as ſwords, and wore ſteel caps. He ſerved in Germany and Flanders under the duke of Marlborough; under the duke of Argyle, in the rebellion 1715; in the Highland Watch, or companies raiſed for enforcing the laws in the Highlands; in the ſame companies when, under the name of the 42d regiment, they were ſent abroad to Flanders, to join the army under the duke of Cumberland; in the ſame regiment in Ireland, and on the breaking-out of the French war, 1757, in America. From the 42d he was draughted to act as a drill-ſerjeant in the 78th regiment, in which he ſerved at the reduction of Louiſburg and Quebec. After this he became an out-penſioner of Chelſea-hoſpital. But ſuch was the ſpirit of this brave and hardy veteran, that he ſerved in 1761 as a volunteer in Germany under the marquis of Granby; and offered his ſervices in the American war to ſir Henry Clinton; who, though he declined to employ the old man in the fatigues and dangers of war, treated him with great kindneſs, allowed him a liberal weekly penſion out of his own pocket, and ſent him home in a ſhip charged with diſpatches to government. The ſer-

jeant, "as his memory, according to the obſervation of his biographer, is impaired, does not pretend to make an exact enumeration of all his offspring; but he knows of ſixteen ſons now living, fourteen of whom are in the army and navy, beſides daughters; the eldeſt of whom by his preſent wife is a mantua-maker at Newcaſtle. His eldeſt ſon is now eighty-three years old, and the youngeſt only nine." In his prime, he did not exceed five feet and ſeven inches; he had inclined through age to five feet five inches. He had an intereſting phyſiognomy, expreſſive of ſincerity, ſenſibility, and manly courage. *Memoirs of his Life*, 1791, in the 103d year of his age.

Mathew Tait, of Auchinlech, Airſhire, died Feb. 19, 1792, aged 123: he ſerved as a private at the taking of Gibraltar in 1704.

Mrs. Sarah Haynes, of Winford, Somerſet, died Dec. 1793, aged 103.

Mrs. Freeman, of Falmouth, died in Dec. 1793, aged 118; her ſight was not quick, but her intellects were perfect to the laſt.

Silveſter Manclarke, of Loweſtoff, Suffolk, died Jan. 1794, aged 107.

Edward Collins, of Saliſbury, died in Jan. 1794, aged 100.

Mrs. Lally, of Bradford, Yorkſhire, died in the ſame month, in the 110th year of her age.

There was living in Portſmouth poor-houſe, in May 1793, one Elizabeth Bennet, aged 104 years.

In Feb. 1794, a ſoldier, named John Knowle, who was then in the 105th year of his age, applied to the lord-mayor of London for a walking-paſs to Birmingham; the mayor offered him a riding-paſs, but he ſaid he could not bear the ſhaking and jolting of a carriage: he had ſerved in the 37th regiment of foot, and was diſcharged at the age of 84; his right eye and hearing were well, and he had all his front teeth but one.

In 1796 died at Berkeley county, Virginia, Charles Roberts, gent. aged 116.

In 1800 died at Perth, Elſpet Watſon, aged 115; ſhe was a dwarf, being not more than two feet nine inches high, and a common beggar for many years.

In the month of December, 1806, we have an account of the deaths of the following aged perſons:—Mrs. Margaret Galley died at Norwich, aged 100.—John Shortall, at Kilcooley, Ireland, aged 106: his widow was 102 at his death.—At Kennarth, Caernarvon, aged 100, Samuel Griffiths, a fiſherman. He was father of 25 children, all of whom he brought up without parochial aſſiſtance.—At Capel Cerrig, ſame county, aged 104, Gayner Thomas. She had fourteen children, thirty grandchildren, and nineteen great-grand-children.

Eſmina Diamond, a free black woman, died at Kingſton, Jamaica, on the 26th July, 1812, at the advanced age of 130 years.

In Iſſara, a town of the government of Penſa, in Ruſſia, there was living, in September 1812, a Bohemian, named Woronin, who had reached the great age of 120; his eldeſt ſon 81, the eldeſt of his grandſons 51. This Bohemian patriarch was of a lively diſpoſition, and ſtill ſo active as to be able to dance, which he often does in the faſhion of his country.

In October 1812, there was living in the pariſh of Tippermuir, about five miles to the north-weſt of Perth, John Hay, aged 107 years, in very good health.

May 4, 1813, died at Whitehaven, Elizabeth Bell, widow, in the 106th year of her age. She was remarkably active, and poſſeſſed the full power of her faculties to the laſt; about a week before, ſhe had a fall, by which ſhe broke her thigh, and was otherwiſe bruiſed, ſo as to occaſion her death. She has left a ſon in his 85th year, a daughter in her 76th, and another in her 71ſt; beſides ſeveral grand-children, great-grand-children, and great-great-grand-children.

The examples which are exhibited in the above liſt are abundantly ſufficient to prove, that longevity, in more modern times, does not depend, ſo much as ſome have ſuppoſed, on any particular climate, ſituation, or occupation in life. For we ſee that it often prevails in places where all theſe are extremely diſſimilar; and it would, moreover, be very difficult, in the hiſtories of the ſeveral perſons above-mentioned, to find any circumſtance common to them all, except perhaps that of being born of healthy parents, and of being inured to daily labour, temperance, and ſimplicity of diet. Among the inferior ranks of mankind, therefore, rather than amongſt the ſons of eaſe and luxury, ſhall we find the moſt numerous inſtances of longevity; even frequently, when other external circumſtances ſeem extremely unfavourable; as in the caſe of Henry Jenkins and old Parr, whoſe livelihood is ſaid to have conſiſted chiefly of the coarſeſt fare, as they (or Jenkins at leaſt) depended on precarious alms. The plain diet and invigorating employments of a country life, are acknowledged, on all hands, to be highly conducive to health and longevity; while the luxury and refinements of large cities are allowed to be equally deſtructive to the human ſpecies; and this conſideration alone, perhaps, more than counterbalances all the boaſted privileges of ſuperior elegance and civilization reſulting from a city life.

Among thoſe who have led a life of contemplation and ſtudy, many have reached a very advanced age. Longevity is frequent among the different orders of religious, who by their ſtatutes are confined to a moderate diet, and obliged to abſtain from wine and the uſe of meat. Some celebrated anchorets have lived to a great age, while they fed upon nothing but the wild roots and fruits which they found in the deſert whither they had retired. The philoſopher Xenophilus, who lived to the age of 106, was of the Pythagorean ſect. It is well known, that thoſe philoſophers, who held the tranſmigration of ſouls, denied themſelves the uſe of meat, becauſe they imagined that killing an animal would be to aſſaſſinate another ſelf. A country life has produced many ſound and vigorous old men. It is ſuppoſed that a happy old age is attained with greater difficulty in towns than in the country. Sir Hans Sloane, Duverney, and Fontenelle, however, are inſtances of men whoſe lives have been ſpent in cities, and yet extended to a very great length. It has been obſerved that men deprived of reaſon live very long; which is to be imputed to their being exempt from thoſe inquietudes which are the moſt deadly poiſon. Perſons poſſeſſing a ſufficiently good underſtanding, but deſtitute of ambition, have been found to enjoy very long life. Men who are devoid of pretenſions, who are free from thoſe cares which a deſire of ſhining by a diſplay of talents, or of acquiring dignity and power, neceſſarily brings in its train, who feel no regret for the paſt nor anxiety about the future, are ſtrangers to thoſe torments of the mind which waſte and conſume the body. To this tranquillity of ſoul, which is ſo excellent a prerogative of infancy, they add that of being long young by phyſical conſtitution, on which the moral has a ſtriking and powerful influence.

Premature wiſdom, and early talents, are often fitter to excite aſtoniſhment than expectation. The rapid unfolding of moral faculties, by ſhortening the period of youth, ſeems to diminiſh in proportion the total duration of life. We have read of a young lady of ſeventeen, who could ſpeak very correctly ſeven languages; ſhe tranſlated and wrote Latin, Greek, Italian, Spaniſh, German, Engliſh, and French; but ſhe died at the age of eighteen. The young man by whom ſhe was aſked in marriage, having been informed that he could not obtain her hand till he had made himſelf worthy of her by the ſame degree of talents and information, died the ſame year, and at the ſame age.

The ingenious Dr. Ruſh of Philadelphia, has publiſhed ſome very curious obſervations on the probable cauſes of longevity; and which he attributes principally to the following ſources, viz.

Deſcent from long-lived Anceſtors.—I have not found a ſingle inſtance of a perſon who has lived to be eighty years old, in whom this was not the caſe. In ſome inſtances

I found the deſcent was only from one, but in general it was from both parents. The knowledge of this fact may ſerve, not only to aſſiſt in calculating what are called the chances of lives, but it may be made uſeful to a phyſician. He may learn from it to cheriſh hopes of his patients in chronic and in ſome acute diſeaſes, in proportion to the capacity of life they have derived from their anceſtors. Dr. Franklin, who died in his 84th year, was deſcended from long-lived parents. His father died at 89, and his mother at 87. His father had ſeventeen children by two wives. The doctor informed me that he once ſat down as one of eleven adult ſons and daughters at his father's table. In an excurſion he once made to that part of England from which his family migrated to America, he diſcovered, in a great grave-yard, tombſtones of ſeveral perſons of his name, who had lived to be very old. Theſe perſons he ſuppoſed to have been his anceſtors.

Temperance in Eating and Drinking.—To this remark I found ſeveral exceptions. I met with one man of 84 years of age, who had been intemperate in eating; and four or five perſons who had been intemperate in drinking ardent ſpirits. They had all been day-labourers, or had deferred drinking until they began to feel the languor of old age. I did not meet with a ſingle perſon who had not, for the laſt forty or fifty years of their lives, uſed tea, coffee, and bread and butter, twice a-day, as part of their diet. I am diſpoſed to believe that thoſe articles of diet do not materially affect the duration of human life, although they evidently impair the ſtrength of the ſyſtem. The duration of life does not appear to depend ſo much upon the ſtrength of the body, or upon the quantity of its excitability, as upon the exact accommodation of ſtimuli to each of them. A watch-ſpring will laſt as long as an anchor, provided the forces which are capable of deſtroying both are in an exact ratio to their ſtrength. The uſe of tea and coffee in diet ſeems to be happily ſuited to the change which has taken place in the human body by ſedentary occupations, by which means leſs nouriſhment and ſtimulus are required than formerly to ſupport animal life.

A moderate Uſe of the Underſtanding.—It has long been an eſtabliſhed truth, that literary men (other circumſtances being equal) are longer-lived than other people. But it is not neceſſary that the underſtanding ſhould be employed upon philoſophical ſubjects to produce this influence upon human life. Buſineſs, politics, and religion, which are the objects of attention of men of all claſſes, impart a vigour to the underſtanding, which, by being conveyed to every part of the body, tends to produce health and long life.

Equanimity of Temper.—The violent and irregular actions of the paſſions tend to wear away the ſprings of life. Perſons who live upon annuities in Europe have been obſerved to be longer-lived, in equal circumſtances, than other people. This is probably occaſioned by their being exempted, by the greater certainty of their ſubſiſtence, from thoſe fears of want which ſo frequently diſtract the minds, and thereby weaken the bodies, of people. Life-rents have been ſuppoſed to have influence in prolonging life. Perhaps the deſire of life, in order to enjoy for as long as poſſible that property which cannot be enjoyed a ſecond time by a child or relation, may be another cauſe of the longevity of perſons who live upon certain incomes. It is a fact, that the deſire of life is a very powerful ſtimulus in prolonging it, eſpecially when that deſire is ſupported by hope. This is obvious to phyſicians every day. Deſpair of recovery is the beginning of death in all diſeaſes. But, obvious and reaſonable as the effects of equanimity of temper are upon human life, there are ſome exceptions in favour of paſſionate men and women having attained to a great age. The morbid ſtimulus of anger, in theſe caſes, was probably obviated by leſs degrees, or leſs active exerciſes, of the underſtanding, or by the defect or weakneſs of ſome of the other ſtimuli which kept up the motions of life.

Matrimony.—In the courſe of my enquiries, I met with only one perſon beyond eighty years of age who had never been married. I met with ſeveral women who had borne from ten to twenty children, and ſuckled them all. I met with one woman, a native of Herefordſhire in England, who is now in the 100th year of her age, who bore a child at 60, menſtruated till 80, and frequently ſuckled two of her children (though born in ſucceſſion to each other) at the ſame time. She had paſſed the greateſt part of her life over a waſhing-tub.

I have not found that acute, nor that all chronic, diſeaſes, ſhorten life. Dr. Franklin had two ſucceſſive vomicas in his lungs before he was forty years of age. I met with one man beyond eighty, who had ſurvived a moſt violent attack of the yellow fever; a ſecond, who had ſeveral of his bones fractured by falls and in frays; and many who had frequently been affected by intermittents. I met with one man of eighty-ſix, who had all his life been ſubject to ſyncope; another who had been for fifty years occaſionally affected with a cough; and two inſtances of men who had been afflicted for forty years with obſtinate head-achs. I met with only one perſon beyond eighty who had ever been affected by a diſorder in the ſtomach; and in him it aroſe from an occaſional rupture. Mr. John Strangeways Hutton, of Philadelphia, who died in the 100th year of his age, informed me that he never had vomited in his life. This circumſtance is the more remarkable, as he paſſed ſeveral years at ſea when a young man. This venerable old man was born in New York in the year 1684. His grandfather lived to be 101, but was unable to walk for thirty years before he died, from an exceſſive quantity of fat. His mother died at 91. His drink was water, beer, and cider: he had a fixed diſlike to ſpirits of all kinds. His appetite was good, and he ate plentifully during the laſt years of his life. He ſeldom drank any thing between his meals. He was intoxicated but twice in his life, and that was when a boy, and at ſea, where he remembered perfectly to have celebrated by a feu-de-joye the birth-day of queen Anne. He was formerly afflicted with the head-ach and giddineſs, but never had a fever, except from the ſmall-pox, in the courſe of his life. His pulſe was ſlow, but regular. He had been twice married. By his firſt wife he had eight, and by his ſecond ſeventeen, children: one of them lived to be eighty-three years of age. He was about five feet nine inches in height, of a ſlender make, and carried an erect head to the laſt year of his life.

I have not found the loſs of teeth to affect the duration of human life ſo much as might be expected. Edward Drinker, who lived to be 103 years old, loſt his teeth thirty years before he died, from drawing the hot ſmoke of tobacco into his mouth through a ſhort pipe. Dr. Sayre, of New Jerſey, to whom I am indebted for ſeveral valuable hiſtories of old perſons, mentions one man aged 81, whoſe teeth began to decay at ſixteen, and another of 90, who loſt his teeth thirty years before he ſaw him.

I have not obſerved baldneſs, or grey hairs, occurring in early or middle life, to prevent old age. In one of the hiſtories furniſhed by Dr. Sayre, I find an account of a man of 80, whoſe hair began to aſſume a ſilver colour when he was only eleven years of age. Notwithſtanding there appears in the human body a certain capacity of long life, which ſeems to diſpoſe it to preſerve its exiſtence in every ſituation, yet this capacity does not always protect it from premature deſtruction; for, among the old people whom I examined, I ſcarcely met with one who had not loſt brothers or ſiſters in early and middle life, and who were born under circumſtances equally favourable to longevity with themſelves.

Let us now take a retroſpective view of man's life from his infancy, and enumerate the chief of theſe different cauſes. Of a thouſand infants, extracted from the London bills of mortality, twenty-three died almoſt as ſoon as they came into the world: teething carried off fifty, and convulſions two hundred and ſeventy-ſeven: eighty

died

died of the ſmall-pox, and ſeven of the meaſles. Among the adult females, eight at leaſt died in child-bed: conſumption and aſthma, diſeaſes more frequent in England than in France, carried off an hundred and ninety-one of the ſame ſex, and almoſt a fifth part of the full-grown men. An hundred and fifty died of fevers. At a more advanced age, twelve died of apoplexy, and forty-one of dropſy; without mentioning thoſe to whom diſeaſes of little importance in themſelves became mortal. There only remained ſeventy-eight whoſe death could be aſcribed to old age; and of theſe twenty-ſeven lived to the age of eighty and upwards. Among the different diſeaſes of which we have now ſeen the fatal effects, and which carry off more than nine-tenths of mankind, not one, it muſt be allowed, is natural to the conſtitution. The inhabitants of this iſland are in general but little ſubject to diſeaſes, excepting conſumption and the meaſles; and many of them enjoy uninterrupted health to old age. And here it may be proper to mention what are the moſt prevalent diſeaſes in other countries, which prove equally fatal to the duration of human life. In northern climates, ſcurvy, the cholic of the Laplanders, and diſeaſes of the lungs, moſt frequently occaſion death. In temperate climates, dropſy carries off a great many at the beginning of old age, which is the boundary of life in the greateſt part of both ſexes, when they have eſcaped the acute diſeaſes, ſuch as putrid fever, &c. Acute diſeaſes are moſt common in warm countries. In ſome places the rays of the ſun kill in a few hours thoſe who are expoſed to its burning heat. The air of Egypt and of Aſia Minor engenders the plague, by which one half of the inhabitants are carried off. Between the tropics men are ſubject to dyſenteries and violent fevers. The cold of the night, in warm climates, occaſions ſometimes violent diſeaſes, ſuch as palſy, quinſy, and a ſwelling of the head. Damp and marſhy places give riſe to fevers of a different kind, but alſo very dangerous. The life of ſailors has a great tendency to produce ſcurvy. How many profeſſions prove fatal to the health, and in moſt men haſten that period which nature would have brought on by ſlow degrees! Miners, ſtone-cutters, gilders, perſons employed in emptying privies, &c. are ſubject to diſeaſes of the lungs, and become paralytic. Other profeſſions bring on other accidents, of which it would carry us too far to give a particular account. What has been ſaid is ſufficient to ſhow, that it is the dangers with which we are ſurrounded that ſhorten the period of human exiſtence.

By examining the liſt of thoſe who have attained a great age, it will be found that mankind are longer-lived in northern than in ſouthern countries. It has been obſerved, that there are more old men in mountainous and elevated ſituations, than in plains and low countries. We repeat it, if the duration of life among the inhabitants of ſouthern climates be compared with the duration of life in northern nations, it will be allowed, that the latter enjoy both longer life and better health than the former. Their growth being retarded by the rigour of the climate, their decay muſt alſo be ſlower, becauſe of the proportion which exiſts between the growth of animals and the length of their lives. Among ten perſons who have lived to the age of an hundred, eight or nine will be found to have lived in the north.

It appears from the bills of mortality, that in the country more boys are born than girls; in cities, on the contrary, the number of females is commonly greateſt. Obſervations made with great care prove, that in moſt countries there are fewer men alive than women, and that more males die, chiefly at the firſt and laſt periods of life. In Sweden, the whole number of females, in 1763, was to that of the males in the proportion of ten to nine. The number of old women who exceeded eighty years of age, was to that of old men of the ſame age, in the proportion of thirty-three to nineteen; and there were more women than men who had attained the age of eighty-ſix, in the proportion of almoſt two to one.

M. Daubenton has given, in the Encyclopédie Methodique, a table of the probabilities of the duration of life, conſtructed from that which is to be found in the ſeventh volume of the Supplémens à l'Hiſtoire Naturelle de M. de Buffon. The following is an abridgement of it:

Of 23994 children, born at the ſame time, there will probably die,

In one year, — —	7998
Remaining 2-3ds, or 15996.	
In eight years, —	11997
Remaining 1-half, or 11997.	
In thirty-eight years,	15996
Remaining 1-3d, or 7998.	
In fifty years, —	17994
Remaining 1-4th, or 5998.	
In ſixty-one years, —	19995
Remaining 1-6th, or 3999.	
In ſeventy years, —	21595
Remaining 1-10th, or 2399.	
In eighty years, ——	22395
Remaining 1-40th, or 599.	
In ninety years, ——	23914
Remaining 1-300th, or 79.	
In one hundred years,	23992
Remaining 1-10000th, or 2.	

It thus appears, that a very ſmall number of men indeed paſs through all the periods of life, and arrive at the goal marked out by nature. Innumerable cauſes accelerate our diſſolution. The life of man, we have obſerved, conſiſts in the activity and exerciſe of his organs, which grow up and acquire ſtrength during infancy, adoleſcence, and youth. No ſooner has the body attained its utmoſt perfection, than it begins to decline. Its decay is at firſt imperceptible; but in the progreſs of time the membranes become cartilaginous, the cartilages acquire the conſiſtence of bone; the bones become more ſolid, and all the fibres are hardened.

The *age of decline* extends from forty or forty-five to ſixty or ſixty-five years of age. At this time of life, the diminution of the fat is the cauſe of thoſe wrinkles which begin to appear in the face and ſome other parts of the body. The ſkin, not being ſupported by the ſame quantity of fat, and being incapable, from want of elaſticity, of contracting, ſinks down and forms folds. In the decline of life, a remarkable change takes place alſo in viſion. In the vigour of our days, the cryſtalline lens being thicker and more diaphanous than the humours of the eye, enables us to read letters of a very ſmall character at the diſtance of eight or ten inches. But, when the age of decline comes on, the quantity of the humours of the eye diminiſhes, they loſe their clearneſs, and the tranſparent cornea becomes leſs convex. To remedy this inconvenience, we place what we wiſh to read at a greater diſtance from the eye; but viſion thereby is very little improved, becauſe the image of the object becomes ſmaller and more obſcure. Another mark of the decline of life is a weakneſs of the ſtomach, and indigeſtion, in moſt people who do not take ſufficient exerciſe in proportion to the quantity and the quality of their food.

At ſixty, ſixty-three, or ſixty-five, years of age, the ſigns of decline become more and more viſible, and indicate *old age*. This period commonly extends to the age of ſeventy, ſometimes to ſeventy-five, but ſeldom to eighty. When the body is extenuated and bent by old age, man then becomes *crazy*. Crazineſs therefore is nothing but an infirm old age. The eyes and ſtomach then become weaker and weaker; leanneſs increaſes the number of the wrinkles; the beard and the hair become white; the ſtrength and the memory begin to fail. After ſeventy, or at moſt eighty, years of age, the life of man is nothing but *labour and ſorrow*; ſuch was the language of David near three thouſand years ago. Some men of ſtrong conſtitutions, and in good health, enjoy old age for a long time without decrepitude; but ſuch inſtances are not very common.

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The ſigns of *decrepitude* form a ſtriking picture of weakneſs, and announce the approaching diſſolution of the body. The memory totally fails; the nerves become hard and blunted; deafneſs and blindneſs take place; the ſenſes of ſmell, of touch, and of taſte, are deſtroyed; the appetite fails; the neceſſity of eating, and more frequently that of drinking, are alone felt. After the teeth fall out, maſtication is imperfectly performed, and digeſtion is very bad; the lips fall inwards; the edges of the jaws can no longer approach one another; the muſcles of the lower jaw become ſo weak, that they are unable to raiſe and ſupport it; the body ſinks down; the ſpine is bent outward, and the vertebræ grow together at the anterior part; the body becomes extremely lean; the ſtrength fails; the decrepid wretch is unable to ſupport himſelf; he is obliged to remain on a ſeat, or ſtretched on his bed; the bladder becomes paralytic; the inteſtines loſe their ſpring; the circulation of the blood becomes ſlower; the ſtrokes of the pulſe no longer amount to the number of eighty in a minute, as in the vigour of life, but are reduced to twenty-four, and ſometimes fewer; reſpiration is ſlower; the body loſes its heat; the circulation of the blood ceaſes; death follows; and the dream of life is no more!

In the Memoirs of the Academy of Sciences at Berlin for the year 1766, M. Merian publiſhed an eſſay on the comparative duration and intenſity of pleaſure and pain during life, in which he made the balance preponderate on the ſide of pain in both theſe reſpects. This deciſion gave occaſion to an eſſay on the ſame ſubject by M. de Beguelin; who begins with obſerving, that M. Merian ought to have pointed out in what manner the melancholy reſult of his inquiry can be reconciled with the conſolatory perſuaſion that we owe our exiſtence to a Being of infinite goodneſs, who certainly could not intend that the ſum of evil ſhould be greater than that of good to his creatures; he ought to have ſhown that, notwithſtanding this preponderance of pain, Providence deſigns for us, and, when we are wiſe enough to accept of it, really confers on us, a much greater ſum of good than of evil, of agreeable than of diſagreeable ſenſations.

It is juſtly obſerved by M. de Beguelin, that neither great pleaſures nor great pains conſtitute the habitual ſtate of man, but are very thinly ſown in the path of human life. How many individuals are there who have never experienced either! The habitual ſtate of man is that of ſimple well-being; which, when a little heightened, becomes pleaſure, and, when a little abated, is nullity of ſenſation, or the middle term of the ſcale, of which pleaſing ſenſations occupy the one, and painful ſenſations the other, ſide. By nullity of ſenſation, however, the academician does not mean a ſtate of perfect indifference; for this would be incompatible with the nature of man. From a ſtate of pain, whatever be its degree, all wiſh to be delivered; yet it is obſervable that, among a hundred thouſand perſons, ſcarcely one can be found who ruſhes out of life in order to get rid of his ſufferings; and, in this caſe, it is generally doubted whether he had at that moment the entire uſe of his reaſon: whence M. de Beguelin concludes, that even the moſt painful circumſtances are not unaccompanied with ſome perceptions of good.

It is becauſe well-being is the habitual ſtate of man, that pleaſures appear to us leſs lively than pains of equal intenſity; and that the durations of pleaſure, and of pain, though equal with reſpect to abſolute time, ſeem very unequal when compared. We conſider as pleaſure, only that degree of good which is perceptibly greater than our habitual ſtate of well-being; whereas we include under the appellation of pain every ſtate, in which our habitual well-being loſes any thing of its intenſity.

After theſe preliminary obſervations, the ingenious author mentions two queſtions, which, though difficult to anſwer with preciſion, are highly intereſting. In the common courſe, and among the ſeveral claſſes, of human life, is the number of pains greater or leſs than that of pleaſures, ſuppoſing the intenſity of each to be nearly equal? Of the claſs of pains, and that of pleaſures, which contains the greater number of genera and ſpecies? Without preſuming to decide on theſe queſtions, the author believes that, if they could be accurately inveſtigated, the iſſue of both would be on the ſide of pleaſure; eſpecially if they were confined to thoſe pleaſures and pains which we derive from nature. In ſupport of this opinion, he obſerves that the former are friendly, and the latter inimical, to the phyſical conſtitution of ſentient beings; and this leads him (we think, juſtly) to ſuppoſe that infinite goodneſs has ſtrewed the path of life with a much greater number of pleaſures than of pains, and has given us a much greater diverſity of the former than of the latter. The ſupreme Being has made us ſuſceptible of ſeveral different ſenſations at the ſame time; which, by their heterogeneity, frequently weaken the continued impreſſion of pain. Time and employment are known to heal the deepeſt wounds of affliction; and even the moſt wretched find relief from converſing on the circumſtances of their diſtreſs. In ſhort, it is a conſtant law of nature, which is nothing more than the primitive regulation of the Creator, that there ſhould be an unremitting tendency to the preſervation of beings in general, and to repair whatever injuries they may receive from foreign cauſes; but can this law be ſaid to act with reſpect to mankind, if the number of their pains exceeds that of their pleaſures?

In order to ſet this argument in a ſtronger light, M. de Beguelin takes a more particular view of thoſe pleaſing ſenſations which enter into the habitual ſtate of moſt men: theſe ariſe from a conſciouſneſs of exiſtence; the enjoyment, if not of perfect, yet of tolerable, health; the alternate ſucceſſion of action and reſt; the gratification of the appetites of nature; curioſity; the attachments prompted by intereſt; the relations and affections of ſocial life; the deſire of acquiring and of communicating knowledge; a variety of occupations and employments, whether of buſineſs or of amuſement, which exerciſe and improve the faculties both of body and mind; together with a conſciouſneſs of difficulties overcome, and of duties performed; and, laſtly, hope, which anticipates future enjoyment. All theſe ſources of pleaſure are intimately connected with our nature, and are common to the greateſt part of mankind in every period and condition of life. Our author has not mentioned factitious enjoyments, becauſe, with theſe he muſt have contraſted factitious privations, which probably exceed them in number; nor would it be fair to place that good or that evil, which derives its exiſtence ſolely from the irregularity of the imagination, in the ſame claſs with the pleaſures and pains allotted to us by the condition of our nature.

Perhaps it may be aſked, if our pleaſures be really more numerous than our pains, why are there ſo few who would be willing to re-commence the career of life through which they have already paſſed? for it is a common remark of old people, that they do not wiſh to go through life again. The academician anſwers this objection by obſerving, that the activity of the human mind is ſuch as to require a continual ſucceſſion of new ideas; and that nature has implanted in us a conſtant tendency to new ſtates of being, each differing from the preceding, and which gradually lead to that perfection which finite beings cannot attain at once. We are formed, not for a ſtationary condition, not to re-commence the circumſtances through which we have already paſſed, but to be conſtantly advancing in our career toward new and higher modes of exiſtence. Another cauſe is, that the condition ſuppoſed, in the notion of re-commencing our life, is, that all the circumſtances through which we muſt paſs are already known to us. Hence neither curioſity is intereſted, nor hope excited; no new objects can be attained; nor have we the liberty of preventing or of avoiding the pains through which we know that we muſt paſs; hence the experience, the knowledge, and the abilities, which we have acquired, would be loſt on us; and we could have no other proſpect than that of being, at the end of our ſecond exiſtence, exactly at the ſame point from which we had ſet out. Remove this condition; and moſt men would be

glad,

glad, for the ſake of avoiding death, to re-commence a life equally or even leſs advantageous in point of happineſs than that which they have experienced. From this number our author does not except thoſe pretended philoſophers, who limit exiſtence to the preſent ſtate; who are continually complaining of the miſeries of life, and yet have not the courage to put an end to it. As to thoſe whom reaſon and religion inſpire with a well-founded hope of a future exiſtence, and of a continued progreſs toward perfection, though they have as lively a ſenſe as others of the pleaſures of this life, which they conſider as a natural preparation for a future ſtate, they would never be deſirous to re-commence their career; which, whatever pleaſures it might afford, would only retard their advancement toward that perfect ſtate for which they know they are deſtined.

LIFE (Tree of). See THUYA.

LIFE-ANNUITY, an annual income, the payments of which depend on the continuance of any given life or lives.

The value of a life-annuity is properly the ſum that will be ſufficient to enable a *feller* (allowing for the chances of mortality) to pay the annuity without loſs; and, ſuppoſing money to bear no intereſt, it is always equal to the *expectation* of the life. For example: Obſervations ſhow, that, according to the *mean* probabilities of the duration of human life, the *expectation* of a life aged ten is nearly forty years; or, in other words, that a ſet of lives at this age will, one with another, enjoy forty years each of exiſtence, ſome of them enjoying a duration as much longer as others enjoy a ſhorter. It is obvious, therefore, that, ſuppoſing money to bear no intereſt, 40l. in hand for each life would be ſufficient to enable a ſeller to pay any number of ſuch lives 1l. per ann. for their whole duration; or, in other words, that 40l. is, on this ſuppoſition, the value of a life aged ten. But, if any improvement is made of money by putting it out to intereſt, this will be *more* than the value; becauſe it will be more than ſufficient to pay the annuity; and as much more than ſufficient as the improvement or the intereſt is greater. If, for inſtance, any ſum now in hand may be ſo improved, by being put out to intereſt at 4 per cent. as to double itſelf in eighteen years; the ſeller of ſuch an annuity will (in conſequence of putting out *half* the purchaſe-money to intereſt) find himſelf, at the end of eighteen years, in poſſeſſion of 42l. or of 20l. more than is ſufficient to pay the remainder of the annuities, though he ſhould make no farther improvement of the purchaſe-money. If he puts out the money to higher intereſt, he will be a greater gainer; if to leſs, he will be a leſs gainer; but at any rate of intereſt he muſt be a gainer. The truth is, that, ſuppoſing the intereſt to be that juſt mentioned, or 4 per cent. and all the improvement poſſible made of the money at this intereſt, he will find 17l. 10s. 6d. for each annuity (inſtead of 40l.) to be ſufficient to enable him to make all his payments; (ſee the Tables at the end of this article.) but that, if he improves the money at 5 per cent. he will find 15l. to be ſufficient.

It may ſeem to follow from hence, that we have nothing to do, to find the value of a life-annuity, but to find the expectation of the life, and then to take out of the common tables the value of an annuity *certain* for a term of years equal to the expectation; and it may appear ſtrange that this ſhould not give the true value. The truth is, that it will give the value *greater* than it is; or that a leſs ſum than that found in this way will be ſufficient to pay the annuity. Suppoſing the intereſt 4 per cent. the value of an annuity certain for forty years is 19·79277, (ſee Table II. under the article ANNUITIES, vol. i. p. 739.) or 19l. 15s. 10d. but the value of a life aged ten, at this rate of intereſt, is, as hath been juſt ſaid, no more than 17l. 10s. 6d. The principal reaſon of this is the difference between the value of forty payments of an annuity to be made *every* year regularly one after another, till in forty years they are all made; and the value of the ſame number of payments to be made at greater diſtances of time from one another, and not to be *all* made till the end of ſeventy or eighty years. In this laſt caſe there is more time given for the improvement of the purchaſe-money, and therefore a leſs ſum will be ſufficient to enable a ſeller to make his payments. All that is learned from knowing the expectation of a number of lives, is the *mean* number of payments that will be made to each of them, and not the time in which they will be made. For example: The expectation of a life at ten being forty years, it follows that to a hundred lives at this age, forty payments for each life, or four thouſand in all, will be made. But, as all the lives will not be extinct in leſs than ſeventy or eighty years, many of the payments will not be made till after the expiration of forty years; and therefore a part of the purchaſe money will be improved for a longer time than forty years. In general, it may be obſerved that *one-half* nearly of the payments of a ſet of life-annuities will be made after the expiration of a term of years equal to the expectations of the lives; and that, this half having a longer time for accumulation than the expectations of the lives, the value of the lives muſt be leſs than the value of annuities to be paid regularly every year for a time equal to the expectations. Thus 1980l. will, in conſequence of being improved at 4 per cent. pay a hundred annuities of 1l. for forty years. But a leſs ſum (or 1750l.) will pay a hundred ſuch annuities to a ſet of lives whoſe common expectation is forty years; becauſe one-half nearly of the payments will not be made till after the end of forty years, and ſome not till after the end of ſeventy or eighty years; and conſequently one-half nearly of the purchaſe-money will be improved for more than forty years, and ſome of it for more than ſeventy or eighty years.

Theſe obſervations demonſtrate, that it is a miſtake to reckon the value of a life-annuity the ſame either with the value of an annuity certain for a term of years equal to the expectation of the life; or with the value of an annuity for a term certain, equal to that which a life has an even chance of exiſting. The true method of computing the values of life-annuities may be explained in the following manner. Let us ſuppoſe that the duration of the annuity is to be only *one* year. That is, that 1l. is to be paid a year hence, provided a life now of a given age ſhould be then in being. Were it *certain* that this life would not fail in the year, the value of the annuity would be the ſame with the value of it payable a year hence, or with the ſum which, now put out to intereſt, would increaſe to 1l. in a year; and this ſum, ſuppoſing intereſt at 4 per cent. is by the Table juſt quoted ·96154, or 19s. 3d. But, the payment not being to be made ſhould the life happen to fail in the year, this ſum ought to be diminiſhed in proportion to the degree of the uncertainty of the life's continuing to exiſt through the year; and it is eaſy to ſee that this *uncertainty*, or *chance*, is in the proportion of the number of perſons at that age living at the end of the year, to the number living at the beginning of it, as ſhown by obſervations. For example: If it has been found, in any ſituation, that but half the number of perſons of the given age living at the beginning of the year are living at the end of it, the uncertainty will be as half; and the value juſt mentioned ought to be leſſened one-half. If it appears that two-thirds, or nine-tenths, or ninety-nine hundredths, are living at the end of the year, the ſame value muſt be diminiſhed only one-third,, one-tenth, or one-hundredth. That is, it will be neceſſary to multiply it by $\frac{1}{3}$, $\frac{9}{10}$, or $\frac{99}{100}$. Univerſally then, the preſent value of any ſum to be paid a year hence, provided a given life ſhould be then exiſting, is that ſum multiplied by the value of 1l. payable at the end of the year, and alſo by the fraction formed by making the number of the living at the age of the given life (taken out of the following Table) the *denominator*, and the number of the living at the next ſucceeding age (or at the end of the year) the *numerator*. For example: Let the value be ſought of 1l. payable a year hence, if a child aged ten ſhould be then living, reckoning intereſt at 4 per cent. The value

of 1l. reckoning this intereſt, and payable a year hence, is (as hath been juſt ſaid) 19s. 3d. or, in decimal parts of a pound, ·961. The number of the living at the age of ten (in the Northampton column of that Table) is 498; and at the next ſucceeding age (or eleven) is 493. It follows therefore that, according to this Table, out of 498 living at the age of ten, only 493 are living at the end of the year; or, in other words, that the chance or probability of a life aged ten exiſting through the year is as $\frac{493}{498}$; which fraction, therefore, multiplied by ·961, gives the value ſought, or ·949, equal to 18s. $11\frac{3}{4}$d.

It is plain therefore that, in this buſineſs, it is neceſſary to know the value of life at all the different ages, from ſome table of obſervations on the mortality of mankind, which may ſhow the proportion of the perſons living, out of a given number, at the end of any propoſed time; or from ſome certain hypotheſis, or aſſumed principle. Now various tables and hypotheſes of this ſort have been given by the writers on this ſubject, as Dr. Halley, Mr. Demoivre, Mr. Thomas Simpſon, Mr. Dodſon, Mr. Kerſſeboom, M. Des Parcieux, Dr. Price, Mr. Morgan, Baron Maſeres, and many others. But the ſame table of probabilities of life will not ſuit all places; for long experience has ſhown that all places are not equally healthy, or that the proportion of the number of perſons that die annually is different for different places. Dr. Halley computed a table of the annual deaths as drawn from the bills of mortality of the city of Breſlau in Germany, Mr. Smart and Mr. Simpſon from thoſe of London, Dr. Price from thoſe of Northampton, Mr. Kerſſeboom from thoſe of the provinces of Holland and Weſt-Frieſland, and M. Des Parcieux from the liſts of the French tontines, or long annuities; and all theſe are found to differ from one another. It may not therefore be improper to inſert here a comparative view of the principal tables that have been given of this kind, where the firſt column ſhows the age, and the other columns the number of perſons living at that age, out of 1000 born, or of the age 0, in the firſt line of each column.

TABLE I. *Showing the Number of Perſons living at all Ages, out of* 1000 *that had been born at ſeveral Places, viz.*

Ages.	Vienna.	Berlin.	London.	Norwich.	North-ampton.	Breſlau.	Branden-burg.	Holy-Croſs.	Holland	France.	Swiſſer-land.
0	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
1	542	633	680	798	738	769	775	882	804	805	811
2	471	528	548	651	628	658	718	762	768	777	765
3	430	485	492	595	585	614	687	717	736	750	735
4	400	434	452	566	562	585	664	682	709	727	715
5	377	403	426	544	544	563	642	659	689	711	701
6	357	387	410	526	530	546	622	636	676	697	688
7	344	376	397	511	518	532	607	618	664	686	677
8	337	367	388	500	510	523	595	604	652	676	667
9	331	361	380	490	504	515	585	595	646	667	659
10	326	356	373	481	498	508	577	589	639	660	653
11	322	353	367	474	493	502	570	585	633	654	648
12	318	350	361	469	488	497	564	581	627	649	643
13	314	347	356	464	484	492	559	577	621	644	639
14	310	344	351	460	480	488	554	573	616	639	635
15	306	341	347	455	475	483	549	569	611	635	631
16	302	338	343	451	470	479	544	565	606	631	626
17	299	335	338	446	465	474	539	560	601	626	622
18	295	332	334	442	459	470	535	555	596	621	618
19	291	328	329	437	453	465	531	550	590	616	614
20	287	324	325	432	447	461	527	545	584	610	610
21	284	320	321	426	440	456	522	539	577	604	606
22	280	315	316	421	433	451	517	532	571	598	602
23	276	310	310	415	426	446	512	525	566	592	597
24	273	305	305	409	419	441	507	518	559	586	592
25	269	297	299	404	412	436	502	512	551	580	587
26	265	293	294	398	405	431	498	506	543	574	582
27	261	287	288	392	398	426	495	501	535	568	577
28	256	281	283	385	391	421	492	496	526	562	572
29	251	275	278	378	384	415	489	491	517	556	567
30	247	269	272	372	378	409	486	486	508	550	563
31	243	264	266	366	372	403	482	481	499	544	558
32	239	259	260	361	366	397	477	476	490	538	553
33	235	254	254	355	360	391	472	471	482	532	548
34	231	249	248	350	354	384	467	466	474	526	544
35	226	243	242	344	348	377	462	460	467	520	539
36	221	237	236	338	342	370	456	454	460	514	533
37	216	230	230	333	336	363	450	447	453	508	527
38	211	223	224	327	330	356	444	440	446	503	520
39	205	216	218	322	324	349	438	433	439	497	513
40	199	209	214	317	317	342	432	426	432	492	506
41	194	203	207	311	310	335	427	418	425	487	500
42	189	197	201	306	303	328	422	410	419	482	494
43	185	192	194	300	296	321	417	401	413	476	488
44	181	187	187	294	289	314	412	393	407	471	482
45	176	182	180	287	282	307	407	386	400	466	476
46	171	177	174	281	275	299	400	379	393	460	469
47	165	172	167	274	268	291	394	372	386	455	461
48	159	167	159	268	261	283	388	365	378	449	451
49	153	162	153	261	254	275	381	359	370	443	441
50	147	157	147	255	247	267	374	353	362	436	431

TABLE I. continued.

Ages.	Vienna.	Berlin.	London.	Norwich.	Northampton.	Breſlau.	Brandenburg.	Holy-Croſs.	Holland.	France.	Swiſſerland.
51	142	152	141	248	239	259	367	347	354	429	422
52	137	147	135	242	232	250	359	340	345	422	414
53	133	142	130	235	225	241	351	333	336	414	406
54	128	137	125	228	218	232	343	326	327	406	397
55	123	132	120	221	211	224	334	318	318	397	388
56	117	127	116	213	204	216	324	310	309	388	377
57	111	121	111	206	197	209	314	301	300	379	364
58	106	115	106	199	190	201	304	292	291	369	348
59	101	109	101	191	183	193	293	283	282	359	331
60	96	103	96	184	176	186	282	273	273	349	314
61	91	97	92	177	169	178	271	263	264	339	299
62	87	92	87	169	162	170	260	253	255	329	286
63	82	88	83	161	155	163	248	243	245	318	274
64	77	84	78	153	148	155	236	233	235	307	262
65	72	80	74	144	141	147	224	223	225	296	250
66	67	75	70	136	134	140	213	213	215	285	236
67	62	70	65	128	127	132	202	203	205	273	220
68	57	65	61	119	120	124	190	193	195	260	202
69	52	60	56	111	113	117	178	182	185	246	184
70	48	55	52	103	106	109	166	171	175	232	168
71	44	51	47	94	99	101	153	161	165	218	153
72	40	47	43	86	92	93	138	151	155	195	140
73	36	43	39	79	85	85	122	142	145	188	129
74	33	39	35	71	78	77	107	134	135	173	119
75	30	35	32	64	71	69	93	126	125	158	09
76	27	32	28	57	64	61	80	119	114	144	98
77	24	29	25	50	58	53	68	112	103	129	85
78	21	26	22	43	52	45	59	105	92	115	71
79	18	23	19	37	46	38	51	98	82	102	58
80	16	20	17	32	40	32	44	90	72	88	46
81	14	18	14	27	34	26	38	81	62	75	36
82	12	16	12	23	28	22	32	71	53	63	29
83	10	14	10	19	23	18	25	61	45	53	24
84	8	12	8	16	19	15	21	51	38	44	20
85	7	10	7	13	16	12	15	41	31	36	17
86	6	8	6	10	13	9	11	32	25	28	14
87	5	7	5	8	11	6	8	24	19	21	11
88	4	6	4	6	8	4	6	17	14	16	9
89	3	5	3	5	6	2	4	11	10	12	7
90	2	4	2	4	4	1	3	7	7	8	5

This Table ſhows that the mortality and chance of life are very various in different places; and that therefore, to obtain a ſufficient accuracy, it is neceſſary to adapt a table of probabilities or chances of life to every place for which annuities are to be calculated; or at leaſt one ſet of tables for large towns, and another for country places, as well as for the ſuppoſition of different rates of intereſt.

Several of the foregoing calculations, as they commenced with numbers different from one another, are here reduced to the ſame number at the beginning, viz. 1000 perſons, by which means we are enabled by inſpection, at any age, to compare the numbers together, and immediately perceive the relative degrees of vitality at the ſeveral places. The tables are alſo arranged according to the degree of vitality amongſt them; the leaſt, or that at Vienna, firſt; and the reſt in their order, to the higheſt, which is the province of Vaud in Swiſſerland. The authorities upon which theſe tables depend, are as they here follow: The firſt, taken from Dr. Price's Obſervations on Reverſionary Payments, is formed from the bills at Vienna, for eight years, as given by Mr. Suſmilch, in his Gottliche Ordnung; the 2d, for Berlin, from the ſame, as formed from the bills there for four years, viz. from 1752 to 1755; the 3d, from Dr. Price, ſhowing the true probabilities of life in London, formed from the bills for ten years, viz. from 1759 to 1768; the 4th, for Norwich, formed by Dr. Price from the bills for 30 years, viz. from 1740 to 1769; the 5th, by the ſame, from the bills for Northampton; the 6th, as deduced by Dr. Halley, from the bills of mortality at Breſlau; the 7th ſhows the probabilities of life in a country pariſh in Brandenburg, formed from the bills for 50 years, from 1710 to 1759, as given by Mr. Suſmilch; the 8th ſhows the probabilities of life in the pariſh of Holy-Croſs, near Shrewſbury, formed from a regiſter kept by the Rev. Mr. Garſuch, for 20 years, from 1750 to 1770; the 9th, for Holland, was formed by M. Kerſſeboom, from the regiſters of certain annuities for lives granted by the government of Holland, which had been kept there for 125 years, in which the ages of the ſeveral annuitants dying during that period had been truly entered; the 10th, for France, were formed by M. Des Parcieux, from the liſts of the French tontines, or long annuities, and verified by a compariſon with the mortuary regiſters of ſeveral religious houſes for both ſexes; and the 11th, or laſt, for the diſtrict of Vaud in Swiſſerland, was formed by Dr. Price from the regiſters of 43 pariſhes given by M. Muret, in the Bern Memoirs for the year 1766.

From ſuch liſts as the foregoing, various tables have been formed for the valuation of annuities on ſingle and joint lives, at ſeveral rates of intereſt, in which the value is ſhown by inſpection. The following are thoſe that are given by Mr. Simpſon, in his Select Exerciſes, as deduced from the London bills of mortality.

TABLE II. *Showing the Value of an Annuity on One Life, or Number of Years Annuity in the Value, ſuppoſing Money to bear Intereſt at the ſeveral Rates of* 3, 4, *and* 5, *per Cent.*

Age.	Years Value at 3 per Cent.	Years Value at 4 per Cent.	Years Value at 5 per Cent.	Age.	Years Value at 3 per Cent.	Years Value at 4 per Cent.	Years Value at 5 per Cent.
6	18·8	16·2	14·1	41	13·0	11·4	10·2
7	18·9	16·3	14·2	42	12 8	11·2	10·1
8	19·0	16·4	14·3	43	12·6	11 1	10·0
9	19·0	16·4	14·3	44	12·5	11·0	9·9
10	19·0	16·4	14·3	45	12·3	10·8	9·8
11	19·0	16·4	14·3	46	12·1	10·7	9·7
12	18·9	16·3	14·2	47	11·9	10·5	9·5
13	18·7	16·2	14·1	48	11·8	10·4	9·4
14	18·5	16·0	14·0	49	11·6	10·2	9·3
15	18·3	15·8	13·9	50	11·4	10·1	9·2
16	18·1	15·6	13·7	51	11·2	9·9	9·0
17	17·9	15·4	13·5	52	11·0	9·8	8·9
18	17·6	15·2	13·4	53	10·7	9·6	8·8
19	17·4	15·0	13·2	54	10·5	9·4	8·6
20	17·2	14·8	13·0	55	10·3	9·3	8·5
21	17·0	14·7	12·9	56	10 1	9·1	8·4
22	16·8	14·5	12·7	57	9·9	8·9	8·2
23	16·5	14·3	12·6	58	9·6	8·7	8·1
24	16·3	14·1	12·4	59	9·4	8·6	8·0
25	16·1	14·0	12·3	60	9·2	8·4	7·9
26	15·9	13·8	12·1	61	8·9	8·2	7·7
27	15·6	13·6	12·0	62	8·7	8·1	7 6
28	15·4	13·4	11·8	63	8·5	7·9	7·4
29	15·2	13·2	11·7	64	8·3	7·7	7·3
30	15·0	13·1	11·6	65	8·0	7·5	7·1
31	14·8	12·9	11·4	66	7 8	7·3	6·9
32	14·6	12·7	11·3	67	7·6	7·1	6·7
33	14·4	12·6	11·2	68	7·4	6·9	6·6
34	14·2	12·4	11·0	69	7·1	6·7	6·4
35	14·1	12·3	10·9	70	6·9	6·5	6·2
36	13·9	12·1	10·8	71	6·7	6·3	6·0
37	13·7	11·9	10 6	72	6·5	6·1	5·8
38	13·5	11·8	10·5	73	6·2	5·9	5·6
39	13·3	11·6	10·4	74	5·9	5·6	5·4
40	13·2	11·5	10·3	75	5·6	5·4	5·2

The uſes of theſe Tables may be exemplified in the following Problems.

PROB. 1. *To find the Probability, or Proportion of Chance, that a Perſon of a Given Age continues in being a propoſed Number of Years.*—Suppoſe the age be 40, and the number of years propoſed 15; then, to calculate by the probabilities for London, in Tab. I. againſt 40 years ſtands 214, and againſt 55 years, the age to which the perſon muſt arrive, ſtands 120; which ſhows that, of 214 perſons who attain to the age of 40, only 120 of them reach the age of 55, and conſequently 94 die between the ages of 40 and 55. It is evident therefore that the odds for attaining the propoſed age of 55, are as 120 to 94, or as 9 to 7 nearly.

PROB. 2. *To find the Value of an Annuity for a propoſed Life.*—This problem is reſolved from Tab. II. by looking againſt the given age, and under the propoſed rate of intereſt; then the correſponding quantity ſhows the number of years purchaſe required. For example, If the given age be 36, the rate of intereſt 4 per cent. and the propoſed annuity 250l. Then in the Table it appears that the value is 12·1 years purchaſe, or 12.1 times 250l. that is 3025l.

After the ſame manner the anſwer will be found in any other caſe falling within the limits of the Table. But, as there may ſometimes be occaſion to know the values of lives computed at higher rates of intereſt than thoſe in the Table, the two following practical rules are ſubjoined; by which the problem is reſolved independent of tables.

Rule 1. When the given age is not leſs than 45 years, nor greater than 85, ſubtract it from 92; then multiply the remainder by the perpetuity, and divide the product by the ſaid remainder added to $2\frac{1}{2}$ times the perpetuity; ſo ſhall the quotient be the number of years purchaſe required. Where note, that by the *perpetuity* is meant the number of years purchaſe of the fee-ſimple; found by dividing 100 by the rate per cent. at which intereſt is reckoned.

Ex. Let the given age be 50 years, and the rate of intereſt 10 per cent. Then ſubtracting 50 from 92, there remains 42; which multiplied by 10 the perpetuity, gives 420; and this divided by 67, the remainder increaſed by $2\frac{1}{2}$ times 10 the perpetuity, quotes 6·3 nearly, for the number of years purchaſe. Therefore, ſuppoſing the annuity to be 100l. its value in preſent money will be 630l.

Rule 2. When the age is between 10 and 45 years; take 8-tenths of what it wants of 45, which divide by the rate per cent. increaſed by 1·2; then, if the quotient be added to the value of a life of 45 years, found by the preceding rule, there will be obtained the number of years purchaſe in this caſe. For example, Let the propoſed age be 20 years, and the rate of intereſt 5 per cent. Here taking 20 from 45, there remains 25; $\frac{8}{10}$ of which is 20; which divided by 6·2, quotes 3·2; and this added to 9·8, the value of a life of 45, found by the former rule, gives 13 for the number of years purchaſe that a life of 20 ought to be valued at.

And the concluſions derived by theſe rules, Mr. Simpſon adds, are ſo near the true values, computed from real obſervations, as ſeldom to differ from them by more than $\frac{1}{10}$ or $\frac{2}{10}$ of one year's purchaſe.

The obſervations here alluded to, are thoſe which are founded on the London bills of mortality. And a ſimilar method of ſolution, accommodated to the Breſlau obſervations, will be as follows, viz. "Multiply the difference between the given age and 85 years by the perpetuity, and divide the product by 8-tenths of the ſaid difference increaſed by double the perpetuity, for the anſwer." Which, from 8 to 80 years of age, will commonly come within leſs than $\frac{1}{8}$ of a year's purchaſe of the truth.

TABLE III. *Showing the Value of an Annuity for Two Joint Lives; that is, for as long as they exist together.*

Age of Younger	Age of Elder	Value at 3 per Cent.	Value at 4 per Cent.	Value at 5 per Cent.
10	10	14·7	13·0	11·6
	15	14·3	12·7	11·3
	20	13·8	12·2	10·8
	25	13·1	11·6	10·2
	30	12·3	10·9	9·7
	35	11·5	10·2	9·1
	40	10·7	9·6	8·6
	45	10·0	9·0	8·1
	50	9·3	8·4	7·6
	55	8·6	7·8	7·1
	60	7·8	7·2	6·6
	65	6·9	6·5	6·1
	70	6·1	5·8	5·5
	75	5·3	5·1	4·9
15	15	13·9	12·3	11·0
	20	13·3	11·8	10·5
	25	12·6	11·2	10·1
	30	11·9	10·6	9·5
	35	11·2	10·0	9·0
	40	10·4	9·4	8·5
	45	9·6	8·8	8·0
	50	8·9	8·2	7·5
	55	8·2	7·6	7·0
	60	7·5	7·0	6·5
	65	6·8	6·4	6·0
	70	6·0	5·7	5·4
	75	5·2	5·0	4·8
20	20	12·8	11·3	10 1
	25	12·2	10·8	9·7
	30	11·6	10·3	9·2
	35	10·9	9·8	8·8
	40	10·2	9·2	8·4
	45	9·5	8·6	7·9
	50	8·8	8·0	7·4
	55	8·1	7·5	6·9
	60	7·4	6·9	6·4
	65	6·7	6·3	5·9
	70	6·0	5·7	5·4
	75	5·2	5·0	4·8
25	25	11·8	10·5	9·4
	30	11·3	10·1	9·0
	35	10·7	9·6	8·6
	40	10·0	9·1	8·2
	45	9·4	8·5	7·8
	50	8·7	7·9	7·3
	55	8·0	7·4	6·8
	60	7·3	6·8	6·3
	65	6·6	6·2	5·8
	70	5·9	5·6	5·3
	75	5·1	4·9	4·7
30	30	10·8	9·6	8·6
	35	10·3	9·2	8·3
	40	9·7	8·8	8·0
	45	9·1	8·3	7·6
	50	8·5	7·8	7·2
	55	7·9	7·3	6·7
	60	7·2	6·7	6·2
	65	6·5	6·1	5·7
	70	5·8	5·5	5·2
	75	5·1	4·9	4·7
35	35	9·9	8·8	8·0
	40	9·4	8·5	7·7
	45	8·9	8·1	7·4
	50	8·3	7·6	7·0
	55	7·7	7·1	6·6
	60	7·1	6·5	6·1
	65	6·4	6·0	5·6
	70	5·7	5·4	5·1
	75	5·0	4·8	4·6
40	40	9·1	8·1	7·3
	45	8·7	7·8	7·1
	50	8·2	7·4	6·8
	55	7·6	6·9	6·4
	60	7·0	6·4	6·0
	65	6·4	5·9	5·5
	70	5·7	5·4	5·1
	75	5·0	4·8	4·6
45	45	8·3	7·4	6·7
	50	7·9	7·1	6·5
	55	7·4	6·7	6·2
	60	6·8	6·3	5·8
	65	6·3	5·8	5·4
	70	5·6	5·3	5·0
	75	4·9	4·7	4·5
50	50	7·6	6·8	6·2
	55	7·2	6·5	6·0
	60	6·7	6·1	5·7
	65	6·2	5·7	5·3
	70	5·5	5·2	4·9
	75	4·8	4·6	4·4
55	55	6·9	6·2	5·7
	60	6·5	5·9	5·5
	65	6·0	5·6	5·2
	70	5·4	5·1	4·8
	75	4·7	4·5	4·3
60	60	6·1	5·6	5·2
	65	5·7	5·3	4·9
	70	5·2	4·9	4·6
	75	4·6	4·4	4·2
65	65	5·4	5·0	4·7
	70	4·9	4·6	4·4
	75	4·4	4·2	4·0
70	70	4·6	4·4	4·2
	75	4·2	4·0	3·9
75	75	3·8	3·7	3·6

TABLE IV. *For the Value of an Annuity upon the Longer of Two Given Lives.*

Age of Younger	Age of Elder	Value at 3 per Cent.	Value at 4 per Cent.	Value at 5 per Cent.
10	10	23·4	19·9	17·1
	15	22·9	19·5	16·8
	20	22·5	19·1	16·6
	25	22·2	18·8	16·4
	30	21·9	18·6	16·2
	35	21·6	18·4	16·1
	40	21·4	18·3	16 0
	45	21·2	18·2	15·9
	50	20·9	18·0	15·8
	55	20·7	17·8	15 7
	60	20·4	17·6	15·5
	65	20·1	17·4	15·3
	70	19 8	17·2	15·1
	75	19·5	16·9	14·8
15	15	22·8	19·3	16·7
	20	22·3	18·9	16·4
	25	21·9	18·6	16·2
	30	21·6	18·3	16·0
	35	21·3	18·1	15·9
	40	21·1	17·9	15 7
	45	20·9	17·8	15·6
	50	20·7	17·6	15·4
	55	20·4	17·4	15·3
	60	20·1	17·2	15·2
	65	19·8	16·9	15·0
	70	19·4	16·6	14·7
	75	18·9	16·3	14·4
20	20	21·6	18·3	15·8
	25	21·1	17·9	15·5
	30	20·7	17·6	15·3
	35	20·4	17·4	15·1
	40	20·1	17·2	15·0
	45	19·9	17·0	14·9
	50	19 6	16·8	14·7
	55	19·4	16·6	14·5
	60	19·1	16·3	14·3
	65	18·7	16 0	14·1
	70	18·2	15·7	13·8
	75	17·7	15·3	13·5
25	25	20·3	17·4	15·1
	30	19·8	17·0	14·9
	35	19·4	16·7	14·7
	40	19·2	16·5	14·5
	45	18·9	16·3	14·3
	50	18·7	16·1	14·2
	55	18·4	15·9	14·0
	60	18·0	15·6	13·8
	65	17·6	15·3	13·6
	70	17·2	15·0	13·3
	75	16·7	14·6	12·9
30	30	19·3	16·6	14·5
	35	18·8	16·2	14·2
	40	18·4	15·9	14·0
	45	18·1	15·6	13·8
	50	17·8	15·4	13·6
	55	17·4	15·1	13·4
	60	17·0	14·8	13·2
	65	16·6	14·5	12·9
	70	16·1	14·1	12·6
	75	15 6	13 7	12·2
35	35	18·3	15·8	13·8
	40	17·8	15·4	13·5
	45	17·4	15·1	13·3
	50	17·1	14·8	13 1
	55	16·7	14·5	12 9
	60	16·3	14·2	12·7
	65	15·8	13·8	12·4
	70	15·3	13·4	12·0
	75	14·8	13·0	11·6
40	40	17·3	15·0	13·3
	45	16·8	14·6	13·0
	50	16·3	14·2	12·7
	55	15·9	13·9	12·4
	60	15·4	13·5	12·1
	65	14·9	13·1	11·8
	70	14·5	12·7	11·4
	75	14·0	12·3	11·0
45	45	16·2	14·2	12·8
	50	15·7	13·8	12·5
	55	15·2	13·4	12·1
	60	14·7	12·9	11·7
	65	14·1	12·5	11·4
	70	13·6	12·0	11·0
	75	13·1	11·6	10·6
50	50	15·0	13·3	12·1
	55	14·5	12·9	11·7
	60	13·9	12·4	11·3
	65	13·3	12·0	10·9
	70	12·8	11·5	10·5
	75	12·3	11·0	10·1
55	55	13·6	12·4	11·3
	60	13·0	11·9	10 9
	65	12·4	11·3	10·5
	70	11·8	10·8	10·0
	75	11·3	10·3	9·5
60	60	12·2	11·2	10·5
	65	11·5	10·6	10·0
	70	10·9	10·1	9·5
	75	10·3	9·5	9·0
65	65	10·7	10·0	9·4
	70	10·0	9·4	8·9
	75	9·3	8·7	8·3
70	70	9·2	8·6	8·2
	75	8·4	7·9	7·6
75	75	7·6	7·2	6·9

EXEMPLIFICATION of TABLES III. and IV.

PROB. 3. *To find the Value of an Annuity for Two Joint Lives; that is, for as long as they both continue in being together.*—In Table III. find the younger age, or that nearest to it, in column 1, and the higher age in column 2; then against this last is the number of years purchase in the proper column for the interest.

Ex. Suppose the two ages be 20 and 35 years; then the value is 10·9 years purchase at 3 per cent.
or 9·8 - - at 4 per cent.
or 8·8 - - at 5 per cent.

PROB. 4. *To find the Value of the Annuity for the Longest of Two Lives; that is, for as long as either of them continues in being.*—In Table IV. find the age of the youngest life, or the nearest to it, in column 1, and the age of the elder in column 2; then against this last is the answer in the proper column of interest.

Ex. If the two ages be 15 and 40; then the value of the annuity upon the longest of two such lives
is 21·1 years purchase at 3 per cent.
or 17·9 - - 4 per cent.
or 15·7 - - 5 per cent.

In the last two problems, if the younger age, or the rate of interest, be not exactly found in the Tables, the nearest to them may be taken, and then by proportion the value for the true numbers will be nearly found.

Rules and tables for the values of three lives, &c. may also be seen in Simpson, and in Baron Maseres's Annuities, &c. All these calculations have been made from tables of the real mortuary registers, differing unequally at the several ages. But rules have also been given upon other principles, as by De Moivre, upon the supposition that the decrements of life are equal at all ages; an assumption not much differing from the truth, from 7 to 70 years of age.

Most of the offices we have enumerated under the article ASSURANCE, vol. ii. p. 293, 4, grant annuities on lives; but the life-annuities now granted by the government are so much more advantageous to the purchaser, that we need not stop to notice any other.

By acts of the 48th, 49th, and 52d, Geo. III. the commissioners for the reduction of the national debt are empowered to grant life-annuities to persons who may be disposed to transfer to the said commissioners, either 3l. per cent. consolidated or reduced bank-annuities, when those stocks shall be at or above 50; but no person can be admitted as a nominee who shall be under the age of 35 years, nor can any sum be transferred less than 100l. stock. It is also provided that no person who shall not be a native of and resident in Great Britain or Ireland can be the nominee in respect of any life-annuity to be purchased by or on the behalf of any other person or persons.

Previous to the transfer, the parties must produce certificates of the age of the nominees, by a copy of the register of their baptism under the hand of the minister, or, in his absence, under the hands of the churchwardens and overseers of the parish, or any two of them, where such register is kept. This *certificate* of register to be signed by two witnesses, one of whom is to make *affidavit* of the truth of it.

Upon the certificates and affidavits being produced to the proper officer, he shall grant a certificate in the form prescribed by the act; which certificate being produced at the bank of England, and upon the transfer, to the commissioners for the reduction of the national debt, of the bank-annuities to be transferred, as the consideration for the purchase of the life-annuity, the person producing the said certificate shall be entitled to receive a certificate from one of the cashiers of the bank of England, and signed by one of the said cashiers, acknowledging such transfer, and which shall be an acquittance or discharge for the stock so transferred; but it is provided, that no certificate granted by the said officer (not the cashier) shall be valid under the provisions of this act after the expiration of five days from the date of such certificate. In purchasing the said life-annuities, the price at which the stock is to be taken in payment for the same is to be the price at which the said stock was to be bought on the nearest day preceding the date of the certificate.

If certificates or affidavits containing false statements of the ages of nominees, with intent to obtain a higher annuity than would be obtained according to their true age, should be produced, the annuity, and the stock transferred for the purchase of it, will be forfeited, and the person on whose behalf such stock may have been transferred will also forfeit treble the value of all sums which may have been received on account of the said annuity, and a penalty of 500l. Persons having once produced the documents required by the act, may purchase a further annuity upon the life of the same nominee without exhibiting any fresh certificate of age, &c. These life-annuities are on government security; are payable half-yearly at the bank of England, the same as the dividends, and may be received by power of attorney; they are also transferable, but not in parts or shares, nor can the original nominee ever be changed.

If either 3l. per cent. consols or reduced bank annuities be transferred between the 5th Jan. and 4th April, both inclusive; the life-annuity becomes payable the 5th July and 5th Jan. in every year. If between the 5th April and 4th July, it becomes payable the 10th Oct. and 5th April in every year. If between the 5th of July and 9th of Oct. it becomes payable the 5th Jan. and 5th July in every year. If between the 10th Oct. and 4th Jan. it becomes payable the 5th April and 10th Oct. in every year.

By observing the above periods, it will be seen that purchases may be made so as to receive life-annuities *quarterly*. At the time of payment, if the nominee shall appear personally and be identified at the office, no documents will be required of the party to enable him or her to receive the same; but, in cases of non-appearance, a certificate of the life of the nominee must be produced, accompanied by an affidavit of identity, the form of which may be had on application at the office. Life-annuities purchased under the provisions of the above acts, are free from all taxes, charges, and impositions, whatsoever, except such as dividends of consolidated or reduced bank annuities are or may be subject and liable to; and are to be deemed personal estate.

Upon the death of a single nominee, or of the survivor of any two joint nominees, one fourth part of the annuity depending upon his or her life will be payable to the person entitled to the said annuity, or to his or her executors, administrators, or assigns, (over and above all arrears,) provided it be claimed within two years after such decease, but not otherwise. For example, if an annuity of 100l. depended upon the life of the nominee, the fourth part to be claimed (for that time only) would be 25l. over and above any arrear that might be due on such annuity. Persons receiving annuities after the same ought to cease by virtue of the act (knowing the nominees to be dead) will forfeit treble the value of the money so received, and a farther penalty of 500l.

Persons convicted of wilfully or corruptly swearing or affirming any matters or things which shall be untrue, will be subject to the penalties of perjury. Persons convicted of forging, counterfeiting, or altering, any register of birth or baptism, or any copy thereof, or any of the certificates, affidavits, or other instruments required, by the act, or of personating any true and real nominee or nominees, will be adjudged guilty of felony.

Tables of the rates and blank forms are delivered gratis at the Government Life-Annuity Office, Bank-buildings, Cornhill. No fee whatever is charged at this office; and all documents relating to the purchase, transfer, or receipt, of these annuities, are exempt from the stamp-duty.

TABLE I.—SINGLE LIVES.

The Annual Amount of Life-Annuities which will be payable during the Continuance of SINGLE LIVES for every 100l. of 3l. per Cent. Conſolidated or Reduced Bank Annuities transferred to the Commiſſioners for the Reduction of the National Debt; according to the ſeveral Prices of Stock therein ſtated.

Age.	Price of Stock 50 & under 51.	51—52	52—53	53—54	54—55	55—56	56—57	57—58	58—59	59—60	60—61	61—62	62—63	63—64	64—65	65—66	66—67	67—68	68—69	69—70
	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d.
35	4 5 0	4 6 0	4 6 0	4 7 0	4 8 0	4 9 0	4 9 0	4 10 0	4 11 0	4 11 0	4 12 0	4 13 0	4 13 0	4 14 0	4 15 0	4 16 0	4 16 0	4 17 0	4 18 0	4 18 0
36	4 6 0	4 6 0	4 7 0	4 8 0	4 9 0	4 9 0	4 10 0	4 11 0	4 12 0	4 12 0	4 13 0	4 14 0	4 14 0	4 15 0	4 16 0	4 17 0	4 17 0	4 18 0	4 19 0	5 0 0
37	4 7 0	4 7 0	4 8 0	4 9 0	4 10 0	4 10 0	4 11 0	4 12 0	4 13 0	4 13 0	4 14 0	4 15 0	4 15 0	4 16 0	4 17 0	4 18 0	4 18 0	4 19 0	5 0 0	5 1 0
38	4 8 0	4 8 0	4 9 0	4 10 0	4 11 0	4 11 0	4 12 0	4 13 0	4 14 0	4 14 0	4 15 0	4 16 0	4 16 0	4 17 0	4 18 0	4 19 0	5 0 0	5 1 0	5 2 0	5 2 0
39	4 8 0	4 9 0	4 10 0	4 10 0	4 11 0	4 12 0	4 13 0	4 14 0	4 14 0	4 15 0	4 16 0	4 17 0	4 18 0	4 19 0	5 0 0	5 1 0	5 2 0	5 3 0	5 3 0	5 4 0
40	4 9 0	4 10 0	4 11 0	4 11 0	4 12 0	4 13 0	4 14 0	4 15 0	4 15 0	4 16 0	4 17 0	4 18 0	4 19 0	5 0 0	5 1 0	5 2 0	5 3 0	5 4 0	5 4 0	5 5 0
41	4 10 0	4 10 0	4 11 0	4 12 0	4 13 0	4 14 0	4 15 0	4 15 0	4 16 0	4 17 0	4 18 0	4 19 0	5 0 0	5 1 0	5 2 0	5 3 0	5 4 0	5 5 0	5 5 0	5 6 0
42	4 10 0	4 11 0	4 12 0	4 13 0	4 14 0	4 15 0	4 15 0	4 16 0	4 17 0	4 18 0	4 19 0	5 0 0	5 1 0	5 2 0	5 3 0	5 4 0	5 5 0	5 6 0	5 6 0	5 7 0
43	4 12 0	4 13 0	4 14 0	4 15 0	4 16 0	4 17 0	4 17 0	4 18 0	4 19 0	5 0 0	5 1 0	5 2 0	5 2 0	5 3 0	5 4 0	5 5 0	5 6 0	5 7 0	5 8 0	5 9 0
44	4 13 0	4 14 0	4 15 0	4 16 0	4 17 0	4 18 0	4 18 0	4 19 0	5 0 0	5 1 0	5 2 0	5 3 0	5 4 0	5 5 0	5 6 0	5 7 0	5 7 0	5 8 0	5 9 0	5 10 0
45	4 14 0	4 14 0	4 15 0	4 16 0	4 17 0	4 18 0	4 19 0	5 0 0	5 1 0	5 2 0	5 3 0	5 4 0	5 5 0	5 6 0	5 7 0	5 8 0	5 9 0	5 10 0	5 11 0	5 12 0
46	4 16 0	4 16 0	4 17 0	4 18 0	4 19 0	5 0 0	5 1 0	5 2 0	5 3 0	5 4 0	5 5 0	5 6 0	5 7 0	5 8 0	5 9 0	5 10 0	5 11 0	5 12 0	5 13 0	5 14 0
47	4 16 0	4 17 0	4 18 0	4 19 0	5 0 0	5 1 0	5 2 0	5 3 0	5 4 0	5 5 0	5 6 0	5 7 0	5 8 0	5 9 0	5 10 0	5 11 0	5 12 0	5 13 0	5 14 0	5 15 0
48	4 18 0	4 19 0	5 0 0	5 1 0	5 2 0	5 3 0	5 4 0	5 5 0	5 6 0	5 7 0	5 8 0	5 9 0	5 10 0	5 11 0	5 12 0	5 13 0	5 14 0	5 15 0	5 16 0	5 17 0
49	5 0 0	5 1 0	5 2 0	5 3 0	5 4 0	5 5 0	5 6 0	5 7 0	5 8 0	5 9 0	5 10 0	5 11 0	5 12 0	5 13 0	5 14 0	5 15 0	5 16 0	5 17 0	5 18 0	5 19 0
50	5 2 0	5 3 0	5 4 0	5 5 0	5 6 0	5 7 0	5 8 0	5 9 0	5 10 0	5 11 0	5 12 0	5 13 0	5 14 0	5 15 0	5 16 0	5 17 0	5 18 0	5 19 0	6 0 0	6 1 0
51	5 3 0	5 4 0	5 5 0	5 6 0	5 7 0	5 9 0	5 10 0	5 11 0	5 12 0	5 13 0	5 14 0	5 15 0	5 16 0	5 17 0	5 18 0	5 19 0	6 0 0	6 1 0	6 2 0	6 3 0
52	5 4 0	5 5 0	5 6 0	5 7 0	5 8 0	5 9 0	5 10 0	5 12 0	5 13 0	5 14 0	5 15 0	5 17 0	5 18 0	5 19 0	6 0 0	6 1 0	6 2 0	6 3 0	6 4 0	6 5 0
53	5 7 0	5 8 0	5 9 0	5 10 0	5 11 0	5 12 0	5 13 0	5 15 0	5 16 0	5 17 0	5 18 0	5 19 0	6 0 0	6 1 0	6 2 0	6 3 0	6 4 0	6 5 0	6 6 0	6 7 0
54	5 8 0	5 9 0	5 10 0	5 12 0	5 13 0	5 14 0	5 15 0	5 16 0	5 18 0	5 19 0	6 0 0	6 1 0	6 2 0	6 3 0	6 5 0	6 6 0	6 7 0	6 8 0	6 8 0	6 9 0
55	5 10 0	5 11 0	5 12 0	5 13 0	5 15 0	5 16 0	5 17 0	6 18 0	6 0 0	6 1 0	6 2 0	6 3 0	6 5 0	6 6 0	6 7 0	6 8 0	6 10 0	6 11 0	6 12 0	6 13 0
56	5 11 0	5 12 0	5 14 0	5 15 0	5 16 0	5 18 0	5 19 0	6 0 0	6 1 0	6 3 0	6 4 0	6 6 0	6 7 0	6 8 0	6 10 0	6 11 0	6 12 0	6 14 0	6 15 0	6 16 0
57	5 14 0	5 15 0	5 16 0	5 18 0	5 19 0	6 0 0	6 2 0	6 3 0	6 4 0	6 6 0	6 7 0	6 8 0	6 10 0	6 11 0	6 13 0	6 14 0	6 15 0	6 17 0	6 18 0	7 0 0
58	5 16 0	5 17 0	5 19 0	6 0 0	6 2 0	6 3 0	6 4 0	6 6 0	6 7 0	6 9 0	6 10 0	6 11 0	6 13 0	6 14 0	6 16 0	6 17 0	6 19 0	7 0 0	7 1 0	7 3 0
59	5 19 0	6 0 0	6 1 0	6 3 0	6 4 0	6 6 0	6 7 0	6 9 0	6 10 0	6 12 0	6 13 0	6 14 0	6 16 0	6 17 0	6 19 0	7 0 0	7 1 0	7 3 0	7 4 0	7 6 0
60	6 0 0	6 2 0	6 3 0	6 5 0	6 6 0	6 8 0	6 9 0	6 11 0	6 12 0	6 14 0	6 15 0	6 17 0	6 18 0	7 0 0	7 1 0	7 3 0	7 4 0	7 6 0	7 7 0	7 9 0
61	6 3 0	6 4 0	6 6 0	6 7 0	6 9 0	6 10 0	6 12 0	6 13 0	6 15 0	6 16 0	6 18 0	6 19 0	7 1 0	7 2 0	7 4 0	7 6 0	7 7 0	7 9 0	7 10 0	7 12 0
62	6 5 0	6 6 0	6 8 0	6 9 0	6 11 0	6 13 0	6 14 0	6 16 0	6 18 0	6 19 0	7 1 0	7 3 0	7 5 0	7 6 0	7 8 0	7 9 0	7 11 0	7 13 0	7 14 0	7 16 0
63	6 8 0	6 10 0	6 11 0	6 13 0	6 15 0	6 17 0	6 18 0	7 0 0	7 2 0	7 3 0	7 5 0	7 7 0	7 9 0	7 10 0	7 12 0	7 14 0	7 15 0	7 17 0	7 19 0	8 0 0
64	6 13 0	6 14 0	6 16 0	6 18 0	7 0 0	7 1 0	7 3 0	7 5 0	7 7 0	7 8 0	7 10 0	7 12 0	7 14 0	7 16 0	7 18 0	8 0 0	8 2 0	8 4 0	8 5 0	8 7 0
65	6 16 0	6 17 0	6 19 0	7 1 0	7 3 0	7 5 0	7 7 0	7 8 0	7 10 0	7 12 0	7 14 0	7 16 0	7 18 0	8 0 0	8 2 0	8 4 0	8 5 0	8 7 0	8 9 0	8 11 0
66	7 0 0	7 1 0	7 3 0	7 5 0	7 7 0	7 9 0	7 11 0	7 13 0	7 15 0	7 17 0	7 19 0	8 1 0	8 3 0	8 5 0	8 7 0	8 9 0	8 11 0	8 13 0	8 15 0	8 17 0
67	7 5 0	7 7 0	7 9 0	7 11 0	7 13 0	7 15 0	7 17 0	7 19 0	8 1 0	8 3 0	8 5 0	8 7 0	8 9 0	8 11 0	8 13 0	8 15 0	8 17 0	8 19 0	9 1 0	9 3 0
68	7 10 0	7 12 0	7 14 0	7 16 0	7 18 0	8 1 0	8 3 0	8 5 0	8 7 0	8 9 0	8 11 0	8 13 0	8 15 0	8 18 0	9 0 0	9 2 0	9 4 0	9 6 0	9 8 0	9 10 0
69	7 16 0	7 18 0	8 0 0	8 3 0	8 5 0	8 7 0	8 9 0	8 11 0	8 14 0	8 16 0	8 18 0	9 0 0	9 2 0	9 4 0	9 7 0	9 9 0	9 11 0	9 13 0	9 16 0	9 18 0
70	8 1 0	8 3 0	8 5 0	8 8 0	8 10 0	8 12 0	8 15 0	8 17 0	8 19 0	9 2 0	9 4 0	9 6 0	9 9 0	9 11 0	9 13 0	9 16 0	9 18 0	10 0 0	10 3 0	10 5 0
71	8 8 0	8 10 0	8 12 0	8 15 0	8 17 0	9 0 0	8 2 0	9 5 0	9 7 0	9 10 0	9 12 0	9 14 0	9 17 0	9 19 0	10 2 0	10 4 0	10 7 0	10 9 0	10 12 0	10 14 0
72	8 15 0	8 18 0	9 0 0	9 3 0	9 5 0	9 8 0	9 11 0	9 13 0	9 16 0	9 18 0	10 1 0	10 3 0	10 6 0	10 8 0	10 11 0	10 14 0	10 16 0	10 19 0	11 2 0	11 4 0
73	9 3 0	9 5 0	9 8 0	9 11 0	9 14 0	9 16 0	9 19 0	10 2 0	10 5 0	10 7 0	10 10 0	10 13 0	10 16 0	10 18 0	11 1 0	11 4 0	11 7 0	11 9 0	11 12 0	11 15 0
74	9 11 0	9 13 0	9 16 0	9 19 0	10 2 0	10 5 0	10 8 0	10 11 0	10 14 0	10 17 0	11 0 0	11 3 0	11 6 0	11 9 0	11 12 0	11 15 0	11 18 0	12 1 0	12 4 0	12 7 0
75	10 0 0	10 3 0	10 6 0	10 0 0	10 12 0	10 16 0	10 19 0	11 2 0	11 5 0	11 8 0	11 11 0	11 14 0	11 17 0	12 0 0	12 3 0	12 6 0	12 10 0	12 13 0	12 16 0	12 19 0

EXAMPLES. A perſon whoſe age is 60 would receive (if the price of ſtock were 50 and under 51) an annuity of 6l. for every 100l. of 3l. per cent. conſols or reduced annuities transferred to the commiſſioners, being at the average rate of 11l. 17s. 7d. for 100l. money. Other offices allow 9l. 4s. per cent. only at this age.

A perſon whoſe age is 60 would receive (if the price of ſtock were 60 and under 61) an annuity of 6l. 15s. for every 100l. of 3 per cent. conſols, or reduced annuities, being at the rate of 11l. 3s. 2d. for 100l. money.

TABLE II. JOINT LIVES.

The Annual Amount of Life-Annuities granted on the Continuance of Two Lives, and the Life of the longer Liver of them, which will be payable for every 100l. of the Stock transferred, according to the Average Price thereof, in case the Nominees shall be of equal Ages, or, being of different Ages, in case the Age of the elder Nominee shall not exceed the Age of the younger Nominee by more than FIVE YEARS at the Time of the Transfer.

Age of Lives, or younger Life.	60—61	61—62	62—63	63—64	64—65	65—66	66—67	67—68	68—69	69—70	70—71
	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d.
35	3 15 0	3 16 0	3 16 0	3 17 0	3 17 0	3 18 0	3 18 0	3 19 0	3 19 0	4 0 0	4 0 0
40	3 19 0	3 19 0	4 0 0	4 0 0	4 1 0	4 1 0	4 2 0	4 3 0	4 3 0	4 4 0	4 4 0
45	4 3 0	4 3 0	4 4 0	4 5 0	4 5 0	4 6 0	4 7 0	4 7 0	4 8 0	4 9 0	4 9 0
50	4 8 0	4 9 0	4 10 0	4 11 0	4 12 0	4 12 0	4 13 0	4 14 0	4 15 0	4 15 0	4 16 0
55	4 16 0	4 16 0	4 17 0	4 18 0	4 19 0	5 0 0	5 1 0	5 2 0	5 3 0	5 4 0	5 5 0
60	5 4 0	5 5 0	5 7 0	5 8 0	5 9 0	5 10 0	5 11 0	5 12 0	5 13 0	5 14 0	5 15 0
65	5 18 0	5 19 0	6 1 0	6 2 0	6 3 0	6 5 0	6 6 0	6 7 0	6 8 0	6 10 0	6 11 0
70	6 18 0	7 0 0	7 1 0	7 3 0	7 5 0	7 6 0	7 8 0	7 10 0	7 11 0	7 13 0	7 15 0
75	8 9 0	8 11 0	8 14 0	8 16 0	8 18 0	9 0 0	9 3 0	9 5 0	9 7 0	9 9 0	9 11 0

In case the Age of the elder Nominee shall exceed the Age of the younger Nominee by more than Five Years, but not by more than TEN YEARS, at the Time of the Transfer.

Age of younger Life.	60—61	61—62	62—63	63—64	64—65	65—66	66—67	67—68	68—69	69—70	70—71
	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. .
35	3 17 0	3 17 0	3 18 0	3 18 0	3 19 0	3 19 0	4 0 0	4 1 0	4 1 0	4 2 0	4 2 0
40	4 1 0	4 1 0	4 2 0	4 2 0	4 3 0	4 4 0	4 4 0	4 5 0	4 5 0	4 6 0	4 7 0
45	4 5 0	4 6 0	4 7 0	4 8 0	4 8 0	4 9 0	4 10 0	4 10 0	4 11 0	4 12 0	4 13 0
50	4 12 0	4 12 0	4 13 0	4 14 0	4 15 0	4 16 0	4 17 0	4 18 0	4 18 0	4 19 0	5 0 0
55	5 0 0	5 1 0	5 2 0	5 3 0	5 4 0	5 5 0	5 6 0	5 7 0	5 8 0	5 9 0	5 10 0
60	5 10 0	5 12 0	5 13 0	5 14 0	5 15 0	5 16 0	5 17 0	5 19 0	6 0 0	6 1 0	6 2 0
65	6 7 0	6 8 0	6 10 0	6 11 0	6 13 0	6 14 0	6 15 0	6 17 0	6 18 0	7 0 0	7 1 0
70	7 10 0	7 12 0	7 14 0	7 16 0	7 18 0	8 0 0	8 2 0	8 4 0	8 6 0	8 8 0	8 9 0

In case the Age of the elder Nominee shall exceed the Age of the younger Nominee by more than Ten Years, but not by more than FIFTEEN YEARS.

Younger	60—61	61—62	62—63	63—64	64—65	65—66	66—67	67—68	68—69	69—70	70—71
	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s d.
35	3 18 0	3 19 0	4 0 0	4 0 0	4 1 0	4 1 0	4 2 0	4 2 0	4 3 0	4 4 0	4 4 0
40	4 3 0	4 3 0	4 4 0	4 5 0	4 5 0	4 6 0	4 7 0	4 7 0	4 8 0	4 9 0	4 9 0
45	4 8 0	4 9 0	4 10 0	4 10 0	4 11 0	4 12 0	4 13 0	4 13 0	4 14 0	4 15 0	4 16 0
50	4 15 0	4 16 0	4 17 0	4 18 0	4 19 0	4 19 0	5 0 0	5 1 0	5 2 0	5 3 0	5 4 0
55	5 4 0	5 5 0	5 6 0	5 7 0	5 8 0	5 9 0	5 10 0	5 11 0	5 12 0	5 13 0	5 14 0
60	5 17 0	5 18 0	5 19 0	6 1 0	6 2 0	6 3 0	6 4 0	6 6 0	6 7 0	6 8 0	6 9 0
65	6 14 0	6 16 0	6 17 0	6 19 0	7 0 0	7 2 0	7 4 0	7 5 0	7 7 0	7 8 0	7 10 0

In case the Age of the elder Nominee shall exceed the Age of the younger Nominee by more than Fifteen Years, but not by more than TWENTY YEARS.

	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d	l. s. d.	l. s. d.
35	4 0 0	4 1 0	4 1 0	4 2 0	4 3 0	4 3 0	4 4 0	4 4 0	4 5 0	4 6 0	4 6 0
40	4 5 0	4 6 0	4 6 0	4 7 0	4 8 0	4 8 0	4 9 0	4 10 0	4 10 0	4 11 0	4 12 0
45	4 11 0	4 12 0	4 12 0	4 13 0	4 14 0	4 15 0	4 16 0	4 16 0	4 17 0	4 18 0	4 19 0
50	4 19 0	5 0 0	5 1 0	5 2 0	5 3 0	5 4 0	5 5 0	5 6 0	5 7 0	5 8 0	
55	5 8 0	5 9 0	5 10 0	5 11 0	5 12 0	5 13 0	5 14 0	5 16 0	5 17 0	5 18 0	5 19 0
60	5 2 0	6 3 0	6 5 0	6 6 0	6 7 0	6 9 0	6 10 0	6 11 0	6 13 0	6 14 0	6 16 0

In case the Age of the elder Nominee shall exceed the Age of the younger Nominee by more than Twenty Years, but not by more than TWENTY-FIVE YEARS.

	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d.	l. s. d
35	4 2 0	4 3 0	4 3 0	4 4 0	4 5 0	4 5 0	4 6 0	4 7 0	4 7 0	4 8 0	4 8 0
40	4 7 0	4 8 0	4 9 0	4 9 0	4 10 0	4 11 0	4 11 0	4 12 0	4 13 0	4 14 0	4 14 0
45	4 14 0	4 14 0	4 15 0	4 16 0	4 17 0	4 18 0	4 19 0	4 19 0	5 0 0	5 1 0	5 2 0
50	5 1 0	5 2 0	5 3 0	5 4 0	5 5 0	5 6 0	5 7 0	5 8 0	5 9 0	5 10 0	5 11 0
55	5 12 0	5 13 0	5 14 0	5 15 0	5 17 0	5 18 0	5 19 0	6 0 0	6 1 0	6 2 0	6 4 0

In caſe the Age of the elder Nominee ſhall exceed the Age of the younger Nominee by more than Twenty-five Years, but not by more than THIRTY Years.

Younger	60—61	61—62	62—63	63—64	64—65	65—66	66—67	67—68	68—69	69—70	70—71
	l. s. d.	*l. s. d.*	*l. s. d.*	*l. s. d.*	*l. s. d.*	*l. s. d.*	*l. s. d.*	*l. s. d.*	*l. s. d.*	*l. s. d.*	*l. s. d.*
35	4 4 0	4 5 0	4 5 0	4 6 0	4 7 0	4 7 0	4 8 0	4 9 0	4 9 0	4 10 0	4 10 0
40	4 9 0	4 10 0	4 11 0	4 12 0	4 12 0	4 13 0	4 14 0	4 15 0	4 15 0	4 16 0	4 17 0
45	4 16 0	4 17 0	4 18 0	4 19 0	5 0 0	5 1 0	5 2 0	5 2 0	5 3 0	5 4 0	5 5 0
50	5 4 0	5 5 0	5 6 0	5 7 0	5 8 0	5 9 0	5 10 0	5 11 0	5 12 0	5 13 0	5 14 0

In caſe the Age of the elder Nominee ſhall exceed the Age of the younger Nominee by more than Thirty Years, but not by more than THIRTY-FIVE YEARS.

	l. s. d.	*l. s. d.*	*l. s. d.*	*l. s. d.*	*l. s. d.*	*l. s. d.*	*l. s. d.*	*l. s. d.*	*l. s. d.*	*l. s. d.*	*l. s. d.*
35	4 6 0	4 6 0	4 7 0	4 8 0	4 8 0	4 9 0	4 10 0	4 11 0	4 11 0	4 12 0	4 13 0
40	4 12 0	4 12 0	4 13 0	4 14 0	4 15 0	4 15 0	4 16 0	4 17 0	4 18 0	4 19 0	4 19 0
45	4 19 0	5 0 0	5 1 0	5 1 0	5 2 0	5 3 0	5 4 0	5 5 0	5 6 0	5 7 0	5 8 0

In caſe the Age of the elder Nominee ſhall exceed the Age of the younger Nominee by more than Thirty-five Years.

	l. s. d	*l. s. d.*	*l. s. d.*	*l. s. d.*	*l. s. d.*	*l. s. d.*	*l. s. d.*	*l. s. d.*	*l. s. d.*	*l. s. d.*	*l. s. d*
35	4 8 0	4 8 0	4 9 0	4 10 0	4 10 0	4 11 0	4 12 0	4 12 0	4 13 0	4 14 0	4 15 0
40	4 13 0	4 14 0	4 15 0	4 16 0	4 17 0	4 17 0	4 18 0	4 19 0	5 0 0	5 1 0	5 1 0

The Tables being very long, the above ages and prices of ſtock only are ſtated; but annuities are granted upon all joint lives, from the age of 35 and upwards, when the 3 per cent. conſ. or reduced are at or above 50.

EXAMPLES. 1. If the elder life be 60, and the younger 55, (difference 5;) the rate of annuity for theſe two lives, or the ſurvivor of them, if the price of ſtock were 65 and under 66, would be 5l. for every 100l. ſtock, being at the average rate of 7l. 12s. 8d. for 100l. money.

2. Elder life 72, younger 60, difference 12. The rate of annuity upon theſe two lives, if the ſtock were at 65 and under 66, would be 6l. 3s. for every 100l. ſtock, or 9l. 7s. 9d. for 100l. money. Other offices, 8l. 3s. per cent.

3. Elder life 67, younger 45, difference 22 years. The rate of annuity for theſe two lives (price of ſtock as before) would be 4l. 18s. for every 100l. ſtock, or 7l. 9s. 7d. for 100l. money. Other offices, 6l. 17s. for 100l. money.

4. Elder life 75, younger 35, difference 40. The rate of annuity upon theſe two lives (price of ſtock as before) would be 4l. 11s. for every 100l. ſtock, or 6l. 18s. 11d. for 100l. money.

In the calculation of tables for granting life-annuities, however, no notice is taken (nor indeed could it be without having in every inſtance a double ſet) of the difference between the duration of human life among males and females; for ſuch a difference there certainly is, much in favour of females, as will appear from the following facts. At Northampton, though more males are born than females, and nearly the ſame number die; yet the number of living females appeared, by an account taken in 1746, to be greater than the number of males in the proportion of 2301 to 1770, or 39 to 30. In the pariſh of Holy Croſs, Salop, in the year 1760, the number of females turned of 80 was 13, of males 2. In the year 1770, theſe numbers were 11 and 6 reſpectively; and for 20 years, from 1760 to 1780, eleven out of 966 had died above 90 in this pariſh, and they were all females. At Berlin it appeared, from an accurate account which was taken of the inhabitants in 1747, that the number of female citizens exceeded the number of male citizens in the proportion of 459 to 391; and yet, out of this ſmaller number of males, more had died for 20 years preceding 1751, in the proportion of 19 to 17. At Edinburgh, in 1743, the number of females was to the number of males, as 4 to 3; but the females that died annually from 1749 to 1758, were to the males in no higher proportion than as $3\frac{1}{3}$ to 3.

Whoever will take the pains to examine the accounts in Phil. Tranſ. abr. vol. vii. part iv. p. 46, &c. will find, that though, in the towns there enumerated, the proportion of males and females born is no higher than 19 to 18, yet the proportion of boys and girls that die is 8 to 7; and that, in particular, the ſtill-born and chryſom males are to the ſtill-born and chryſom females as 3 to 2. In thirty-nine pariſhes of the diſtrict of Vaud in Swiſſerland, the number of males that died during ten years before 1766, was 8170; of females 8167; of whom the number that died under one year of age was 1817 males, and 1305 females; and under ten years of age 3099 males, and 2598 females. In the beginning of life, therefore, and before any emigrations can take place, the rate of mortality among males appears to be greater than among females. And this is rendered yet more certain by the following accounts. At Vevey, in the diſtrict of Vaud, juſt mentioned, there died in the courſe of twenty years, ended at 1764, in the firſt month after birth, of males 135 to 89 females; and in the firſt year 225 to 162. To the ſame effect it appears from a table given by Suſmilch, in his Gottliche Ordnung, vol. ii. p. 317, that in Berlin 203 males die in the firſt month, and but 168 females; and in the firſt year 489 males, and but 395 females. And it alſo appears from a table of Struyck's, that in Holland 396 males die in the firſt year to 306 females. Thus, as the greater mortality of males takes place among children, as well as among males at all ages, the fact cannot be accounted for merely by their being more ſubject to untimely deaths by various accidents, and by their being addicted to the exceſſes and irregularities which ſhorten life. Mr. Kerſſeboom informs us, that, during the courſe of 125 years in Holland, females have, in all accidents of age, lived about three or four years longer than the ſame number of males. In ſeveral towns of Germany, &c. it appears that, of 7270 married perſons who had died, the proportion of married men who died to the married women was as 3 to 2; and in Breſlaw, for eight years, as 5 to 3. In all Pomerania, during nine years, from 1748 to 1756, this proportion was nearly as 15 to 11. Among the miniſters and profeſſors in Scotland, twenty married men die to twelve married women, at a medium of twenty-ſeven years, or in the proportion of 5 to 3; ſo that there is the chance of 3 to 2, and in ſome circumſtances even a greater chance, that the woman ſhall be the ſurvivor of a marriage, and not a man; and this difference cannot be accounted for merely by the difference of age between men and their wives, without admitting

mitting the greater mortality of males. In the diſtrict of Vaud, in Swiſſerland, it appears, that half the females do not die till the age of forty-ſix and upwards, though half the males die under thirty-ſix. It is likewiſe an indiſputable fact, that, in the beginning of life, the rate of mortality among males is much greater than among females.

From a table formed by Dr. Price, from a regiſter kept for twenty years at Gainſborough, it appears, that of thoſe who live to eighty, the major part, in the proportion of 49 to 32, are females. M. Des Parcieux at Paris, and Mr. Wargentin in Sweden, have further obſerved, that not only women live longer than men, but that married women live longer than ſingle women. From ſome regiſters examined by Mr. Muret in Swiſſerland, it appears, that of equal numbers of ſingle and married women between fifteen and twenty-five, more of the former died than of the latter, in the proportion of 2 to 1.

The authorities for the facts here mentioned, and much more on this ſubject, may be found in the ſecond volume of Dr. Price's Treatiſe on Reverſionary Payments, ſeventh edition.

LIFE-ASSU'RANCE, a tranſaction whereby a ſum of money is ſecured to be paid upon the death of the perſon whoſe life is aſſured, or upon the failure of one out of two or more joint-lives. Under the article ASSURANCE, vol. ii. p. 293, 4, we gave a liſt of the offices for this purpoſe in London, with ſome account of their modes of tranſacting buſineſs, not in reſpect to life-aſſurances only, but alſo to indemnify perſons againſt loſſes from fire. Since that article was publiſhed, we have met with a pamphlet put forth by the Rock Life-Aſſurance Company, an eſtabliſhment not then in exiſtence; and, as we think we cannot too much recommend the principle of life-aſſurance, whether for the aſſiſtance of a family upon the death of the principal, or for ſingle perſons in the way of annuity to commence at a certain age, we ſhall ſtate a few particulars from that pamphlet, as far as it relates to life-aſſurance; and ſhall inſert alſo the Tables, as they ſeem more favourable to the public than that already given in our ſecond volume.

It is not an unuſual thing to hear it obſerved by the moſt careful and prudent men, that they can lay out the premiums which would be required for an aſſurance to better account than any ſociety can do for them, and that economy is the beſt aſſurance. This would be an indubitable truth, if care could ſecure to the man who huſbands his money time to improve it. No man would inſure his houſe againſt fire, if prudence could guard him againſt an accident; and yet, whatever the chance may be againſt any one houſe being burnt down, no thinking man would remain uninſured at the preſent low rates. The fatal caſualties to which the life of man is ſubject, one would imagine, ſhould diſpoſe us all to make a provident uſe of the means which a life-ſociety holds out for the benefit of thoſe who are dear to us; and yet, in all the united kingdom, there are not perhaps 30,000 perſons aſſured againſt the conſequences to their poſterity of their own premature death. Whenever a conflagration happens, it is the uſual and benevolent inquiry of every perſon, "if the ſufferers are inſured." We truſt the time is not diſtant, when, on the early and premature death of the father of a family, the ſame conſiderate hope will be expreſſed that he has ſeaſonably provided by inſurance for his heir.

It will be obvious to every man who takes the trouble to calculate, that no pecuniary loſs can occur to the family of a perſon of middle age, who ſhall have paid the premium of aſſurance for twenty years. It is only when the life endures beyond that period, that, by the operation of compound intereſt, he begins to loſe by the tranſaction. This requires, however, that he ſhould have uniformly and regularly laid out the whole ſum with its accumulations at intereſt; that there ſhould not have been a ſingle lapſe, nor a ſingle loſs; and that there ſhould have been no commiſſion, and no tax upon the ſtock to pay. If it be an act of prudence in a huſband and parent to live within his income, that he may lay up a proviſion for the objects of his tenderneſs, it is clearly prudent to make an aſſurance on the term of his life, becauſe he thereby aſcertains his purpoſe by the ſafeſt and the ſpeedieſt means. An aſſurance for life is of the ſame nature as an annual ſaving, for it is laying up a ſum for hereafter; with this moſt cheering difference, however, that the one mode requires many years to accompliſh the end, whereas the other ſecures it from the firſt day after the policy is iſſued. If the event ſhould happen in the firſt year of the aſſurance, the heir of the perſon, his family, or his aſſigns, would receive the principal ſum which he has aſſured. This advantage he would obtain in thoſe ſocieties, where, on the extinction of a policy, the proprietors undertake to pay the preciſe ſum aſſured, but in which the profits accruing from the buſineſs, if any, are divided among themſelves. In a ſociety inſtituted like the Rock Life-Company, the advantage would be materially improved; for, by the principles of their aſſociation, no length of time, no repetition of payments, can ever create a loſs to a young inſurer. In this company the aggregate profits of the concern are divided at intervals among all the perſons aſſured for life, ſo that the addition to the actual ſum in his policy, will always be in proportion to the time he has been on the books, and to the number of payments he has made.

The principle of life-aſſurance holds out, to all perſons of limited income, the obvious means of ſecuring to their aſſigns a ſum which otherwiſe, by the great but unavoidable increaſe in the price of every article of expenditure, it might be very inconvenient, and even impracticable, by any poſſible retrenchment, to lay up. It will be admitted, that 1500l. a-year at this time, cannot ſecure to a family the ſame eſtabliſhment as 1000l. afforded ſome years ago. A provident perſon, therefore, who in the former caſe was able to ſave 500l. a-year, cannot now do this without abridging many of the comforts to which the family have been accuſtomed; or, what is more important, withholding from his children the education which a parent is naturally anxious to give them. By laying out, however, probably no more than 100l. a-year in a life-aſſurance, he may add 400l. to his annual expenditure, and yet accompliſh the object of ſecuring a proviſion of two or three thouſand pounds for his family. If the policy ſhould continue for years, there is every proſpect of an accumulation that would make the act a meaſure of economy, as well as of preſervation, ſince in no other way could the ſame ſum, without a riſk, be laid out to the ſame advantage.

But, in all caſes of aſſurance on life, the ſolidity of the office is the firſt thing to be regarded. When a young man in the vigour of health commences an aſſurance, he may flatter himſelf with the enjoyment of life for many years; and it is merely the conſideration of the fatality to which we are all ſubject, that induces him to provide againſt the untimely event. The terms are calculated on the expectation of this durability; and a provident office has to lay up, with the moſt ſcrupulous care, the premiums received, to conſtitute and create the capital which is certainly to be called for hereafter. A ſociety that ſhould conſider theſe depoſits as profits, and proceed to make dividends thereon, muſt, in proceſs of time, and that at no very diſtant period, come to ruin. To conſider this as a mercantile concern; to calculate *profit and loſs* on ſingle tranſactions; to talk of good years and bad years; and to be laviſh becauſe a ſeaſon has been favourable; would be the height of ſelf-deception, and would lead to diſappointment. A life-ſociety that ſhould raſhly proceed to divide among its members the oſtenſible profits, accruing from the caſual circumſtance of the demands upon its fund not being equal to the table of expectations for the firſt few years of its eſtabliſhment, would be totally unmindful of the obligations into which it had entered. This appearance may be very deluſive, and may ariſe from various cauſes. In what a ſituation muſt a perſon be, who by annual payments for many years, contributed to a fund that,

that had been thus improvidently ſquandered; when he finds, in his old age, the ſecurity upon which he reſted, undermined and tottering to its fall! He may be then arrived at years beyond the period of aſſurance, or he may be ſubject to infirmities that would make him ineligible; at any rate, his increaſed number of years would enhance the premium he had to pay for a new aſſurance. It is of the utmoſt importance, therefore, that a perſon commencing an aſſurance on his life, ſhould be thoroughly ſatisfied as to the fund, the conſtitution, and practice, of the company from which he takes his policy. In this reſpect, a life-office differs materially from a fire-aſſurance. When a man aſſures his houſe againſt the accident of fire, he has to reckon on the ſolvency of the eſtabliſhment for one year only, becauſe, at the end of that period, he may renew it in the ſame office, if he ſtill has confidence, or transfer it to another, without any increaſe of premium. The nature of the thing to be inſured is not more liable to the accident in the ſecond year, or in the twentieth year, than in the firſt. But, with reſpect to life, every year increaſes the riſk, and, conſequently, augments the premium.

The Rock Life-Aſſurance Company is formed to grant aſſurances on life, for the whole term, or any limited period, and to receive depoſits of ſums of money, to return, at a given time, or upon any ſpecies of contingency of life, either a ſpecific ſum, or an equivalent annuity.

The profits derived from the accumulation of preminms and their intereſt, eſtimated on an accurate inveſtigation of the demands to be made on them, are divided into three parts; two of theſe parts are aſſigned to the body of perſons aſſured on the whole of life, and one of theſe parts is added to the capital ſtock of the company, thereby to augment the ſecurity to the public. The part aſſigned to the body of perſons aſſured on the whole of life, is divided among them, in proportion to the number of premiums paid and the ſum aſſured by each; and it is to be received by the heirs and aſſigns of the party, which makes the aſſurance, at the time when the principal ſum aſſured is paid.

1. The firſt mode of aſſurance which preſents itſelf to our view is, *on the whole term of life*. This is highly important to perſons poſſeſſing entails, by enabling them advantageouſly to provide for younger children; and it is applicable to the higheſt and moſt extenſive hereditary eſtates, where a parent deſires to preſerve unbroken the whole domain. By a ſmall annual economy, he may thus provide for all the younger branches of his family, without intrenching on the parent ſtock. It is alſo applicable to perſons holding public ſituations, benefices, penſions, &c. and to members of the learned profeſſions, merchants, and bankers, as well as all others whoſe income is only for life. We ſhall juſt ſtate the following caſe, as being worthy of peculiar attention from perſons in trade who are about to enter the marriage-ſtate. Suppoſe the bride to have a fortune of 3000l. which her parents or guardians wiſh to have ſettled upon her: in this caſe, if inveſted in the funds, the huſband can derive no benefit from the fortune, except its annual intereſt. Now, if the gentleman be not more than 26 years of age, the premium of aſſurance on his life for 3000l. will be under 75l. per annum. Of courſe, if 1500l. be ſecured by inveſtment in the funds, or otherwiſe, ſo that it produce 5 per cent. the intereſt thereon will be ſufficient to pay the premium of aſſurance on the 3000l. and thus the remaining 1500l. may ſafely be left at the huſband's diſpoſal. On the event of his death, the family receive the 3000l. aſſured, with whatever increaſe may have ariſen upon it, and have alſo the 1500l. which was inveſted as a ſecurity for the premiums. Thus the 3000l. fortune, which in the common mode would have produced only 150l. per annum, not only yields the principal ſum of 4500l. and upwards, on the huſband's death, but, in all probability, the 1500l. left at his diſpoſal in buſineſs may of itſelf have given an income equal to what would otherwiſe have been the produce of the whole fortune, ſettled in the common way; as ten per cent. is looked upon to be a common return for capital employed in trade.

2. *On joint lives and ſurviviorſhips.* This mode applies to numerous claſſes in ſociety, and eſpecially to thoſe in the marriage-ſtate. The income of a huſband may be loſt if his wife die before him; and very generally, if the huſband die before the wife, ſhe ſtands in need of proviſion. In either caſe this may be prevented by aſſurance. Thus a ſum may be ſecured to either on the death of the other, by a payment of an annual premium during their joint lives. This mode of aſſurance alſo enables perſons who, though entitled to large property in reverſion, have none in poſſeſſion, to enjoy a preſent income, which otherwiſe could not be obtained. This is done by aſſuring the life of the heir againſt that of the poſſeſſor of the property in queſtion, to any amount which the friends of the heir are willing to advance him for preſent ſubſiſtence. If the heir ſhould die before he comes into poſſeſſion, the aſſurance will indemnify his creditors; if, on the other hand, he obtain the eſtate, he can eaſily repay the amount himſelf. As contingencies alſo occur, in which three or more lives are concerned, as in the caſe of leaſes upon lives, aſſurances may be made upon each contingency.

3. *Annuities.*—The principle of granting annuities for life has been ſufficiently explained: but here we have to obſerve, that the plan which the government have recently eſtabliſhed for the converſion of three per cents. into life-annuities, applies to ſtockholders only, and does not extend to perſons under thirty-five years of age. Families or individuals, of all ages, deſirous of inveſting the whole or part of their money created by induſtry, or deſcending to them by bequeſt or inheritance, may have annuities granted to them at the Rock-office, for the increaſe of their incomes, on the terms which mathematical accuracy has proved to be correct. And it may be proper to remark, that perſons purchaſing an annuity from government, who may afterwards be deſirous of leaving a part of their capital behind them, may at this office make an aſſurance for ſuch part thereof. Thus a father or mother, left with a young family, may be deſirous of ſinking their capital to enlarge their income, by which they may educate their children. But out of this increaſed income, they may devote a part to a life-aſſurance, that would ſecure a ſum to be paid at their death. This may merit the attention of thoſe who have already converted their three per cents. into life-annuities.

4. *Remote life-annuities.*—A plan is formed at this office, adapted to a numerous and important claſs of perſons, who have not hitherto enjoyed the means of providing by inſurance for the decline of life. In the lower claſſes of induſtry, there are numerous friendly ſocieties, in which, by an annual, quarterly, or monthly, payment, it is propoſed to return to the members a ſtipulated ſum, on certain contingencies of illneſs, &c. and theſe inſtitutions, if well regulated, would be highly beneficial to the community. The legiſlature has ſanctioned them; and perhaps it would have been well if they had alſo put them under ſome farther regulation; for in general their calculations are vague and deluſive. In many inſtances their funds have been either totally ſquandered, or been found inſufficient. They have alſo too frequently been converted into engines of abuſe, by paying weekly ſums to artiſans out of work, and have thereby encouraged combinations among workmen, not leſs injurious to the miſguided members themſelves than to the public weal. It is certain, however, that an inſtitution which ſhould have for its object to provide a comfortable income to the prudent and induſtrious in the decline of their faculties, would at once be an incentive, and a conſolation to the mind. It would be free from all the objections that exiſt againſt all the clubs, boxes, and friendly ſocieties, to which we have alluded; and it would particularly deſerve the countenance of all magiſtrates and clergymen, church-wardens, land-owners, and others, intereſted in watching over the morals

morals and the subsistence of the people; since, in proportion to the spread and success of this plan, would the industrious be rendered independent, and the poor-rates be relieved. Professional men, artists, clerks, mechanics, and, in short, individuals of all occupations where personal exertion is the source of income, and whose livelihood may be affected by the decay of their mental or bodily powers, are the persons to whom this plan of provision for old age is adapted.

A person paying a stipulated sum to this office, yearly, half-yearly, or quarterly, for a certain number of years, may, from the termination of that period, receive an adequate annuity for the rest of his life. The period for the payment of the premiums to the office must, both as to the amount of the sum and the duration of the payments, be regulated by the age of the person. Of course this plan is recommended only to the healthy, prudent, and temperate. It will not suit the invalid, or the dissipated part of the community. The office proposes, for the sake of extending the benefits of this plan to all the classes of industry, to accept of quarterly payments, not less, however, than one pound per quarter, and which, if the individuals increase in income, may be advanced so as to give them a corresponding advance in the future annuity. The plan is digested so, that not merely the sums thus paid in by individuals will be carefully husbanded and improved for them, but that they who survive will reap the benefit arising from the deaths of those who may be cut off before the stated periods of the commencement of their respective annuities. And it is on the calculation of the probable decrement of life, among a given number of regular and healthy persons, of middle age, that the table of terms is calculated. The proposed annuities will not be so great as if the lives were to be promiscuously taken from the mass of society; but even in this way the provision will be greater than any sum that the same persons could make in the same time, by laying out the money for themselves at compound interest.

It has long been the subject of regret that some plan of assurance on life has not been established for military officers, by which they might secure to themselves a comfortable provision for old age. An insurance in the usual way, *on the whole period of life*, to provide a sum to be paid to their widows and families, may be effected indeed at every office, but upon terms which are necessarily high, on account of the hazards to which military life is subject. The annual expense is too great in general for a military man; and it is necessary also that he should present himself at the board, and submit to an examination; and if, by the effects of climate or the chance of war, his constitution appears to be endangered, he finds an insurance impracticable. Very few military men, therefore, have insured their lives; but, though the difficulty and expense of making an assurance of the life of a military man are great, there is no difficulty whatever in securing *a provision for his old age*, if he shall survive the dangers of his profession, so as to enable him to retire with comfort from the service. Military persons, after passing what is termed the seasoning point, are generally long-lived. The habits of cleanliness and activity which they acquire, the care of their health which is taught them, are favourable to longevity; and accordingly the very long lives of our defenders, the pensioners in and out of our military and naval asylums, are highly creditable to the service as a profession. Again; military persons in general are single, and have rather to look to comforts for themselves, if they shall attain old age, than for their posterity; but, however, even married men, by securing to themselves an annuity for old age, secure also the means of educating and bringing forward their children.

The object of this plan is to enable a military man to retire *upon full pay* at an early period of his life; by paying annually a small sum out of his pay for a certain number of years, he may secure to himself an annuity for the rest of his life. He may direct this to be paid quarterly, half-yearly, or yearly, by his agent in London. It is not necessary for him to make his appearance at the board of directors. He has only to send a written declaration of his age, regiment, &c. and to give a certificate of his identity at all times, but particularly when his annuity shall have to commence. He must be particular as to his age, because an error would forfeit his policy. The society require no certificate as to health, because the calculation is made on the supposition that they are all in good health. No man who had the knowledge of a bodily complaint likely to shorten life would make an assurance for a remote annuity.

The plan is also made to apply to the purchase of preferment; for, instead of an annuity, an officer may stipulate, by a proportionate annual premium, to have a sum paid down to him at the end of a certain number of years, which of course he may apply to the purchase of a step in the army, or as he pleases.

It is material to observe, that the office has agreed to take the payments on this plan quarterly, in order to extend the benefits to non-commissioned officers and privates; and they may all secure annuities from 10l. per annum up to any reasonable amount, and on terms within the reach of every prudent soldier or sailor.

The plan is also adapted to persons going abroad, to the civil departments in India, to persons resident for a time in the West Indies, to traders, to travellers, and all others whose avocations may take them for a time from their native land. However men may wander in pursuit of fortune, it is their prospect and object to return; and this plan may facilitate the execution of their wishes in this respect. A particular table, adapted to climate, is formed for this species of remote annuity; in which of course a stipulation is made for change of place, and for the return of the individual to this country.

The whole of this engagement for *remote annuities*, in all the classes, both at home and abroad, may be entered into without the personal appearance at the office of the person desirous to secure to himself such a provision. It is taken as a matter of course that he is a person of sound health; and it is only required that a certificate of his actual age, and the usual declaration thereon, shall be lodged at the office; together with certificates of change of place, and identity of person, during the whole period of the contract.

TABLE I. *Premiums for assuring the Sum of One Hundred Pounds upon the Life of a Person, from the age of eight to sixty-seven.*

Age.	One Year	Seven Years, at an Annual Payment of	Whole Life, at an Annual Payment of
8 to 14	0 17 9	1 1 5	1 17 7
15	0 17 11	1 2 11	1 18 7
16	0 19 2	1 4 7	1 19 8
17	1 1 2	1 6 1	2 0 8
18	1 3 3	1 7 5	2 1 8
19	1 5 0	1 8 6	2 2 8
20	1 7 3	1 9 5	2 3 7
21	1 8 10	1 10 1	2 4 6
22	1 9 3	1 10 6	2 5 4
23	1 9 8	1 11 0	2 6 3
24	1 10 2	1 11 6	2 7 1
25	1 10 7	1 12 1	2 8 1
26	1 11 1	1 12 7	2 9 1
27	1 11 7	1 13 2	2 10 1
28	1 12 1	1 13 9	2 11 1
29	1 12 8	1 14 4	2 12 3
30	1 13 3	1 14 11	2 13 5
31	1 13 9	1 15 7	2 14 7
32	1 14 4	1 16 3	2 15 9
33	1 15 0	1 16 10	2 17 1
34	1 15 8	1 17 8	2 18 5
35	1 16 4	1 18 10	2 19 10
36	1 17 0	1 19 7	3 1 4
37	1 17 9	2 0 8	3 2 10
38	1 18 6	2 1 9	3 4 6
39	1 19 3	2 2 11	3 6 2
40	2 0 8	2 4 1	3 7 11
41	2 2 0	2 5 4	3 9 9
42	2 3 6	2 6 6	3 11 8
43	2 4 6	2 7 9	3 13 8
44	2 5 6	2 9 2	3 15 9
45	2 6 8	2 10 10	3 17 11
46	2 7 10	2 12 6	4 0 2
47	2 9 0	2 14 4	4 2 7
48	2 10 3	2 16 4	4 5 1
49	2 12 3	2 18 6	4 7 10
50	2 15 1	3 0 8	4 10 8
51	2 17 4	3 2 8	4 13 6
52	2 19 1	3 4 9	4 16 5
53	3 1 0	3 7 0	4 19 7
54	3 3 0	3 9 5	5 2 10
55	3 5 0	3 12 0	5 6 4
56	3 7 3	3 14 8	5 10 1
57	3 9 8	3 17 6	5 14 0
58	3 12 3	4 0 6	5 18 2
59	3 15 1	4 3 8	6 2 8
60	3 18 1	4 7 1	6 7 4
61	4 1 5	4 10 11	6 12 4
62	4 3 11	4 15 0	6 17 9
63	4 7 8	4 19 8	7 3 7
64	4 10 9	5 4 10	7 9 10
65	4 15 2	5 10 10	7 16 9
66	5 0 1	5 17 7	8 4 1
67	5 5 6	6 5 2	8 12 1

TABLE II. *Annual Premiums, payable during the joint continuance of Two Lives, for assuring One Hundred Pounds, on the Contingency of one Life's surviving the other.*

Ages. Life to be assured.	Life against which the Assurance is to be made.	Premiums
10	10	1 8 6
	20	1 9 1
	30	1 8 3
	40	1 7 8
	50	1 6 11
	60	1 6 0
	70	1 4 11
20	10	1 16 6
	20	1 17 0
	30	1 15 9
	40	1 14 8
	50	1 13 6
	60	1 12 1
	70	1 10 6
30	10	2 5 5
	20	2 6 0
	30	2 4 6
	40	2 2 9
	50	2 0 11
	60	1 18 10
	70	1 16 7
40	10	2 19 2
	20	2 19 10
	30	2 18 2
	40	2 15 11
	50	2 12 10
	60	2 9 4
	70	2 5 11
50	10	4 0 11
	20	4 1 10
	30	4 0 1
	40	3 17 10
	50	3 13 10
	60	3 7 7
	70	3 1 6
60	10	5 16 9
	20	5 18 1
	30	5 16 3
	40	5 14 0
	50	5 10 7
	60	5 2 4
	70	4 9 10
67	10	8 1 0
	20	8 2 9
	30	8 0 10
	40	7 18 7
	50	7 15 6
	60	7 8 8
	70	6 10 8

TABLE III. *Annual Premiums payable during the continuance of two joint Lives for assuring One Hundred Pounds, to be paid when either of the Lives shall drop.*

Age.	Age.	£. s. d.	Age.	Age.	£. s. d.
10	10	2 17 1	30	30	4 8 11
	15	3 1 1		35	4 14 1
	20	3 5 7		40	5 0 11
	25	3 9 3		45	5 9 6
	30	3 13 9		50	6 1 0
	35	3 19 6		55	6 15 5
	40	4 6 10		60	7 15 0
	45	4 15 11		67	9 18 1
	50	5 7 10			
	55	6 2 8	35	35	4 19 0
	60	7 2 9		40	5 5 6
	67	9 6 3		45	5 13 10
				50	6 5 0
15	15	3 5 0		55	6 19 2
	20	3 9 6		60	7 18 6
	25	3 13 1		67	10 1 2
	30	3 17 6			
	35	4 3 1	40	40	5 11 9
	40	4 10 4		45	5 19 9
	45	4 19 5		50	6 10 8
	50	5 11 3		55	7 4 5
	55	6 6 1		60	8 3 4
	60	7 6 0		67	10 5 6
	67	9 9 5			
			45	45	6 7 4
20	20	3 13 11		50	6 17 9
	25	3 17 5		55	7 11 0
	30	4 1 9		60	8 9 6
	35	4 7 3		67	10 11 1
	40	4 14 6			
	45	5 3 6	50	50	7 7 8
	50	5 15 4		55	8 0 3
	55	6 10 2		60	8 18 2
	60	7 10 2		67	10 18 10
	67	9 13 9			
			55	55	8 12 2
25	25	4 0 10		60	9 9 0
	30	4 5 0		67	11 8 5
	35	4 10 3			
	40	4 17 4	60	60	10 4 9
	45	5 6 2		67	12 2 1
	50	5 17 10			
	55	6 12 6	67	67	13 15 8
	60	7 12 5			
	67	9 15 9			

The preceding Tables show the rates for the assurance of 100l. on various ages and on various contingencies. TABLE I. gives the rate of assurance of 100l. for one year, for seven years, or for the whole of life; from which some estimate may be formed of the rates of assurance for any assignable time. The person who wishes to assure any sum, looks to the column having "Age" at the top of it, and in this column he looks for the number which gives his age at the next birth-day; and, according as he wishes to make the assurance, he carries his eye into the other columns. If he wishes to make an assurance for one year, he looks to the column marked "One Year;" and in the line of the number denoting his age next birth-day, he finds the sum to be paid, for securing to his family or assigns one hundred pounds, in case he should die within the year. If he wishes to make the assurance for seven years, he looks to the column marked at the top "Seven Years," and there finds in the line of the number, denoting his age next birth-day, the sum to be paid annually to secure one hundred pounds to his family or assigns, in case he should die within seven years. If he wishes to make an assurance for the whole life, he turns to the column

lumn marked "Whole Life," and there, in a ſimilar manner, he finds the ſum to be paid by him annually to ſecure to his family or aſſigns the ſum of 100l. Thus, a perſon aged thirty years and five months, looks to the firſt column, for the number 31, and in a line with it he finds in the ſecond column marked "One Year," the figures 1l. 13s. 9d. and, by paying this ſum, he will ſecure to his family or aſſigns one hundred pounds if he dies within the year from the day on which he made the payment. In the third column, he finds in the ſame line the numbers 1l. 15s. 7d. and, by paying this ſum every year, he will ſecure to his family or aſſigns one hundred pounds in caſe he dies within ſeven years. In the laſt column, he finds the numbers 2l. 14s. 7d. and, by paying this ſum annually, he ſecures to his family one hundred pounds, let his death happen at any time. The reader will compare this Table with that given in vol. ii. p. 294. The rates, however, are liable to a diſcretionary increaſe from the conſideration of the ſtate of the party who applies for aſſurance. Military perſons are charged two-and-twenty per cent. on the amount of their premiums additional; officers on half-pay, officers in the militia, fencibles, and the like levies, and perſons not having had either the ſmall-pox or cow-pox, are charged eleven per cent. on their premiums extra. If the perſon prefers to pay a ſum down at once, inſtead of annual payments, the ſum is fixed upon a due proportion to the annual payments in the table for his age.

TABLE II. preſents the rate of annual payments, to ſecure 100l. to the ſurvivor of two perſons; theſe payments having been made during the joint lives of the parties. In the column marked "Life to be aſſured," are given ages from ten to ſixty-ſeven, and the perſon at whoſe death the ſum is to be paid looks into this column for the number neareſt his age. In the next column, marked "Life againſt which the Aſſurance is to be made," the age of the perſon, who is to receive the ſum aſſured, is to be ſought. In the third column, marked "Premium," is, in the line with the laſt number, found, the ſum to be annually paid during the joint lives of the two parties concerned in this mode of aſſurance. Thus, if a huſband, aged thirty, is deſirous of ſecuring to his wife, aged twenty, a ſum at his deceaſe, provided ſhe ſurvives him, he looks into the firſt column on the left hand, and finds the number 30 between two diviſions. In the next column, between thoſe diviſions, he finds the number 20, and in a line with the number 20, in the third column, he finds the ſum 2l. 6s. 0d. which he is to pay annually during the joint lives of himſelf and his wife, to ſecure to the latter 100l. at his death, provided ſhe ſurvives him. If the huſband prefers the payment of a groſs ſum at once, he may do it by advancing a ſum proportionable to the annual payments. If the ages of the parties are any where between thoſe ſet down in the columns of the Table, the rate per cent. for thoſe ages is fixed upon the ſame ſcale with thoſe ſet down, and the reader may judge of this proportionate premium by conſulting the premiums neareſt to the ages of the parties on whom the aſſurance is to be made.

TABLE III. ſtates the annual ſums to be paid during the joint lives of two parties, to ſecure to the ſurvivor one hundred pounds on the death of the other party; in this caſe the two firſt columns on the left hand, entitled "Age," are to be looked at for the ages required; and from the age of the elder party, in the ſecond column, we take the figures in the third column in the ſame line with it. Thus a huſband, deſiring to make this aſſurance on the lives of himſelf and his wife, he being thirty years of age and his wife twenty-five, looks into the firſt column for her age, and in the next column under it finds the number 30, oppoſite to which, in the third column, ſtand the numbers 4l. 5s. 0d. which he is to pay annually to ſecure 100l. to be paid to either, on the death of the other.

LI'FE-BLOOD, *ſ.* The blood neceſſary to life; the vital blood.—They loved with that calm and noble value which dwells in the heart, with a warmth like that of *life-blood*. *Spectator*.

Money, the *life-blood* of the nation,
Corrupts and ſtagnates in the veins,
Unleſs a proper circulation
Its motion and its heat maintains. *Swift.*

LI'FE-BOAT. See LIFE-PRESERVER.

LIFE-ESTA'TE, *ſ.* An eſtate of freehold, not of inheritance. Of theſe ſome are *conventional*, or expreſsly created by the act of the parties; others merely *legal*, or created by conſtruction and operation of law. See the article ESTATE.

1. Eſtates for life of the firſt kind, expreſsly created by deed or grant, are where a leaſe is made of lands or tenements to a man to hold for the term of his own life, or that of any other perſon, or for more lives than one; in any of which caſes he is ſtyled *tenant for life*; only, when he holds the eſtate by the life of another, he is uſually called tenant *pur autre vie*. Theſe eſtates for life are like inheritances, of a feodal nature; and for ſome time were the higheſt eſtate that any man could have in a feud, which was not in its original hereditary. They are given or conferred by the ſame feodal rights and ſolemnities, the ſame inveſtiture or livery of ſeiſin, as fees themſelves are; and they are held by fealty, if demanded, and ſuch conventional rents and ſervices, as the lord or leſſor, and his tenant or leſſee, have agreed on. Eſtates for life may be created, not only by expreſs words, but alſo by a general grant, without defining or limiting any ſpecific eſtate. As if we grant to A. B. the manor of Dale, this makes him tenant for life. Such eſtates for life will, generally ſpeaking, endure as long as the life for which they are granted: but there are ſome eſtates for life, which may determine upon future contingencies, before the life for which they are created expires; as an eſtate granted to a woman during her widowhood, or to a man till he be promoted to a benefice. Theſe, while they ſubſiſt, are reckoned eſtates for life; becauſe, the time for which they will endure being uncertain, they may by poſſibility laſt for life, if the contingencies upon which they determine do not ſooner happen.

In caſe an eſtate be granted to a man for his life generally, it may alſo determine by his *civil death*; for which reaſons, in conveyances the grant is uſually made for the term of a man's *natural* life, which can only determine by his natural death. One ſpecies of civil death is, where a man, by *act of parliament*, is attainted of treaſon or felony; and, ſaving his life, is baniſhed for ever; this lord Coke declares to be a civil death; but he ſays, a temporary exile is not a civil death. Under this reaſoning, where a man receives judgment of death, and afterwards leaves the kingdom for life, upon a conditional pardon, there can be very little doubt but this amounts to a civil death: this practice did not exiſt in the time of lord Coke, who ſays that a man can only loſe his country by authority of parliament. 1 *Inſt.* 133.

2. The ſecond eſtate for life is of the *legal* kind, as contra-diſtinguiſhed from *conventional*; viz. that of tenant in tail after poſſibility of iſſue extinct. This happens where one is tenant in ſpecial tail, and a perſon, from whoſe body the iſſue was to ſpring, dies without iſſue; or, having left iſſue, that iſſue becomes extinct; in either of theſe caſes, the ſurviving tenant in ſpecial tail becomes tenant in tail after poſſibility of iſſue extinct. This eſtate muſt be created by the act of God; that is, by the death of that perſon out of whoſe body the iſſue was to ſpring; for no limitation, conveyance, or other human act, can make it. A poſſibility of iſſue is always ſuppoſed to exiſt in law, unleſs extinguiſhed by the death of the parties; even though the donees be each of them 100 years old. *Litt.* § 34. *Co. Litt.* 28. This eſtate is of an amphibious nature, partaking partly of an eſtate-tail, and partly of an eſtate for life. In truth, the tenant is only tenant for life, but with many of the privileges of a tenant in tail; as, not to be puniſhable for waſte, &c. *Co. Litt.* 27. or, he is tenant in tail, with many of the reſtrictions of a tenant for

life; as, to forfeit his eſtate if he alienes it in fee-ſimple; (*ibid.* 28.) whereas ſuch alienation by tenant in tail, though voidable by the iſſue, is no forfeiture of the eſtate to the reverſioner, who is not concerned in intereſt till all poſſibility of iſſue be extinct. But, in general, the law looks upon this eſtate as equivalent to an eſtate for life only; and, as ſuch, will permit this tenant to exchange his eſtate with a tenant for life; which exchange can only be made of eſtates that are equal in their nature. *Blackſt.* b. ii.

The *incidents* to an eſtate for life are principally the following; and they are applicable, not only to that ſpecies of tenants for life which are expreſsly created by deed, but alſo to thoſe which are created by act or operation of law. 1. Every tenant for life, unleſs reſtrained by covenant or agreement, may of common right take upon the land demiſed to him reaſonable eſtovers, or botes; but he is not permitted to cut down timber, or do other waſte upon the premiſes. 2. Tenant for life, or his repreſentatives, ſhall not be prejudiced by any ſudden determination of his eſtate, becauſe ſuch a determination is contingent and uncertain. Therefore, if a tenant for his own life ſows the lands, and dies before harveſt, his executors ſhall have the emblements, or profits of the crop. The benefits of the law of emblements are particularly extended to the parochial clergy, by ſtat. 28 Hen. VIII. c. 11; for all perſons who are preſented to any eccleſiaſtical benefice, or to any civil office, are conſidered as tenants for their own lives, unleſs the contrary be expreſſed in the form of the donation. 1 *Comm.* c. 8.

The under-tenants or leſſees of eſtates for life have the ſame, nay greater, indulgences than their leſſors the original tenants for life. *The ſame*; for the law of eſtovers and emblements, with regard to the tenant for life, is alſo law with regard to his under-tenant, who repreſents him and ſtands in his place. *Greater*; for in thoſe caſes where tenant for life ſhall not have the emblements, becauſe the eſtate determines by his own act, the exception ſhall not reach his leſſee, who is a third perſon. The leſſees of tenants for life had alſo at the common law another moſt unreaſonable advantage; for, at the death of their leſſors, the tenants for life, theſe under-tenants might, if they pleaſed, quit the premiſes, and pay no rent to any body for the occupation of the land ſince the laſt quarter-day, or other day aſſigned for payment of rent. 10 *Rep.* 127. To remedy which, it is now enacted by ſtat. 11 Geo. II. c. 19. § 15, that the executors or adminiſtrators of tenant for life, on whoſe death any leaſe determined, ſhall recover of the leſſee a rateable proportion of rent, from the laſt day of payment to the death of ſuch leſſor.

By ſtat. 19 Car. II. c. 6, where perſons for whoſe lives eſtates are held, ſhall abſent themſelves for ſeven years, they ſhall be preſumed dead. And by 6 Ann. c. 18, perſons for whoſe lives eſtates are held, ſhall, on application to the lord-chancellor, be produced. The tenant holding after the determination of the life, deemed a treſpaſſer. Poſthumous children are enabled to take in remainder, where the life-eſtate is determined. 10 & 11 *Will.* III. c. 16.

LIFE EVERLA'STING, in botany. See GNAPHALIUM, vol. viii. p. 635.

LI'FE-FUL, *adj.* Invigorating:

Fair ſun, ſhew forth thy favourable ray,
And let thy *life-ful* heat not fervent be. *Spenſer.*

LIFE-GIV'ING, *adj.* Having the power to give life.—

Kindled at firſt from heav'n's *life-giving* fire. *Spenſer.*

He ſat deviſing death
To them who liv'd; nor on the virtue thought
Of that *life-giving* plant. *Milton's Paradiſe Loſt.*

LIFE-GUA'RD, *ſ.* The guard of a king's perſon.

LIFE-HAR'MING, *adj.* Prejudicial to life:

You promis'd, when you parted with the king,
To lay aſide *life-harming* heavineſs. *Shakeſp. Rich.* II.

LIFE-LAN'D, *ſ.* Land held on a leaſe for lives.

LI'FE-LIKE, *adj.* Like a living perſon:

Minerva, *life-like*, on embodied air
Impreſs'd the form of Ipthema the fair. *Pope.*

LI'FE-PRESERVER, *ſ.* A name which has been applied to ſundry-machines and contrivances for ſaving people from drowning, yet in general diſtinguiſhed from *life-boats*. But, as every life-boat is intended to be a life-preſerver, we have thought it beſt to include them under one article.

The firſt boat of this kind to be noticed, in point of time, is that of Monſ. de Bernieres, one of the four controllers-general of bridges and cauſeways in France. We have not any particular deſcription of it, farther than that it was made with a falſe bottom, the ſpace between which and the true one was filled with pieces of cork laid as cloſe together as poſſible; the ſides of the boat were raiſed proportionably, leaving large apertures for the water to run off; the ſtern was raiſed, and there was ſomething of a deck for the men to take ſhelter under when the boat ſhould be thrown on its ſide by the violence of the waves. The boat was about 18 feet long, and 5 or 6 broad, the diſtance between the true and the falſe bottom one foot. It was preſented to the king (Louis XV.) in the year 1769; another was afterwards made, with improvements, for the duke de Chartres, and a third for the marquis de Marigni. On the 11th of October, 1771, according to Gillingwater's Hiſtory of Loweſtoff, one of theſe boats was exhibited at Paris before the king and the dauphin, and in the preſence of the provoſt of the merchants, of the body of the town, and of a numerous concourſe of ſpectators of all conditions. (Dr. Rees ſays this took place on the 1ſt of Auguſt, 1777.) The experiments were made in the way of compariſon with another common boat of the ſame place, and of equal ſize. Both boats had been built ten years, and their exterior forms appeared to be exactly ſimilar. The common boat contained only eight men, who rocked it and made it incline ſo much to one ſide, that it preſently filled with water, and ſunk; ſo that the men were obliged to ſave themſelves by ſwimming; a thing common in all veſſels of the ſame kind, either from the imprudence of thoſe who are in them, the ſtrength of the waves or wind, a violent or unexpected ſhock, or their being overloaded, or overpowered any other way. The ſame men who had juſt eſcaped the boat which ſunk, got into the boat of M. Bernieres; rocked and filled it, as they had done the other, with water. But, inſtead of ſinking to the bottom, though brim-full, it bore being rowed about the river, loaded as it was with men and water, without any danger to the people in it. M. Bernieres carried the trial ſtill farther. He ordered a maſt to be erected in this ſame boat, when filled with water; and to the top of the maſt had a rope faſtened, and drawn till the end of the maſt touched the ſurface of the river, ſo that the boat was entirely on one ſide, a poſition into which neither winds nor waves could bring her; yet, as ſoon as the men, who had hauled her into this ſituation, let go the rope, the boat and maſt recovered themſelves perfectly in leſs than the quarter of a ſecond; a convincing proof that the boat could neither be ſunk nor overturned, and that it afforded the greateſt poſſible ſecurity in every way. It is added, that, in conſequence of the above trials, the provoſt of the merchants and the corporation of Paris gave Bernieres permiſſion to eſtabliſh his boats on the Seine, at the port near the Pont Royal; and, moreover, promiſed him all the protection and encouragement in their power; and Bernieres, on his ſide, propoſed to ſupply the public with a certain number of theſe boats before the end of the next year. Whether he fulfilled his engagement, or whether he was ſucceſsful in the ſubſequent trials of this uſeful invention, as he was in the former, we have not been able to learn. But a French writer obſerves, that "the indifference with which the invention of M. de Bernieres was received ſhows how regardleſs men are of the moſt uſeful diſcoveries, when the general intereſts of humanity only are concerned, and when trouble and expenſe are required

quired to render them practically uſeful." *Montucla's edit. of Ozanam's Recreations*, vol. ii.

Such however, we are proud to ſay, is not the caſe in England. The moment that a *life-boat*, upon evidently juſt principles, was ſtarted, it met with general patronage from the merchants, the ſhip-owners, the nobility, and the government, of this country; not only ſo, but it is equally well known, that premiums are annually offered, particularly by the Society for the Encouragement of Arts, Manufactures, and Commerce, to incite ingenious men to make diſcoveries for the benefit of the community.

The following circumſtance gave riſe to the life-boat conſtructed by Mr. Henry Greathead of South Shields, for the purpoſe of preſerving the lives of ſhipwrecked perſons. In September 1789, the Adventure of Newcaſtle was ſtranded on the Herd-ſand, on the ſouth ſide of Tynemouth haven, in the midſt of tremendous breakers; and the greateſt part of the crew periſhed within three hundred yards of the ſhore, and in the preſence of thouſands of ſpectators, not one of whom could be prevailed upon, by any reward, to venture out to her aſſiſtance, in any boat or coble of the common conſtruction. On this occaſion, the gentlemen of South Shields called a meeting of the inhabitants, at which a committee was appointed, and premiums were offered for plans of a boat which ſhould be the beſt calculated to brave the dangers of the ſea, particularly of broken water. Many propoſals were offered; but the preference was unanimouſly given to that of Mr. Greathead, who was immediately directed to build a boat at the expenſe of the committee. Other claimants to the invention have ſince appeared, who aſſert that Mr. Greathead was merely the builder (under the direction of the committee), not the contriver, of this moſt uſeful life-boat. The general voice has however decided (juſtly we think) in favour of Mr. Greathead.

Greathead's life-boat, then, was firſt tried on the 30th of January, 1790; and ſo well has it anſwered, and indeed exceeded every expectation, in the moſt tremendous broken ſea, that ſince that time hundreds of lives have been ſaved at the entrance of the Tyne alone, which otherwiſe muſt have been loſt; and in no inſtance has it ever failed.

The principle of this boat appears to have been ſuggeſted to Mr. Greathead by the following ſimple fact: Take a ſpheroid, and divide it into quarters; each quarter is elliptical, and nearly reſembles the half of a wooden bowl, having a curvature with projecting ends; this, thrown into the ſea or broken water, cannot be upſet, or lie with the bottom upwards. Such then is the ſhape of the boat. Its length is thirty feet; breadth, ten feet; depth, from the top of the gunwale to the lower part of the keel in midſhips, three feet three inches; from the gunwale to the platform (within), two feet four; from the top of the ſtems (both ends being ſimilar) to the horizontal line of the bottom of the keel, five feet nine. The keel is a plank of three inches thick, of a proportionate breadth in midſhips, narrowing gradually towards the ends, to the breadth of the ſtems at the bottom, and forming a great convexity downwards. The ſtems are ſegments of a circle, with conſiderable *rakes*. The bottom ſection, to the floor-heads, is a curve fore and aft, with the ſweep of the keel. The floor-timber has a ſmall riſe, curving from the keel to the floor-heads. A bilge-plank is wrought in on each ſide next the floor-heads, with a double rabbit or groove of a ſimilar thickneſs with the keel; and on the outſide of this are fixed two bilge-trees, correſponding nearly with the level of the keel. The ends of the bottom ſection form that fine kind of entrance obſervable in the lower part of the bow of the fiſhing-boat called a *coble*, much uſed in the north. From this part to the top of the ſtem it is more elliptical, forming a conſiderable projection. The ſides, from the floor-heads to the top of the gunwale, ſtaunch off on each ſide, in proportion to above half the breadth of the floor. The breadth is continued far forwards towards the ends, leaving a ſufficient length of ſtraight ſide at the top. The ſheer is regular along the ſtraight ſide, and more elevated towards the ends. The gunwale fixed to the outſide is three inches thick. The ſides, from the under part of the gunwale, along the whole length of the regular ſheer, extending twenty-one feet ſix inches, are caſed with layers of cork, to the depth of ſixteen inches, downwards; and, the thickneſs of this caſing of cork being four inches, it projects at the top a little without the gunwale. The cork, on the outſide, is ſecured with thin plates or ſlips of copper, and the boat is faſtened with copper nails. The *thwarts*, or ſeats, are five in number, double-banked; conſequently the boat may be rowed with ten oars. The thwarts are firmly ſtanchioned. The ſide-oars are ſhort, with iron tholes and rope-grommets, ſo that the rower can pull either way. The boat is ſteered with an oar at each end; and the ſteering-oar is one-third longer than the rowing-oar. The platform placed at the bottom, within the boat, is horizontal, the length of the midſhips, and elevated at the ends, for the convenience of the ſteerſman, to give him a greater power with the oar. The internal part of the boat next the ſides, from the under part of the thwarts down to the platform, is caſed with cork; the whole quantity of which, affixed to the life-boat, is nearly ſeven hundred weight. The cork indiſputably contributes much to the buoyancy of the boat, is a good defence in going along-ſide a veſſel, and is of principal uſe in keeping the boat in an erect poſition in the ſea, or rather for giving her a very lively and quick diſpoſition to recover from any ſudden cant or lurch, which ſhe may receive from the ſtroke of a heavy wave. But, excluſively of the cork, the admirable conſtruction of this boat gives it a decided pre-eminence. The ends being ſimilar, the boat can be rowed either way; and this peculiarity of form alleviates her in riſing over the waves. The curvature of the keel and bottom facilitates her movement in turning, and contributes to the eaſe of the ſteerage, as a ſingle ſtroke of the ſteering-oar has an immediate effect, the boat moving as it were upon a centre. The fine entrance below is of uſe in dividing the waves, when rowing againſt them; and, combined with the convexity of the bottom, and the elliptical form of the ſtem, admits her to riſe with wonderful buoyancy in a high ſea, and to launch forward with rapidity, without ſhipping any water, when a common boat would be in danger of being filled. The flaunching or ſpreading form of the boat, from her floor-heads to the gunwale, gives her a conſiderable bearing; and the continuation of the breadth, well forward, is a great ſupport to her in the ſea; and it has been found by experience, that boats of this conſtruction are the beſt ſea-boats for rowing againſt turbulent waves. The internal ſhallowneſs of the boat from the gunwale down to the platform, the convexity of the form, and the bulk of cork within, leave a very diminiſhed ſpace for the water to occupy; ſo that the life-boat, when filled with water, contains a conſiderable leſs quantity than the common boat, and is in no danger either of ſinking or overturning.

It may be preſumed by ſome, that in caſes of high wind, agitated ſea, and broken waves, a boat of ſuch a bulk could not prevail againſt them by the force of oars; but the life-boat, from her peculiar form, may be rowed a-head, when the attempt in other boats would fail. Boats of the common form, adapted for ſpeed, are of courſe put in motion with a ſmall power; but, for want of buoyancy and bearing, are over-run by the waves, and ſunk, when impelled againſt them; and boats conſtructed for burthen meet with too much reſiſtance from the wind and ſea, when oppoſed to them, and cannot in ſuch caſes be rowed from the ſhore to a ſhip in diſtreſs.

"An idea has been entertained (ſays Mr. Greathead) that the ſuperior advantages of the life-boat are to be aſcribed ſolely to the quantity of cork affixed; but this is a very erroneous opinion, and I truſt has been amply refuted by the preceding obſervations on the conſtruction of this boat. It muſt be admitted that the application of cork to common boats would add to their buoyancy and

ſecurity; and it might be a uſeful expedient, if there was a quantity of cork on-board of ſhips, to prepare the boats with, in caſes of ſhipwreck, as it might be expeditiouſly done in a temporary way, by means of clamps, or ſome other contrivance. The application of cork to ſome of the boats of his majeſty's ſhips (the launches) might be worthy of conſideration, more particularly, as an experiment might be made at a little expenſe, and without injury to the boats."

The life-boat is kept in a boat-houſe, and placed upon four low wheels, ready to be moved at a moment's notice. Theſe wheels are convenient in conveying the boat along the ſhore to the ſea; but, if ſhe had to travel upon them on a rough road, her frame would be exceedingly ſhaken; beſides, it has been found difficult and troubleſome to replace her upon theſe wheels, on her return from ſea. Another plan has therefore been adopted: two wheels of twelve feet diameter, with a moveable arched axis, and a pole fixed thereto for a lever, have been conſtructed. The boat is ſuſpended, near her centre, between the wheels, under the axis; toward each extremity of which is an iron pin. When the pole is elevated perpendicularly, the upper part of the axis becomes depreſſed, and a pair of rope ſlings, which go round the boat, being fixed to the iron pins, ſhe is raiſed with the greateſt facility by means of the pole, which is then faſtened down to the ſtem of the boat.

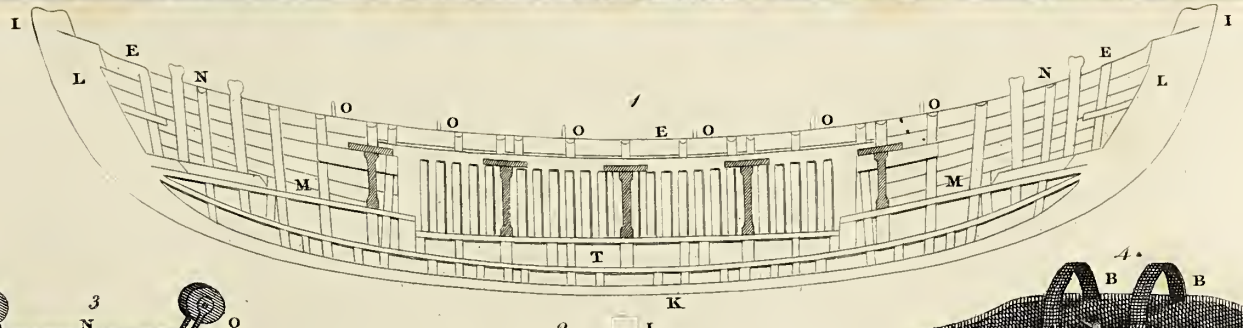
Mr. Greathead gives the following inſtructions for the management of the life-boat. "The boats, in general, of this deſcription are painted white on the outſide; this colour more immediately engaging the eye of the ſpectator, when riſing from the hollow of the ſea, than any other. The bottom of the boat is at firſt varniſhed, (which will take paint afterwards,) for the more minute inſpection of purchaſers. The oars ſhe is equipped with are made of fir, of the beſt quality; having found by experience, that a rove aſh-oar, that will dreſs clean and light, is too pliant among the breakers; and when made ſtrong and heavy, from rowing double-banked, the purchaſe being ſhort, ſooner exhauſts the rower, which makes the fir-oar, when made ſtiff, more preferable. In the management of the boat, ſhe requires twelve men to work her; that is, five men on each ſide rowing double-banked, with an oar ſlung over an iron thole, with a grommet, (as provided,) ſo as to enable the rower to pull either way, and one man at each end to ſteer her, and to be ready at the oppoſite end to take the ſteer-oar, when wanted. As, from the conſtruction of the boat, ſhe is always in a poſition to be rowed either way, without turning the boat; when manned, the perſon who ſteers her ſhould be well acquainted with the courſe of the tides, in order to take every poſſible advantage; the beſt method, if the direction will admit of it, is to head the ſea. The ſteerſman ſhould keep his eye fixed upon the wave or breaker, and encourage the rowers to give way, as the boat riſes to it; being then aided by the force of the oars, ſhe launches over it with vaſt rapidity, without ſhipping any water. It is neceſſary to obſerve, that there is often a ſtrong reflux of ſea occaſioned by the ſtranded wrecks, which requires both diſpatch and care in the people employed, that the boat be not damaged. When the wreck is reached, if the wind blows to the land, the boat will come in ſhore without any other effort than ſteering."

The following additional obſervations and inſtructions are given by Mr. Hinderwell of Scarborough. The life-boat at Scarborough is under the direction of a committee. Twenty-four fiſhermen, compoſing two crews, are alternately employed to navigate her. A reward, in caſes of ſhipwreck, is paid by the committee to each man actually engaged in the aſſiſtance; and it is expected the veſſel receiving aſſiſtance ſhould contribute to defray this expenſe. None have hitherto refuſed. It is of importance that the command of the boat ſhould be entruſted to ſome ſteady experienced perſon, who is acquainted with the direction of the tides or currents, as much ſkill may be required in riſing them to the moſt advantage, in going to a ſhip in diſtreſs. It ſhould alſo be recommended, to keep the head of the boat to the ſea, as much as circumſtances will admit; and, to give her an accelerated velocity to meet the wave, much exerſion is neceſſary in approaching a wreck, on account of the ſtrong reflux of the waves, which is ſometimes attended with great danger. In a general way, it is ſafeſt to go on the lee quarter; but this depends on the poſition of the veſſel; and the maſter of the boat ſhould exerciſe his ſkill in placing her in the moſt convenient ſituation. The boatmen ſhould practiſe themſelves in the uſe of the boat, that they may be the better acquainted with her movements; and they ſhould at all times be ſtrictly obedient to the directions of the perſon who is appointed to the command.

The upper part of the annexed Plate contains a perſpective view of the life-boat riſing over a heavy ſurge, and going out to the aſſiſtance of a ſhip, which appears in the horizon in diſtreſs. In the life-boat are ten rowers, pulling to get to the ſhip. At the lower end of the boat, a man is ſteering her with a long oar towards the ſhip; and another perſon is ſtationed with an oar at the higher end, to ſteer the boat on her return; both ends of the boat being formed alike, in order to uſe either at pleaſure in going to or coming from the ſhip. The ſheer, or curve of the boat, riſing conſiderably from the middle to the ſtems, or ends, is clearly diſtinguiſhed; alſo the coating of cork, ſecured by ſlips of copper along the outſide of the boat, near the part where the rowers are ſeated, Fig. 1, in the lower part of the Plate, is a longitudinal ſection of the ſame life-boat, in order to ſhow the parts diſtinctly. EEE, the ſheer or curve of the boat. II, the two ſtems, or ends, which are exactly alike. K, the keel. LL, the aprons, to ſtrengthen the ſtems. MM, the ſheets, or places for paſſengers. NN, timber-heads, or boat-faſtenings. OOOOO, the tholes on which the oars are ſlung by grommets. T, flooring under the rowers' feet. Fig. 2 is a croſs ſection of the ſame; wherein FF are the outſide coatings of cork; GG, the inſide cork filling; HH, the outſide planks of the boat; I, one of the ſtems of the boat; K, the keel; NN, the timber-head; PP, the thwarts, or rowers' ſeats; R, one of the ſtanchions under the thwarts, each being thus firmly ſupported; S, a ſection of the gang-board, which croſſes the thwarts, and forms the paſſage from one end of the boat to the other; T, the floor-heads, or platform for the rowers' feet; VV, the two bilge pieces, nearly level with the keel; WW, the gunwales; X, a ring-bolt for the head-faſt, there being another alſo at the other end; Y, a platform for the ſteerſman.

After this life-boat had been ſubmitted to a teſt of twelve years' experience, during which period Mr. Greathead had facrificed a very conſiderable portion of his time in furniſhing plans, and otherwiſe rendering the invention as extenſively uſeful as he could; on the 25th of February, 1802, he preſented a petition to the houſe of commons, the prayer of which was as follows: "Your petitioner having been inſtrumental in ſaving the lives of ſo many perſons; the utility of the boat being now eſtabliſhed; and your petitioner having derived little or no pecuniary advantage whatever from the invention, his models having been made public; humbly hopes, that this honourable houſe will take his caſe into their conſideration, and grant your petitioner ſuch reward as to this honourable houſe ſhall ſeem meet, &c."

The petition, having been recommended by his majeſty, was referred to the conſideration of a committee; of whoſe report the following is a brief abſtract. "It appeared to your committee to be neceſſary to direct their inquiries particularly to the three following ſubjects. 1ſt. The utility of the life-boat. 2dly. The originality of the invention claimed by Mr. Greathead. 3dly. Whether he had received any, and what, remuneration. And, in order to aſcertain theſe facts, your committee proceeded to examine, Ralph Hillery, a ſeaman, who ſtated, that he



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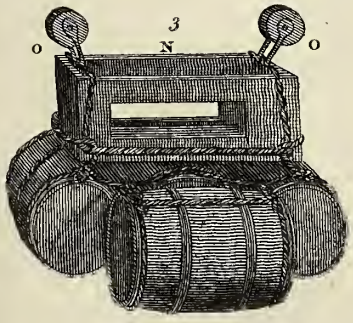

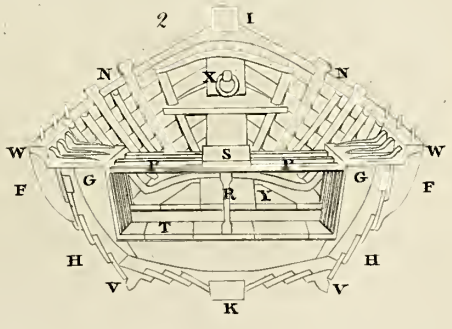

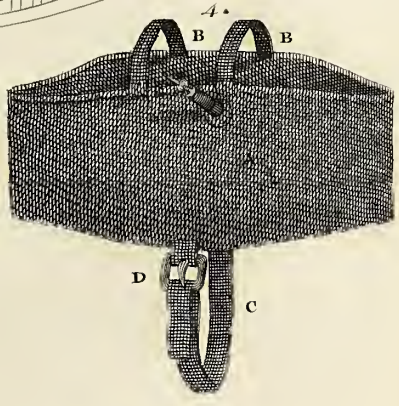

Greathead's Boat. Daniel's Life-Preserver &c.

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J. Hall

had been forty-five years at ſea, in the Greenland and coal trade, and has reſided always at Shields. About three years ago, he was in the Northumberland life-boat, which was preſented to North Shields by the duke of Northumberland, the firſt time ſhe went off, which was to the relief of the ſloop Edinburgh. This veſſel was ſeen to go upon the Herd-ſands, about a mile and a half from ſhore; ſhe was brought to an anchor before the life-boat got to her, and ſhe continued ſtriking the ground ſo heavily, that ſhe would not have held together ten minutes longer, had they not got to her; they made her cut her cable, and then took ſeven men out of her, and brought them on-ſhore. The ſea at that time was monſtrouſly high, ſo high that no other boat whatever could have lived in it. He was then aſked, whether he had been out in the life-boat on any other occaſion? to which he replied, that he had been five times out in her to the relief of different ſhips; from one ſhip they ſaved fifteen men; and in every inſtance when he, the witneſs, was in the boat, they ſaved the whole of the crews of the wrecked ſhips. Beſides the times he has been himſelf in the boat, he has ſeen her go off ſcores of times, and never ſaw her fail in bringing off ſuch of the crews as ſtayed by the ſhips. But many times part of the crews of the veſſels wrecked have taken to their own boats, and have been drowned by the boats' upſetting; whilſt the remainder of the crews that continued on-board have been ſaved by the life-boat. And the witneſs declared his conviction, that no other boat that ever he ſaw could have gone from the ſhore, and ſaved the crews, at the times the life-boat went. He ſtated, that, in the event of the life-boat filling with water, ſhe would continue ſtill upright, and would not founder, as boats of a common conſtruction do. That, about two months ago, he ſaw her come on-ſhore with a ſhip's crew, beſides her own crew, ſo full of water, that it ran over each ſide; the ſea had broken ſeveral of her oars; and he believes, that no boat of any other conſtruction could have brought the crew on-ſhore ſo filled with water.

"Captain William Carter, of the ſhip Providence, of Newcaſtle, ſtated, that he had reſided at South Shields twenty-five years, and been fifteen years in the coal and Baltic trades; that on the 28th of November, 1797, he commanded the Velocity, of 59 tons, riding at anchor on Tynemouth bar, amongſt the broken water, when the ſhip Planter was driven on-ſhore by the violence of the gale, about one hundred yards from the Velocity; the life-boat came off, and took fifteen perſons out of the Planter; and they had ſcarcely quitted the ſhip, when ſhe went to pieces; they muſt all otherwiſe have inevitably periſhed, as the wreck came on-ſhore almoſt as ſoon as the life-boat. He conceived, that no boat of a common conſtruction could have given relief at that time. There were ſeveral other veſſels in the ſame ſituation with the Planter; namely, the Gateſhead, the Mary, and the Beaver, beſides a ſloop, whoſe name the witneſs does not know. The crew of the Gateſhead, being nine in number, took to their own boat, which ſunk, and ſeven of them were loſt; the other two ſaved themſelves by ropes thrown from the Mary. After the life-boat had landed the crew of the Planter, ſhe went off ſucceſſively to the other veſſels, and brought the whole of their crews ſafe on-ſhore, together with the two perſons who had eſcaped from the boat of the Gateſhead. He has ſeen the life-boat go to the aſſiſtance of other veſſels at different times, and ſhe always ſucceeded in bringing the crews on-ſhore. The witneſs has ſeveral times obſerved her to come on-ſhore full of water, and always ſafe.

"Captain Gilfred Lawſon Reed, an elder brother of the Trinity-houſe, ſtated, that he had been bred to the ſea, and had been a member of the Trinity-houſe ſeventeen years. He had the management of the life-boat at Loweſtoffe, particularly laſt year, where he was requeſted by the ſubſcribers to make any improvement he thought neceſſary. She was built exactly upon Mr. Greathead's plan, correſponding with the model before the committee. Having fitted her for ſervice as far as he thought proper, he was requeſted by a number of the ſubſcribers to launch this life-boat; he took an opportunity, when the ſea fell very heavy on the beach, and launched her in the preſence of at leaſt two hundred ſpectators. Twenty-four men jumped into her; and, when ſhe firſt mounted the waves, the ſpectators with one voice expreſſed their aſtoniſhment. He had given the men orders to croſs a ſhoal, that lay about a mile and a half from the ſhore, upon which the ſea broke very heavily; by ſome miſtake one of the plugs was left out of the bottom, and ſhe filled with water before ſhe got to the ſhoal, which obliged the men to return immediately, and ſhe brought the twenty-four men ſafe to ſhore, though when ſhe gained the ſhore ſhe was full of water to the gunwale and midſhips; yet by her ſheer one-third of her at each end was out of the water. Being aſked, wherein he conſidered the ſuperiority of the life-boat conſiſts over any other boat that has hitherto been invented? he anſwered, *the curvature of the keel, and the flaunching ſides*; which render it almoſt impoſſible to be upſet. When this boat was afloat and full of water, the men all went to one ſide of the boat, in order to try the poſſibility of upſetting her, which they could not effect.

"Mr. Thomas Henderwell, of Scarborough, ſhipowner, ſtated, that the peculiar nature of the curvature of the keel of this boat is the foundation and baſis of its excellence. It regulates, in a great meaſure, the ſheer with elevation towards the ends. This conſtruction ſpreads and repels the water in every direction, and enables her to aſcend and deſcend with great facility over the breakers. The ends being reduced regularly from the centre to leſs than one-third proportion of the midſhips, both ends are lighter than the body-ſection. By means of the curved keel, and the centre of gravity being placed in the centre of the boat, ſhe preſerves equilibrium in the midſt of the breakers. The internal ſhallowneſs of the boat in the body-ſection, occaſioned by the convexity of the keel and the ſheer at the top, leaves ſo ſmall a ſpace for the water to occupy, that the boat, though filled with water, is in no danger of ſinking or upſetting. The buoyancy of the boat, when filled with water, is alſo aſſiſted by the cork being placed above the water-line.

"Mr. Samuel Plumb, of Lower Shadwell, deſcribed himſelf to have been bred to the ſea, and to have acted in the capacity of maſter of a ſhip from 1777 until within theſe eighteen months; that he had been chiefly employed in the coal and Baltic trades, and had reſided at Shields the whole of his life till within the laſt five years. He is acquainted with the Shields life-boats; and, from every information he had received, Mr. Greathead has been univerſally conſidered as the inventor of them. He went out in one of them to the relief of a ſhip, which was wrecked on the coaſt near the mouth of the Tyne. The firſt time they reached the wreck, the rope, which they threw from the wreck to the life-boat, broke, and the boat was drifted to the northward by the violence of the wind and ſtrong current of the tide; they then landed, and by two horſes dragged the boat along the ſand to the ſouthward, and then launched her again through the breakers to the veſſel. In the ſecond attempt they ſucceeded in bringing the crew on-ſhore. The witneſs never ſaw any other boat in which he would have ventured to the relief of the crew, or which he thinks could have executed the purpoſe of ſaving them.

"Mr. William Maſterman, of South Shields, ſhipowner, was one of the original committee that ordered the life-boat at South Shields in 1789. He corroborated the evidence given by captain William Carter; and ſtated, that from the ſituation of his reſidence he has ſeen the performance of the life-boat more frequently than probably any other of the committee at South Shields, and has frequently ſeen and aſſiſted in the launching of the life-boat from the beach into the ſea during a ſtorm.

That

That this is done with the aſſiſtance of low wheels, or what may be called rollers, upon which ſhe is dragged to the water's edge; and, by means of hands proportioned to the weight of the boat, ſhe can be launched with as much eaſe as any other boat. He remembers the inſtance ſtated by Mr. Samuel Plumb, in which the life-boat, being driftcd to the northward by a ſtrong tide, was landed, and again launched to the ſouthward, oppoſite to the wreck, and in the face of a very heavy ſea. When the Gateſhead, Planter, and other ſhips, were wrecked, it was firſt diſcovered that the life-boat could act with perfect ſafety *athwart the ſea*; and ſince that time, the boat has been rowed athwart-ſea, or otherwiſe, indifferently, as the object to be relieved required it; and that ſhe goes with the ſame ſafety from one object to another, in a broken ſea, as an ordinary boat would paſs from one ſhip to another in a ſmooth ſea. He is confident, ſince the eſtabliſhment of the life-boat, that there have been at leaſt 300 perſons brought on-ſhore from ſhips in diſtreſs, and wrecks off Shields, the greateſt part of whom muſt otherwiſe have periſhed. And the witneſs added, that it was his opinion, founded upon experience and the obſervations he had been enabled to make, that no ſea, however high, could overſet or ſink the life-boat."

The *originality* of Mr. Greathead's invention is there proved by proper certificates and atteſtations; and the remuneration that he had received, over and above a profit of from ten to fifteen pounds each upon building a few boats, are ſtated to be, From the Literary and Philoſophical Society of Newcaſtle, five guineas; Royal Humane Society, a medallion; Corporation of the Trinity Houſe, 100 guineas; Society of Arts, a gold medallion and 50 guineas. The vote of parliament, on the third of June, in conſequence of the foregoing report, was, "That a ſum not exceeding 1200 pounds be granted to his majeſty, to be paid to Henry Greathead, of South Shields, in the county of Durham, boat-builder, as a reward for his invention of the life-boat, whereby many lives have already been ſaved, and great ſecurity is afforded to ſeamen and property in caſes of ſhipwreck."

The ſubſcribers at Lloyd's, on the 20th of May, voted to Mr. Greathead the ſum of 100 guineas, "as an acknowledgment of his talents and exertions in inventing and building a life-boat," and 2000l. "for the purpoſe of encouraging the building of life-boats on different parts of the coaſts of theſe kingdoms." At the beginning of 1804, Mr. Greathead received a very valuable diamond ring from the emperor of Ruſſia, whoſe munificence to ingenious men of all countries is well known.

The following extract from the Tyne Mercury of the 29th of November, 1803, is another proof of the great utility of the life-boat. "The Bee of Shields, John Houſton maſter, having put to ſea (21ſt Nov.) in an eaſterly wind, had not proceeded far, when it began to blow ſtrong from the ſouth-eaſt, which obliged him a few hours after to put back. In taking Tynemouth bar at the laſt quarter ebb, in a very heavy ſea, ſhe ſtruck the ground, and unſhipped her rudder. Being now completely unmanageable, ſhe drifted towards the north ſide of the bar, and at length drove on the Black Middens. They who have witneſſed the tremendous ſea which breaks on the north-eaſt part of this harbour, in a ſouth-eaſterly wind, may form a conception of the dreadful ſituation in which the crew of the veſſel were ſituated. In the midſt of rocks, where the ſea runs mountains high, ſo as frequently to obſcure the ſhip, and where any veſſel might be expected immediately to go to pieces; their only refuge from being ſwept into the gulf, was to climb up into the ſhrouds, which the captain, with ſix men and boys, being the whole crew, inſtantly effected. The dangerous ſituation in which they were placed, immediately attracted an immenſe number of ſpectators from both North and South Shields. The ſhores in every direction were lined with people, who expreſſed, by their anxious looks, the moſt ſympathetic apprehenſions for their ſafety. The making uſe of the life-boat was by moſt people thought impoſſible; and, at all events, the attempt was attended with extreme danger, owing to the tremendous ſea, and the immenſe rocks which lay where the veſſel was ſtranded. So confident, however, was Mr. Greathead, the inventor, of the life-boat being able to live in any ſea, if properly navigated, that he, without heſitation, and with the greateſt alertneſs, volunteered his ſervices to bring off the men from the brig. This intrepid offer operated like electricity among the ſailors; and immediately the Northumberland life-boat was launched, and manned with Mr. Greathead and South Shields pilots. In the courſe of a few minutes they reached the veſſel without much difficulty, and picked off the men from the ſhrouds ſhivering with cold, and almoſt periſhed by fatigue. One man, in making too much haſte to enter the boat, fell into the breakers, but was immediately recovered. When the whole crew was in the boat, they rowed towards the ſhore; and in leſs than an hour from the time the boat was launched, did they return in ſafety to South Shields, without a ſingle accident!"

In May 1807, the gold medal of the Society of Arts was voted to Mr. C. Wilſon, of the Commercial Road, London, for a boat which poſſeſſes great advantages either in embarking or diſembarking of troops, in affording ſuccour to veſſels in diſtreſs, or in preventing accidents from carrying too great a preſs of ſail. It unites the powers of a ſecure ſailing-boat, with more room and greater expedition than other boats which draw the ſame depth of water uſually poſſeſs. Its conſtruction alſo obviates the danger of its being overſet by perſons crowding on one ſide, in getting in or out of the boat. The inventor calls it a neutral-built ſelf-balanced boat. "By the term *neutral* is meant, what is neither of the two preſent modes now in uſe, i. e. clincher or carver, but both united, viz. clincher in the inſide and carver on the outſide, which neutralizes both the two into a third; and, as every thing has a diſtinguiſhing name, I have taken the liberty to preſent it to the public under the name of a neutral boat.

"The two modes of clincher and carver built have each their ſeparate advantages and diſadvantages in regard to each other. I ſhall begin with the clincher firſt. As the ſides of the planks are firmly faſtened to each other, by lapping over and rivetting, they are much ſtronger than if the edges only butted; and they have the property of being made tight without caulking, only in the huddings and keel-ſeams; and are much lighter than carver-built boats, and more adapted for many uſes; beſides ſaving the difference between thick and thin plank. But they have their diſadvantages alſo; in the firſt place, both unfair ſides and unfair water-lines, which makes them liable to be injured by other bodies they come in contact with, and have the edges of the planks broken ſo as to make a leak, which would not happen to a ſmooth-ſided boat; neither can the uneven ſide move ſo well through the water, on account of its various reſiſtances. They have alſo this diſadvantage, that, if damaged, they require the ſkill of a profeſſional workman to repair them.

"The carver-built boats have the advantage of having ſmooth ſides and fair water-lines, together with having the planks of an equal thickneſs all over the boat, which makes them leſs liable to receive injuries when meeting with other bodies, and more adapted to move in the water, by their fair ſides and fair water-lines. They are alſo more readily repaired; if a profeſſional boat-builder is not at hand, it can be done by a common ſhipwright, or any workman that is uſed to wood-work. But they have alſo their diſadvantages; in the firſt inſtance they are under the neceſſity of being built of plank of a great thickneſs to ſtand caulking; at the ſame time they require larger timbers, which makes them heavy and unfit for many uſes, and alſo a great conſumption of timber on account of the thickneſs of the plank neceſſary. They are alſo more ſubject to leaks from various cauſes than clincher-built boats.

"We will now look to the neutral ſyſtem, and ſee if both

both their advantages are not united, and both their diſadvantages got clear of. A boat of this conſtruction has all the ſtrength of one clincher-built, and can be made as light or lighter. It is free from the diſadvantages of irregular outſides, and from the difficulty of repairing, which in this can be performed by any common workman in wood, as I have found by experience. A boat built this way has a fair and ſmooth outſide; it has all the advantages of a carver-built one, at the ſame time it is clear of the diſadvantages of being loaded with unneceſſary wood, which makes the carver-work very heavy, the liability of leaks, and frequent want of caulking. There is one evil which both carver and clincher built boats have in common, that of having keel-ſeams, and a vacancy between the ſand or garboard ſtreak and the upper part of the keel, which ſoon gets filled with dirt, and remains ſo, which naturally retains moiſture, and ſpeedily rots the wood. In this mode that evil is removed, by having the midſhip-plank bolted on to the keel, wide enough to come over each ſide of the keel to clinch the ſlips on; this not only removes the evil, but ſaves a great deal of trouble in making the rabbets in the keel, and various bevellings in the ſand-ſtreaks, which muſt be done by a good workman. Theſe boats require no larger timbers than common clincher-built boats, as the timbers need no greater notches; but with this difference, that theſe timbers will catch the ſlips that are rivetted over the joints of the planks each way, and ſo the timbers and ſlips will brace one another, and add an additional ſtrength; but, in the clincher-built boats, the timbers catch the laps of the ſeams only one way, and conſequently form no brace whatever.

"All I need to explain further on the neutral ſyſtem is its application. It can be applied to all open boats, of whatever form or uſe, to all coal and other barges, lighters, or any veſſels uſed in rivers or canals, and alſo to all large cutters and luggers, which are now clincher-built. In the boat I have altered for government, the balance-bodies (if the interior of the boat was filled with water) would exclude as much water, between the inſide of the boat and the outſide, as is equal to a body of water of 1 ton. 17 cwt. 2 qrs. which is a great deal more than the weight of men that will go in her, conſequently they can run no riſk whatever of being drowned; and, even if ſhe had a hole through her bottom, ſhe would always keep a ſufficient height out of the water either for rowing or ſailing.

"As the balance-ſides project a foot beyond the reſiſting part in the water, there is that leverage on the boat (over a common one), and alſo the ſame in the length of the loom of the oar that is in the inſide from the gunwale of the boat, which allows the whole of the oar to be lengthened, and by that means it deſcribes a larger circle in the water, and makes a longer pull; the oars for the government-boat I have made are lengthened from 14 to 18 feet. The experiment of having two ſpars fixed at a diſtance from a boat's gunwale, and the oars to work from them, has often been tried and found to anſwer; but this has a great advantage over that method. There is another advantage or property which this boat has: ſhe cannot roll at ſea, but always keeps a level poſition as far as the ſurface of the ſea will allow; ſhe may heel, but not roll, as the balances are always ready to catch either way, and the oppoſite one aſſiſts the other by its weight out of water and gravitation; neither can this boat pitch like another, for the balance-bodies being out of the water, and the breadth of ſix feet only in the water, it can only act with a gravity on the water equal to a boat of the weight of ſix feet, but as the reſiſtance of the water upwards equal to a boat of eight feet wide.

"The national importance of ſuch boats, I leave to the public to decide. I muſt here obſerve, that my plan contains two diſtinct and ſeparate improvements, viz. my neutral mode of building, and the application of the balance-bodies. The firſt improvement relates to the *building* of boats, barges, &c. in general. The ſecond is only partial, and applicable to boats of peculiar deſcriptions or uſes; that is, all ſuch as are wanted for diſpatch, ſafety, or pleaſure, or occaſionally for life-boats; as there can be no queſtion of the ſelf-balanced boats built upon my plan rowing and ſailing faſter than other boats, and they may be uſed to go to ſea when others cannot; but the application of the balance-bodies is not meant as a general one, as it is not fit for veſſels of burthen that are ſometimes light, and at others heavy laden, when the difference of the draught of water is conſiderable."

A *metallic life-boat*, on pneumatic and hydroſtatic principles, that will neither ſink or overſet, yet ſerve all the ordinary purpoſes of ſhips' boats, either for rowing or ſailing, was tried on Monday, the 31ſt of Auguſt, 1812, at London-bridge, on the ebb-tide, during the time of the greateſt fall, with her crew on-board, and filled with water; when ſhe paſſed through with the greateſt ſafety, and diſcharged a conſiderable portion of the water purpoſely put into her. Theſe life-boats are deſcribed as being made of malleable iron, lead, and tin; one of twenty feet long and ſix feet wide drawing only ten inches water, with twenty-five perſons; and to poſſeſs valves, that, without pumping or perſonal aid, diſcharge all the water from them, which valves act occaſionally as air-valves; they are hydroſtatically ballaſted with confined water, taken in or put out at pleaſure—are remarkably buoyant and lively in agitated water. This complete piece of nautical mechaniſm is the invention of Mr. Dodd, the engineer; and a patent has been taken out to ſecure the diſcovery.

The ſilver medal of the Society of Arts, and twenty guineas, were voted to the Rev. James Bremner, miniſter of Walls and Flota, Orkney Iſlands, in May 1810, for a method of making any ſhip's boat a life-boat to preſerve the lives of the crew in imminent danger.

It would appear that, for ſeveral years, Mr. Bremner had turned his attention towards deviſing ſome effectual method for ſaving the lives of people in caſes of ſhipwreck; but it was not, it is believed, till the year 1798, that he firſt ſubmitted his ſcheme to the conſideration of any of the public bodies in theſe kingdoms. In the month of October, 1800, he addreſſed a letter to the Highland Society of Scotland, incloſing a repreſentation on the ſubject of his propoſed ſcheme, and which he requeſted might be ſubmitted to the conſideration of the directors. In that letter he ſtates that the plan had received the approbation of the Trinity-houſes of London and Leith, of the Royal Humane Society of London, and of many captains of merchantmen. An experiment was made in the port of Leith under the ſuperintendance of Mr. Bremner himſelf, and in preſence of a committee of the directors of the ſociety. This experiment proved ſatisfactory to the committee, whoſe favourable report to the directors induced them to preſent Mr. Bremner with a piece of plate in teſtimony of their approbation of his ſcheme. The following is a general deſcription of the method of preparing a boat for this purpoſe.

The dimenſions of the ſloop's boat, with which the experiment was tried, were 14 feet in length, five feet four inches in width, and two feet two inches in depth. The only addition or previous preparation of the boat, was ring-bolts in the inſide, and two auger-bores or holes in the outſide of the keel, as points of ſecurity for fixing the neceſſary ſeizing-ropes. The ring-bolts, within-ſide the keel, were placed, the one forward, one-third from the ſtem, the other aft, one-third from the ſtern; the other two, the one directly at the ſtem, the other at the ſtern. The auger-bores, outſide the keel, were half way betwixt the rings, viz. the one betwixt the two rings forward, the other betwixt the two rings aft. Two empty hogſheads were then placed in the fore part of the boat, parallel and cloſe to each other, and laid lengthways, fore and aft. Theſe were ſecured in their places by paſſing the ſeizing-ropes round all, that is, over the gunwales and through the auger-bore in the keel, as alſo from the ring-bolt in the ſtem to that next it in the keel; taking care, in doing this, to paſs the rope alſo through eyes on

the ſlings of the caſks, which had been previouſly prepared. The ſame proceſs was obſerved in the after-part of the boat. And laſtly, a bar of iron, about three hundred weight, was fixed to the keel, on the inſide. A ſmall quantity of cork was alſo placed in the ſtern, intended chiefly to raiſe to a proper height the caſks placed above it; but without which the reſult of the experiment would have been the ſame. The quantity of cork neceſſary, which will depend on the ſize of the boat, is to be made up into ſeveral parcels, but none larger than one perſon can eaſily manage. Each parcel to be properly ſecured and numbered, ſo as that the whole may fit and fill up the boat completely, in the ſpaces betwixt the ring-bolts, fore and aft, as above deſcribed; and to anſwer the end, it is material that there ſhould be cork enough to riſe nearly three feet above the gunwales, ſo as to form an arch from gunwale to gunwale. The cork being thus laid in the boat, it is to be properly ſecured, firſt by paſſing a ſtrong rope round all, over the gunwales, and through the auger-bore, outſide the keel; as alſo by paſſing ſeizing-ropes from the ring-bolt in the ſtem to that next it in the keel, taking care to make as many turns and ſeizings betwixt theſe ring-bolts, as completely to ſecure the cork from ſlipping out. The very ſame thing to be done as to the rope round the gunwales, and through the hole outſide the keel, with ſeizing-ropes from the ring-bolts, to be made aft, or in the ſtern of the boat.

Where cork cannot be had, or may not be kept in readineſs on account of its expenſe, which, however, is not very great, caſks will anſwer the purpoſe, though it may be doubtful whether there would not be a greater chance that the fury of the waves might unlooſe them, unleſs particular care was taken to have them properly fixed. In the caſe of caſks, two empty ones are to be placed in the fore-part of the boat, parallel to one another, cloſe together, and to be laid lengthwiſe fore and aft. Two other empty caſks to be placed in the ſame way in the ſtern, or aft-part of the boat; and the whole to be ſecured as firmly and compactly as poſſible, by ſtrong ropes round the boat and caſks, and alſo by ſeizing-ropes in the ſame way as deſcribed in the caſe of cork; then two other empty caſks, of the ſame dimenſions, one fore, and another aft, to be placed over and in the middle between the two already fixed, and to be firmly ſecured, as above-mentioned. As the boat is to be thus prepared on the deck of the ſhip, when danger appears, a piece of ſail ſhould be thrown in below, betwixt, and about, the caſks, for the more effectually ſecuring them, and to prevent the ſeizing-ropes from ſo readily ſlipping; it would be proper alſo to have ſlings on the caſks, with eyes in them, through which to paſs the ſeizing-ropes.

Laſtly, both in the caſe of cork and caſks, an iron bar, of about three hundred weight, for ſuch a boat as above deſcribed, ſhould be ſecured to the keel on the inſide, in the middle or empty ſpace. This middle or empty ſpace of the boat is for the ſailors; and in a ſhip's boat of the common ſize may hold eight people, with room to work a pair of oars. Every thing being previouſly ready, it is certain that the neceſſary fixing of the caſks will not take up above ten or twelve minutes, and it is obvious the cork can be fixed in a much ſhorter period. It is alſo completely aſcertained, that a boat ſo prepared, though full of water, will not ſink, but on the contrary be extremely buoyant, and will eaſily go a-head: that it would be next to impoſſible the boat ſhould overſet; but, in caſe of this at any time happening, ſhe would inſtantly return to her proper poſition on her keel. Though the experiment was tried only with caſks, with but a ſmall quantity of cork, as before ſtated, yet it is generally believed, and Mr. Bremner himſelf is of the ſame opinon, that it might anſwer equally well, and perhaps better, to have the cork or caſks ſtowed in midſhips, leaving an empty ſpace in each end, by which means the management of the boat by the helm or rudder would be preſerved; though the other plan ſeems better in the view of uſing oars.

The great benefit derived from the common life-boats is well known, and univerſally acknowledged; but they are very far from being adequate to the calamity they are intended to remedy. Their number comparatively is very few, and the ſphere of their operations extremely limited. In darkneſs by night, and in thick ſnow by day, when their aid is moſt wanted, they are of no avail. Storms may blow, and ſometimes have blown, ſo hard as to defeat their utmoſt exertions; and, even in the moſt favourable caſes, they require a conſiderable time before they can reach the wreck; in the mean time the veſſel may be daſhed to pieces, and all hands loſt.

The very pre-eminent advantage of the ſhip-boat in theſe and ſeveral other reſpects is very conſpicuous. This boat is wherever the ſhip is, and recourſe may immediately be had to her; is of equal utility by night as by day, and in the thickeſt as well as in the cleareſt weather; and, whilſt the life-boat, with extreme ſlow progreſs, muſt be impelled againſt wind and ſea by a force ſuperior to both, the ſhip-boat has only to drift with eaſe before the ſtorm; for it is well underſtood, that, when a life-boat has reached the ſhip in diſtreſs, the moſt difficult part of her taſk is performed; the return is always comparatively eaſy.

Of this advantage the Highland Society were fully aware; and the following is an extract from the Report of the committee, after ſeeing the experiment detailed above: "Mr. Bremner's contrivance differs from any life-boat of which they have received information, in ſo far as the latter, being ſtationed at particular ports, are intended and calculated to afford occaſional relief in thoſe caſes of danger that may occur within their reach; and, though very uſeful and proper in their invention, are yet thus limited in their uſe, while they are ſo conſtructed as not to be fit for the ordinary purpoſes of a boat, and on theſe accounts are neither proper nor convenient to be carried to ſea on-board a ſhip; whereas, on the other hand, Mr. Bremner's plan is of more general application, the object of it being a ſimple and expeditious method of converting every boat whatever, in all ſituations of danger, into a life-boat; ſo that, at the ſame time that a boat retains all its common utility, it may be alſo eaſily reſorted to as a ſafeguard againſt danger, and, in many caſes, as the only poſſible means of eſcaping from death, otherwiſe inevitable; where life-boats, properly ſo called, as well as every other means of eſcape, are wanting."

Mr. Bremner ſays; "From the obvious ſimilarity there is betwixt the prepared ſhip-boat and the common life-boat, ſome have been led to imagine, that the former has been borrowed from the latter. This I can with truth affirm was by no means the caſe; and, to prove it beyond all queſtion, I can refer to the evidence of a nobleman now living, the right hon. lord Melville, to whom, when treaſurer of the navy, I ſent the outline of my plan in the year 1792, a period at which no life-boat exiſted, nor for ſeveral years afterwards; and the plan, detailed at more length, was tranſmitted afterwards by his lordſhip, to the Elder Brethren of the Trinity of London, for their opinion thereon; upon which I received the anſwer, under the hand of their ſecretary, as mentioned in the Highland Society's Report. From whence it appears that this was the firſt attempt that ever had been made upon any regular plan, to find a remedy for the manifold dangers and diſtreſſes to which ſeamen are expoſed by ſhipwreck. Whether my communications and correſpondence ſo many years before may have given riſe to the life-boats or not, is a queſtion that probably never will be ſolved."

Mr. Bremner propoſed ſome other contrivances for ſaving the lives of ſeamen, particularly a life-preſerver to be applied to the body. And he was the inventor of an important improvement in the uſe of great guns, which is now adopted throughout the Britiſh navy; we mean gun-locks to cannon. In reference to his inventions and to his circumſtances, he ſpeaks as follows in his letter to the Society of Arts, upon communicating to them a copy of his

his plans: "I ſhall only add, that I expect no benefit nor advantage whatever to myſelf from my perſeverance and labours on this ſubject, nor reimburſement for an expenſe of ſome hundred pounds which it has coſt me in repeated journeys to Edinburgh and London, as well as in experiments, which a living of *leſs than ſeventy pounds a-year* could very ill afford; but I ſhall nevertheleſs reckon myſelf amply rewarded, if what I have to propoſe ſhall at any time, or in any caſe, prove the means of relieving from the deepeſt diſtreſs, and of reſcuing from otherwiſe inevitable death, even a few of thoſe who have had the misfortune to be involved in the horrors of ſhipwreck."

The reader will conſider with pleaſure the philanthropy of his heart, which induced him, with ſo ſmall a portion of worldly means, to undertake ſo arduous a taſk; and will contemplate, with ſurpriſe, the perſeverance and unremitted attention which he exerted in effecting the object; and admire the ingenuity, efficacy, and ſimplicity, of the means, by which he has effected it. In the hour of diſtreſs and danger the bleſſings of many an unfortunate perſon, reſcued from a watery grave, will attend his efforts in the cauſe of humanity.

In his reply to the ſecretary of the Society of Arts, (who had acquainted him with the rewards that were decreed to him, and the time when they would be delivered,) the feeling mind will regret the neceſſity of ſuch paſſages as the following: "Were I to attend in perſon, it would altogether defeat the end of the ſociety's bounty. My ſituation debars me that honour, and I regret it the more as I cannot have that opportunity of teſtifying to his grace the preſident, and to the ſociety, the deep ſenſe I have of the favour and honour they have done me. I truſt that my remote diſtance will be my humble apology to the ſociety for my non-attendance, and that you will do me the favour to receive the ſociety's rewards for me. Whenever I can find a proper opportunity, I will direct ſome perſon to call upon you for the ſame; and I will endeavour to get a model of a boat fitted up on my plan, and ſent to the ſociety."

The idea of employing empty caſks as life-preſervers has been purſued by Mr. Cleghorn, with great ſucceſs, in his publication called the Hydro-Aëronaut, or Navigator's Life-Buoy. He propoſes to apply the principle of the buoyancy of empty caſks either in the ſhip, or boat, (as by Mr. Bremner,) or outſide the boat, or detached in the form of rafts, or on a ſmall ſcale for ſaving the lives of individuals; and how ſmall a quantity of confined air is neceſſary to every uſeful purpoſe, is a matter which might aſtoniſh an uninformed perſon, or any one who has not conſidered the ſubject; though Mr. Cleghorn's aſſertions will ſtand the teſt of experiment, as being founded on true hydroſtatical principles.

Mr. Cleghorn's chief aim is to ſhow, that, without any particular precaution, every ſhip has almoſt always within itſelf effectual means to prevent the loſs of any of its crew in caſes of ſhipwreck; that man, naturally the moſt helpleſs of animals in water, may eaſily acquire buoyancy ſufficient to ſupport him individually in that element; and conſequently, that perſons of every deſcription may be freed from the danger and dread of drowning, and aſſured, that, by a very ſimple method, they may be, in moſt caſes, little more expoſed to the loſs of life in water than they uſually are when travelling by land.

A body of any kind floating in water diſplaces a volume of water, whoſe weight is exactly equal to the weight of ſuch floating body. Agreeably to this well-known principle, when a man is ſuſpended in water by the aid of two inflated bladders, his weight *in water* is exactly equal to the weight of water diſplaced by the *immerſed part* of the bladders, becauſe in water he loſes all his own weight, excepting the weight which the bladders ſupport. If only one-half of the bladders be under water, one of theſe bladders, (if they are alike,) being entirely under water, would equally ſupport the man. This ſhows, that, in order to give any volume of confined air all its buoyant power in water, it muſt be entirely immerſed, and that a much ſmaller volume of confined air than is uſually ſuppoſed will ſuffice to ſupport human bodies and others in water. As bladders are too weak to be relied on for general uſe, eſpecially in dangerous caſes, let it be ſuppoſed that the common air here given is confined in ſmall caſks, which we will call *air-caſks*, or *life-buoys*, either of wood, metal, or any other ſuitable ſubſtance, as will be explained hereafter. When a pint, a gallon, or any other meaſure, of air is mentioned, it is always underſtood to mean common air, or its own buoyancy, abſtractedly from the wood, metal, or other ſubſtance, in which it may be confined; as it is on the buoyancy of the air alone we calculate, common air being always nearly of the ſame weight, and having nearly the ſame buoyancy; whereas the weight of wood, metal, or other ſubſtances, employed to confine the air, varies greatly, and muſt be conſidered apart. Thus a pint of air confined in a pint-caſk of oak, elm, &c. placed in water, has the buoyancy of a pint of air and the additional buoyancy of the wood which contains it. On the contrary, a tin or copper caſe, capable of containing juſt one pint, has not in water the buoyancy of one pint of air, becauſe its buoyancy is diminiſhed by the weight of the metal, for which an addition of air muſt always be made, in order that the given volume of air may have its full buoyancy. Caſks are peculiarly well adapted to the object in view; they are to be found ready, and in great abundance, wherever man in a civilized ſtate exiſts. From their ſhape, as well as their ſubſtance, they are ſtrong and capable of much reſiſtance; and the common air which fills them comes ſpontaneouſly every where.

To determine, to a phyſical certainty, the eaſieſt and moſt effectual means of ſupporting human bodies in water, and ſaving them from drowning, only a few ſimple experiments will be requiſite. A pint of confined air ſupports in freſh water one pound and a half of iron, or two pounds of flint or ſtone; conſequently, two pints or one quart of confined air ſupport three pounds of iron; and, in the ſame proportion, 1493⅓ pints, or not quite 3½ hogſheads, of confined air, ſupport 2240 pounds, or one ton, of iron. Eight pints of confined air have been found, by experiment, to ſupport, *in freſh water*, with his head above the ſurface, a bony man, weighing in air twelve ſtone. Four pints of confined air ſupport the ſame man in freſh water, with his head all under the ſurface excepting his noſe and mouth. The ſame four pints of confined air ſupport the ſame man, in *ſea-water*, with his head *above the ſurface*. One pint of confined air (or leſs) ſupports the ſame man in ſea-water with his head all under the ſurface excepting his noſe and mouth. Theſe proportions of confined air, it is thought, will be found ſufficient for men of almoſt any ſize, ſhape, or weight. Thus: *In freſh water*, two-thirds of a pint of confined air for every ſtone a man weighs on land, will ſupport him with his head all above the ſurface; but for greater ſecurity, and to render the application more eaſy at firſt, one whole pint per ſtone may be allowed. One third of a pint of confined air for every ſtone will ſupport him with his head all under the ſurface excepting his noſe and mouth, whether in a perpendicular poſture or lying on his back, this laſt being preferable; but half a pint of confined air per ſtone may be granted as above. In ſea-water, one third of a pint of confined air for every ſtone a man weighs, will ſupport him with his head above the ſurface; but half a pint of confined air per ſtone may be granted as above. One twelfth of a pint of air (or even leſs) for every ſtone a man weighs, will ſupport him with his head all under water, excepting his noſe and mouth; but one ſixth of a pint of confined air per ſtone may be granted as above. For a detail of the very curious and intereſting experiments which led to theſe concluſions, we muſt refer to Mr. Cleghorn's pamphlet, p. 59 & ſeq. The whole is well deſerving of peruſal.

A man then, who would render himſelf buoyant in freſh water, if he weighs in common ſcales 12 ſtone (of 14lb. each),

each), provides himſelf with twelve pints of common air confined in one, two, or more, air-tight caſks, or life-buoys. If he weigh 15 or 16 ſtone, he takes with him fifteen or ſixteen pints of confined air; and ſo in proportion.

This allowance of air having been found by experience greatly to exceed what is neceſſary; men, either individually or collectively, by applying it, would be perfectly ſecured againſt drowning in freſh water, and doubly ſo in ſea-water. But, taking men collectively, let there be allowed ſixteen pints, or two gallons, of confined air for each man on-board of a ſinking-ſhip; with this ample allowance, one hogſhead of confined air, placed in a boat, would ſupport in freſh water (at two gallons per man) 27 men, and in ſea-water (at one gallon per man) 54 men, even were each man to weigh ſixteen ſtone. Thus then, in a large ſhip, 26 hogſheads might ſave 702 men in freſh water, or 13 hogſheads in ſea-water, though each man ſhould weigh ſixteen ſtone. The reader may already perceive how eaſy it is to prevent the loſs of lives in water.

The general principle being now laid down, its application is next to be conſidered. Many trading veſſels have not ten men; but let it be ſuppoſed that a merchant-ſhip, or any other, having 27 men on-board, is in extreme danger; that the water is gaining rapidly, and that there is not the leaſt doubt of her ſinking in half an hour. No aſſiſtance can be expected from any quarter; the neareſt land is too diſtant to be reached by the moſt expert ſwimmer, and there is nothing on-board more than what is uſual in every ſhip of the ſame kind. Let there be even leſs. Let her only boat have been waſhed overboard. A more dreadful criſis can hardly be imagined. In a much leſs deſtitute condition than this have numberleſs crews, with their ſhips, been ſwallowed up by the deep, while they had at hand every thing that was neceſſary to ſave them from periſhing. No ſhip is without caſks. There is ſcarcely one which has not a much greater number of caſks with water, wine, beer, ſpirits, &c. than would be requiſite, in moſt caſes, to ſave every human creature on-board. This will appear the more ſtrikingly obvious, when we conſider that every veſſel, on going to ſea, has in caſks more than two gallons of water and other liquids for each perſon on-board. Now this very ſmall quantity of liquids of every kind (i. e. two gallons for each perſon) is no ſooner drawn from the caſks, but it is ſucceeded by air, amply ſufficient to ſupport in freſh water, (and doubly ſo in ſea-water,) and bear to a place of ſafety, every human creature in the ſhip. The ſhorteſt and ſimpleſt method of eſcaping from the perilous ſituation deſcribed, would be to lay hold of all the air-tight caſks at hand, if any, that were empty; if none of this kind, to empty as many as might be quickly procured, and bung them well; to nail to or tie round them ropes, and tie to theſe other ſmall ropes or ſtrong cord in loops, at a little diſtance from one another, as many as would be requiſite for each man to have at leaſt one of theſe loops to lay hold of. It may be allowed that in half an hour or leſs, three hogſheads might be got ready, or ſix hogſheads or more. If ſix hogſheads could be got ready, four or five men would cling to each. If three hogſheads, nine men would cling to each. But one hogſhead only, if no more could be had, would ſupport all the 27 men, provided they could find room to hold and hang by it. It muſt however be obſerved, that when there is only one air-caſk, without a boat, for ſeveral perſons, it will be apt to roll or turn in the water if not equally loaded on both ſides, or made to float ſteady by having planks laſhed to it. But if two caſks could be had, as it is ſuppoſed they always might, the beſt way would be to laſh them together ſide by ſide. This would completely prevent them from turning; and, though one hogſhead of confined air might be managed ſo as to ſupport in freſh water 27 men, and 54 in ſea-water, two half-hogſheads, containing the ſame volume of air, being laſhed together, would never turn, would ſupport the ſame number of men, and afford much more ſpace for them to hold by and float in the water. It may alſo be remarked, that caſks laſhed together two by two, for detached parties of men, will generally be preferable to any other number of caſks ſo laſhed; becauſe, as has been juſt ſaid, two caſks thus united cannot turn in water, like one caſk, and they have a greater proportion of horizonal circumference than three, four, or any other larger number; for, when caſks are laſhed together in pairs, men may cling to both ends and to one ſide of each; but, if three or more caſks be laſhed cloſe together, ſide to ſide, men can only cling to the ends and to one ſide of the firſt and laſt, there being no room for men between the ſides of the intermediate caſks.

It appears, that very uſeful rafts might frequently be made by laſhing empty caſks to planks, broken maſts, yards, oars, boards, or almoſt any other pieces of timber at hand. Thus, let a broken maſt, yard, or plank, have an empty caſk laſhed acroſs each of its ends; being ſo much heavier than the caſks in water, it would always be undermoſt, and ſerve as a keel. Let two ropes be fixed to the uppermoſt parts of the ends of the caſks, and drawn tight, parallel to the keel and to one another, for the men to hold by. This would form a very good life-raft, or ſubſtitute for a life-boat; would ſupport, in ſea-water, (if the caſks were not leſs than hogſheads,) about 50 men, allowing two gallons, or 100 men, allowing one gallon, of confined air for each man. It would float ſteady, eſpecially if iron, braſs, or lead, were ſlung to the keel by way of ballaſt; care being taken not to have more weight of human bodies and ballaſt than the raft could well bear, according to the proportions of air already given for both.

Let it be ſuppoſed, from a ſhip's ſinking ſo very faſt, or any other cauſe, that the men take to a boat without ballaſt, which threatens to upſet with the firſt ſquall; and that they have only air-caſks ſufficient to prevent it from ſinking with them. The only danger here being of upſetting, it may be prevented, in great meaſure, or entirely, by laſhing tight one or more of the air-caſks to each of the *outſides* of the boat. The reſiſtance this gives a boat to the upſetting impulſe of the waves is very great, and, it is thought, would wholly preclude the danger of upſetting, almoſt in any caſe. Here it will perhaps be obſerved, that a boat, though it ſhould have only one air-caſk on each of its outſides, would have its progreſs through the water greatly impeded by the heads of the caſks preſenting their flat ſurfaces to the water; but this is not neceſſary, as the caſks might eaſily be placed and made faſt with their foremoſt heads raiſed above the ſurface of the water, which would meet with but very little reſiſtance from their circular ſides.

Suppoſe that men, whoſe ſhip is ſinking faſt, in order to ſave their lives, take to a boat without ballaſt, which boat is only in danger of upſetting. Suppoſe that they have but one air-caſk, which, were it laſhed to the outſide of the boat, could only prevent it from turning over on that ſide, and that there is danger of its turning over on the other ſide. If the boat has a maſt, or a ſtrong ſtick of any kind, or even an oar that can be fixed upright in lieu of a maſt; let the air-caſk be laſhed to it as high as poſſible, without riſk of breaking the maſt, or its ſubſtitute. Should the boat, thus rigged, upſet, it would inſtantly be turned right again, by the buoyancy of the air-caſk acting on the maſt as on a lever, with a power proportioned to the ſize of the air-caſk and the length of the maſt-lever. It is, however, thought that it would be impoſſible for ſuch a boat to upſet, owing to the reſiſtance of the air-caſk on its reaching the ſurface of the water, when the boat might perhaps lie a little on its ſide till righted, but it could not upſet.

Suppoſe that a firſt-rate ſhip of the line, at ſea, is ſinking, and ſeven or eight hundred men on-board, without any reſource but ſuch as might be found within the ſhip. Let one (or more) of its boats be ballaſted, with ſuch weight of iron, cannon, or ſtone, as may be moſt convenient, ſo as to carry ſail in ſtormy weather, and air-caſks in the proportion already given. The number of men here being ſo great, ſhould it ſeem quite impoſſible to

ſave

ſave them all, it would ſtill be deſirable to ſave, at leaſt, thoſe who might be in the boat or clinging to it. The ſituation of the others, who are moſt in number, would not be ſo deſperate as it appears to be at firſt ſight. Every man might and ought to try to be ſaved. Let a long ſtrong rope be tied to the ſtern of the boat: to this rope let air-caſks be laſhed, with a rope round the middle of each caſk, in a row, ſide to ſide, the rope lying along *upon* the caſks; and let loops of cord be fixed along the ends of the caſks on each ſide, at a little diſtance from one another; ſo that every man, who is not either in or along-ſide of the boat, may have a loop to hold by. Allowing only twenty-ſeven men for every hogſhead of air, 28 hogſheads, in this manner, would ſave 756 men, excluſively of thoſe in and along-ſide of the boat; and, allowing fifty-four men for each hogſhead, 14 hogſheads would ſuffice. But a man of war, with 7 or 800 men, would, even for its ſhorteſt voyages, always have many more than 28 hogſheads with water only; and the greater the number uſed in this way, the more would the men clinging to them float at eaſe. This mode of floating caſks has probably never yet been tried for the end here propoſed; but it is very common on ſome parts of the Mediterranean coaſt, for ſhipping wines and brandy on-board of veſſels, which, not finding depth of water to approach near the ſhore, anchor and load in bays or open roads, where no other method is uſed. In very ſtormy weather, or when ſuddenly ſurpriſed by a ſquall, the main rope, made of a kind of ruſh, ſometimes breaks, and the detached caſks are driven back to the ſhore, or float out to ſea, till they are overtaken by boats. With our ropes there would be little danger of this kind; or, even if the ropes were to break, the detached party would float ſafe as the reſt, and would only be deprived of the benefit of the boat as a leader. It appears that men, ſupported and floating in this manner, would not be hurt by the caſks, as they could not be caught between them, and their legs and bodies would ſink under the caſks, and, like them, move and yield to the impulſe of the waves. An experiment of this kind is well worth a trial. There may alſo be the ſame reſources on-board of a ſinking man of war, as have been ſtated before; i. e. to uſe all the water-tight caſks that may be or can be got ready, laſhing them together in pairs, or in life-rafts, as has been already explained.

Were the uſe of empty or air-caſks to be adopted for the purpoſe in view, it would be proper to have rings or loops *permanently affixed* to the caſks, by which men might hold, and to which ropes or cords might quickly be tied when wanted. Such rings, or cord with knotted loops, might be fixed round the heads of the caſks, nailed to the inſide of the projecting ends of the ſtaves, where they would be very conveniently placed for uſe, and preſerved from being torn off or injured. Particular care ought to be taken to have bungs for all the caſks; a proviſion of them might always be kept in reſerve, and thoſe actually in uſe might be attached by a ſtring or ſmall braſs chain to their reſpective caſks. Should, however, bungs at any time be wanting, in their ſtead might be ſubſtituted untwiſted ropes, rags, pieces of ſails, ſhirts, clothes, &c.

When recourſe is had to boats, rafts, or caſks, for ſaving lives, and there is danger of being long out, a proviſion of broken biſcuit, for food, might be put into one or more caſks, which, if in a boat, would add little to the weight of the cargo when the boat was dry, and conſiderably to its buoyancy when the boat was full of water, as there would be always a good deal of air mixed with the particles of biſcuit. A caſk with water, beer, or wine, might alſo be put into the boat, or tied to it and towed along. Theſe proviſions could not be uſed during a ſtorm; but might be very uſeful when it had ſubſided, or when the people were landed, eſpecially if on an uninhabited ſhore.

It has already been ſeen, that twelve pints of confined air are more than ſufficient to ſupport a bony man of twelve ſtone weight in freſh water, and ſix pints in ſea-water; therefore, let ſix pints of confined air be granted for every man, on an average, *in ſea-water*. Thus, ſix pints of confined air, properly attached to a man's ſhoulders, or rather to his breaſt, would make him float with ſafety and eaſe on the moſt boiſterous ſea, without experiencing any other inconvenience than what unavoidably proceeds from wet, cold, and perhaps want of nouriſhment, which would ſeldom continue long enough to endanger his life. This new kind of vehicle will alſo carry its rider in a ſitting poſture, by having tied to the air-caſk, or life-buoy, the two ends of a rope, and the middle of it hanging down double behind the man, like a ſwing, on which he may ſit as on a chair.

It may be objected to the uſe of life-buoys for individuals on-board of men of war, eſpecially firſt-rate ſhips, which have ſo many (ſuppoſe 700) men, that there would not be ſpare room for a life-buoy for each. But 700 life-buoys, of ſix pints, or three-fourths of a gallon, each, are in all only 525 gallons, or not quite $9\frac{3}{4}$ hogſheads; and even this ſmall number might be reduced to 350 gallons, or about $6\frac{1}{2}$ hogſheads, by allowing only four pints, or half a gallon, of confined air for each man, which would be ſufficient to ſave a ſhip's crew, if, upon an average, the men did not weigh more than twelve ſtone each. The ſpace that any of theſe laſt-mentioned life-buoys would occupy could hardly be a ſufficient reaſon for not adopting them; and, if no other exiſt, perhaps each man's life-buoy might be kept in his birth, hung to his bed or hammock, like a hat, where it might be eaſily and quickly found on any emergency. Should this be objected to, (which indeed it has,) as being apt to favour deſertion, or going on ſhore without leave, the life-buoys might be collected and put under proper care when the ſhip is at anchor; and when at ſea, or at leaſt when there is reaſon to think they would be wanted, they might be delivered one to each man. They might all be numbered, and with very little trouble, and in a very ſhort time, might be diſtributed, and collected again when the danger was paſt. If theſe life-buoys were caſks, it would be neceſſary to keep them always wet or moiſt within, that they might be air-tight; but metal life-buoys, which would be rather ſmaller in ſize, would require nothing of this kind; they would be always air-tight, provided they were well corked and not injured. The expenſe of either would not be more than two or three ſhillings each ſeparately, and conſiderably leſs when bought in large numbers at the wholeſale price. On-board of merchant-ſhips, the number of life-buoys requiſite would be ſo ſmall, that there does not appear the leaſt objection to them.

As the epithet of *patent* is frequently prefixed to novelties, in order to ſell them at an advanced price, even when no ſuch patent has been obtained;—with a view to prevent any ſuch abuſe relative to *the navigator's life-buoy*, and to render it as univerſally beneficial as poſſible, Mr. Cleghorn declares, that, "whatever right cuſtom and the law might give him, he never intends to apply nor aſſiſt in ſoliciting for a patent, that may in any wiſe reſtrain the beneficial effects of the inventions mentioned in this eſſay for ſaving men's lives."

Amongſt many other caſes in which ſhips might be ſaved by means of confined air; when a ſhip happens to be ſtranded, as is very frequent, near the ſhore, a communication might be eaſily and certainly eſtabliſhed between the ſhip and the land by a rope, one end of which might be conveyed to the ſhore by men in a boat with air-caſks, or clinging to a pair of caſks, or individually, each man having on his reſpective life-buoy. This ſeems greatly preferable to any thing of the kind in uſe, as it would not only ſend a rope's end ſafe on ſhore, but at the ſame time convey there uſeful hands to make it faſt, and turn the thus-eſtabliſhed communication to the greateſt advantage.

In that valuable miſcellany, the Philoſophical Magazine, we have an account of various means for preventing the loſs of a ſhip, when in danger within two or three

hundred fathoms of the ſhore. The only certain method of ſaving the crew of a veſſel in ſuch a ſtate is, to eſtabliſh a rope of communication from the ſhore to the ſhip. One of the plans is, that of throwing from the veſſel into the ſea an empty caſk with a cord attached to it; "the wind and the waves would drive the caſk to the ſhore, and afford the means of eſtabliſhing that rope of communication already mentioned." *Phil. Mag.* iv. 250. It ſeems very remarkable, that the anonymous author, who appears to have taken much pains to point out means for ſaving the ſhipwrecked, ſhould not have thought of ſending with the empty caſk at leaſt one man, to make the rope's end faſt on-ſhore, as it muſt frequently happen, when a ſhip is in danger, whether owing to darkneſs or to the neareſt land being uninhabited, that there is no perſon ready to lay hold of the rope, and fix it on-ſhore, without which it can be of no uſe. A very convenient raft for this purpoſe might be made by laſhing together a few ſmall caſks and a ſeaman's cheſt. Fig. 3, on the preceding Plate, repreſents ſuch a machine ready for uſe: the apparatus N, to hold the perſon upon it, is made from a ſeaman's cheſt with holes cut in the ſides of it, to allow the perſon within it firmer hold, and to let out the water that may be thrown into it from the waves; OO are two pulleys attached to the ends of the cheſt, and through which the line is to run; the raft is to be ballaſted underneath, to prevent it from upſetting. The whole apparatus is ſo arranged as to be encloſed in a ſmall box, and may be ſeen at the repoſitory of the Society of Arts in the Adelphi. Such a machine ſhould be kept on-board every ſhip, great and ſmall.

When a ſhip is leaky, and in danger of ſinking, it is very common to throw her guns and goods overboard, to lighten her. In ſuch caſes, it would be much eaſier, and much more effectual, if, inſtead of throwing away valuables, many of which are but little, if any thing, heavier, and ſome perhaps are lighter, than ſea-water; caſks containing water, or other liquids of little value, as many as might be ſufficient, or could be had, were to be emptied of their contents, and well bunged; if theſe contents could be pumped or thrown over-board, the ſhip would evidently be lightened of the weight of ſuch contents. Thus, if caſks containing four hogſheads, or one tun of water, could be emptied into the ſea, the veſſel would be lighter by the weight of four hogſheads or one ton of water, and would, beſides, acquire a new degree of buoyancy, ſufficient to ſupport upwards of one ton of iron or braſs, or one ton and a third of flint or ſtone, and many tons of goods not much heavier than water. But, allowing that the contents of theſe emptied caſks do remain on-board, the ſhip, it is true, carries the ſame burden as it did before they were emptied; but, ſhould the ſhip fill with water, ſo as to float the empty caſks, their buoyancy would of courſe take place, and prove, that every four empty hogſheads, or every four hogſheads of confined air, contribute conſiderably more to buoy up the veſſel, than every ton of iron or braſs, or many tons of goods little heavier than water, could contribute to bear it down and ſink it.

As this new and eaſy operation may prove a great ſaving, and a moſt valuable acquiſition, both to our navy and commerce, it ſeems to deſerve particular notice. The effects of confined air for ſaving goods lighter than iron or braſs, would be in proportion to their weight compared to the weight of theſe metals *in water*. Thus, four hogſheads, or one ton, of confined air, would contribute more to ſupport a leaky veſſel than four ton and a half of coal would contribute to ſink it. Therefore, by emptying four hogſheads of their water, and bunging them, four ton and a half of coal would be ſaved; and, though the water from theſe four hogſheads were to remain in the hold, the veſſel would be ſafer than it would be by throwing the four ton and a half of coal into the ſea; and the ſame proportion would ſubſiſt for any number of tons of air to four times and a half the tons of coal. Of other goods, lighter than coal, more might be ſaved, in proportion to their weight in water.

This method of ſupporting leaky veſſels would have another great advantage. It would require nothing more than to unbung the holes in the heads of the caſks; to let the contents run, and to bung the caſks again when empty. This might ſoon be done by one man, inſtead of employing many hands in the hard, tedious, and deſtructive, labour of throwing overboard valuable and frequently light goods, at a time when men are ſo much wanted for other neceſſary employments. A ſhip having a conſiderable part or the whole of her cargo in caſks, ſuch as wine, brandy, rum, &c. would never ſink, were the people, when there appears great danger of ſinking, to empty and bung up as many caſks as might ſuffice to keep the ſhip above water. The number requiſite would be much ſmaller than it would appear to be at firſt ſight. Ships at ſea, eſpecially thoſe of the navy, when part of their caſks have been emptied for uſe, are ſometimes found too light; for which reaſon, thoſe caſks are filled with ſea-water, to add to the ſhips' weight, and make them ſail deeper and ſteadier. Should ſuch ſhips become leaky, and threaten to founder, it ſeems evident that they might always be ſaved by emptying and bunging their caſks, as has been explained.

Confined air might alſo be very uſeful on voyages of diſcovery, and on other occaſions, for reconnoitring hidden rocks or ſhoals, which impede navigation; and likewiſe to facilitate landing on unknown coaſts, where the land cannot be approached without much danger. A boat with air-caſks might attempt to land on almoſt any ſhore; and, even ſhould it be ſtaved, the men might be ſaved by clinging to the air-caſks. But, were the men individually provided with ſmall air-caſks, or life-buoys, their lives would be perfectly ſafe, and they might continue their purſuit, though deprived of both their boat and its air-caſks. With their own ſmall life-buoys only, they might float in deep water, and ſtep or ſtand upon the rocks or ſhoals within reach of their feet, and by ſounding mark ſuch as were ſtill lower in the water. Confined air might alſo be uſeful to divers; it would raiſe them rapidly to the ſurface of the water, after leaving at the bottom the weights of ſtone requiſite to ſink them, as is practiſed in the pearl-fiſhery. With confined air they might reſt and breathe on the ſurface of the water, without a boat, which would frequently not be wanted either to convey them to the place of their deſcent or to receive them on emerging. And a communication, if uſeful, might be eſtabliſhed between the ſurface and the bottom of the water, by means of a cord, one end of which might be held in the diver's hand, and the other end attached to his weights of ſtone, to be left at the bottom of the water, the length of the cord being at leaſt equal to the depth of the water.

It has been found by experiment, and is admitted in hydroſtatics, that a cubic foot of river or freſh water weighs about 70lb. and a cubic foot of ſea-water about 73lb. This difference, at firſt ſight, appears by much too inconſiderable to juſtify what has been aſſerted, that "half the volume of confined air requiſite to ſupport a man in freſh water will ſupport him in ſea-water;" yet it is clearly demonſtrable, thus: Suppoſe a man, weighing 150lb. in air, or on land, being immerſed in freſh water, diſplaces two cubic feet of it; he loſes 140lb. and retains only 10lb. of his own weight. The ſame man immerſed in ſea-water alſo diſplaces two cubic feet of it, loſes 146lb. and retains only 4lb. of his own weight. In freſh water he is 10lb. and in ſea-water only 4lb. heavier than the reſpective volume of either water which he diſplaces; and, in order to float with his head above the ſurface, requires artificial buoyancy, capable of ſupporting 10lb. if he be in freſh water, and only 4lb. if in ſea-water. The difference, therefore, between the power of ſea-water and freſh water, for ſupporting human bodies, is as 4 to 10, or as 2 to 5; but

but it is here assumed only as 1 to 2; so that any human body may be supported in sea-water by half the volume of confined air necessary to support it in fresh water, the head in both cases being above the surface.

Mr. Cleghorn proceeds to describe the different forms in which his life-buoys might be made, and how to be applied. The matter is very interesting; but we must refer our readers to the book itself, from which we have already copied so much; while we proceed to describe the life-preserver constructed by John Bentley, esq. about the year 1797. It is however remarkable, that, although he exhibited it in public several times, some very important parts of it seem to have escaped notice. One material point is to enable a person who cannot swim not only to float, but to make progress through the water. The hands and feet are too narrow to accomplish this without a knowledge of the art of swimming, therefore the fingers and feet must be artificially webbed. Thus the whole apparatus, which he calls a *nautilus*, consists of three distinct parts, and are to be thus constructed. The buoyant is made of copper, in the form of a tube, to fit the round of the body, about six inches diameter, the seam brazed with hard solder. It should be made in three lengths, the ends quite flat, to fit each other exactly, so that, when put together, they form a ring or belt. This is in case of accident happening to one part by leaking, that it may not extend to the other two, which will be sufficient to prevent sinking. Each of these parts is sewed up in baize, with three strong tapes near the end of each piece, by which all of them are securely tied together. A flexible pipe, of the thickness of a quill, is inserted in each piece, from the upper side to the bottom; so that, if any leakage happens, the water is readily drawn out by the mouth and discharged. The buoyant, thus prepared, must be securely tied with strong tapes, crossed round and over the shoulders, to prevent it getting down; it cannot get over the arms. When it is thus fixed, the body will, by its own gravity, be erect in the water, with the feet downwards, and will always retain this position, unless force is applied to alter it, and which it will again recover when the force ceases to act. The second part, which is for the hands, is a pair of oiled silk gloves, which, after being made in the usual way, the fingers are opened to their full extent breadthways, and a piece of the same material sewed over them on the under side. Tapes are sewed at the top to tie them round the wrist. The third part, being for the feet, is made thus: Take a piece of half-inch wainscot or mahogany, 11 inches long, and 10 inches wide. Cut it longitudinally into three pieces, two of them $3\frac{3}{4}$ inches broad, and the other $2\frac{1}{2}$ inches. Fasten them well together with two pair of brass hinges, and rule-joints to fall and rise like a two-leaved table, the narrow piece being in the middle. On the under side of the middle-piece, in the centre, a wooden turn-buckle must be screwed, to prevent the side-pieces from falling down, when walking to or from the water. Two wooden stops are so fixed upon this piece as to prevent the sides, when down, coming to a right angle with the middle-piece, that the rising and falling may be duly performed with the action of the feet. To the upper side of the middle-piece a common leather shoe (to fit the person) must be fastened on with two screws through the sole; and near each end of this middle-piece two small holes are made with a centre-bit, through which good tapes are passed, to tie round the instep and over the foot. A pair of these must of course be provided; and a person thus equipped, being perfectly buoyant in water, and web-footed and web-fingered, will be able to outswim any other person, and may exist in the water as long as cold and hunger will permit. By increasing the dimensions of the buoyant, a proportionate quantity of provisions, or any other article, may be carried. The inventor has written a letter, and otherwise amused himself, on the sea, with this apparatus; and believes he could cross from Dover to Calais in perfect safety. It is very convenient for crossing deep rivers, where there are neither boats nor bridges. It is procured at little expense, very portable, and put on (the inventor says) in one minute.

Daniel's life-preserver, being made entirely of leather, appears to be in some respects preferable to the above. It was honoured with the gold medal of the Society of Arts in May 1807, in consequence of the testimonies in its favour, and which are printed in the 25th volume of their Transactions. Mr. Daniel declares that he sunk near 1500l. to prevent other people from sinking. At fig. 4. of our Plate, A represents the body of the machine, which is double throughout, made of pliable water-proof leather, large enough to admit its encircling the body of the wearer, whose head is to pass between the two fixed straps, B B, which rest upon the shoulders; the arms of the wearer pass through the spaces on the outside of the straps, one on each side, admitting the machine under them to encircle the body like a large hollow belt; the strap, C, on the lower part of the machine, is attached to the back of it, and, by passing betwixt the thighs of the wearer, and buckling at D, holds the machine sufficiently firm to the body, without too much pressure under the arms. The machine, being thus fixed, is inflated with air by the wearer blowing in from his lungs through the cock, E, a sufficient quantity of air to fill the machine, which air is retained by turning the stop-cock. The machine, when filled with air, will displace a sufficient quantity of water to prevent four persons from sinking under water. Mr. Daniel recommends his life-preservers to be prepared as follows: viz. To select sound German horse-hides, and to cut a piece six feet long, and two feet six inches wide, free from blemish or shell; it is first to be curried, and then rendered water-proof by Mollerstein's patent varnish, which preserves the leather more supple, and admits it to be easier inflated, than any other water-proof leather. The machine, when properly made according to the drawing and description, resembles a broad belt, or circular girdle, composed of two folds of pliable leather attached together, and perfectly impervious to water.

A Bristol correspondent in the Monthly Magazine, vol. xxxiv. proposes to make every sailor's dress a life-preserver: "Suppose there was quilted in the jackets of sailors, about the collar and neck, between the outside and the lining, a quantity of cork-shavings or chippings, (such as may be had at the cork-cutters,) or as a belt, a considerable breadth across the back and shoulders, then principally omitted under the arms, and resumed over the chest and stomach, yet not so much as to create inconvenience. It appears to me that sufficient might be inserted to give a man time to exert himself, or so far assist as to prevent drowning. The large quantity of cloth now quilted about the neck and shoulders of coats, shows that much could be worn without inconvenience. The slings, or braces as they are improperly called, might also afford a place for a small portion to assist, and probably the waistband of the trowsers. What I would infer is, that every part of the usual dress of the sailor should be made with a view of preserving his life, in case of accident; for, exclusive of those who, in consequence of engagements with the enemy, are placed in great danger, numbers are frequently precipitated into the water, by the sudden heeling of the ship, the breaking of yards and masts, and a variety of other accidents; and, if so much cork could be commodiously worked into the ordinary dress as would give them an opportunity of recovering themselves, and using their own exertions, it would certainly preserve many valuable lives."

The admiralty, we are informed, (strange as it may appear,) have declined furnishing the navy with life-preservers, lest facility should be given to desertion.

While we are upon the subject, we cannot omit to notice some other methods of preserving the lives of persons shipwrecked near the coast. It seems first to have occurred to a Frenchman, (who writes however anonymously,) that to a bomb or cannon-ball might be fastened the end of a rope,

a rope, extended afterwards in a zig-zag direction before the mortar or cannon, or ſuſpended on a piece of wood raiſed ſeveral feet. But, as it was neceſſary to know if the cord would not break by the force of the exploſion and the velocity of the motion, the author thought it proper to conſult profeſſional men. He accordingly wrote to ſome officers of the artillery in garriſon at La Fere in France; and they almoſt all replied that the rope would infallibly break.

Not deeming this anſwer ſatisfactory, he happily conceived the idea of making the experiment on a ſmall ſcale. He cauſed a piece of the barrel of a muſket to be filed into the form of a ſmall mortar of eighteen lines in length internally; and, having tied a packthread to a common ball of lead, he made an experiment, which perfectly ſucceeded, as did many others which he afterwards repeated, even with the ſtrongeſt charges of powder. This ſucceſs he communicated to the officers of artillery, who replied, that there was a great difference between a quarter of an ounce of powder and four or five pounds employed for a bomb; and were ſtill of opinion that the rope would break.

Having already made experiments, he was ſtill diſpoſed to doubt the truth of this aſſertion; and therefore tried a four-inch mortar with a ball of the ſame calibre, and eighteen ounces of powder, with a rope only three or four lines in diameter; and his ſucceſs was equally flattering as before. Theſe experiments were repeated, by order of government, at La Fere, four times with an eight-inch mortar, and three times with one of twelve inches; all of which happily ſucceeded. The ſame author goes on to obſerve;

"It ought to be remembered, that a veſſel is never caſt away, or periſhes, on the coaſt, but becauſe it is driven thither againſt the will of the captain, and by the violence of the waves and the wind, which almoſt always blows from the ſea towards the ſhore, without which there would be no danger to be apprehended: conſequently, in theſe circumſtances, the wind comes always from the ſea, either directly or obliquely, and blows towards the ſhore.

"1ſt, A common paper kite, therefore, launched from the veſſel and driven by the wind to the ſhore, would be ſufficient to ſave the crew of any ſhip. This kite would convey to the ſhore a ſtrong packthread, to the end of which might be affixed a cord, to be drawn on-board by means of the ſtring of the kite; and with this cord a rope, or as many as ſhould be neceſſary, might be conveyed to the ſhip.

"2dly, A ſmall balloon, of ſix or ſeven feet in diameter, and raiſed by rarefied air, would be alſo an excellent means for the like purpoſe. Being driven by the wind from the veſſel to the ſhore, it would carry thither a ſtring capable of drawing a cord with which ſeveral ropes might be afterwards conveyed to the veſſel. Had the diſcovery of the air-balloon produced no other benefit, it would be entitled on this account to be conſidered as of great importance.

"3dly, A ſky-rocket, of a large diameter, would be of equal ſervice. It would alſo carry, from the veſſel to the ſhore, a ſtring capable of drawing a rope after it."

The author juſt quoted ſays, that he announced his diſcovery in a French journal in January 1794. It is, however, to be obſerved, that, in the year 1792, a bounty of fifty guineas was given by the Society of Arts in London, to Mr. John Bell, then ſerjeant, afterwards lieutenant, of the royal regiment of artillery, for his invention of throwing a rope on-ſhore by means of a ſhell *from a mortar on-board the veſſel in diſtreſs*; the particulars of which were publiſhed in the tenth volume of the Society's Tranſactions, page 204.

The ſeveral trials made before a committee of the ſociety at Woolwich, on the 29th of Auguſt, 1791, of throwing a line on-ſhore on this principle, were as follow. From a boat moored about 250 yards from ſhore, the ſhell was thrown 150 yards on-ſhore, with the rope attached to it; the ſhell was of caſt-iron, filled with lead, it weighed 75 pounds, its diameter eight inches; the rope in the trial was a deep-ſea line, of which 160 yards weighed eighteen lbs. the angle of the mortar from whence the ſhell was fired, was 45 degrees. By means of the line, Mr. Bell and another man worked themſelves on-ſhore upon his raft of caſks; the raft was upon the model already deſcribed, and repreſented at fig. 3 of our Plate. The ſecond trial was repeated in a ſimilar manner, and with equal ſucceſs, the ſhell falling within a few yards of the former place; the gale of wind was briſk, and the water rough. The direction of the ſhell was nearly from north to ſouth, and the wind blew nearly north-weſt. In the third trial, the mortar was elevated to 70 degrees; the rope attached to the ſhell was an inch-and-half tarred rope, of which every fifty yards weighed fourteen pounds and a half; the ſhell of the kind above-mentioned; it fell 160 yards from the mortar, and buried itſelf about two-thirds in the ground; the line or rope run out was about 200 yards, and it required the force of three men to draw the ſhell out of the ground at that diſtance. Each charge of powder was fifteen ounces. A fourth experiment was made by firing, from the ſame mortar, a grapnel in a wooden caſe; it did not retain its hold in the ground ſo well as the ſhell, but amongſt the crevices of rocks, or where the veſſel is near ſhore, will be uſeful. A grapnel of this kind may be fired from a common cannon with an endleſs rope, running in a pulley or ſmall block fixed thereto, by which a raft may be ſucceſſively drawn to and from the veſſel either by the perſon on-board the veſſel or thoſe on-ſhore.

The following are the obſervations made by lieutenant Bell, upon throwing a line on-ſhore in caſe of a ſhip being ſtranded.

1ſt, From the propoſed conſtruction of the piece of ordnance, intended to throw the ſhot and line on-ſhore, I ſuppoſe it will be between five and ſix hundred weight. The chamber is to contain one pound of powder, and the bore to admit a leaden ball of ſixty pounds or upwards; the length of range, or diſtance, will depend upon the ſize of the line made uſe of; I ſuppoſe it will carry a deep-ſea line between three and four hundred yards diſtance.

2d. All ſhips that have iron ballaſt may uſe this piece as a part of it, and then there would be only the trifling difference of caſting ſo much of the ballaſt into the form of the piece; the leaden balls may likewiſe be uſed as ballaſt.

3d. I am of opinion there are various ways, on-board of a ſhip, that the mortar may be placed in a proper poſition for firing without a carriage expreſsly made for it; it may be placed upon a coil of rope, or its trunnions reſted upon quoins, or any thing elſe, whereby the muzzle can be raiſed ſo high that the groove upon the trunnion appears vertical, as the piece in that poſition would be elevated nearly 45 degrees.

4th. As I imagine all ſhips carry deep-ſea lines, on that account I made uſe of it in the experiments at Woolwich; but, if it ſhould be thought too ſhort for the diſtance, any other light line may be added to the length of it.

5th. Suppoſing a ſhip's owner to purchaſe ſuch a piece of ordnance with the leaden balls, and a block carriage; I do not think the whole would amount to more than ten or eleven pounds expenſe.

6th. Where a ſhip is driving or unmanageable near the ſhore, it would be proper to have the piece loaded, the line reeled upon hand-ſpikes or poles, and laid upon the deck ready for firing at any time it might be judged neceſſary. The hand-ſpikes or poles, the line is reeled upon, preſerve it in an horizontal form; and they are not to be drawn out until the inſtant of firing; in this manner the line will deliver itſelf freely.

7th.

7th. In trading-ſhips, this piece would anſwer for making ſignals of diſtreſs, by filling the chamber with powder, and well wadding it, as the report would be heard ſome miles diſtance at ſea.

8th. Such a gun, being accompanied with a few rounds of round and grape ſhot, would defend a ſhip much better than a longer gun, againſt any piratical or other hoſtile intentions, as, from its ſhortneſs, it would be more readily loaded and fired with a larger charge each time.

9th. Accidents from a gun burſting, which may ariſe from an unſkilful perſon loading with too great a proportion of powder, are in this piece effectually guarded againſt, by the chamber being conſtructed to contain but one pound of powder, a quantity which is only about one-third of the uſual charge of a cannon.

10th. From the ſmall ſize of ſuch a gun and carriage, it might be kept upon deck, without much inconvenience in working the ſhip, in order to be ready if neceſſity required; and, when the ſhip is out at ſea, it might then be put below. But, from the number of dreadful wrecks which ſo frequently happen along the coaſt, it certainly would be prudent to have it always upon deck when within ſight of land, and particularly in ſtormy weather.

As a counterpart to this, we have to mention the contrivance of Capt. Manby, of Yarmouth in Norfolk, whoſe method of preſerving the lives of ſhipwrecked perſons, and of forming a communication with ſhips ſtranded on a lee-ſhore, is by means of a rope thrown over the veſſel *from a mortar on-ſhore*, by which an apparatus can be uſed to reſcue the crew, &c. Sundry teſtimonies are recorded, to prove the excellence of this invention; and we ſhall tranſcribe the following, in which our readers will remark that Capt. Manby's apparatus can be employed when it is impoſſible to fire a mortar from the ſtranded veſſel.

"John Prouting, late maſter of the brigantine or veſſel called the Elizabeth of Plymouth, maketh oath and ſaith, that he was on-board the ſaid veſſel, when ſhe was unfortunately ſtranded on the beach of Great Yarmouth, in a violent gale of wind, on Friday the 12th day of February inſtant. That a rope from the ſhore was thrown by a piece of ordnance to the diſtance of one hundred and fifty yards, over the ſaid veſſel, and lodged upon her rigging, at which time no other communication could be obtained; and by means of which rope ſo thrown he ſolely attributes the ſafety of himſelf and crew. That he could not at the time have uſed a piece of ordnance, or any rope on-board for effecting a communication with the ſhore, from the rolling of his ſaid veſſel and the ſea making continual breaches over her; and that the deponent is fully convinced that the invention of throwing a rope to a ſhip or veſſel ſtranded on a lee-ſhore, is of the utmoſt conſequence and importance to a maritime and commercial country, and intereſting to the world at large. JOHN PROUTING. Sworn at Great Yarmouth aforeſaid, this 22nd day of February, 1808, before me, EDMUND K. LACON, Mayor of the Borough of Great Yarmouth."

In conſequence of this and many other teſtimonies in favour of this contrivance, the gold medal of the Society of Arts was voted to Capt. Manby in May 1808.

Few of the objects which we deſire are attained at once, and by a ſingle cauſe. The ſame wants offer themſelves under various features of difficulty, and require to be met with different means. The life-boat invented by Mr. Greathead is of effect in thoſe ſhipwrecks that happen at a diſtance from the land; Capt. Manby's invention is adapted to thoſe that happen under cliffs, or ſo near the ſhore that no boat can be brought into uſe. Where the beach gradually declines, it is covered with water only as the waves roll in; and in the reſorbency, ſuppoſing that there is a ſufficient depth of water to float the boat, and force it out towards the ſea for a moment, it is again driven back by the next wave, to the fury of which the action of the oars does not offer a ſufficient reſiſtance; and theſe obſtacles, in a violent ſtorm, are of themſelves enough to render all efforts to get the life-boat off to the diſtreſſed veſſel ineffectual. The following evidence will ſhow how effectually Capt. Manby's contrivance obviates all theſe inconveniences.

Minutes of Captain Manby's Experiments at Loweſtoffe, Auguſt 26th and September 10th, 1807.

A cohorn of four inches and a-half bore, weighing three quarters of a hundred weight and one pound, at thirty-five degrees elevation, loaded with four ounces of gunpowder, threw a round ſhot weighing eleven pounds and a half, to which was faſtened a hided rope, and a large deep-ſea line, to the diſtance of one hundred and eighty yards. At an elevation of thirty degrees to one hundred and eighty-eight yards, a field-piece of five inches and a half bore, threw a round ſhot, barbed at the top, weighing thirty pounds, faſtened to a whale-rope one inch and a half, to the diſtance of one hundred and ninety yards; the elevation was twenty degrees and a half, and a charge of eight ounces of powder. The ſame piece, elevated twenty-five degrees, with a charge of ten ounces of powder, threw a ſhot ſimilar to the laſt two hundred yards. The grapnel with extended flutes, weighing forty-two pounds, and the ſame rope as before, the piece at an elevation of twenty-two degrees, and a charge of ten ounces of powder, was thrown one hundred and ninety yards. A boat was hauled over the ſurf, by pulling at the line faſtened to the grapnel, which ſhe went to, took up, and returned again to the ſhore. Signed by M. MAURICE, Secretary of the Suffolk Humane Society.

Minutes of Experiments made by Captain Manby at Winterton, March 2, 1808; certified by I. B. Huntington, Eſq. one of his Majeſty's Juſtices of the Peace for the County of Norfolk.

A galloper-carriage conveyed from Yarmouth to Winterton the following ſtores, viz. A five-and-a-half-inch royal mortar on its bed; two ammunition-boxes filled; two hundred fathom of inch-and-a-half rope; two hundred fathom of deep-ſea line; twenty fathom of inch-and a-half rope, fitted up with two blocks, as a gun-tackle purchaſe; three iron-ſhod ſtakes; a large maul to drive them with; a cot fitted up on a ſtretcher, with gudgeons and fore-lock pins, to convey people on-ſhore; two round twenty-four pounder ſhot, with eyes, to form communication; a ſhot with barbed ſhort flukes to catch the rigging of a veſſel, for the purpoſe of hauling a boat off, when the crew are ſo benumbed with cold or fatigue, that they are incapable of aſſiſting in the plan intended for their relief; a grapnel forty-two pounds weight, to haul a boat over a high ſurf to get off to ſhips in diſtreſs at a diſtance from the ſhore.

The carriage thus loaded travelled with conſiderable eaſe, accompanied by two men ſeated on the ropes; and was found capable of going with two horſes at the rate of eight miles an hour. The mortar, being laid at the angle of twenty-two degrees and a half, (which was found to give the greateſt range with a rope if projected againſt the wind,) threw a deep-ſea line with

4 ounces of powder	-	140 yards
6 - - - do.	- - -	182
8 - - - do.	- - -	215
10 - - - do.	- - -	249
12 - - - do.	- - -	290
14 - - - do.	- - -	310
16 - - - do.	- - -	322

The barbed ſhot at the ſame angle, with ſixteen ounces of powder, carried two hundred and forty-ſix yards of inch-and-half rope. The grapnel, with the ſame rope as the laſt, with ſixteen ounces of powder, was blown to pieces; but the ſame grapnel had been thrown at Loweſtoffe, on the 10th of September preceding, one hundred and ninety yards, with ten ounces of powder, and was found to anſwer every purpoſe of its invention.

I do certify the above was made in my preſence.

I. B. HUNTINGTON.

Remarks.—It is often extremely difficult, and in many caſes abſolutely impoſſible, to get a communication with a veſſel, eſpecially on the beach between Yarmouth and Loweſtoffe, parallel to which runs, for about ſixty miles in length, a ridge of ſand about a hundred and fifty yards from the ſhore, on which veſſels ground, and on which breaks (in a ſtorm) a tremendous ſurf, the intervening ſpace between the ridge and the ſhore being full of a very croſs and heavy ſea, which forms an eddy, ſomething of the nature of a whirlpool, that baffles every endeavour of the people on-board or on-ſhore to get communication with each other; a caſk, for inſtance, or any other floating ſubſtance, inſtead of drawing on-ſhore, turns round, and continues mid-way, and, with the wind at or near north or ſouth, never comes on-ſhore at all; and I have ſeen two hours employed in the attempt, which in winter, when the people are periſhing faſt, owing to their being wet and frozen, is particularly diſtreſſing; but in many caſes it is abſolutely impoſſible for the men to be on deck, (eſpecially in ſmall coal-laden veſſels,) the ſea breaking completely over them as high as their leading-blocks; conſequently the people are obliged to be in the rigging, and then it is quite out of their power to aſſiſt themſelves; nor is it poſſible for the people on-ſhore to give them any help, except by the means of this excellent apparatus, which I do conſider a moſt effectual relief in ſuch caſes of diſtreſs.

As to the method explained already of having the apparatus on-board every ſhip, ſo that the ſhot might be thrown on the beach or rocks, it is to be conſidered, that in many caſes of ſhipwreck, (eſpecially when the veſſel is deep laden,) the men, as obſerved before, are totally unable to keep the deck, the ſea completely breaking over it; conſequently they are obliged to take to the rigging, where they are ſoon benumbed by the cold, and quite unable to aſſiſt themſelves, while thoſe on ſhore, who are dry, and who have room with exerciſe to keep their blood in circulation, are the reverſe; beſides, it takes up a conſiderable ſpace (more than there is on-board ſmall veſſels, ſuppoſing the men are capable of exerting themſelves) to manage the apparatus.

The throwing the grapnel I conſider a moſt important part of the buſineſs, as without it I conceive it impoſſible to get a life-boat off a beach ſimilar to the one I have before mentioned; and, indeed, it has always been found impracticable, and ſeldom attempted, when blowing very hard and a great ſurf, as the weight of the boat is ſo conſiderable when ſhe is ſtruck by a ſea, that it is not in the power of any ſet of men to pull her through, without the aſſiſtance of a rope ahead. Now the grapnel, being thrown by the force of the powder two hundred yards, falls without the broken water, and enables the men to haul her through it without difficulty; and ſuch a new and effectual power is acquired by the invention, as will be the means of ſaving many valuable lives. JOHN FOWLER.

Directions for applying Capt. Manby's Invention.

A five-and-half-inch royal mortar is laid at the object requiring aſſiſtance, if the wind blows directly on the ſhore; but an allowance to be made to windward, in proportion as the wind blows on the ſide, as the body of rope will fall conſiderably to leeward in that caſe. The rope requires the greateſt regularity in being laid, as on that depends its preſervation; it muſt be ſhort faked, and care taken that the fakes do not touch each other; the end is paſſed through a leather caſe of three feet in length, which effectually prevents the rope burning, and bent to a large eye that projects out of the ſhot. It being fired over the veſſel, the rope falls on the rigging. When the perſons on-board get it, they are to return a rope by the one ſent, to which the people on-ſhore will bend a ſtout rope, and a tailed block rove with the rope that had been fired, to get communication; theſe they will haul on-board. The ſtout rope muſt then be made faſt to any part of the rigging they can depend on; but, if the maſts are ſtanding, I ſhould recommend that it be faſtened to the maſt-head, juſt below the cap, for the convenience of getting from the top into the conveyance ſent to them, as the people are moſt likely to aſſemble in the tops. The other end of the large rope ſhould be tied to a long gun-tackle purchaſe, ſecured by three iron-ſhod ſtakes, driven triangularly into the ground. The tackle, being bowſed, keeps the rope ſufficiently taught, and perſons eaſing off the fall, as the ſhip rolls, prevents the rope parting, or what it is laſhed to from being carried away. The tailed block is made faſt juſt under the large rope; and one end of the ſmall rope that is rove through it is bent to the fore part of a cot; the other end to the after-part of the ſame conveyance. The cot has large eyelet-holes in it, to let out water it might catch in dipping through the top of a ſurf, and laſhings to ſecure the people from being waſhed out. It is extended by a ſtretcher of wood, having gudgeons and forelock-pins at each end to receive the great rope, and travel on it to and from the veſſel, as long as ſhe holds together, for the purpoſe of bringing on-ſhore the crew, goods, or ſtores.

LI'FE-RENT, *ſ.* A rent which a man receives for term of life, or the ſuſtentation of it. *Skene.*

LI'FE-STRING, *ſ.* Nerve; ſtrings imagined to convey life:

Theſe lines now are the veins, the arteries,
The undecaying *life-ſtrings* of thoſe hearts
That ſtill ſhall pant, and ſtill ſhall exerciſe
The motion ſpirit and nature both impart. *Daniel.*

LI'FE-TIME, *ſ.* Continuance or duration of life.—Jourdain talked proſe all his *life-time*, without knowing what it was. *Addiſon on Medals.*

LI'FE-WEARY, *adj.* Wretched; tired of living:

Let me have
A dram of poiſon, ſuch ſoon-ſpeeding geer
As will diſperſe itſelf through all the veins,
That the *life-weary* taker may fall dead. *Shakeſpeare.*

LI'FEHOLD, *ſ.* A real eſtate held on a leaſe for lives.

LI'FELESS, *adj.* Dead; deprived of life:

I, who make the triumph of to-day,
May of to-morrow's pomp one part appear,
Ghaſtly with wounds, and *lifeleſs* on the bier. *Prior.*

Unanimated; void of life.—The power which produces their motions, ſprings from ſomething without themſelves: if this power were ſuſpended, they would become a *lifeleſs* unactive heap of matter. *Cheyne.*

Was I to have ne'er parted from thy ſide;
As good have grown there ſtill a *lifeleſs* rib! *Milton.*

Wanting power, force, or ſpirit:

Hopeleſs and helpleſs doth Ægeon wend,
But to procraſtinate his *lifeleſs* end. *Shakeſpeare.*

Wanting or deprived of phyſical energy:

The other victor-flame a moment ſtood,
Then fell, and *lifeleſs* left th' extinguiſh'd wood. *Dryden.*

LI'FELESSLY, *adv.* Without vigour; frigidly; jejunely.

LIFF, a town of Scotland, in the county of Angus: four miles north-weſt of Dundee.

LIFFAMAT'ULA, an iſland in the Eaſtern Indian Sea: twenty-five miles long and ſix broad. Lat. 2. S. lon. 126. 18. E.

LIF'FEY, a river of Ireland, which riſes in the north-weſtern mountains of the county of Wicklow, and, winding through the county of Kildare, paſſes through the city of Dublin, and flows into Dublin bay. It derives its chief importance from the greatneſs of the city ſituated on its banks.

LIF'FORD, the county-town of the county of Donegal, Ireland, a very ſmall place, and at one extremity of that large county, but fixed upon to accommodate the judges and gentlemen of the bar: one mile weſt from Strabane, and 101 north-weſt by north from Dublin.

LIFFRE', a town of France, in the department of the Ille and Vilaine, and chief place of a canton, in the diſtrict of Rennes: nine miles north-eaſt of Rennes. The place contains 2096, and the canton 8372, inhabitants, in ſeven communes.

To LIFT, *v. a.* [*lyffta*, Swed. *loffter*, Dan. I *lifted*, or *lift*; I have *lifted*, or *lift*.] To raiſe from the ground; to heave; to elevate; to hold on high:

Your gueſts are coming;
Lift up your countenance, as 'twere the day
Of celebration of that nuptial. *Shakeſp. Winter's Tale.*

To bear; to ſupport. *Not in uſe:*

So down he fell, that th' earth him underneath
Did groan, as feeble ſo great load to *lift*. *Fairy Queen.*

To rob; to plunder. Whence the term *ſhop-lifter:*

So weary bees in little cells repoſe,
But if night-robbers *lift* the well-ſtor'd hive,
An humming through their waxen city grows. *Dryden.*

To exalt; to elevate mentally.—My heart was *lift* up in the ways of the Lord. 2 *Chron.*

Of Orpheus now no more let poets tell,
To bright Cæcilia greater power is given:
His numbers rais'd a ſhade from hell,
Her's *lift* the ſoul to heav'n. *Pope.*

To raiſe in fortune.—The eye of the Lord *lifted* up his head from miſery. *Ecclus.*—To raiſe in eſtimation.—Neither can it be thought, becauſe ſome leſſons are choſen out of the Apocrypha, that we do offer diſgrace to the word of God, or *lift* up the writings of men above it. *Hooker.*—To exalt in dignity:

See to what a godlike height
The Roman virtues *lift* up mortal man! *Addiſon.*

To elevate; to ſwell, as with pride.—Our ſucceſſes have been great, and our hearts have been too much *lifted* up by them, ſo that we have reaſon to humble ourſelves. *Atterbury.*—*Up* is very often emphatically added to *lift*.—He *lift up* his ſpear againſt eight hundred, whom he ſlew at one time. 2 *Sam.* xxiii. 8.

To LIFT, *v. n.* To ſtrive to raiſe by ſtrength.—The mind, by being engaged in a taſk beyond its ſtrength, like the body ſtrained by *lifting* at a weight too heavy, has often its force broken. *Locke.*

Pinch cattle of paſture while ſummer doth laſt,
And *lift* at their tailes ere a winter be paſt. *Tuſſer.*

LIFT, *ſ.* The manner of lifting.—In the *lift* of the feet, when a man goeth up the hill, the weight of the body beareth moſt upon the knees. *Bacon.*—In races, it is not the large ſtride, or high *lift*, that makes the ſpeed. *Bacon's Eſſays.*—The act of lifting.—The goat gives the fox a *lift*, and out he ſprings. *L'Eſtrange.*—*Lift*, in Scotland, denotes a load or ſurcharge of anything; as alſo, if one be diſguiſed much with liquor, they ſay, He has got a great *lift*. [In Scottiſh.] The ſky: for in a ſtarry night they ſay, How clear the *lift* is!—*Lifts* of a ſail are ropes to raiſe or lower them at pleaſure.

DEAD LIFT, is an effort to raiſe what with the whole force cannot be moved; and figuratively any ſtate of impotence and inability:

Myſelf and Trulla made a ſhift
To help him out at a *dead lift*. *Hudibras.*

LIF'TER, *ſ.* One that lifts.—Thou, O Lord, art my glory, and the *lifter*-up of mine head. *Pſal.* iii. 3.

LIF'TING, *ſ.* The act of raiſing.

LIF'TING-PIECES, *ſ.* [in clockwork.] The parts that lift up and unlock the detents.

LIF'TINGS, *ſ.* The name of a cuſtom which prevails among the vulgar in the counties of Lancaſhire and Cheſhire, particularly in and about Cheſter, Liverpool, Manchеſter, Bolton, Warrington, and the adjacent country, on Eaſter Monday and Tueſday. On the former of theſe days the women, on the latter the men, forming parties of ſix or eight each, ſurround every one of the oppoſite ſex whom they meet, and lift them thrice, not very gently, above their heads into the air, with loud ſhouts on each elevation. People of the better ſort are obliged to keep at home on thoſe days, or to redeem themſelves with money. The origin of this ſtrange ceremony ſeems to bear the ſame teſtimony to its antiquity which Mr. Brand alleges reſpecting moſt of the cuſtoms of the common people; that it has "outlived the general knowledge of the very cauſes which gave riſe to it." Some have ſaid, that it was an emblem of the reſurrection of Jeſus Chriſt; but it can hardly be thought that a fact, which Chriſtians celebrate as the foundation of their moſt glorious hopes, ſhould be commemorated in ſo ludicrous and indecent a way; others have therefore ſuppoſed, that it was originally a pagan ceremony, deſigned to ridicule the Chriſtian doctrine of a reſurrection; but this is ſtill more unlikely, as it cannot be imagined that Chriſtians would adopt a cuſtom expreſsly intended to expoſe themſelves and the moſt eſſential doctrine of their religion. A third opinion is, that it was introduced by the proteſtants to ridicule the elevation of the hoſt in catholic churches. But it might have been expected that a cuſtom of ſo late a date would have had the time and the occaſion of its introduction noticed by ſome hiſtorical or topographical writer; beſides, why ſhould this be done at Eaſter, rather than at any other time of the year? And what, in either of the three caſes, ſhould lead the men and women alternately to take liberties with each other?

In the city of Durham there exiſts a cuſtom ſtrikingly correſpondent, in this laſt particular, with the Lancaſhire liftings. Mr. Brand deſcribes it thus: "There is a cuſtom ſtill retained in the city of Durham on theſe holidays; on one day the men take off the women's ſhoes, which are only to be redeemed by a preſent; on the next day the women take off the men's in like manner." He refers, in the ſame place, to Durand's Ritual of the Romiſh Church, l. 6. c. 86. 9. *In pleriſque etiam regionibus, mulieres ſecunda die poſt Paſcha verberant maritos ſuos; die vero tertia mariti uxores ſuas:* "On the ſecond day of Eaſter the women beat their huſbands; on the third the huſbands their wives."

From this it appears that the eſſence of all theſe three cuſtoms conſiſts in the two ſexes expreſſing, in different ways, their ſenſe of ſome mutual grudge againſt each other. But what can this be? or why at Eaſter? It ſeems, however, to be the opinion of the beſt-informed perſons, that theſe cuſtoms are in commemoration of our Lord's reſurrection. Were ſuch the caſe, we could wiſh to ſee the whole aboliſhed, as, in addition to its appearing like a burleſque, the indecent expreſſions attending the proceeding muſt give a ſtranger a very indifferent opinion of the veneration entertained here for an event the moſt intereſting to human nature. As it ſeems to originate in Wales, whither our moſt ancient cuſtoms retired, perhaps there are ſome little remains in it of a ceremony attached to the early religion of this iſland; as it was the practice of our firſt Chriſtian miſſionaries, to ſuffer the converts to retain as much of the former ceremonies and uſages, which they were attached to, as was conſiſtent with the ſpirit and purity of our benevolent religion. In that caſe, it may be claſſed with the May-games of our iſland, or the hill-fires of the Iriſh.

To LIG, *v. n.* [*leggen*, Dut.] To lie:

Thou kenſt the great care
I have of thy health and thy welfare,
Which many wild beaſts *liggen* in wait
For to entrap in thy tender ſtate. *Spenſer's Paſtorals.*

LIG'AMENT. *ſ.* [*ligamentum*, from *ligo*, Lat. *ligament*, Fr.] A white and ſolid body, ſofter than a cartilage, but harder than a membrane; they have no conſpicuous cavities, neither have they any ſenſe, leſt they ſhould ſuffer upon the motion of the joint; their chief uſe is to faſten the bones, which are articulated together for motion, leſt they

they ſhould be diſlocated with exerciſe. *Quincy.*—The incus is one way joined to the malleus, the other end being a proceſs is fixed with a *ligament* to the ſtapes. *Holder.*

Be all their *ligaments* at once unbound,
And their disjointed bones to powder ground. *Sandys.*

[In popular or poetical language.] Any thing which connects the parts of the body:

Though our *ligaments* betimes grow weak,
We muſt not force them till themſelves they break. *Denh.*

Bond; chain; entanglement.—Men ſometimes, upon the hour of departure, do ſpeak and reaſon above themſelves; for then the ſoul, beginning to be freed from the *ligaments* of the body, reaſons like herſelf, and diſcourſes in a ſtrain above mortality. *Addiſon's Spectator.*

LIGAMEN'TAL, or LIGAMEN'TOUS, *adj.* Compoſing a ligament.—The urachos, or *ligamental* paſſage, is derived from the bottom of the bladder, whereby it diſchargeth the watery and urinary part of its aliment. *Brown's Vulgar Errours.*—The clavicle is inſerted into the firſt bone of the ſternon, and bound in by a ſtrong *ligamentous* membrane. *Wiſeman.*

LI'GAN, *ſ.* [from *lier*, Fr. to tie.] A wreck conſiſting of goods ſunk in the ſea, but tied to a cork or buoy, in order to be found again. Over theſe, as well as flotſam and jetſam, the high-admiral hath juriſdiction, as they are in and upon the ſea. See FLOTSAM, and the article WRECK.

LIGA'NI, a town of Turkiſh Armenia: thirty miles eaſt of Iſpira.

LIGAR'DES, a town of France, in the department of the Gers: ſeven miles north-eaſt of Condom, and eight north-weſt of Lectoure.

LIGA'RIUS (Quintus), a Roman proconſul in Africa, 49 B.C. Taking part with Pompey, he was forbidden by Julius Cæſar to return to Rome; to obtain his pardon, Cicero made that admired oration in his defence which has immortalized the memory of the client with that of the advocate.

LIGA'TION, *ſ.* [*ligatio*, Lat.] The act of binding. The ſtate of being bound.—The ſlumber of the body ſeems to be but the waking of the ſoul; it is the *ligation* of ſenſe, but the liberty of reaſon. *Addiſon.*

LIG'ATURE, *ſ.* [*ligatura*, Lat.] Anything tied round another; a bandage.—If you ſlit the artery, and thruſt into it a pipe, and caſt a ſtrait *ligature* upon that part of the artery; notwithſtanding the blood hath free paſſage through the pipe, yet will not the artery beat below the *ligature*; but, do but take off the *ligature*, it will beat immediately. *Ray on the Creation.*—The many *ligatures* of our Engliſh dreſs check the circulation of the blood. *Spectator.*—The act of binding.—Any ſtoppage of the circulation will produce a dropſy, as by ſtrong *ligature* or compreſſion. *Arbuthnot on Diet.*—The ſtate of being bound. *Not very proper.*—Sand and gravel grounds eaſily admit of heat and moiſture, for which they are not much the better, becauſe they let it paſs too ſoon, and contract no *ligature*. *Mortimer's Huſbandry.*

LIGATURE, in muſic, ſignifies a tying or binding together of notes; alſo the mark ⁀ which binds them.

LIGATURES, among printers, are types conſiſting of two letters or characters joined together, as, *ct*, *&*, *ff*, *ſt*, *ſi*. The old editions of Greek authors are extremely full of ligatures; but they are little uſed in modern printing.

LIGATURE, in ſurgery, is a cord, band, ſtring, fillet, &c. whether of leather, linen, or any other matter, uſed to extend or replace bones that are broken or diſlocated; to tie the patients down in lithotomy and amputations; to tie upon the veins in phlebotomy, on the arteries in amputations or in large wounds; to ſecure the ſplints that are applied to fractures; to tie up the proceſſes of the peritonæum with the ſpermatic veſſels in caſtration; and, laſtly, in taking off warts or other excreſcences.

Ligature is the only means to be depended upon for putting a permanent ſtop to all bleedings from arteries of conſiderable ſize. In ordinary caſes, the mouth of the bleeding veſſel, being expoſed, is taken hold of with the tenaculum, or forceps, and tied. In ſome inſtances, the artery being only punctured, and not cut through, nor brought into view, the ſurgeon has firſt to cut down to the wounded portion of the veſſel, and then paſs a double ligature under it by means of an aneuriſm-needle, or an eye-probe; the latter inſtrument, having fulfilled its office, is to be removed by dividing the double-ligature with a pair of ſciſſors. Whoever is acquainted with the hiſtory of ſurgery, muſt be fully ſenſible of the immenſe advantage which the moderns have over the ancients in the familiar employment of ligatures for the ſtoppage of hemorrhage. But, although many years have elapſed ſince this important improvement in practice began, it was not till very lately that ſeveral moſt intereſting circumſtances, relative to the uſe of the ligature, were brought to light. For this elucidation of a difficult, though highly momentous, ſubject to the practical ſurgeon, we are indebted to the judgment, accuracy, and talents, of Dr. J. F. D. Jones, whoſe Treatiſe on Hemorrhage demands the earneſt attention of every enlightened practitioner. Before this work appeared, ſcarcely any ſurgeon had a juſt conception of the manner in which ligatures effected the ſuppreſſion of hemorrhage; nor were the principles on which they ought to be made and applied properly underſtood. One of the firſt and moſt material effects of a ligature applied to an artery, is to produce a diviſion of the middle and internal coats of the veſſel. This fact was communicated to Dr. Jones by Mr. Thomſon of Edinburgh, and is alleged to have been known to the celebrated M. Deſault of Paris. The inner coats of the artery, thus cut through by the preſſure of the ligature, are in the fitteſt ſtate for inflaming and effuſing coagulable lymph, and, in ſhort, for undergoing that proceſs, by which the permanent cloſure of the veſſel is to be accompanied. Hence, ligatures ſhould not be thick, irregular, and clumſy; but ſmalliſh, firm, and round; and they ſhould be applied with tightneſs, as it is of conſequence that they divide the inner coats of the artery, and the fear of their cutting the veſſel quite through is deſtitute of foundation.

LIGE'A, the name of one of the ſea-nymphs.

LIG'EANCE, *ſ.* in law, is the true and faithful obedience of a ſubject to his ſovereign; and is alſo applied to the dominion or territory of the liege lord; thus children are ſaid to be born in or out of the ligeance of the king, &c. See ALLEGIANCE and LIEGE.

LIGE'AS, *ſ.* in old records, a liege.

LI'GER, or LIGERIS, now *Loire*, a large river of Gaul, falling into the ocean.

LIGHT, *ſ.* [leoht, Sax.] The material medium of ſight; that body by which we ſee; luminous matter.—*Light* is propagated from luminous bodies in time, and ſpends about ſeven or eight minutes of an hour inpaſſing from the ſun to the earth. *Newton's Optics.*—State of the elements in which things become viſible; oppoſed to *darkneſs*.—God called the *light* day, and the darkneſs he called night. *Geneſis.*

So alike thou driv'ſt away
Light and darkneſs, night and day. *Carew.*

Power of perceiving external objects by the eye: oppoſed to *blindneſs*.—My ſtrength faileth me; as for the *light* of mine eyes, it alſo is gone from me. *Pſalms.*

If it be true that *light* is in the ſoul,
She all in every part, why was the ſight
To ſuch a ſlender ball as th' eye confin'd,
So obvious and ſo eaſy to be quench'd,
And not, as feeling, through all parts diffus'd,
That ſhe might look at will through ev'ry pore? *Milton.*

Day.—The murderer, riſing with the *light*, killeth the poor. *Job.*

Ere

Ere the third dawning *light*
Return, the ſtars of morn ſhall ſee him riſe
Out of his grave, freſh as the dawning *light*. *Milton.*

Life.—Infants that never ſaw *light*. *Job.*

Swift roll the years, and riſe the expected morn.
O ſpring to *light*, auſpicious babe, be born! *Pope.*

Artificial illumination.—Seven lamps ſhall give *light*. *Numb.*
—Illumination of mind; inſtruction; knowledge:

I will place within them as a guide
My umpire conſcience, whom if they will hear,
Light after *light* well us'd they ſhall attain,
And to the end perſiſting ſafe arrive. *Milton.*

The ordinary words of language, and our common uſe of them, would have given us *light* into the nature of our ideas, if conſidered with attention. *Locke.*—The books of Varro concerning navigation are loſt, which no doubt would have given us great *light* in thoſe matters. *Arbuthnot on Coins.*—The part of a picture which is drawn with bright colours, or in which the light is ſuppoſed to fall.—Never admit two equal *lights* in the ſame picture; but the greater *light* muſt ſtrike forcibly on thoſe places of the picture where the principal figures are; diminiſhing as it comes nearer the borders. *Dryden's Dufreſnoy.*—Reach of knowledge; mental view.—*Light*, and underſtanding, and wiſdom, like the wiſdom of the gods, was found in him. *Daniel*, v. 11.—Point of view; ſituation; direction in which the light falls.—Frequent conſideration of a thing wears off the ſtrangeneſs of it; and ſhows it in its ſeveral *lights*, and various ways of appearance, to the view of the mind. *South.*—Public view; public notice:

Why am I aſk'd what next ſhall ſee the *light*?
Heav'ns! was I born for nothing but to write? *Pope.*

The public:

Grave epiſtles bring vice to *light*,
Such as a king might read, a biſhop write. *Pope.*

Explanation.—We ſhould compare places of ſcripture treating of the ſame point; thus one part of the ſacred text could not fail to give *light* unto another. *Locke's Eſſay on St. Paul's Epiſtles.*—Any thing that gives light; a pharos; a taper; any luminous body.—Then he called for a *light*, and ſprang in and fell down before Paul. *Acts*, xvi. 29.—I put as great difference between our new *lights* and ancient truth, as between the ſun and a meteor. *Glanville.* I will make ſome offers at their ſafety, by fixing ſome marks like *lights* upon a coaſt, by which the ſhips may avoid at leaſt known rocks. *Temple.*

That *light* you ſee is burning in my hall;
How far that little candle throws his beams!
So ſhines a good deed in a naughty world. *Shakeſpeare.*

LIGHT, in the common acceptation of the word, ſignifies that inviſible etherial matter which makes objects perceptible to our ſenſe of ſeeing. Hence the moſt diſtinguiſhing property of light is that by which it renders objects viſible, by ſome power which transfers their exterior figure to the retina of the eye.

We obtain light from three diſtinct ſources, namely, ſolar light, phoſphoreſcent light, and light of combuſtion.

I. Very little was known of the nature and properties of light before the experimental reſearches of Newton; and it is remarkable that at this time ſo little ſhould have been added to the labours of that acute philoſopher. It is ſtrange, that after the evidence of his experiments there could have been two opinions reſpecting the nature of light. Huygens ſuppoſed the phenomena of light to be cauſed by an undulatory motion, excited in a ſuppoſed ſubtile and elaſtic medium, pervading all ſpace: that theſe waves or pulſes are propagated, firſt at the luminous body, ſuch as the ſun or a candle, and tranſmitted in all directions. The impreſſion made by theſe waves upon the eye is the cauſe of viſion. This doctrine has ſince been taken up by Euler, who, with much zeal and mathematical labour, ſupported it to his death. Newton, however, had given an hypotheſis, ſupported by clear and ſtriking experiments; and at the ſame time had pointed out inſurmountable objections to the undulatory hypotheſis, ſo that the labour and great talents of Euler were exhauſted to little purpoſe. Sir Iſaac Newton argued, with great propriety, that the undulatory motion was inconſiſtent with the phenomena of light. The paſſage of light would not be confined to ſtraight lines, but might, like ſound, be conveyed through crooked tubes; which is contrary to the fact. Beſides, if light conſiſted in a mere preſſion, or pulſe, it would be propagated to all diſtances in the ſame inſtant of time; the contrary of which appears from the phenomena of the eclipſes of Jupiter's ſatellites, as noticed under the article ASTRONOMY, vol. ii. p. 386.

We ſhall therefore, with Newton, conſider light as a material agent, moving with an immenſe velocity from the point where it is liberated. If its motion be in free ſpace, it moves in ſtraight lines in the form of radii; and would continue for ever in the ſame direction, if not changed in its courſe by the attraction of other matter. Light, therefore, like electricity and caloric, appears in a high degree to be repellent of itſelf, although it poſſeſſes attraction for ponderable matter. Indeed, it is to this great repulſion of the particles of light that we are to attribute its progreſſive velocity, which, therefore, is as the force by which its particles are ſeparated.

The ſmall extent of the limits of viſion upon the ſurface of our globe does not enable us to appreciate the velocity with which light moves. Roemer, a Daniſh philoſopher, at length found the means of determining this point by the difference of time in the eclipſes of Jupiter's ſatellites, when the earth was on the ſame or on the contrary ſide of the ſun with that planet. The immerſions of theſe ſatellites, as the Earth approaches towards Jupiter, are found to anticipate ſomewhat on the true time, and to commence ſooner; and again, as the Earth retires from Jupiter, their emerſions, which alone in that caſe can be obſerved, happen later and later, or loſe time; deviating thus, very conſiderably on either ſide, from the true time marked by the tables. This was firſt obſerved by M. Roemer, and ſince by other aſtronomers; the reaſon of which is not owing to any eccentricity; but apparently follows from this circumſtance, that the light of the ſun, reflected from the ſatellites, has farther to travel, before it reaches the eye, in the one caſe than in the other, by a ſpace equal to the diameter of the earth's annual orbit. The obſervations, whence this concluſion was deduced, were made at the obſervatory belonging to the Royal Academy of Sciences at Paris, from 1670 to 1675; the principal fact was, that the firſt ſatellite ſometimes emerged exactly at the times calculated by the tables, and ſometime not, inſomuch that the greateſt variation was about fourteen minutes. The particular obſervation that was the moſt ſtriking, was the emerſion of this ſatellite obſerved at Paris Nov. 9, 1676, ten minutes later than it had been obſerved in the month of Auguſt, when the Earth was much nearer to Jupiter. Hence Caſſini and Roemer both concluded, that this circumſtance depended on the diſtance of Jupiter with reſpect to the earth; and that in order to account for it, they muſt ſuppoſe that the light was about fourteen minutes in croſſing the earth's orbit. But the concluſion was afterwards abandoned and attacked by Monſieur Caſſini. M. Roemer's opinion found an able advocate in Dr. Halley; who removed Caſſini's difficulty, and left M. Roemer's concluſion in its full force. In a memoir preſented to the academy in 1707, Monſieur Maraldi endeavoured to give a new force to Caſſini's arguments; but Roemer's doctrine found a new defender in Mr. Pound. See Phil. Tranſ. N° 136.

It has been ſince found, that, when the Earth is between the Sun and Jupiter, his ſatellites are eclipſed about eight minutes ſooner than they could be according to the tables; and that, when the Earth is nearly in the oppoſite point of its orbit, theſe eclipſes happen about eight minutes later

than the tables predict them. Hence it is undeniably certain, that the motion of light is not inſtantaneous, ſince it takes about 16½ minutes of time to go through a ſpace equal to the diameter of the earth's orbit, which is at leaſt 190 millions of miles in length; and conſequently the particles of light fly about 191,919 or 200,000 miles every ſecond of time, which is near a million of miles ſwifter than the motion of a cannon-ball. And, as light is 16½ minutes in travelling acroſs the Earth's orbit, it muſt be 8¼ minutes in coming from the Sun to us; therefore, if the ſun were annihilated, we ſhould ſee him for 8¼ minutes after; and, if he were again created, he would be 8¼ minutes old before we could ſee him.

The firſt perſon, who conceived the thought of meaſuring the velocity of light, was Galileo, who has given a particular deſcription of his contrivance for this purpoſe, in his Treatiſe on Mechanics, p. 39. He had two men with lights, one of whom was to obſerve when the other uncovered his light, and to exhibit his own the moment that he perceived it; the experiment was tried, as may naturally be imagined, without ſucceſs, at the diſtance of one mile; but the members of the Academy del Cimento reſumed the experiment, and placed the obſervers, to as little purpoſe, at the diſtance of two miles. However, the method uſed by M. Roemer, already mentioned, was the only one adequate to the diſcovery of the velocity of light. See the article OPTICS.

The wonderful diviſibility of the parts of matter is nowhere more apparent than in the minuteneſs of the particles of light. Dr. Nieuwentyt has computed, that an inch of candle, when converted to light, becomes divided into 269,617,040 parts, with 40 ciphers annexed; at which rate there muſt iſſue out of it, when burning, 418,660, with 39 ciphers more, particles in the ſecond of a minute; vaſtly more than a thouſand times a thouſand million times the number of ſands the whole earth can contain; reckoning ten inches to one foot, and that 100 ſands are equal to one inch. See Relig. Philoſ. vol. iii. p. 865.

It muſt be acknowledged, that many difficulties and objections have been urged againſt the materiality of light, or the hypotheſis of light's conſiſting of ſmall particles emitted from luminous bodies; and that many eminent philoſophers, both foreigners and Engliſh, have recurred to the opinion, that light conſiſts of vibrations propagated from the luminous body through a ſubtile etherial medium.

The ingenious Dr. Franklin, in a letter dated April 23d, 1752, expreſſes his diſſatisfaction with the doctrine, that ſuppoſes particles of matter, called light, continually driven off from the ſun's ſurface, with a ſwiftneſs ſo prodigious. "Muſt not," ſays he, "the ſmalleſt portion conceivable have, with ſuch a motion, a force exceeding that of a twenty-four pounder diſcharged from a cannon? Muſt not the ſun diminiſh exceedingly by ſuch a waſte of matter; and the planets, inſtead of drawing nearer to him, as ſome have feared, recede to greater diſtances through the leſſened attraction? Yet theſe particles, with this amazing motion, will not drive before them, or remove, the leaſt and lighteſt duſt they meet with; and the ſun appears to continue of his ancient dimenſions, and his attendants move in their ancient orbits." Accordingly, he conjectures, that all the phenomena of light may be more conveniently ſolved, by ſuppoſing univerſal ſpace filled with a ſubtile elaſtic fluid; which, when at reſt, is not viſible, but whoſe vibrations affect that fine ſenſe in the eye, as thoſe of air do the groſſer organs of the ear; and that different degrees of the vibration of this medium may occaſion the appearances of different colours. The elaſtic fluid, he ſays, is always the ſame, and yet weaker and ſtronger ſparks differ in apparent colour, ſome white, blue, purple, red; the ſtrongeſt, white; the weak ones, red.

Dr. Horſley has taken conſiderable pains to obviate the difficulties ſuggeſted by Dr. Franklin; and ſuppoſing that the diameter of each particle of light does not exceed one millionth of one millionth of an inch, and that the denſity of each particle is three times that of iron, that the light of the ſun traverſes the ſemi-diameter of the orbis magnus in 7', and that this ſemi-diameter is 22919 ſemi-diameters of the earth, he calculates, that the momentum or force of motion in each particle of light coming from the ſun is leſs than that in an iron ball of ¼th of an inch diameter, moving at the rate of leſs than an inch in twelve thouſand millions of millions of Egyptian years. Hence, he concludes, that a particle of matter, which is probably larger than any particle of light, moving with the velocity of light, has a force of motion, which, inſtead of exceeding the force of a twenty-four pounder diſcharged from a cannon, is infinitely leſs than that of the ſmalleſt ſhot diſcharged from a pocket-piſtol, or leſs than any that art can create. Moreover, he thinks it poſſible, that light may be produced by a continual emiſſion of matter from the ſun, without any ſuch waſte of his ſubſtance as ſhould ſenſibly contract his dimenſions, or alter the motions of the planets, within any moderate length of time. In proof of this, he obſerves, that it is not neceſſary to the production of any of the phenomena of light, that the emanation from the ſun ſhould be continual in a ſtrict mathematical ſenſe, or without any interval; and likewiſe that part of the light which iſſues from the ſun is continuall, returning to him by reflection from the planets, and other light is continually coming to him from the ſuns of other ſyſtems. He proceeds by calculation to ſhow, that in 385,130,000 Egyptian years, the ſun would loſe $\frac{1}{132\,32}$d of his matter; and therefore that the gravitation towards the ſun, at any given diſtance, would diminiſh in the ſame proportion. But this alteration is much too ſmall to dicover itſelf in the motion of the earth, or of any of the planets. He alſo computes, that the greateſt ſtroke which the retina of a common eye ſuſtains, when the eye, in a bright day, is turned up directly to the ſun, does not exceed that which an iron ſhot, ¼th of an inch diameter, would give, moving only at the rate of 16·16 inches in a year; but the ordinary ſtroke is leſs than the $\frac{1}{26\,84}$th part of this.

One of the principal difficulties attending the hypotheſis of the materiality of light, is the non-interference of its particles with each other. There is, probably, ſays Mr. Melville, Edinb. Eſſ. vol. ii. p. 17, &c. no phyſical point in the viſible horizon, that does not ſend rays to every other point, unleſs where opaque bodies interpoſe. Light, in its paſſage from one ſyſtem to another, often paſſes through torrents of light iſſuing from other ſuns and ſyſtems, without ever interfering, or being diverted from its courſe either by it, or by the particles of that elaſtic medium, which ſome have ſuppoſed to be diffuſed through all the mundane ſpace. In accounting for this fact, he ſuppoſes that the particles of light muſt be incomparably rare, even when they are the moſt denſe; that is, that the ſemi-diameters of two of the neareſt particles, in the ſame or in different beams, ſoon after their emiſſion, are incomparably leſs than their diſtance from one another. This conſideration obviates the objection urged by Euler and others againſt the materiality of light, from its influence in diſturbing the freedom and perpetuity of the celeſtial motions. The difficulty attending the ſuppoſition, that particles of light move through other light, in all imaginable directions, without perpetual colliſions among the particles, and continual deflections from a rectilinear courſe, is, in a great degree, obviated, by an eaſy computation of Mr. Canton. He obſerves, that it is neceſſary to allow only a very ſmall portion of time between the emiſſion of every particle and the next that follows in the ſame direction. Suppoſe, for inſtance, that one lucid point of the ſun's ſurface emits 150 particles in one ſecond, which are more than ſufficient to give continual light to the eye, without the leaſt appearance of intermiſſion; yet ſtill the particles of which it conſiſts will, on account of their great velocity, be more than a thouſand miles behind one another, and thereby leave room enough for others to paſs in all directions. (Phil. Tranſ. vol. lviii. art. 45.) But, if we adopt the concluſions drawn from d'Arcy's experiments on the duration of the ſenſations excited

excited by light, who ſtates it at the ſeventh part of a ſecond, (Hiſt. Acad. Scienc. 1765.) we may admit an interval of more than 20,000 miles between each particle.

That light is a real ſubſtance, notwithſtanding the objections that have been urged againſt this hypotheſis, ſeems to be eſtabliſhed by the phenomena of the Bolognian ſtone, and of other ſubſtances, which poſſeſs the remarkable property of imbibing light, of retaining it for ſome time, and afterwards of emitting it.

The doctrine of the materiality of light is farther confirmed by thoſe experiments which demonſtrate, that the colour and inward texture of ſome bodies are changed, in conſequence of their being expoſed to the light. The firſt obſervation of this kind appears to have been made by M. Duhamel, who found that the juice of a certain ſhell-fiſh in Provence contracted a fine purple colour when it was expoſed to the light of the ſun, and that, the ſtronger was the light, the more ſplendid was the colour. Pieces of cloth dipped in this liquor, and expoſed to the ſun, became red, though they were incloſed in glaſs; but they acquired none of this colour in the ſame expoſure, if they were covered with the thinneſt plates of metal. It was afterwards obſerved by Beccarius, (Com. Bonon. vol. iv. p. 75.) that a quantity of Luna cornea, expoſed to the rays of the ſun, became of a violet colour, whilſt part of the ſame compoſition, covered with black paper, remained white. This effect was found by M. H. Schulze to depend on the ſilver that happened to be in it. (Ac. Cæſar, vol. i. p. 528, &c.) G. Bonzius was thus led to ſome ſubſequent experiments, which ſeem to prove that various colours are conſiderably affected by light, excluſive of heat or any thing elſe. By expoſing ribbons of different colours to the rays of the ſun for ſeveral days in the open air, he found that all, except the yellow and light green, loſt part of their luſtre, and were conſiderably faded; but, when the ſame ribbons were expoſed to a much greater degree of *heat* in a dark room, none of the colours were affected, except that a ſmall part of their luſtre was loſt; nor was any ſenſible change made in them after remaining for a conſiderable time in a room that faced the north. By incloſing them in an exhauſted receiver, he found that the change was not occaſioned by the air; but no change could be produced in them by the light of torches. Beccarius alſo found by experiments on paper, and a great variety of ſubſtances, mineral, vegetable, and animal, that the light of the ſun produced many changes in the internal ſtructure of bodies, and that thoſe ſubſtances which imbibed light were much injured. The ſtronger the light, and the longer they were expoſed to it, the more injury they received; and the injury thus ſuſtained was found to be laſting.

The mutual action between light and other matter is productive of numerous phenomena. Theſe conſtitute two diſtinct branches of ſcience. The one has for its object the inveſtigation of the phyſical properties of light, for which we are principally indebted to Newton, and which forms the baſis of the ſcience of OPTICS. The other is confined to the chemical agency of light, reſting upon facts diſcovered ſince the time of that great genius; and for which ſee the article CHEMISTRY, vol. iv. p. 153, 179–181.

II. In general, a very conſiderable degree of heat is requiſite to the emiſſion of light from any body; but there are ſeveral exceptions to this, eſpecially in light proceeding from putreſcent ſubſtances and phoſphorus, together with that of luminous animals, and other ſimilar appearances.

The exhibition of light by living animals is a ſingular property belonging only to creatures of a ſimple ſtructure, as inſects and worms. The Meduſa is the only genus of worms which has been aſcertained to ſhow light; for the account of certain ſpecies of Lepas, Murex, and Chama, yielding light, does not ſeem to reſt upon any good authority; and the ſtories told by Brugueire and by Flaugergues of earth-worms being luminous, are improbable in themſelves, even if they were not contrary to common obſervation. The examples of luminous ſpecies are more numerous amongſt inſects than in any other claſs. They are to be found in the following genera; Elater, Lampyris, Fulgora, Pauſus, Scolopendra, and Cancer. See thoſe articles; particularly LAMPYRIS, p. 124, 5, of this volume.

Some writers have attributed the property of ſhining while alive to certain *fiſhes*; but, as it would appear, upon very queſtionable grounds. In a voyage from France to Cayenne, Mr. Bajon ſaw in the ſea a number of luminous points which ſhone when ſtruck, and another appearance of pale flames, about three feet below the ſurface of the water. He likewiſe obſerved, in the migration of the dorado and other fiſhes, that their bodies were ſtudded with ſimilar luminous points. Upon examination, he diſcoveed theſe to be minute ſpheres which adhered to the ſurface of the fiſh: they were moſt probably the ſmall ſpecies of luminous meduſa: Bajon's obſervations therefore proved no property of ſhining in the fiſh themſelves.

The firſt diſtinct account that we meet with of light proceeding from putreſcent animal fleſh is that which is given by Fabricius ab Aquapendente; who ſays, that, when three Roman youths, reſiding at Padua, had bought a lamb, and had eaten part of it on Eaſter-day, 1562, ſeveral pieces of the remainder, which they kept till the day following, ſhone like ſo many candles when they were caſually viewed in the dark. Part of this luminous fleſh was immediately ſent to Aquapendente, who was profeſſor of anatomy in that city. He obſerved, that both the lean and the fat of this meat ſhone with a whitiſh kind of light; and alſo took notice, that ſome pieces of kid's fleſh, which had happened to have lain in contact with it, were luminous, as well as the fingers and other parts of the bodies of thoſe perſons who touched it. Thoſe parts, he obſerved, ſhone the moſt which were ſoft to the touch, and ſeemed to be tranſparent in candle-light; but, where the fleſh was thick and ſolid, or where a bone was near the outſide, it did not ſhine.

After this appearance, we find no account of any other ſimilar to it, before that which was obſerved by Bartholin, and of which he gives a very pompous deſcription in his ingenious treatiſe already quoted. This happened at Montpelier in 1641, when a poor old woman had bought a piece of fleſh in the market, intending to make uſe of it the day following. But, happening not to be able to ſleep well that night, and her bed and pantry being in the ſame room, ſhe obſerved ſo much light come from the fleſh, as to illuminate all the place where it hung. A part of this luminous fleſh was carried as a curioſity to Henry Bourbon, duke of Condé, the governor of the place, who viewed it for ſeveral hours with the greateſt aſtoniſhment. This light was obſerved to be whitiſh; and not to cover the whole ſurface of the fleſh, but certain parts only, as if gems of unequal ſplendour had been ſcattered over it. This fleſh was kept till it began to putrefy, when the light vaniſhed; which, as ſome religious people fancied, it did in the form of a croſs.

It was natural to expect, that the almoſt-univerſal experimental philoſopher Mr. Boyle would try the effect of his air-pump upon theſe luminous ſubſtances. Accordingly, we find that he did not fail to do it; when he preſently found that the light of rotten wood was extinguiſhed in vacuo, and revived again on the admiſſion of the air, even after a long continuance in vacuo; but the extinguiſhing of this light was not ſo complete immediately upon exhauſting the receiver as ſome little time afterwards. He could not perceive, however, that the light of rotten wood was increaſed in condenſed air; but this, he imagined, might ariſe from his not being able to judge very well of the degree of light, through ſo thick and cloudy a glaſs veſſel as he then made uſe of; but we find that the light of a ſhining fiſh, which was put into a condenſing-engine before the Royal Society in 1668, was rendered

more

more vivid by that means. The chief of Mr. Boyle's experiments were made in October 1667. This philoſopher attended to a great variety of circumſtances relating to this curious phenomenon. Among other things he obſerved, that change of air was not neceſſary to the maintenance of this light; for it continued a long time when a piece of the wood was put into a very ſmall glaſs, hermetically ſealed; and it made no difference when this tube, which contained the wood, was put into an exhauſted receiver. This he alſo obſerved with reſpect to a luminous fiſh, which he put into water, and placed in the ſame circumſtances. He alſo found, that the light of ſhining fiſhes had other properties in common with that of ſhining wood; but the latter, he ſays, was preſently quenched with water, ſpirit of wine, a greater variety of ſaline mixtures, and other fluids. Water, however, did not quench all the light of ſome ſhining veal on which he tried it, though ſpirit of wine deſtroyed its virtue preſently.

Mr. Boyle's obſervation of light proceeding from fleſh-meat was quite caſual. On the 15th of February 1662, one of his ſervants was greatly alarmed with the ſhining of ſome veal, which had been kept a few days, but had no bad ſmell, and was in a ſtate very proper for uſe. The ſervant immediately made his maſter acquainted with this extraordinary appearance; and, though he was then in bed, he ordered it to be immediately brought to him, and examined it with the greateſt attention. Suſpecting that the ſtate of the atmoſphere had ſome ſhare in the production of this phenomenon, he takes notice, after deſcribing the appearance, that the wind was ſouth-weſt and bluſtering, the air hot for the ſeaſon, the moon was paſt its laſt quarter, and the mercury in the barometer was at $29\frac{3}{10}$ inches.

Mr. Boyle was often diſappointed in his experiments on ſhining fiſhes; finding that they did not always ſhine in the very ſame circumſtances, as far as he could judge, with others which had ſhined before. At one time that they failed to ſhine, according to his expectations, he obſerved that the weather was variable, and not without ſome days of froſt and ſnow. In general he made uſe of whitings, finding them the fitteſt for his purpoſe. In a diſcourſe, however, upon this ſubject at the Royal Society in 1681, it was aſſerted, that, of all fiſhy ſubſtances, the eggs of lobſters, after they had been boiled, ſhone the brighteſt. Olig. Jacobœus obſerves, that, upon opening a ſea-polypus, it was ſo luminous as to ſtartle ſeveral perſons, who ſaw it; and he ſays, that, the more putrid the fiſh was, the more luminous it grew. The nails alſo, and the fingers, of the perſons who touched it, became luminous; and the black liquor which iſſued from the animal, and which is its bile, ſhone alſo, but with a very faint light.

Mr. Boyle draws a minute compariſon between the light of burning coals and that of ſhining wood or fiſh, ſhowing in what particulars they agree, and in what they differ. Among other things he obſerves, that extreme cold extinguiſhes the light of ſhining wood, as appeared when a piece of it was put into a glaſs tube, and held in a frigorific mixture. He alſo found that rotten wood did not waſte itſelf by ſhining, and that the application of a thermometer to it did not diſcover the leaſt degree of heat.

There is a remarkable ſhell-fiſh, or worm, called Pholas, which forms for itſelf holes in various kinds of ſtone, &c. That this fiſh is luminous, was noticed by Pliny; who obſerves, that it ſhines in the mouth of the perſon who eats it, and, if it touch his hands or clothes, makes them luminous. He alſo ſays that the light depends upon its moiſture. The light of this worm has furniſhed matter for various obſervations and experiments; for which ſee the article Pholas.

Some curious obſervations on the ſhining of ſome fiſhes, and the pickle in which they were immerſed, were made by Dr. Beale, in May 1665; and, had they been properly attended to and purſued, might have led to the diſcovery of the cauſe of this appearance. Having put ſome boiled mackrel into water, together with ſalt and ſweet herbs; when the cook was, ſome time after, ſtirring it, in order to take out ſome of the fiſhes, ſhe obſerved, that, at the firſt motion, the water was very luminous; and that the fiſh ſhining through the water added much to the light which the water yielded. The water was of itſelf thick and blackiſh, rather than of any other colour; and yet it ſhined on being ſtirred, and at the ſame time the fiſhes appeared more luminous than the water. Wherever the drops of this water, after it had been ſtirred, fell to the ground, they ſhined; and the children in the family diverted themſelves with taking the drops, which were as broad as a ſilver penny, and running with them about the houſe. The cook obſerved, that, when ſhe turned up that ſide of the fiſh that was loweſt, no light came from it; and that, when the water had ſettled for ſome time, it did not ſhine at all. The day following, the water gave but little light, and only after a briſk agitation, though the fiſhes continued to ſhine as well from the inſide as the outſide, and eſpecially about the throat, and ſuch places as ſeemed to have been a little broken in the boiling.

When in the light of the ſun he examined, with a microſcope, a ſmall piece of a fiſh which had ſhined very much the night before, he found nothing remarkable on its ſurface, except that he thought he perceived what he calls a *ſteam*, rather dark than luminous, ariſing like a very ſmall duſt from the fiſh, and here and there a very ſmall and almoſt imperceptible ſparkle. Of the ſparkles he had no doubt; but he thought it poſſible that the ſteam might be a deception of the ſight, or ſome duſt in the air. Finding the fiſh to be quite dry, he moiſtened it with his ſpittle; and then obſerved that it gave a little light, though but for a ſhort time. The fiſh at that time was not fetid, nor yet inſipid to the beſt diſcerning palate. Two of the fiſhes he kept two or three days longer for farther trial; but, the weather being very hot, they became fetid; and, contrary to his expectation, there was no more light produced either by the agitation of the water or in the fiſh.

That the ſea is ſometimes luminous, eſpecially when it is put in motion by the daſhing of oars or the beating of it againſt a ſhip, has been obſerved with admiration by a great number of perſons. Mr. Boyle, after reciting all the circumſtances of this appearance, as far as he could collect them from the accounts of navigators; as its being extended as far as the eye could reach, and at other times being viſible only when the water was daſhed againſt ſome other body; that, in ſome ſeas, this phenomenon is accompanied by ſome particular winds, but not in others; and that ſometimes one part of the ſea will be luminous, when another part, not far from it, will not be ſo;—concludes with ſaying, that he could not help ſuſpecting that theſe odd phenomena, belonging to great maſſes of water, were in ſome meaſure owing to ſome coſmical law or cuſtom of the terreſtrial globe, or at leaſt of the planetary vortex.

Father Bourzes, in his voyage to the Indies in 1704, took particular notice of the luminous appearance of the ſea. The light was ſometimes ſo great, that he could eaſily read the title of a book by it, though he was nine or ten feet from the ſurface of the water. Sometimes he could eaſily diſtinguiſh, in the wake of a ſhip, the particles that were luminous from thoſe that were not; and they appeared not to be all of the ſame figure. Some of them were like points of light, and others ſuch as ſtars appear to the naked eye. Some of them were like globes of a line or two in diameter; and others as big as one's head. Sometimes they formed themſelves into ſquares of three or four inches long, and one or two broad. Sometimes all theſe different figures were viſible at the ſame time; and ſometimes they were what he calls vortices of light, which at one particular time appeared and diſappeared immediately like flaſhes of lightning.

Nor did only the wake of the ſhip produce this light; but fiſhes alſo, in ſwimming, left ſo luminous a track behind them, that both their ſize and ſpecies might be diſtinguiſhed by it. When he took ſome of the water out

of the ſea, and ſtirred it ever ſo little with his hand in the dark, he always ſaw in it an infinite number of bright particles; and he had the ſame appearance whenever he dipped a piece of linen in the ſea, and wrung it in a dark place, even though it was half dry; and he obſerved, that, when the ſparkles fell upon any thing that was ſolid, it would continue ſhining for ſome hours together.

After mentioning ſeveral circumſtances which did not contribute to this appearance, this father obſerves, that it depends very much upon the *quality of the water*; and he was pretty ſure that this light is the greateſt when the water is fatteſt, and fulleſt of foam. For in the main ſea, he ſays, the water is not every-where equally pure; and that ſometimes, if linen be dipped in the ſea, it is clammy when it is drawn up again; and he often obſerved, that, when the wake of the ſhip was the brighteſt, the water was the moſt fat and glutinous, and that linen moiſtened with it produced a great deal of light, if it was ſtirred or moved briſkly. Beſides, in ſome parts of the ſea, he ſaw a ſubſtance like ſawduſt, ſometimes red and ſometimes yellow; and, when he drew up the water in thoſe places, it was always viſcous and glutinous. The ſailors told him, that it was the ſpawn of whales; that there are great quantities of it in the north; and that ſometimes, in the night, they appeared all over of a bright light, without being put in motion by any veſſel or fiſh paſſing by them. As a confirmation of this conjecture, that the more glutinous the ſea-water is, the more it is diſpoſed to become luminous, he obſerves, that one day they took a fiſh which was called a *bonite*, the inſide of the mouth of which was ſo luminous, that, without any other light, he could read the ſame characters which he had before read by the light in the wake of the ſhip; and the mouth of this fiſh was full of a viſcous matter, which, when it was rubbed upon a piece of wood, made it immediately all over luminous; though, when the moiſture was dried up, the light was extinguiſhed.

The abbé Nollet was much ſtruck with the luminouſneſs of the ſea when he was at Venice in 1749; and, after taking a great deal of pains to aſcertain the circumſtances of it, concluded that it was occaſioned by a ſhining inſect; and, having examined the water very often, he at length did find a ſmall inſect, which he particularly deſcribes, and to which he attributes the light. The ſame hypotheſis had alſo occurred to M. Vianelli, profeſſor of medicine in Chioggia near Venice; and both he and M. Grizellini, a phyſician in Venice, have given drawings of the inſects from which they imagined this light to proceed. The abbé was the more confirmed in his hypotheſis, by obſerving, ſome time after, the motion of ſome luminous particles in the ſea; for, going into the water, and keeping his head juſt above the ſurface, he ſaw them dart from the bottom, which was covered with weeds, to the top, in a manner which he thought very much reſembled the motions of inſects; though, when he endeavoured to catch them, he only found ſome luminous ſpots upon his handkerchief, which were enlarged when he preſſed them with his finger.

M. le Roi, making a voyage on the Mediterranean, preſently after the abbé Nollet made his obſervations at Venice, took notice, that in the day-time the prow of the ſhip in motion threw up many ſmall particles, which, falling upon the water, rolled upon the ſurface of the ſea for a few ſeconds before they mixed with it; and in the night the ſame particles, as he concluded, had the appearance of fire. Taking a quantity of the water, the ſame ſmall ſparks appeared whenever it was agitated; but, as was obſerved with reſpect to Dr. Beale's experiments, every ſucceſſive agitation produced a leſs effect than the preceding, except after being ſuffered to reſt awhile; for then a freſh agitation would make it almoſt as luminous as the firſt. This water, he obſerved, would retain its property of ſhining by agitation a-day or two; but it diſappeared immediately upon being ſet on the fire, though it was not made to boil. This gentleman, after giving much attention to this phenomenon, concludes, that it is not occaſioned by any ſhining inſects, as the abbé Nollet imagined; eſpecially as, after carefully examining ſome of the luminous points, which he caught upon a handkerchief, he found them to be round like large pins' heads, but with nothing of the appearance of any animal, though he viewed them with a microſcope. He alſo found, that the mixture of a little ſpirit of wine with water juſt drawn from the ſea, would give the appearance of a great number of little ſparks, which would continue viſible longer than thoſe in the ocean. All the acids, and various other liquors, produced the ſame effect, though not quite ſo conſpicuouſly; but no freſh agitation would make them luminous again. M. le Roi is far from aſſerting that there are no luminous inſects in the ſea. He even ſuppoſes that the abbé Nollet and M. Vianelli had found them. But he was ſatisfied that the ſea is luminous chiefly on ſome other account, though he does not ſo much as advance a conjecture about what it is.

M. Ant. Martin made many experiments on the light of fiſhes, with a view to diſcover the cauſe of the light of the ſea. He thought that he had reaſon to conclude, from a great variety of experiments, that all ſea-fiſhes have this property; but that it is not to be found in any that are produced in freſh water. Nothing depended upon the colour of the fiſhes, except that he thought that the white ones, and eſpecially thoſe that had white ſcales, were a little more luminous than others. This light, he found, was increaſed by a ſmall quantity of ſalt; and alſo by a ſmall degree of warmth, though a greater degree extinguiſhed it. This agrees with another obſervation of his, that it depends entirely upon a kind of moiſture which they had about them, and which a ſmall degree of heat would expel, when an oilineſs remained which did not give this light, but would burn in the fire. Light from the fleſh of birds or beaſts is not ſo bright, he ſays, as that which proceeds from fiſh. Human bodies, he ſays, have ſometimes emitted light about the time that they began to putrefy; and the walls and roof of a place in which dead bodies had often been expoſed, had a kind of dew or clammineſs upon them which was ſometimes luminous; and he imagined that the lights which are ſaid to be ſeen in burying-grounds may be owing to this cauſe.

From ſome experiments made by Mr. Canton, he concludes, that the luminouſneſs of ſea-water is owing to the ſlimy and other putreſcent ſubſtances it contains. On the evening of the 14th of June, 1768, he put a ſmall freſh whiting into a gallon of ſea-water, in a pan which was about fourteen inches in diameter, and took notice that neither the whiting nor the water, when agitated, gave any light. A Fahrenheit's thermometer, in the cellar where the pan was placed, ſtood at 54°. On the 15th, at night, that part of the fiſh which was even with the ſurface of the water was luminous, but the water itſelf was dark. He drew the end of a ſtick through it, from one ſide of the pan to the other; and the water appeared luminous behind the ſtick all the way, but gave light only where it was diſturbed. When all the water was ſtirred, the whole became luminous, and appeared like milk, giving a conſiderable degree of light to the ſides of the pan; and it continued to do ſo for ſome time after it was at reſt. The water was moſt luminous when the fiſh had been in it about twenty-eight hours; but would not give any light by being ſtirred, after it had been in it three days. He then put a gallon of freſh water into one pan, and an equal quantity of ſea-water into another; and into each pan he put a freſh herring of about three ounces. The next night the whole ſurface of the ſea-water was luminous without being ſtirred; but it was much more ſo when it was put in motion; and the upper part of the herring, which was conſiderably below the ſurface of the water, was alſo very bright; while at the ſame time the freſh water, and the fiſh that was in it, were quite dark. There were ſeveral very bright luminous ſpots on different parts of the ſurface of the ſea-water; and the whole,

when viewed by the light of a candle, ſeemed covered with a greaſy ſcum. The third night, the light of the ſea-water, while at reſt, was very little, if at all, leſs than before; but, when ſtirred, its light was ſo great as to diſcover the time by a watch; and the fiſh in it appeared as a dark ſubſtance. After this, its light was evidently decreaſing, but was not quite gone before the ſeventh night. The freſh water and the fiſh in it were perfectly dark during the whole time. The thermometer was generally above 60°.

The preceding experiments were made with ſea-water; but he now made uſe of other water, into which he put common or ſea ſalt, till he found, by an hydrometer, that it was of the ſame ſpecific gravity with the ſea-water; and, at the ſame time, in another gallon of water, he diſſolved two pounds of ſalt; and into each of theſe waters he put a ſmall freſh herring. The next evening the whole ſurface of the artificial ſea-water was luminous without being ſtirred; but gave much more light when it was diſturbed. It appeared exactly like the real ſea-water in the preceding experiment; its light laſted about the ſame time, and went off in the ſame manner; while the other water, which was almoſt as ſalt as it could be made, never gave any light. The herring which was taken out of it the ſeventh night, and waſhed from its ſalt, was found firm and ſweet; but the other herring was very ſoft and putrid, much more ſo than that which had been kept as long in freſh water. If a herring, in warm weather, be put into ten gallons of artificial ſea-water, inſtead of one, the water, he ſays, will ſtill become luminous, but its light will not be ſo ſtrong.

It appeared by ſome of the firſt obſervations on this ſubject, that *heat* extinguiſhes the light of putreſcent ſubſtances. Mr. Canton alſo attended to this circumſtance; and obſerves, that, though the greateſt ſummer-heat is well-known to promote putrefaction, yet twenty degrees more than that of the human blood ſeems to hinder it. For, putting a ſmall piece of a luminous fiſh into a thin glaſs ball, he found, that water of the heat of 118 degrees would extinguiſh its light in leſs than half a minute; but that, on taking it out of the water, it would begin to recover its light in about ten ſeconds; but it was never afterwards ſo bright as before.

Mr. Canton made the ſame obſervation that Mr. Ant. Martin had done, viz. that ſeveral kinds of river-fiſh could not be made to give light in the ſame circumſtances in which any ſea-fiſh became luminous. He ſays, however, that a piece of carp made the water very luminous, though the outſide, or ſcaly part of it, did not ſhine at all. For the ſake of thoſe perſons who may chooſe to repeat his experiments, he obſerves, that artificial ſea-water may be made without the uſe of an hydrometer, by the proportion of four ounces avoirdupois of ſalt to ſeven pints of water, wine meaſure.

From undoubted obſervations, however, it appears, that in many places of the ocean it is covered with luminous inſects to a very conſiderable extent. M. Dagelet, a French aſtronomer who returned from the Terra Auſtralis in the year 1774, brought with him ſeveral kinds of worms which ſhine in water when it is ſet in motion; and M. Rigaud, in a paper inſerted (if we are not miſtaken) in the Journal des Sçavans for the month of March 1770, affirms, that the luminous ſurface of the ſea, from the port of Breſt to the Antilles, contains an immenſe quantity of little round ſhining polypuſes of about a quarter of a line in diameter. Other learned men, who acknowledge the exiſtence of theſe luminous animals, cannot, however, be perſuaded to conſider them as the cauſe of all that light and ſcintillation that appear on the ſurface of the ocean; they think that ſome ſubſtance of the phoſphorus kind, ariſing from putrefaction, muſt be admitted as one of the cauſes of this phenomenon. M. Godehoue has publiſhed curious obſervations on a kind of fiſh called in French *bonite*, already-mentioned; and though he has obſerved, and accurately deſcribed, ſeveral of the luminous inſects that are found in ſea-water, he is nevertheleſs of opinion, that the ſcintillation and flaming light of the ſea proceed from the oily and greaſy ſubſtances with which it is impregnated.

The abbé Nollet was long of opinion, that the light of the ſea proceeded from electricity; though he afterwards ſeemed inclined to think, that this phenomenon was cauſed by ſmall animals, either by their luminous aſpect, or at leaſt by ſome liquor or effluvia which they emitted. He did not, however, exclude other cauſes; among theſe, the ſpawn or fry of fiſh deſerves to be noticed. M. Dagelet, ſailing into the bay of Antongil, in the iſland of Madagaſcar, obſerved a prodigious quantity of fry which covered the ſurface of the ſea above a mile in length, and which he at firſt took for banks of ſand on account of their colour; they exhaled a diſagreeable odour, and the ſea had appeared with uncommon ſplendour ſome days before. The ſame accurate obſerver, perceiving the ſea remarkably luminous in the road of the Cape of Good Hope during a perfect calm, remarked, that the oars of the canoes produced a whitiſh and pearly kind of luſtre; when he took in his hand the water which contained this phoſphorus, he diſcerned in it, for ſome minutes, globules of light as large as the heads of pins. When he preſſed theſe globules, they appeared to his touch like a ſoft and thin pulp; and ſome days after the ſea was covered near the coaſts with whole banks of theſe little fiſh in innumerable multitudes.

To putrefaction, alſo, ſome are willing to attribute that luminous appearance which goes by the name of *ignis fatuus*, to which the credulous vulgar aſcribe very extraordinary and eſpecially miſchievous powers. It is moſt frequently obſerved in boggy places, and near rivers, though ſometimes alſo in dry places. By its appearance benighted travellers are ſaid to have been ſometimes miſled into marſhy places, taking the light which they ſaw before them for a candle at a diſtance; from which ſeemingly miſchievous property it has been thought by the vulgar to be a ſpirit of a malignant nature, and been named accordingly *Will with a wiſp*, or *Jack with a lanthorn*; for the ſame reaſon alſo it probably had its Latin name IGNIS FATUUS. See vol. x. p. 830.

A light in ſome reſpects ſimilar to thoſe above mentioned has been found to proceed from that celebrated chemical production called *phoſphorus*, which always tends to decompoſe itſelf, ſo as to take fire by the acceſs of *air* only. Phoſphorus, therefore, when it emits light, is properly a body ignited; though when a very ſmall quantity of it is uſed, as what is left after drawing it over paper, or what may be diſſolved in eſſential oil, the heat is not ſenſible. But perhaps the matter which emits the light in what we call *putreſcent ſubſtances* may be ſimilar to it, though it be generated by a different proceſs, and burn with a leſs degree of heat. Putreſcence is certainly not neceſſary to the light of glow-worms; and yet their light is ſufficiently ſimilar to that of ſhining wood or fleſh. Electric light is unqueſtionably ſimilar to that of phoſphorus, though the ſource of it is apparently very different. See CHEMISTRY, vol. iv. p. 201, 202.

M. Deſſaignes (Report of the National Inſtitute for 1810) defines phoſphoreſcence to be the appearance of a durable or tranſient light, unattended with ſenſible heat, and not followed by any alteration in inorganic bodies. This phoſphoreſcence preſents itſelf under different forms, and like ſolar light is decompoſed by the priſm. From ſome bodies it ſeems to emanate ſlowly and regularly, in others by ſcintillation. Its colour is blue, but appears tarniſhed in thoſe bodies which contain iron; it may, however, be rendered clear, by ſeparating the metal from the bodies which contain it. In general, it has appeared to M. Deſſaignes, that thoſe bodies are the moſt phoſphoreſcent that contain in their compoſition principles which can paſs from a ſtate of gas, or liquid, to a ſolid form. All bodies give out light by compreſſion, whether they are fluid, ſolid, or gaſeous. He has alſo diſcovered that

points have the same effect on phosphorescence as upon the electric fluid. M. Dessaignes distinguishes two kinds of phosphorescence; the one transient, the other permanent. Amongst the first we may state, that which takes place when a certain quantity of water combines with quick-lime; amongst the latter, that of rotten wood, and other organized substances in a state of putrefaction. It appeared important to determine whether the phosphorescence that takes place in those bodies, which become luminous when their temperature is somewhat increased, is owing to combustion. M. Dessaignes made experiments in atmospheric air, in oxygen gas, and in the torricellian vacuum, to ascertain this point; but he could perceive no difference in the intensity of the light under the different circumstances, when the experiments were made on inorganic bodies; but the light of organic bodies was increased in oxygen, from which the author concludes that some part of this light in the latter is owing to combustion.

These luminous organic bodies more particularly occupied his attention. He made experiments on fresh-water fish, sea-fish, and various kinds of wood. The results have proved, that the phosphorescence of each is a species of combustion, in which water and carbonic acid are produced. The woody part, and muscular fibre, do not undergo in these changes any essential alterations. The phosphorescence of the wood is chiefly owing to a glutinous principle, that serves to unite the woody fibres; and that of the fish, to a gelatinous principle, which unites the muscular fibres. M. Dessaignes endeavoured to explain the luminous appearance of the sea, and to support his reasoning by a numerous collection of facts relating to spontaneous phosphorescence. He attributes the light of the sea to two causes; first, to the presence of phosphoric animalcules, and the emanation of luminous matter produced by them; and, secondly, to the simple presence of this matter dissolved and mixed in the water, proceeding not only from these animalcules, but from molluscı, fish, &c.

Among luminous bodies the *diamond* is to be reckoned; as some diamonds are known to shine in the dark. But, on account of the feebleness of their splendour, it is necessary for the person who is to observe them, previously to stay in the dark at least a quarter of an hour; that the pupil of the eye may be dilated and enlarged, and so rendered capable of receiving a large quantity of the rays of light. M. du Fay has also observed, that the eyes ought to be shut for this time, or at least one of them; and that, in that case, the light of the diamond is afterwards only seen by that eye which has been shut. Before the diamond is brought into the dark room, it must be exposed to the sunshine, or at least to the open daylight, to imbibe a sufficient quantity of rays; and this is done in one minute, or even less; eight or ten seconds having been found to furnish as much light as a stone is capable of receiving; and, when brought into the dark, its light continues about twelve or thirteen minutes, weakening all the while by insensible degrees. It is very remarkable, that, in bodies so extremely similar to each other as diamonds are, some should have this property of imbibing the sun's rays, and shining in the dark, and that others should not; yet so it is found to be by experiment, and the most nearly resembling stones shall be found, one to have this property, and another to be destitute of it; while many of the most dissimilar have the property in common. There seems to be no rule, nor even the least traces of any rule, of judging, which diamonds have, and which have not, this property; their natural brightness, their purity, their size, or their shape, contribute nothing to it; and all that has been yet discovered of the least regularity among them, is, that all yellow diamonds have this property. This is supposed to arise from their having more sulphur in their composition, and therefore illuminating more readily, or emitting a more visible flame.

It is not only the open sun-shine, or open day-light, which gives to these diamonds the power of shining in the dark; they receive it in the same manner even if laid under a glass, or plunged in water or in milk. M. du Fay tried whether it was possible to make the diamond retain, for any longer time, the light it naturally parts with so soon; and found, that if the diamond, after being exposed to the light, be covered with black wax, it will shine in the dark as well six hours afterwards as at the time it was first impregnated with the light.

The imbibing light, in this manner, being so nice a property as not to be found in several diamonds, it was not to be supposed that it would be found in any other stones; accordingly, on trial, the ruby, the sapphire, and the topaz, were found wholly destitute of it; and among a large number of rough emeralds, one only was found to possess it. Such is the strange uncertainty of these accidents. All the other less-precious stones were tried, and found not to possess this property of imbibing light from the daylight or sunshine, but they all became luminous by the different means of heating or friction; with this difference, that some acquired it by one of these methods, and others by the other; each being unaffected by that which gave the property to the other. The diamond becomes luminous by all these ways. Beccarius also discovered that diamonds have the property of the Bolognian phosphorus, about the same time that it occurred to M. du Fay. *Com. Bonon.* vol. ii. p. 276. M. du Fay likewise observed, that the common topaz, when calcined, had all the properties of this phosphorus; and, pursuing the discovery, he found the same property, in a great degree, in the belemnites, gypsum, limestone, and marble; though he was obliged to dissolve some very hard substances of this kind in acids, before calcination could produce this change in them; and with some substances he could not succeed even thus; especially with flint-stones, river-sand, jaspers, agates, and rock-crystal.

In Sweden a very curious phenomenon has been observed on certain *flowers*, by M. Haggern, lecturer in natural history. One evening he perceived a faint flash of light repeatedly dart from a marigold. Surprised at such an uncommon appearance, he resolved to examine it with attention; and, to be assured it was no deception of the eye, he placed a man near him, with orders to make a signal at the moment when he observed the light. They both saw it constantly at the same moment. The light was most brilliant on marigolds of an orange or flame colour; but scarcely visible on pale ones. The flash was frequently seen on the same flower two or three times in quick succession, but more commonly at intervals of several minutes; and, when several flowers in the same place emitted their light together, it could be observed at a considerable distance. This phenomenon was remarked in the months of July and August at sunset, and for half an hour when the atmosphere was clear; but after a rainy day, or when the air was loaded with vapours, nothing of it was seen.

The following flowers emitted flashes, more or less vivid, in this order: 1. The marigold, *Calendula officinalis*. 2. Monk's-hood, *Tropæolum majus*. 3. The orange lily, *Lilium bulbiferum*. 4. The Indian pink, *Tagetes patula et erecta*. To discover whether some little insects or phosphoric worms might not be the cause of it, the flowers were carefully examined, even with a microscope, without any such thing being found. From the rapidity of the flash, and other circumstances, it may be conjectured that there is something of electricity in this phenomenon also. It is well known, that, when the pistil of a flower is impregnated, the pollen bursts away by its elasticity, with which electricity may be combined. But M. Haggern, after having observed the flash from the orange-lily, the antheræ of which are a considerable space distant from the petals, found that the light proceeded from *the petals only*; whence he concludes, that this electric light is caused by the pollen, which, in flying off, is scattered on the petals. Whatever be the cause, the effect is singular and highly curious.

A similar phenomenon in respect to the state of the weather,

weather, ſource of the light, &c. has been lately noticed in the Papaver orientale, or oriental poppy, as detailed by a correſpondent in the Monthly Magazine, vol. xxxi. "Walking in my garden the other evening with a friend, we were both ſtruck with this appearance at the ſame inſtant: the ſparks (or flaſhes rather) were very brilliant and in quick ſucceſſion, *the petals* at the ſame time cloſing frequently with ſudden jerks. The flaſhes proceeded entirely from the inſide of the flowers, and, when they were cloſed, ceaſed; the day had been very hot and ſhowery, with much diſtant thunder, the ſun was juſt ſet, the evening calm, and the dew falling. I mention theſe circumſtances, as I have been frequently on the watch ſince for the ſame appearances in a different ſtate of the weather, without ſucceſs." The letter is dated June 13, 1811.

It has been too common for chemiſts to draw the following concluſion; that, when light or light and heat together are evolved, it muſt either have ariſen from combuſtion, or that the light is a component part of the body from which it is diſengaged. As, for inſtance, becauſe Canton's phoſphorus ſhines without the preſence of oxygen, the light is called *light of combination*; and Dr. Hulme has, with leſs foundation, drawn the ſame concluſion. Inſtead of ſaying that light and heat are products of combination from the union of oxygen with inflammable matter, we ſhould ſay that it is the reſult of rapid chemical combination when the bodies have great affinity for each other. We have ſeveral facts which confirm this idea. When ſtrong mineral acids combine with pure potaſh, lime, or magneſia, much heat and ſome light are emitted. The ſame thing is alſo obſerved in ſlacking of lime. In an experiment made by a ſociety of chemiſts it appears, that, when a mixture of ſulphur and copper-filings is expoſed to a red heat, in a glaſs tube, the oxygen being excluded, the two ſubſtances ſuddenly combine, attended with the diſengagement of light. In thoſe chemical changes where heat and light are diſengaged, the following law will obtain: The change of temperature will be as the difference between the ſpecific heat of the compound body and half the ſum of the ſpecific heat of the bodies before combination; while the intenſity of the light and heat will be inverſely as the time in which this change has been taking place.

III. We ſhall here leave the ſubject of phoſphoreſcent light to give ſome account of that produced by combuſtion; in treating which, we ſhall find our progreſs much facilitated, by conſidering combuſtion as dependent on the above law, rather than upon the laws of combuſtion as laid down by Lavoiſier, who was of opinion, that the light and heat furniſhed by combuſtion were entirely derived from the oxygen. See our article CHEMISTRY, vol. iv. p. 195, 6. If, as we have ſuppoſed, the quantity of heat be greater as the ſpecific heat of the reſulting compound is leſs than the mean of the bodies before combination, we ought to have heat evolved whenever ſuch change can be proved; and, by aſcertaining before-hand the ſpecific heat of the compound and of the elements, the quantity of heat may be known. Experience has already given great ſtrength to this notion. The intenſity of the light and heat, however, during theſe changes, will not depend upon the abſolute quantity evolved, but upon the rapidity of the evolution; and, if we are not greatly deceived, the quantity of light will always be as the rapidity of combuſtion. In the ſlow combuſtion of hydrogen gas, the light is not great, but the whole heat is greater than that afforded by any other combuſtible body. On the other hand, the abſolute quantity of heat afforded by the combuſtion of phoſphorus is much leſs than that evolved by burning an equal weight of hydrogen; but the quantity of light given by the former much exceeds that of the latter. The intenſity of light, however, will alſo be inverſely as the ſpace which it occupies; and hence it will be as the ſpecific gravity of the combuſtible body. We may therefore conclude, that the quantity of light afforded by combuſtion will be as the rapidity of combuſtion, which will be as the affinity of the body for oxygen, as the denſity of the burning body, and inverſely as the coheſion of the body. The difference of coheſion between charcoal and the diamond accounts for the relative combuſtibility of theſe two bodies. For this reaſon, ſoft iron wire ought to afford more vivid combuſtion in oxygen than ſteel wire.

In order to obtain a relative idea of the value of different combuſtible bodies uſed for procuring artificial light, we ſhall detail ſome ingenious experiments made by Dr. Henry, and publiſhed in Nicholſon's Journal, vol. xi.

Dr. Henry, with a view to aſcertain the relative value of the combuſtible gaſes, made ſome trials with hydrogen, carburetted hydrogen, and carbonic oxyd. Theſe he found did but afford a very inferior light, compared with the ſplendid light given by the gas afforded by the deſtructive diſtillation of pit-coal, which is equal to the light given by the fineſt ſpermaceti oil. The following Table points out the reſult of his experiments, and clearly ſhows the cauſe of the ſuperior property of coal-gas to produce light.

Kind of Gas.	Meaſures of Oxygen Gas required to ſaturate one hundred meaſures of each.	Meaſures of Carbonic Acid produced.
Pure hydrogen	50 to 54	None
Gas from moiſt coal	60	35
Do. wood (oak)	54	33
Do. dried peat	68	43
Do. from cannel coal	170	100
Do. lamp oil	190	124
Do. wax	220	137
Pure olefiant gas	284	179

The firſt column contains the different gaſes, 100 meaſures of each being uſed in each experiment. The ſecond, the meaſures of oxygen which were conſumed while each of the 100 meaſures were burning. The third, the quantity in meaſures of carbonic acid which reſulted from the combuſtion. It is a fact already aſcertained, that every meaſure of carbonic acid gas has reſulted from a meaſure of oxygen; conſequently, the quantity of oxygen conſumed in its formation is equal in meaſure to the numbers in the third column; the exceſs of oxygen, therefore, appearing in the ſecond. By ſubtracting the number in the third from that in the ſecond, it will give the quantity of oxygen which has combined with the hydrogen in each of the gaſes. This exceſs of oxygen, in the ſecond column, will combine with two meaſures of hydrogen, to form water. In order to form ſome idea of the relative value of theſe combuſtible gaſes, we will compare the firſt, which is pure hydrogen, and the laſt, or the pure olefiant gas, which has the greateſt efficacy in producing light. The 50 meaſures of oxygen in the firſt combine with 100 of hydrogen; and, ſince no carbonic acid is produced, this is the whole effect. In the laſt experiment, 179 of carbonic acid is formed at the expenſe of 179 meaſures of oxygen and about $\frac{1}{7}$th its weight of carbon, which would alone have furniſhed conſiderable light. Since, however, 284 meaſures of oxygen are expended, we have $284 - 179 = 105$ meaſures of oxygen, which would require 200 meaſures of hydrogen. If, therefore, hydrogen and carbon were equally efficacious as combuſtible bodies in producing light, the quantity of light in one, to that in the other, would be as $210 + \frac{5}{7} \times 179 : 100$, or as 25 to 1 nearly. The ratio of the ſpecific gravities of theſe gaſes is as 90 to 8 nearly; therefore, multiplying

tiplying theſe ratios, we get 270 to 8, or 34 to 1 nearly, for the relative intenſity of the light of each.

Theſe different gaſes are here ſuppoſed by Dr. Henry to be mixtures of ſeveral gaſes the compoſition of which is known, and all conſiſting of different proportions of hydrogen and carbon, with the exception of the carbonic oxyd, which contains oxygen. Now, ſetting aſide the latter gas, which being partly ſaturated, the reſt will be in their effect to produce light, as the quantity of carbon they contain; not that carbon is more effective than hydrogen, but becauſe the ſpecific gravity of the gas is increaſed by the carbon. Since, therefore, the olefiant gas contains the moſt, and is of the greateſt ſpecific gravity in conſequence, thoſe gaſes which contain the greateſt quantity of olefiant gas muſt be the beſt for producing light by combuſtion. Now, it may be ſeen in the table, that the gaſes obtained from lamp-oil and wax are the next to the olefiant gas in their effect of giving light; and hence we may conclude that thoſe gaſes contain a large proportion of olefiant gas, and of courſe ſeem well fitted for producing artificial light. If we may judge by analogy, we may expect that the ſpermaceti fat will ſtand as high as the oil; and the beſt tallow may, perhaps, be the next in order. During the burning of theſe ſubſtances, the vapour which, when kindled, conſtitutes the flame, may conſiſt of a great proportion of the olefiant gas. In the burning of all fatty ſubſtances, however, there is a great redundancy of carbon, which flies off with the gaſeous products in the form of ſmoke, and which is burnt in the Argand lamp. The above facts will furniſh an elegant and ſimple method of appreciating the relative value of the different combuſtible bodies to produce light.

The light which is furniſhed by combuſtion, and commonly called *artificial light*, is conſidered by moſt philoſophers as being a component part of the bodies employed in the combuſtion. Even in the ſimple proceſs of heating a body red-hot, it is ſaid that the body at that temperature begins to give out light. It is rather curious, that all bodies ſhould give out light at the ſame temperature, which is ſaid to be about 800° Fah. It would appear, from a fact given by the late Mr. Wedgewood, that the emanating medium is heat or light, according to the denſity of the body from which it is emanated. The heated air is ſo hot, as to make a thin ſlip of gold appear red-hot, although the aerial medium did not become luminous. Terreſtrial light, as it appears to poſſeſs moſt of the properties of ſolar light, like it can be tranſmitted and refracted by tranſparent bodies; and it ſtrictly reſembles it in being reflected by the ſame bodies. It is ſaid, however, to contain a different proportion of the coloured rays from that of ſolar light, being defective in the blue and redundant in the red rays.

Dr. Herſchel has made a number of experiments upon terreſtrial heat, in order to compare it with the heat furniſhed by the ſun; but he ſeems to have taken it for granted, that the ſolar light and the artificial do not differ, although his experiments prove that terreſtrial heat and ſolar heat differ eſſentially. Artificial heat does not paſs through glaſs; while the ſolar calorific rays paſs eaſily through the ſubſtance of a priſm, and afterwards through a convex lens. It has been found that artificial light has ſome chemical properties. The abbé Teſſier found that the green colour of vegetables is produced by the light of a lamp; which fact has been confirmed by Decandolle.

The purpoſes for which mankind employ fires, or combuſtion in general, are either for the uſe of the heat, or for the uſe of the light. The heat is ſubſervient to the numerous and important purpoſes of cooking victuals, of warming apartments, and thus rendering inhabitable ſuch climates as otherwiſe the human ſpecies could not live in; of giving exiſtence to all metallurgic operations, to the making of glaſs, of lime for building, &c. &c. The light is ſubſervient to purpoſes equally important. It enables human beings to follow their operations, during the abſence of the day-light, nearly if not full as well as in the day-time. The flame of a ſingle candle animates a family; every one follows his occupations, and no dread is felt of the darkneſs of night. Were it not for artificial light, how great a portion of the advantages of induſtry, and of real comfort, would the human ſpecies be deprived of!

When heat is wanted, then rough ſolid combuſtibles are uſed, which give it in abundance, and at a cheap rate; but, when light is wanted, then the pureſt and moſt uniform combuſtibles muſt be uſed, otherwiſe an inadequate effect is produced, and a conſiderable quantity of materials is expended. In ſome uncivilized countries, ſlender faggots of ſome kind of reſinous wood are uſed by way of candles. When lighted at one end, they burn gradually, and afford a good deal of light; but it is unſteady, and encumbered with a good deal of ſmoke. Beſides, theſe faggots are readily burnt out, and muſt be quickly replaced by new ones. At preſent, in all civilized countries, the principal combuſtibles that are uſed for the production of a bright and luminous flame, are wax, the fat of animals, under the general name of tallow, and oil, either of fiſh or of vegetables. The extenſive conſumption of theſe materials, and the ſucceſſive increaſe of their price, have obliged the induſtrious to deviſe the beſt means of producing the greateſt effect with the leaſt poſſible quantity of materials; as to which, ſee the article LAMP, p. 115, 16.

Of the three principal materials for producing artificial light, viz. wax, tallow, and oil, the firſt and ſecond are moſtly uſed within-doors in this country; but fiſh-oil, the combuſtion of which is attended with an unpleaſant ſmell, is moſtly uſed for ſtreet-lamps and other out-of-doors purpoſes; excepting indeed when Argand's lamps are uſed, for in theſe the oil gives no bad ſmell. Oil of olives burns without any offenſive ſmell; therefore much uſe is made of it for lamps in private houſes in thoſe countries where it may be had at a cheap rate, as in Italy, the ſouth of France, &c.

Beſides the above, a new material has of late been attempted to be introduced in this country, for the purpoſe of lighting houſes, ſtreets, manufactories, &c. this material is the inflammable gas of coals, (properly called carburetted hydrogen gas,) of which we have juſt ſpoken in our compariſon of gaſes. Every body muſt know, that, when coals are burning in a common-fire-place, a flame more or leſs luminous (according as it is more or leſs encumbered with incombuſtible ſmoke and vapour) iſſues from them; and they frequently emit ſome very beautiful ſtreams of a flame remarkably bright. All this, as we have already mentioned, ariſes from the gaſes which are extricated from the coals by the heat. It was natural to imagine that ſuch gas might be received in proper reſervoirs, and might afterwards be forced out of ſmall apertures, which, being lighted, might ſerve, as the flames of candles, to illuminate a room or other place. The trial was eaſily made, and it was attended with the deſired effect. The principle of the apparatus and of the operation is as follows: The coal is placed in large iron veſſels, called retorts, to the apertures of which iron pipes are adapted, which terminate in a veſſel, or veſſels, called gazometers, gas-holders, or reſervoirs, which are inverted in water. The retorts thus charged are placed upon the fire, the action of which extricates the gas from the coals that are within the retorts, together with an aqueous vapour, a thickiſh fluid, or tar, &c. Theſe products are conveyed through the above-mentioned pipes under the gazometers, where the gas is waſhed, and remains ready for uſe. There are then other ſmaller pipes from the gazometer, which branch out into ſmaller ramifications, until they terminate into the places where the lights are wanted. The extremities of the pipes have ſmall apertures, out of which the gas iſſues; and, the ſtreams being lighted at thoſe apertures, will burn with a clear and conſtant flame as long as the ſupply of gas continues.

Mr. Murdoch was probably the firſt perſon who put in practice GAS-LIGHTS, on an extenſive ſcale; he commenced

menced his experiments on this ſubject in the year 1792; and in 1798 he applied it for lighting part of the very-extenſive manufactory of Meſſrs. Boulton, Watt, and Co. at Soho near Birmingham; and in 1802, at the time of the peace, the illumination of the Soho-works was made by gas. In the year 1808, Mr. Murdoch obtained from the Royal Society a medal (count Rumford's) for his communications upon the ſubject, and which were publiſhed in the Philoſophical Tranſactions for that year. The preciſion with which the particulars are ſtated in Mr. Murdoch's account, and the eſſential uſe of which ſuch ſtatements may be to a vaſt number of perſons, who are now engaged in ſimilar examinations in this new branch of civil economy, induce us to tranſcribe the moſt eſſential part of it.

"Theſe facts and reſults (Mr. Murdoch ſays) were made, during the preſent winter, (1807–8.) at the cotton-manufactory of Meſſrs. Philips and Lee, at Mancheſter, where the light obtained by the combuſtion of the gas from coal is uſed upon a very large ſcale; the apparatus for its production and application having been prepared by me at the works of Meſſrs. Boulton, Watt, and Co. at Soho. The whole of the rooms of this cotton-mill, which is, I believe, the moſt extenſive in the united kingdom, as well as its counting-houſes and ſtore-rooms, and the adjacent dwelling-houſe of Mr. Lee, are lighted with the gas from coal. The total quantity of light uſed during the hours of burning has been aſcertained, by a compariſon of ſhadows, to be about equal to the light which 2500 mould-candles of ſix in the pound would give; each of the candles with which the compariſon was made conſuming at the rate of 4-10ths of an ounce (175 grains) of tallow per hour.

"The burners are of two kinds: the one is upon the principle of the Argand lamp, and reſembles it in appearance; the other is a ſmall curved tube with a conical end, having three circular apertures, or perforations, of about a thirtieth of an inch in diameter, one at the point of the cone, and two lateral ones, through which the gas iſſues, forming three divergent jets of flame, ſomewhat like a fleur-de-lis. The ſhape and general appearance of this tube has procured it, among the workmen, the name of the cockſpur burner. The number of burners employed in all the buildings amounts to 271 Argands and 633 cockſpurs; each of the former giving a light equal to that of four candles of the deſcription above-mentioned; and each of the latter a light equal to two and a quarter of the ſame candles; making therefore the total of the gas-light a little more than equal to that of 2500 candles. When thus regulated, the whole of the above burners require an hourly ſupply of 1250 cubic feet of the gas produced from cannel-coal; the ſuperior quality and quantity of the gas produced from that material having given it a decided preference in this ſituation over every other coal, notwithſtanding its higher price.

"The time during which the gas-light is uſed may, upon an average of the whole year, be ſtated at leaſt at two hours per day of 24 hours. In ſome mills, where there is over-work, it will be three hours; and, in the few where night-work is ſtill continued, nearly twelve hours. But, taking two hours per day as the common average throughout the year, the conſumption in Meſſrs. Philips' and Lee's mill will be $1250 \times 2 = 2500$ cubic feet of gas per day; to produce which, 700 weight of cannel-coal is required in the retort. The price of the beſt Wigan cannel (the ſort uſed) is 13½d. per cwt. (22s. 6d. per ton) delivered at the mill, or ſay about eight ſhillings for the ſeven hundred weight. Multiplying by the number of working-days in the year (313), the annual conſumption of cannel will be 110 tons, and its coſt 125l. About one-third of the above quantity, or ſay forty tons, of good common coal, value ten ſhillings per ton, is required for fuel to heat the retorts, the annual amount of which is 20l. The 110 tons of cannel-coal, when diſtilled, produce about 70 tons of good coke, which is ſold upon the ſpot at 1s. 4d. per cwt. and will therefore amount annually to the ſum of 93l. The quantity of tar produced from each ton of cannel-coal is from 11 to 12 ale-gallons, making a total annual produce of about 1250 ale-gallons, which not having been yet ſold, I cannot determine its value. The intereſt of the capital expended in the neceſſary apparatus and buildings, together with what is conſidered as an ample allowance for wear and tear, is ſtated by Mr. Lee at about 550l. per annum, in which ſome allowance is made for this apparatus being upon a ſcale adequate to the ſupply of a ſtill greater quantity of light than he has occaſion to make uſe of. He is of opinion that the coſt of attendance upon candles would be as much, if not more, than upon the gas-apparatus; ſo that, in forming the compariſon, nothing need be ſtated upon that ſcore, on either ſide.

"The economical ſtatement for one year, then, ſtands thus:

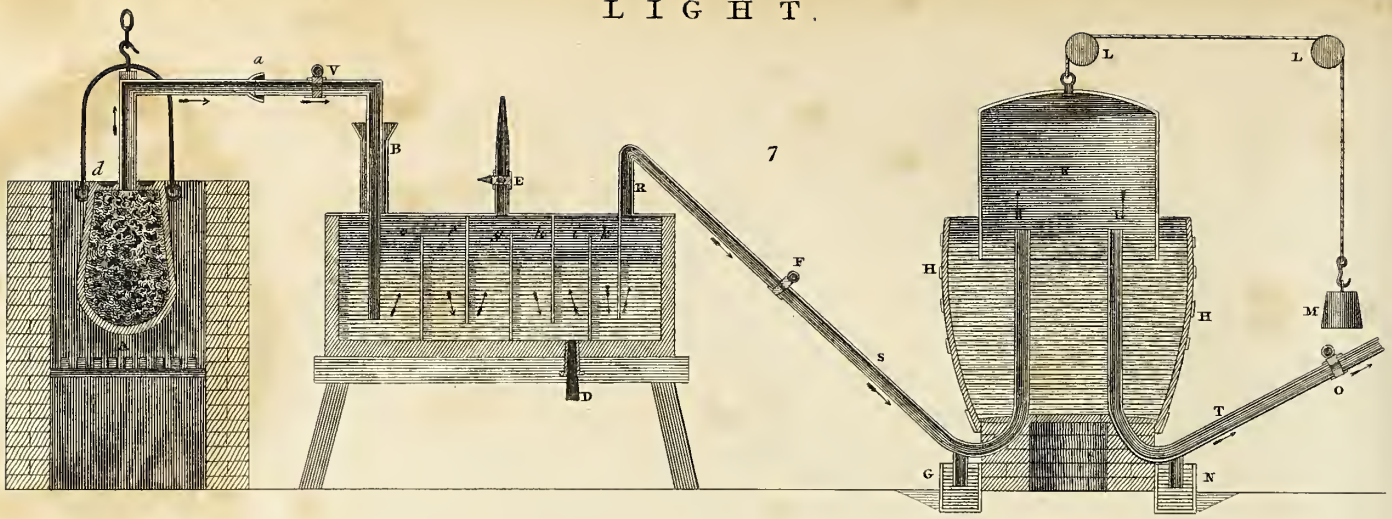
Coſt of 110 tons of cannel coal - - -	£125
Ditto of 40 tons of common ditto - - -	20
	145
Deduct the value of 70 tons of coke - - -	93
The annual expenditure in coal, after deducting the value of the coke, and without allowing any thing for the tar, is therefore - - - - -	52
And the intereſt of capital, and wear and tear of apparatus - - - - - - - -	550
Making the total expenſe of the gas-apparatus per annum, about - - - - - - -	£600

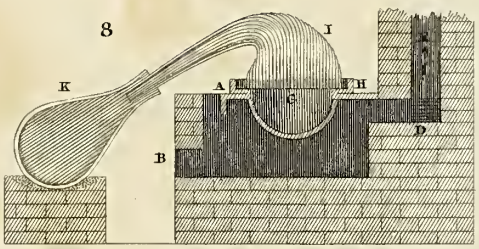
That of candles, to give the ſame light, would be about 2000l. For each candle, conſuming at the rate of 4-10ths of an ounce of tallow per hour, the 2500 candles burning, upon an average of the year, two hours per day, would, at one ſhilling per pound, the preſent price, amount to nearly the ſum of money above-mentioned. If the compariſon were made upon an average of three hours per day, the advantage would be ſtill more in favour of the gas light.

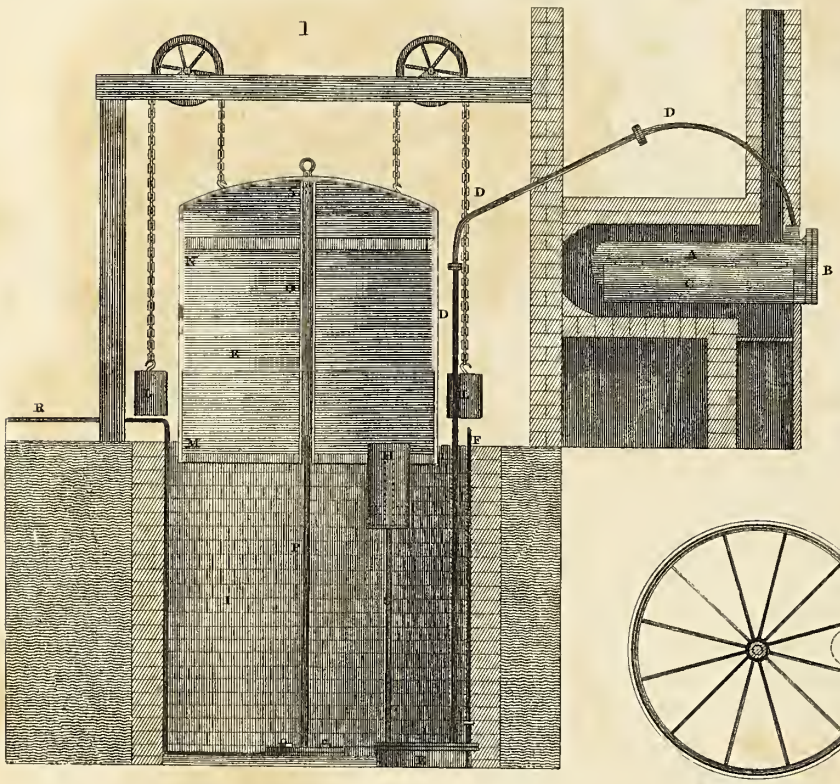
"At firſt, ſome inconvenience was experienced from the ſmell of the unconſumed, or imperfectly-purified, gas; but ſince the laſt improvements, and ſince the perſons to whoſe care it is confided have become familiar with its management, this inconvenience has been obviated, not only in the mill, but alſo in Mr. Lee's houſe, which is moſt brilliantly illuminated with it, to the excluſion of every other ſpecies of artificial light."

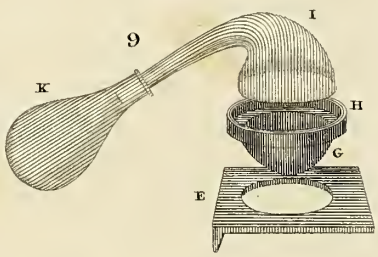
The above calculation is very favourable on the ſcore of economy; but the plan of Mr. Winſor, of which we are now to ſpeak, muſt be much more ſo, ſince he procures many valuable products from the combuſtion (or rather diſtillation) of the coal, which have been neglected by others. A company has been eſtabliſhed for the purpoſe of carrying into execution his invention, with powers to act as a corporate body. Thoſe who form this body propoſe to erect apparatuſes, in convenient ſituations, and convey the gas by pipes along the ſtreets of a town, for the purpoſe of lighting them, as well as the houſes. Experiments were made of this plan by lighting one ſide of Pall Mall, in London, which appeared to anſwer well; and the company's houſe has been conſtantly lighted and heated by gas ſince the firſt eſtabliſhment. Mr. Winſor, at the opening of the buſineſs, gave lectures and experiments on the gas, though the manner of procuring and purifying it he kept a ſecret; he exhibited the mode of conducting it through the houſe, and a number of elegant devices for chandeliers, &c. by which it was conſumed. He ſhowed alſo by experiments, that the flame of the gas was not liable to be extinguiſhed by wind or rain; that it produced no ſmoke, and was not ſo dangerous as the light of lamps or candles, as it could not produce ſparks. Theſe lectures are now repeated by his ſon every Thurſday evening, at No. 98, Pall Mall.

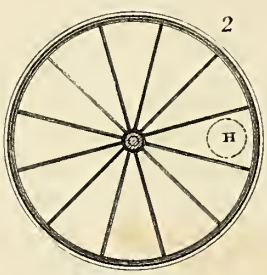
By the minutes of the evidence taken before the com-

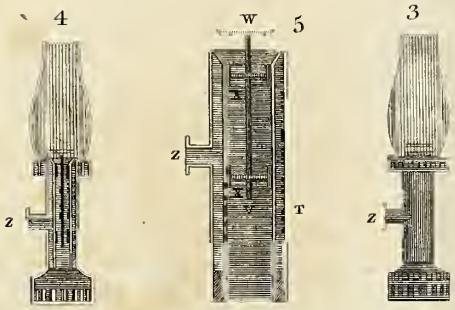


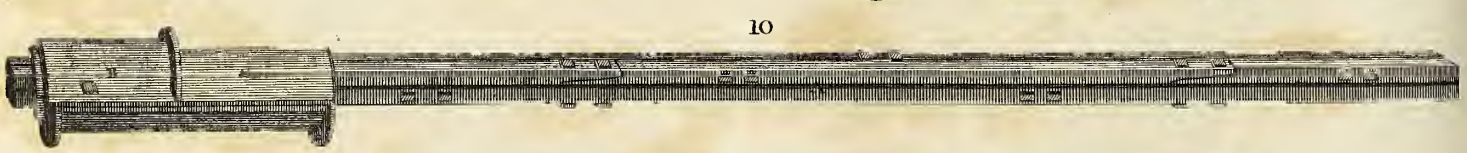












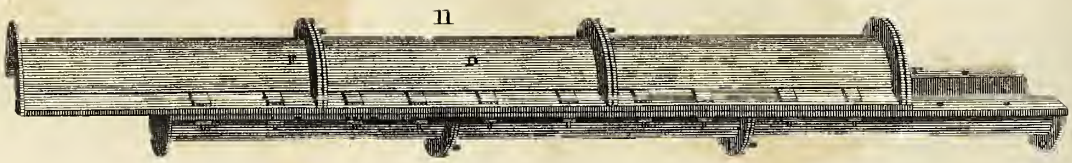


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Fig. 1 to 9. Apparatus for Gas-Lights. 10. 11. Capt. Brodies Pillars for Light houses.

London, Published as the Act directs, July 1.1819. by G. Jones.

mittee of the houſe of commons on the Gas-Light and Coke Company's Bill, in May 1809, it appeared, That from coal is produced coke, oil, tar, pitch, aſphaltum, ammoniacal liquor, and eſſential oil, beſides inflammable air for light and heat. That a certain quantity of coal may be made to increaſe to nearly double its bulk in coke. That one chaldron of coal will certainly produce one chaldron three quarters of coke; and that the coke is of a ſuperior quality to that procured in the market; as it produces no ſmoke, makes no dirt, and has no unpleaſant ſmell. That 100lbs. of coal yield from four to five pounds of tar; the tar yields a quantity of volatile oil, and of aſphaltum equal in value to that brought from the Dead Sea.

From a chaldron of coal was obtained 60lbs. of pitch, and 30lbs. of eſſential oil. The aſphaltum produced beautiful ſpecimens of japan-work, and, diſſolved in turpentine, made excellent varniſh. This ſubſtance is now procured, at a great expenſe, from the Dead Sea, where only it is found native. The 60lbs. of pitch (above ſtated) will produce 30lbs. of aſphaltum and 15lbs. of eſſential oil. The quantity of ammoniacal liquor obtained from the ſame chaldron of coals is eighteen gallons. All theſe products are procured in the proceſs of making the gas.

The ammoniacal liquor may be uſed in dying as a ſubſtitute for colouring matters, decoction of woods, madder, and other expenſive articles; it has been tried on cotton and ſilk, gives a beautiful colour, and will not waſh out. From the ammoniacal liquor is likewiſe produced carbonat of ammonia, vulgarly called "ſmelling ſalts;" ſal ammoniac, uſed by braziers and tinmen; and cauſtic ammonia, or ſimple ammonia, uſed in dying ſilk and in the manufacture of alum and argil. Sulphur is obtained alſo, but not ſo as to be profitable. Fourteen cwt. of ammoniacal liquor yields about $\frac{1}{2}$ cwt. of carbonat of ammonia; i. e. 28lbs. yield 1lb. The ſame liquor yields 1 cwt. of ſal ammoniac. The eſſential oil may be uſed in painting as a ſubſtitute for oil of turpentine; and for varniſhing.

From experiments made by Mr. Accum, an eminent practical chemiſt, it appears, that three buſhels of coals will afford as much light as 1470 candles at 12 to the pound. The colour of the light is a vivid white, very brilliant, much like the Argand lamp; the burners are formed in three points like a cock's ſpur. Each of theſe flames is equal to the intenſity of eighteen pariſh-lamps.

This light is proved to be far more wholeſome than other light, as it emits no carbon, (or ſmoke,) which all other lights do very copiouſly, as may be proved by holding a piece of white paper in this pure gas-light, and the paper will not be diſcoloured, but the contrary will take place with any other light, as the paper will be very much blackened. Where rooms are lighted with any degree of ſplendour, the obnoxious evaporation is generally the ſource of much evil; as Lavoiſier aſſerts that every pound of oil and tallow emits upwards of 14 oz. of carbon, and wax very little leſs.

As it is only an air that cauſes this light, it is impoſſible that it can emit any ſparks; nor can any thing be ſpilt; ſo that the light may be led downwards, and in any ſhape and direction that fancy can ſuggeſt. It may be uſed for fire-works; and even fountains of fire and water together may be contrived with this gas, by having two tubes inſide of each other, one conveying the water and the other conveying the gas. This is one of the curious experiments performed by Mr. Winſor, jun. during his lectures. It may alſo be applied to light-houſes, to burn without any covering, as wind and water will never affect a quantity of this united together in a conſiderable body of light. This is alſo evidently proved by Mr. Winſor at his lectures, wherein he produces a light which ſtands the teſt of a common pair of bellows, and afterwards of water poured upon it from a garden watering-pot.

The tar that is procured during the proceſs of combuſtion is ſuperior to common tar. It preſerves timber, young trees, &c. and would be of great benefit in dock-yards, as it may be paid or put on cold; it ſoaks and penetrates through the ſubſtance it is applied to; and it does not riſe or boil over, as common tar does; and is therefore leſs dangerous.

The ammoniacal liquor, beſides the uſes mentioned above, poſſeſſes other valuable properties. When applied to wounds of animals, it acts powerfully, and proves of great benefit. It is a good manure when diluted with water; if diluted even with ten times its weight of water, the reſult of the crops has been much greater than before. A very great advantage ariſes from ſoaking the ſeeds in this liquor, as the product is much ſtronger and greater.

The coke is an admirable family-fuel, and may alſo be uſed for manufacturing purpoſes. Of this coke there are two kinds, the one more carbonized than the other, therefore more fit for the forge, iron-foundery, glaſs-houſe, and every purpoſe for which a great heat is required; the other is a ſuperior family-coke, which emits hardly any ſmoke, ſoot, or obnoxious vapour.

In ſhort, it is proved, by the minutes of evidence before referred to, and by Mr. Winſor's calculations, that one chaldron of coal may be made to produce, in twenty-four hours, above 18l. ſterling clear profit; on which calculation the gas-light has been compared with oil and tallow; but, if ſubſtituted for wax, it would yield as much additional profit as the difference of price between wax and tallow.

We regret that we are not able to lay before our readers the proceſs by which Mr. Winſor obtains ſuch valuable products, nor the plans of his machincry; but neither of theſe has Mr. Winſor communicated. We ſhall, however, devote a plate to the explanation of ſuch apparatuſes (leſs ſimple and ſcientific perhaps) as we have been able to procure; this being the moſt probable means of their being farther improved, and their advantages more fully eſtabliſhed.

The apparatus which Mr. Clegg has deſcribed, in his communication to the Society of Arts, (Aug. 1808.) is deſigned for producing gas to light manufactories on a large ſcale.

In the annexed engraving, A, fig. 1, ſhows the caſt-iron retort, into which are put the coals intended to be decompoſed by means of a fire underneath it, the heat of which ſurrounds every part of it, excepting the mouth or part by which the coals are introduced. The lid or iron plate B, which covers the mouth of the retort, is ground on air-tight, and faſtened by means of a ſcrew in the centre; C is a ſhield or ſaddle of caſt iron, to preſerve the retort from being injured by the intenſity of the fire underneath it, and to cauſe it to be heated more uniformly. DDD repreſents the caſt-iron pipe which conveys all the volatile products of the coal to the refrigeratory of caſt-iron E, in which the tar, &c. extracted from the coal, is depoſited, and from whence they can be pumped out by means of the copper pipe F. G is the pipe which conveys the gas to the top of the cylindrical veſſel, or receiver, H; this receiver is air-tight at the top, and conſequently the gas diſplaces the water in the veſſel H to a level with the ſmall holes, where the gas is ſuffered to eſcape, and riſe, through the water of the well I, into the large gazometer, K. The uſe of the veſſel H is pointed out as follows, viz. If the pipe G reached all through the water, without paſſing into the veſſel H, the gas would not be rendered pure or waſhed; and, if part of the pipe did not riſe above the water, the water would have free communication with the tar, beſides expoſing the retort A to a very great preſſure, ſo as to endanger its burſting when red-hot. This veſſel or receiver H, in a large apparatus, is about eighteen inches diameter, and two feet long; the quantity of gas, therefore, which it contains, is ſufficient to fill the pipes and retort when cool, and prevents the pipe G from acting as a ſiphon, and expoſes the gas to the water without endangering the retort.

When the operation begins, the upper part of the cylindrical gazometer (or more properly gas-holder) K, made of wrought-iron plates, is ſunk down nearly to a level with the top of the circular well I, and is conſequently

quently nearly filled with water; but it rises gradually as the gas enters it, and displaces the water; the two weights LL suspended over pulleys by chains keep it steady, and prevent its turning round; otherwise the lower stays M of the gazometer would come into contact with the vessel H. There are two sets of these stays; one shown at M, and the other at N. There is also an iron pipe O made fast in the centre of the gazometer, by means of the stays, which slides over the upright pipe P, by which contrivance the gazometer is kept firm and steady when out of the well; it likewise prevents the gas from getting into the cast-iron pipe P, and the copper pipe R, any where but through small holes made in the pipe O at S, at the top of the gazometer, where the gas is perfectly transparent and fit for use. The pure gas enters the tube O at the small holes made in its top at S, and passes on through the tubes P and R to the lamps, where it is consumed and burnt. The seams of the gazometer are luted to make them air-tight, and the whole well painted inside and out, to preserve it from rust.

Fig. 2 shows an horizontal section of the lower hoop of the gazometer K at the part M, with its stays or arms, and the manner in which the iron pipe O, before described at fig. 1, slides on the tube P, passes through the ring in the centre of the hoop; an horizontal section of the receiver H appears therein.

Fig. 5 shows a section of one of the gas-lamps; the space between the outer tube T and the inner tube V, is to be filled with gas supplied by the pipe R, shown in fig. 1, where a stop-cock is inserted for adjusting the flame, which gas passes through a number of small holes made in the outer edge of a circular plate, shown at fig. 6, which unites the tubes T and V at their tops. V is the inner tube which conveys the atmospheric air into the centre of the flame; the upper part of this tube is made conical, or widening outwards, to join a circular plate with holes in it, a horizontal view of which is shown at fig. 6. W is a button, which can be placed at a small distance above the mouth of the lamp; and its use is to convey, in an expanded manner, all the air which rises through this tube to the inner surface of the flame, which assists the combustion very much; this button may be set at any convenient distance above the tubes of the lamp, as it slides in the cross bars XX, by which it is supported in the inner tube. A current of air also passes between the glass tube or chimney and the outer tube T, through holes made in the bottom of the glass-holder, as in Argand's lamps; this surrounds the flame, and completes its combustion, as explained by the view fig. 3, and section, fig. 4, which have a glass upon each. ZZZZ, figs. 3, 4, 5, and 6, show the tube through which the lamp is supplied with gas from the pipe R, fig. 1. Each lamp consumes six cubical feet of gas per hour.

Mr. Clegg's communication has the merit of being the first complete description of an apparatus of English construction, for producing coal-gas, which has yet been made public, from which one might be made without leaving the formation of any part to conjecture, with the exception of the mode in which the screw is to be applied for fastening the lid of the retort: what the screw turns in through the *centre* of the lid at B, fig. 1, we cannot conjecture; we should rather think it must be fastened by a screw, or two screws, at the side. Neither are the dimensions of the apparatus mentioned in the description; but, assuming the length of the inverted vessel as a standard, which is the only part whose capacity is noted, the proportions of the different parts, as taken from the plate, will be thus: The gas-holder six feet in diameter, and 6½ feet high; the retort about five feet long, and 1½ in diameter; the first condenser two feet in diameter, the second immersed vessel 1½ in diameter; and the inverted vessel, or gas-washer, two feet long and about one foot broad; the pulley, over which the chains work, which raise the gas-holder, 1½ feet in diameter; the well 7 feet deep; the flue of the chimney 9 inches across, and the space between the retort and the brick-work 6 inches, except over the fire-place, which is 18 inches long, and 10 deep. A gazometer, containing seven hundred cubical feet of gas, weighs about 20 cwt. and costs about 2l. 10s. the cwt. The whole of an apparatus complete, capable of supporting forty lamps for four hours, each lamp affording light equal to ten candles of eight in the pound, will cost about two hundred and fifty pounds.

The gazometer or gas-holder alone in this apparatus seems objectionable, in being made needlessly strong, as it is stated to be formed of *wrought-iron plates*, and is besides strengthened by two very powerful iron frames inside, when it is not liable to any great pressure internally or externally, or to any friction which would require all this strength. For a common apparatus on a small scale a cask would probably do very well for this part, as the water with which it would be always in contact would keep it staunch. The silver medal of the Society for Arts, &c. was presented to Mr. Clegg for this communication.

The next apparatus we shall notice is by Dr. Stancliffe. A vessel of cast-iron, forming the retort, is set in brick-work in any proper furnace; it has a rim cast in the same piece, inclosing the top of it, so as to make a deep groove all round in the top of the vessel. In this groove the head of the vessel is received; and, to make the fitting air-tight, a quantity of fusible alloy is placed in the groove: this melts by the heat of fire, and forms a fluid luting, which prevents the escape of the gas. For this ingenious invention of luting on the head, Dr. S. has taken out a patent. There is a tube leading from the head to the refrigeratory; the joining of this tube with this vessel is formed by a joint, on a similar principle to the joining of the head with the retort; a tube passes through the lid of the vessel, and another is fixed concentric to and surrounding the former at a small distance. The space between these is filled with water; and the tube, which connects with the head, is immersed in the water, which forms the joint round the pipe, and by this means the tube and the head of the retort can be removed together, to take out the coke, and introduce fresh coals. The refrigeratory is made in two divisions, one above the other; the tube goes down nearly to the bottom of the lowest division, and the gas bubbles up from the end of it through the water with which the lower partition is partly filled: it then passes out at a pipe to the burners. These must not be of such a number as to consume the gas so fast as the retort produces it; by this means it will be under a considerable pressure in the vessel, which is found conducive to the separation of the tar, &c.

Fig. 7 is an apparatus by Mr. B. Cooke of Birmingham, communicated by him to the Society of Arts, and rewarded by them, in May 1810, with a silver medal. A is a common fire-place or stove, built with brick, having cast-iron bars to put the fire in at, and a flue that goes into a chimney; above A is the cast-iron pot, (which holds from twenty-five to one hundred pounds of coal, according to the size of the premises to be lighted,) which hangs by the bewels or ears on a hook, suspended by a chain in this stove or furnace, about three inches above the bars of the grate, and three inches distant from the sides of the stove; the fire then flames all round this pot, and, as it does not rest on the burning fuel, it is the flame only that heats it, so that it does not scale, but will last for years. The smoke, &c. is carried off into a chimney. The cover D of the pot is made rather conical, to fit into the top of the pot close, and from the top of the cover the elbow-pipe proceeds as far as the mark *a*. The other end of the pipe with the elbow entering the water-joint is rivetted to it afterwards; when the lid or cover of the pot is put on, the bewels or ears come over the elbow of the pipe that is on the lid, and a wedge is put between them and this elbow, to keep down the cover air-tight; and a little clay or loam may be luted in the joint, if any gas should escape round the cover of the pot. The other elbow,

elbow, B, goes into a water-joint, formed of a tube affixed to the cover of the purifier C; and another tube, which paſſes through the lid of the purifier. The elbow-pipe then goes over the inner tube; and, when put on, the jointing is made good by pouring water into the ſpace between the tubes, which renders it air-tight. The gas, as the arrows ſhow, paſſes down into the purifier C, which is rather more than half full of water; the uſe of this water-joint is for the convenience of removing the lid *d*, to which this pipe is attached. The purifier C is a wooden trough, with a ſheet-iron top, to which the tubes are ſoldered; and it is faſtened to the trough to keep all ſecure and air-tight. The ſheets of iron, *e*, *f*, *g*, *h*, *i*, *k*, are alternately ſoldered to the iron top, and faſtened to the wooden bottom. Now, when the trough is half filled with water, the gas paſſes into it at B; and, as it can only find its way out again at R, it muſt paſs through the water. The inner pipe B reaches under the ſurface of the water in the trough; now, when the gas is forced into the water, it would riſe to the top of the purifier, and go along in a body to the end, and out at the pipe R, if the ſheets of iron, *e*, *f*, *g*, *h*, *i*, and *k*, which ſtand acroſs the trough with openings in them, alternately at top and bottom, did not ſtop it, force it to deſcend into the water, and hinder it from going any way but through theſe apertures, purifying it all the time it is paſſing through the whole body of water, until it is properly waſhed; it then eſcapes through the pipe R at the end of the trough C; then paſſes down the pipe S, and is carried up into the reſervoir, or gazometer, K. In the bottom of the purifier is an aperture, cloſed by a plug at D, to let off the ammoniacal water and tar as it is depoſited, and the pipe, with the cock E at the top of the purifier, is to burn away the ſpare gas when not to be uſed.

There is a ſtop-cock placed in the main pipe at F, that, when the reſervoir is full, and gas is making, and cannot be uſed, the cock may be turned, and prevent any gas from paſſing from the reſervoir; and, by opening the cock E on the top of the purifier, and firing it, all the gas which is made more than is wanted for uſe may be burnt away. If this were not done, the gas would continue to find its way into the reſervoir K, which would overflow, and produce a diſagreeable ſmell; which this ſimple way of burning it away as faſt as it is made, when not wanted, prevents. It may in ſome meaſure happen, that, although the gas has paſſed through the purifier C, yet that a ſmall portion of tar will paſs along with it, and would either clog the pipe S, or accumulate in the reſervoir. To avoid this, there is placed at the bottom of the pipe S at G, before it riſes into the reſervoir, a jar into which a pipe, made as ſhown in the engraving, conducts the tar; this collects all that paſſes through the purifier; it is filled with water, over which the gas paſſes up into the reſervoir; but the tar drains down this lead pipe, and depoſits itſelf in the jar of water. The longer this pipe S is, the better, ſince it ſerves as a refrigeratory. H is a plain caſk, made to any proper ſize, and filled with water, with a cock to draw off the water when it becomes foul. The upper veſſel K is made of ſheet-iron, rivetted together in the manner engine-boilers are made. If it be only from five hundred to one thouſand gallons in ſize, it will require only two croſs iron bars at top, and four ribs down the ſides to keep it in firm, with a ſtrong ring at top; and, as there is no ſtreſs on this veſſel, it will aſcend and deſcend eaſily without any other ſupport or framing, the plain ſheet-iron ſides being rivetted to the four ribs, and it is quite open at the bottom. A ſtrong rope runs over the pulleys LL, with a weight M to balance the veſſel K, and aſſiſt it in riſing and falling. The pipe I is that through which the gas paſſes from the reſervoir, or gazometer, and, riſing through the pipe T, is conveyed to all parts to be lighted. There is alſo another drain-pipe at N; for, after all the waſhing, &c. a very ſmall portion of tar and moiſture may riſe into the pipes, and perhaps in time clog them; but, by laying all the pipes in the firſt, ſecond, and third, ſtories, on a ſmall deſcent, if any tar or moiſture ſhould riſe, it will drain down all the pipes from top to bottom, and be depoſited in the earthen jar at N; and by this means the pipes will not clog up in half a century. Theſe jars muſt be ſometimes removed and emptied, freſh water put in, as alſo the water in the veſſel H muſt be changed, to keep it clean and ſweet; and the water in the purifier C ſhould be changed every two or three days: by theſe means the gas will be deprived of all its ſmell, at leaſt as far as waſhing will effect it, and the apparatus will be clean.

The ſtop-cock at O is for the uſe of a maſter, if he wiſhes to lock up the gas in the reſervoir, to prevent his workmen, &c. waſting it in his abſence; as alſo, if any pipe ſhould leak, or a cock be out of order, in any part of the premiſes, by turning this cock all the gas is kept in the reſervoir while the pipe is repaired, or any other alteration made; it alſo extinguiſhes all the lights when turned, if any are left burning by careleſs workmen; nor can they be lighted until it is opened again.

The whole of this apparatus is ſimple, and not liable to be put out of order in ſuch a way but that any perſon may put it to rights again. All the art required to make the gas, is to take off the cover of the pot, and, without removing the pot, to take out the coke, and fill it with freſh coal, wedge it down by putting an iron wedge between the bewels or ears and the elbow of the veſſel, and, if required, plaſter a little clay or loam round the cover, to keep it air-tight; a fire is then made under it, and the whole is done. The boy or man who does it muſt now and then look at the fire, and keep it up, until the pot is hot, and the gas is made. In works where lights are wanted almoſt always, I would recommend two fire-places, and two pots, ſo that, when one pot is burned out, the other pot may be ready to act; for this purpoſe the purifier muſt be provided with two of the water-joints B, one communicating with each pot, and the elbow-pipe of each pot muſt have a ſtop-cock, as V; then, when one pot is burning, the cock in the other pipe muſt be ſtopped, that the gas may not find its way out of the purifier; and, when all the gas is extracted from that pot, the cock C, leading from it, muſt be ſtopped, and the pot left to cool; while a fire is put under the other pot, its cock is opened, and a ſupply of gas from it is paſſed into the reſervoir; by theſe means one of the pots is conſtantly ſupplying the reſervoir with gas, and the lights are always kept burning. One purifier is all that is neceſſary; the cock V muſt be ſhut when either of the covers are taken up to fill the pot again with coal. When the elbow-pipe is lifted out of the water-joint, as the cover is attached to it, a plug muſt be provided to fit into the water-joint pipe the moment the elbow is removed from it, or the gas will ruſh out of the pipe at the water-joint; but a better way would be, to lengthen the pipe of the water-joints B, and place a large cock under each of them, almoſt cloſe to the top of the purifier. When one pot is burnt out, by turning the cock it keeps all the gas in the purifier while the cover is removed; no plug is neceſſary in this method. When people are very particular (eſpecially when houſes or counting-houſes are to be lighted), and wiſh all ſmell to be deſtroyed, if they are not ſatisfied with waſhing it, and ſtill think there is a little ſmell left (and very little indeed, if any, will be left) after the waſhing, a ſmall trough may be added, made in the ſame way as the purifier, with ſheets of iron acroſs to force the gas through the pipe R communicating with it. This trough may be filled with water, with a few lumps of lime put into it, and this water and lime changed often: on the gas being forced through this lime-water, if there was any remaining ſmell in it, this would completely take it away; and, as has been before obſerved, by changing all the waters now and then, and keeping this ſmall trough conſtantly ſupplied with clean water and lime, the gas after paſſing it will aſcend the pipes to the lights pure.

Mr. Cook, by means of his apparatus, has produced

ſeveral of the articles we noticed in our account of Mr. Winſor's proceſs; as pitch, tar, aſphaltum, and the eſſential oil, or *ſpirit* as he calls it, becauſe it may be uſed inſtead of that kind of ſpirit known by the name of *tar-ſpirit* in painting and japanning. Of theſe products he ſent ſpecimens to the Society of Arts, which are preſerved in their repoſitory; and in his letter to the ſecretary he proceeds thus: "I hope to lay before you, in a ſhort time, an account of the eſtabliſhment of a work that will be of ſuch magnitude as will ſupply this part of the country with the oil or ſpirit in ſufficient quantity to ſuperſede the uſe of turpentine, &c. in japanning; and I do hope that in time works of the ſame deſcription will be eſtabliſhed through all Staffordſhire, whoſe products will ſupply the place of a great portion of the ſpirit uſed in the kingdom, while the pitch will be of ſufficient quantity to form a great part of that article now uſed in the dock-yards. All I want is ſupport from the great coal companies and maſters, to erect ſufficient apparatus at the different works to preſerve the tar at all the coke-furnaces, and proper means to ſeparate the ſpirit from the tar. It would be a great ſaving to the nation, as in every cwt. of coal coked, there is loſt by the preſent mode about four pound of tar, and the cokes are not half ſo good as if they were coked in cloſe veſſels, to the excluſion of the atmoſpheric air. I need not deſcribe by drawings the manner of extracting the tar from pit-coal in cloſe veſſels, as that method is ſo generally known; it muſt be clear to every one, that it is procured by diſtilling the coal.

"I have, as follows, deſcribed the method I uſe in extracting the ſpirit from the tar, the proceſs of which is ſo ſimple that every one muſt underſtand it. Fig. 8 is a ſection of the furnaces, and one of the retorts, almoſt any number of which may work in a line; the ſame flue will do for all; only taking care, if any are not at work, to ſtop up the draught-hole which communicates with the flue. Theſe furnaces are built without bars, grates, or doors. A is the place where the fuel is put in to heat the retort G; the fire lies under it, and the ſmoke is carried off into the flue F. B is the aperture where the aſhes are raked out. G is a ſection of the iron baſon, or lower part of the retort; the dark-ſhaded ſquare part ſhows the ſpace the fire occupies, and the black ſquare D the flue as it runs along the back of all the line of furnaces, and enters the chimney R, as the arrows ſhow. I, Fig. 8 and 9, ſhows the upper part of the iron, earthen, or glaſs, retort, fitted on the caſt-iron baſon G. K, the receiver. By this mode of ſetting the retorts, all the expenſe of bars, doors, frames, &c. is ſaved, and a briſker draught of air is obtained, which may be ſlackened at pleaſure by covering up in part, or wholly, the fire-place A with a brick. E, fig. 9, is a ſquare iron plate with a circular hole in the centre, built on the top of the furnace. The caſt-iron baſon of the retort G is made to the ſize of the hole in the plate; the moſt convenient ſize of the baſon of the retort, I find, is about five or ſix gallons, in the ſhape of a deep pot, with a flanch or rim H round the edge of it; this pot or baſon of the retort is put into the iron plate E, and the flanch of the retort then reſts on the plate E. I is the upper part of the retort without a bottom, made to reſt and fit on the flanch of the caſt-iron baſon G. K is the receiver, larger in the mouth than the noſe of the retort. To begin the work, I fill, nearly, the iron baſon of the retort G with coal-tar; I then put on the upper part of the retort I, and make it air-tight with a little ſand thrown round it at the flanch H; the receiver K is put in its place, and a ſlow fire is put in at A, under the retort. The tar ſoon begins to boil ſlowly, or rather ſimmer; now, as ſoon as that begins, there riſes from the tar a thick whitiſh vapour, which fills the glaſs retort; part becomes condenſed, and falls in drops from the ſides of the retort into the tar again, while the purer ſpirit riſes into the neck, is condenſed, and keeps dripping down the neck into the receiver. This is the *ſpirit of the tar*; and with this ſpirit that firſt ariſes from the tar was the waiter japanned which I ſent you. The reaſon I choſe to have the receiver wider at the mouth conſiderably than the noſe of the retort is, that there is a ſtrong and very-volatile oily ammonia, that does not ſoon condenſe, but gets out of the receiver into the air the inſtant it leaves the retort; and, though but in a very ſmall quantity, (ſo ſmall that it is hardly poſſible to catch it,) yet will it impregnate the air, for a great diſtance round, with its very penetrating ſmell, while the ſpirit keeps dropping into the receiver pure and ſeparate from the ammonia. The ſpirit is very volatile, quite as much as, if not more than, the ſpirit of turpentine, and ſoon evaporates if expoſed to the air, which is a proof of its drying nature; indeed, when uſed as a ſubſtitute for turpentine, it dries in the ſtove quite as ſoon or ſooner, and takes equally as beautiful a poliſh. I ſent you three ſpecimens. No. 1. is what came off the tar firſt. No. 2. is the ſame diſtilled a ſecond time; and the third ſpecimen is the ſecond re-diſtilled again in a glaſs retort; it there leaves a little pitchy reſiduum, and comes over clear, as the ſample. Very little of the ſpirit is loſt in paſſing through theſe different ſtages, if care is taken that the fire is ſlow, and the proceſs not hurried. When the ſpirit is perfectly extracted from the tar, there remains in the baſon of the retort that beautiful pitch, or aſphaltum, which, when mixed with the ſpirit, forms an ingredient for making the black varniſh uſed in japanning. If it is wiſhed to uſe it as pitch, leſs ſpirit muſt not be extracted from it. I find that ſix gallons of tar will produce, if care is taken, about two gallons or two gallons and a half of ſpirit. A great number of retorts may be kept working by a ſingle man; if we ſay only one hundred, and only worked down in a day, they will produce 200 to 250 gallons of ſpirit; ſo that, by increaſing the number, any quantity may be obtained. When the ſpirit is uſed in the place of turpentine, the varniſh-maker uſes it in the ſame way, and in the ſame quantity, as there appears no manner of difference in the uſe of it from ſpirit of turpentine in the making of varniſh. When the aſphaltum is uſed, it ſupplies the place of real aſphaltum, and in about the ſame quantity."

To LIGHT, *v. a.* [from *light, ſ.*] To kindle; to inflame; to ſet on fire; to make flame.—Swinging coals about in the wire thoroughly *lighted* them. *Boyle.*

Be witneſs, gods, and ſtrike Jocaſta dead,
If an immodeſt thought, or low deſire,
Inflam'd my breaſt ſince firſt our loves were *lighted. Dryd.*

To give light to; to guide by light:

Ah hopeleſs, laſting flames! like thoſe that burn
To *light* the dead, and warm th' unfruitful urn. *Pope.*

To illuminate; to fill with light:

The ſun was ſet, and veſper, to ſupply
His abſent beams, had *lighted* up the ſky. *Dryden.*

Up is emphatically joined to *light.*—No ſun was *lighted up* the world to view. *Dryden's Ovid.*—[From the adjective.]

To lighten; to eaſe of a burthen:

Land ſome of our paſſengers,
And *light* this weary veſſel of her load. *Fairy Queen.*

To LIGHT, *v. n.* [*licht*, chance, Dut. preter. *lighted*, improperly *light* or *lit.*] To happen to find; to fall upon by chance: it has *on* or *upon* before the thing found.—A weaker man may ſometimes *light on* notions which have eſcaped a wiſer. *Watts on the Mind.*—Truth, *light upon* this way, is of no more avail to us than error; for what is ſo taken up by us, may be falſe as well as true; and he has not done his duty, who has thus ſtumbled upon truth in his way to preferment. *Locke.*—Whoſoever firſt *lit on* a parcel of that ſubſtance we call gold, could not rationally take the bulk and figure to depend on its real eſſence. *Locke.*

Haply your eye ſhall *light upon* ſome toy
You have deſire to purchaſe. *Shakeſpeare.*

To fall in any particular direction: with *on*:

The wounded ſteed curvets; and, rais'd upright,
Lights on his feet before; his hoofs behind
Spring up in air aloft, and laſh the wind. *Dryden.*

To fall; to ſtrike on: with *on* or *upon*.—A curſe *lights upon* him preſently after: his great army is utterly ruined, he himſelf ſlain in it, and his head and right hand cut off, and hung up before Jeruſalem. *South.*

On me, me only, as the ſource and ſpring
Of all corruption, all the blame *lights* due. *Milton.*

[Alighꝛan, Sax.] To deſcend from a horſe or carriage.—When Naaman ſaw him running after him, he *lighted* down from the chariot to meet him. 2 *Kings*, v. 21.—Rebekah lifted up her eyes, and, when ſhe ſaw Iſaac, ſhe *lighted* off the camel. *Gen.* xxiv. 64.

I ſaw 'em ſalute on horſeback,
Beheld them when they *lighted*, how they clung
In their embracement. *Shakeſpeare.*

The god laid down his feeble rays,
Then *lighted* from his glittering coach. *Swift.*

To ſettle; to reſt; to ſtoop from flight; to alight:

Then as a bee which among weeds doth fall,
Which ſeem ſweet flow'rs, with luſtre freſh and gay,
She *lights* on that, and this, and taſteth all,
But, pleas'd with none, doth riſe, and ſoar away. *Davies.*

LIGHT, *adj.* [leohꝛ, Sax.] Not tending to the centre with great force; not heavy.—Theſe weights did not exert their natural gravity till they were laid in the golden balance, inſomuch that I could not gueſs which was *light* or heavy whilſt I held them in my hand. *Addiſon.*

Hot and cold were in one body fixt,
And ſoft with hard, and *light* with heavy, mixt. *Dryden.*

Not burdenſome; eaſy to be worn, carried, or lifted.—A king that would not feel his crown too heavy, muſt wear it every day; but, if he think it too *light*, he knoweth not of what metal it is made. *Bacon's Eſſays.*

Horſe, oxen, plough, tumbrel, cart, waggon, and wain,
The *lighter* and ſtronger, the greater thy gaine. *Tuſſer.*

Not afflictive; eaſy to be endured.—Every *light* and common thing incident into any part of man's life. *Hooker.*

Light ſuff'rings give us leiſure to complain:
We groan, but cannot ſpeak, in greater pain. *Dryden.*

Eaſy to be performed; not difficult:

Well pleas'd were all his friends, the taſk was *light*,
The father, mother, daughter, they invite. *Dryden.*

Eaſy to be acted on by any power:

Apples of a ripe flavour, freſh and fair,
Mellow'd by winter from their cruder juice,
Light of digeſtion now, and fit for uſe. *Dryden.*

Not heavily armed.—Paulus Bachitius, with a company of *light* horſemen, lay cloſe in ambuſh, in a convenient place for that purpoſe. *Knolles.*—Active; nimble.—Aſahel was as *light* of foot as a wild roe. 2 *Sam.* ii. 18.

Light bounding from the earth at once they riſe,
Their feet half viewleſs quiver in the ſkies. *Pope.*

Unencumbered; unembarraſſed; clear of impediments.—Unmarried men are beſt maſters, but not beſt ſubjects; for they are *light* to run away. *Bacon.*—Slight; not great.—A *light* error in the manner of making the following trials was enough to render ſome of them unſucceſsful. *Boyle.*—Not denſe; not groſs.—In the wilderneſs there is no bread, nor water, and our ſoul loatheth this *light* bread. *Numbers*, xxi. 5.

Light fumes are merry, groſſer fumes are ſad
Both are the reaſonable ſoul run mad. *Dryden.*

Eaſy to admit any influence; unſteady; unſettled; looſe.—There is no greater argument of a *light* and inconſiderate perſon, than profanely to ſcoff at religion. *Tillotſon.*

Theſe *light* vain perſons ſtill are drunk and mad
With ſurfeitings, and pleaſures of their youth. *Davies.*

Gay; airy; wanting dignity or ſolidity; trifling.—Seneca cannot be too heavy, nor Plautus too *light*. *Shakeſpeare.*

Fictions *light* I mix with truth divine,
And fill theſe lines with other praiſe than thine. *Fairfax.*

Not chaſte; not regular in conduct:

Let me not be *light*;
For a *light* wife doth make a heavy huſband. *Shakeſpeare.*

[From *light*, *ſ.*] Bright; clear.—As ſoon as the morning was *light*, the men were ſent away. *Gen.* xliv. 3.—Not dark; tending to whiteneſs.—In painting, the light and a white colour are but one and the ſame thing: no colour more reſembles the air than white, and by conſequence no colour which is *lighter*. *Dryden.*

LIGHT, *adv.* [for *lightly*, by colloquial corruption.] Lightly; cheaply.—Shall we ſet *light* by that cuſtom of reading, from whence ſo precious a benefit hath grown? *Hooker.*

LIGHT-BEL'LIED, *adj.* A horſe is thus called that commonly has flat, narrow, contracted, ſides, which make the flank turn up like that of a grey-hound.

LIGHT-FIN'GERED, *adj.* Nimble at conveyance; thieviſh.

LI'GHT-FOOT, *adj.* Nimble in running or dancing; active:

Him ſo far had born his *light-foot* ſteed,
Pricked with wrath and fiery fierce diſdain,
That him to follow was but fruitleſs pain. *Fairy Queen.*

LI'GHT-FOOTED, *adj.* Light of foot, nimble in running, active.

LI'GHT-HANDED, *adj.* Diſhoneſt.

LIGHT-HEAD'ED, *adj.* Unſteady; looſe; thoughtleſs; weak.—The Engliſh Liturgy, how piouſly and wiſely ſoever framed, had found great oppoſition; the ceremonies had wrought only upon *light-headed* weak men, yet learned men excepted againſt ſome particulars. *Clarendon.*—Delirious; diſordered in the mind by temporary diſeaſe.—When Belvidera talks of lutes, laurels, ſeas of milk, and ſhips of amber, ſhe is not mad, but *light-headed*. *Walpole.*

LIGHT-HEAD'EDNESS, *ſ.* Deliriouſneſs; diſorder of the mind.

LIGHT-HEART'ED, *adj.* Gay; merry; airy; cheerful.

LIGHT HOR'SE, *ſ.* An appellation given by us to all cavalry that is compoſed of ſmall and lightly-accoutred men mounted on light ſwift horſes. Ours were firſt raiſed in 1757. They were ſo denominated in compariſon with the royal guards, who were heavily armed at all points. They have lately ſucceeded the life-guards in the honour of attending the royal perſon.

LI'GHT HOUSE, *ſ.* An high building, at the top of which lights are hung to guide ſhips at ſea.—He charged himſelf with the riſque of ſuch veſſels as carried corn in winter; and built a pharos, or *light-houſe*. *Arbuthnot.*

The light-houſe is generally a high tower, having at the top an apartment called the lantern, with windows on all ſides, to exhibit the light made within it by the flame of an open fire, or by lamps or candles. It is frequently of ſervice to navigation to erect light-houſes upon inſulated rocks riſing from the ſea, to warn ſhips of their approach to ſuch rocks. Of this kind are the Eddyſtone-rocks off Plymouth, and the Bell-rock at the mouth of the Forth in Scotland. In theſe ſituations, the heavy ſwell of the ſea, when agitated by a ſtorm, ſtrikes with ſuch force againſt the building, as to require every precaution to ſecure it from being overthrown by the continued action of ſo powerful an enemy. The Eddyſtone-rocks being the moſt celebrated, as well from their peculiarly expoſed ſituation,

ſituation, as from the great ingenuity diſplayed in the conſtruction of the light-houſes erected at different periods upon them, the hiſtory of the different erections has been given under the article EDDYSTONE, vol. vi. p. 242.

There are two modes of furniſhing the *light* from which theſe buildings take their name; either by open coal-fires, or by lamps with reflectors. The latter mode, which is now moſt common, had been long uſed in France, but in England is of recent date. The idea was ſuggeſted by the following trivial occurrence: At a meeting of a ſociety of mathematicians at Liverpool, one of the members propoſed to lay a wager that he would read a paragraph of a newſpaper, at ten yards diſtance, with the light of a farthing candle. The wager was laid; and the propoſer covered the inſide of a wooden diſh with pieces of looking-glaſs, faſtened in with glazier's putty, placed this reflector behind his candle, and won the wager. One of the company viewed this experiment with a philoſophic eye. This was Capt. Hutchinſon, the dock-maſter. And hence the origin of thoſe reflecting light-houſes at Liverpool, which were erected in the year 1763. Mr. Hutchinſon ſays, "We have made and had in uſe at Liverpool reflectors of one, two, and three, feet focus, and 3, 5½, 7½, and 12, feet diameter; the three ſmall ones made of tin ſoldered together, and the largeſt of wood covered with looking-glaſs. The two large ones, called the ſea-lights, lead through the channel from the ſea, till the two Hoylake-lights are brought in a line that leads into a very good road-ſtead to lie till it is a proper time to proceed to Liverpool."

The next lamp upon this principle that we hear of was furniſhed to a light-houſe at Hunſtanton, in Norfolk, by Mr. Ezekiel Walker, of Lynn; who ſo much improved the conſtruction of the mirrors, that he is called the *inventor* of reflectors for light-houſes in Great Britain.

In the year 1787, an act of parliament paſſed for erecting four light-houſes in the northern parts of Great Britain: one on Kinnard's Head, in the county of Aberdeen; one on the iſland of North Ranaldſhaw, in the Orkneys; one on the Point of Scalpa, in the iſland of Herries; and a fourth on the Mull of Cantyre. Theſe were erected and lighted under the directions of Mr. Walker, by Mr. Thomas Smith, tinplate-worker of Edinburgh, (who has been erroneouſly called the *inventor*,) and were found to anſwer the purpoſe ſo well, and at ſo ſmall an annual expenſe, that the truſtees obtained another act in the year 1788, authorizing them to erect a fifth light-houſe on the iſland of Arran, or upon the little iſland of Plada, near the ſame, which was to be done without any increaſe of the duties authorized to be levied by the former act.

In theſe light-houſes, the reflector is compoſed of a number of ſquare plane glaſs mirrors, ſimilar to thoſe with which Archimedes is ſaid to have ſet fire to the Roman fleet at the ſiege of Syracuſe; (ſee BURNING-GLASS, vol. iii. p. 534.) Each of theſe mirrors is about an inch ſquare; and they are all diſpoſed cloſe to each other in the concave of a parabolic ſegment, formed of ſtucco or any other proper bed. Stucco has been found to anſwer the purpoſe beſt; and is accordingly employed in all the reflectors of the light-houſes erected by Mr. Walker. His parabolic moulds are from three to five or ſix feet in diameter; and in the centre or apex of each is placed a long ſhallow lamp of tin-plate, filled with whale-oil. In each lamp are ſix cotton wicks, almoſt contiguous to each other, which are ſo diſpoſed as to burn without trimming for about ſix hours. The light of theſe is reflected from each mirror ſpread over the concave ſurface, and is thus multiplied, as it were, by the number of mirrors. The ſtucco moulding is covered on the back with tin-plate, from which a tube, immediately over the lamp, proceeds to the roof of the light-room, and ſerves as a funnel, through which the ſmoke eſcapes without ſullying the faces of the mirrors. The light-room is a cupola, or lantern, of from eight to twelve ſides, compoſed entirely of glaſs, fixed in caſt-iron frames or ſaſhes, and roofed with copper. On circular benches paſſing round the inſide of this lantern, at about eighteen inches from the glaſs frames, are placed the reflectors with their lamps, ſo as that the concave ſurfaces of two or three of the reflectors front every point of the compaſs, and throw a blaze of light in all directions. In the roof immediately over the centre of the room is a hole, through which paſs all the funnels already mentioned, and which ſerves likewiſe to admit freſh air to the lamps. This light-room is firmly fixed on the top of a round tower, ſo as to be immovable by the weather; and the number of the reflectors, and the height of the tower, are leſs or greater according as it is the intention that the light ſhould be ſeen at a leſs or a greater diſtance.

The Scilly light-houſe is alſo a light of mirrors; but they are of copper, plated with ſilver, and poliſhed in the curve of the parabola, by which their light neither ſpreads nor converges, but darts a cylinder of light to a vaſt diſtance. This light conſiſts of ſix round mirrors, placed round a ſeventh, each twenty-two inches in diameter; every mirror having an Argand's lamp in its focus, ſupplied with oil from behind. The frame in which theſe mirrors are fixed ſtands perpendicularly to the horizon, on a ſhaft united with a machine below, that turns the whole round every two minutes. Hence, a cylinder of light five feet and a half diameter ſweeps the whole horizon. Upon this conſtruction Mr. Walker obſerves; "It may be of uſe to thoſe who may hereafter copy the light-houſe at Scilly to know, that the figure in which thoſe mirrors are fixed is as good as any other, but not better. Had they been fixed in a ſquare, a parallelogram, or a triangle, their effect would have been juſt the ſame, for they would have appeared as one ſingle light at a very ſhort diſtance; nay, had they been placed in a right line, their effect would have been ſtill the ſame at three miles diſtance. For it is known from experiment, that two reflectors, made of tin, placed more than ten feet aſunder, appeared at three miles diſtance as one ſingle light; and required to be ſeparated from each other more than nineteen feet to appear two diſtinct lights, when viewed at the ſame diſtance as before. The uſe of ſilver for a reflecting ſurface is certainly an imperfection of no ſmall conſequence. Silver is ſo much inferior to looking-glaſs for this purpoſe, that, for philoſophers to prefer the former to the latter, appears to me very unaccountable. It is my humble opinion, that there is not a lady in the united kingdom who would prefer a ſilver diſh to a looking-glaſs, when ſhe is inclined to ſee a perfect image of her face."

A man judging from mere theory would be very apt to condemn light-houſes of this kind; becauſe the firmeſt building ſhakes in a violent ſtorm, and becauſe ſuch ſhaking, he might think, would ſometimes throw the whole rays of light into the air, and thus miſlead the bewildered ſeaman. This opinion, we know, was actually entertained of them by one of the profoundeſt philoſophers and moſt ſcientific mechanicians of the age. Experience, however, has convinced him, as well as the public at large, that ſuch apprehenſions are groundleſs, and that light-houſes with lamps and reflectors are, in every point of view, preferable to thoſe with fires burning in the open air. They are ſupported at much leſs expenſe; their light is more brilliant, and ſeen at a greater diſtance, whilſt it can never be obſcured by ſmoke, or beaten down on the lee ſide by a violent guſt of wind; and, what is perhaps of ſtill greater importance, the reflectors with their lamps may be ſo variouſly placed, that one light-houſe cannot be miſtaken for another. If we add to all this, that the lamps do not ſtand in need of trimming ſo often as open fires require fuel, and that the light-man is never expoſed either to cold or to wet by attending to his duty, we muſt be convinced that light-houſes with reflectors are much leſs liable to be neglected in ſtormy weather than thoſe with open fires; and that this circumſtance alone would be enough to give the former a preference, almoſt incalculable, over the latter.

Many advantages, we think, would attend the uſe of *gas-lights* in ſuch ſituations. The lamps, once lighted, would

would be little affected by wind or rain, (see p. 683.) and would continue to burn as long as the fire was kept up round the retort; so that the attendant would never be exposed to the weather, or have any motive for neglecting his duty; and the valuable products arising from the coking of the coal might form a part of his salary or perquisites. We long to see this useful invention extended; for it was admitted by Boulton and Watt, who opposed Mr. Winsor in his application to parliament, that the most economical appropriation of the gas-light would be in furnishing a large quantity of light within a small compass or distance. This therefore seems to be a case exactly in point; and we hope to see the experiment tried.

A simple and ingenious plan has been proposed for the construction of light-houses, which, if generally executed, might prove beneficial. The beacon consists of a lantern made of cast metal, in which there is a piece of clock-work, which makes the lamp turn round every two or three minutes, and exhibit different enlightened figures. The figures can be so varied as to distinguish one light-house from another, and to prevent the possibility of mistaking the light of a lime-kiln, or accidental fire, for that of a beacon. The projector, Mr. Farmer, also recommends, as a substitute for light, in foggy weather, a buoy, similar in form to a life-boat, on which is fixed a bell of considerable magnitude and powerful tone, which the motion of the buoy, occasioned by the undulation of the sea, will keep perpetually ringing. The buoy may be placed at any convenient distance from the mouth of the harbour; or the mechanism in the beacon might be so constructed as to cause a bell to ring, or a bass drum to beat, in hazy weather. By placing a buoy or boat of the above description on a sunken or dangerous rock, in any part of the sea, the mariner might be warned by the alarm-bell to keep at a proper distance.

The usual mode of erecting a light-house is to raise it upon iron pillars, sunk either in a natural rock, or in other stone-work, or upon piers sunk in the earth, as the case may be. These pillars, being often totally or in part covered by the sea, are liable to corrosion from the action of salt water. To obviate this inconvenience, Capt. Brodie has invented a method of connecting together several small iron bars, and of coating them with lead, so as to form solid pillars that will not be subject to corrosion. For this and some other marine improvements, the gold medal of the Society of Arts was voted to him in May 1804; and the method of connecting the iron bars or rods is shown at the bottom of the preceding plate. A, fig. 10, is four rods of cast iron, composed of a number of pieces two feet long, rivetted together so as to produce the effect of one bar of the thickness of the whole. B, is a tube of cast iron, formed from a number of separate pieces, each about ten inches long, and which, when placed round the iron rods above-mentioned, and then screwed together, forms a mould, into which the melted lead is to be poured, to coat the iron rods. C, a portion of the rods covered with the melted lead, so as to form a cylindrical pillar apparently of lead, the iron being perfectly coated therewith. At fig. 11, D shows the manner in which the hollow cylinder is formed to any length required, by the junction of a number of semi-cylinders rivetted together and fitting each other. E, the side-flanges screwed close together. F, the end-flanges also screwed together as prepared for the melted lead. After a certain portion of the iron rods are coated with lead, the lower parts of the tube are taken off and placed higher up; by which repeated changes, a few tubes will answer the purpose to coat any length of the iron rods.

LIGHT IN'FANTRY. See INFANTRY, vol. xi. p. 33.

LI'GHT-LEGGED, *adj.* Nimble; swift.—*Light-legged* Pas has got the middle space. *Sidney.*

LIGHT-MI'NDED, *adj.* Unsettled; unsteady.—He that is hasty to give credit is *light-minded. Eccl.* xix. 4.

LI'GHT-ROOM, *s.* A small apartment, enclosed with glass windows, near the magazine of a ship of war. It is used to contain the lights by which the gunner and his assistants are enabled to fill cartridges with powder to be ready for action.

LIGHT AND SHADE, in painting. As light, when acting upon substantial forms, is always accompanied by shadow, and as they are necessary adjuncts to each other, we shall here unite them, and treat of them together. It is by the contrast of each to the other, that the effect of either is produced by colours; and, however paradoxical it may appear, it is nevertheless true, that light in the art of painting is not more necessary to produce shadow, than shade is for the production of light. The colours which give the appearance of the former, obtain that effect only when surrounded with darker ones, which constitute shade; without the latter, they would appear nothing more than an uninteresting mass of one plain tone, without any degree of the quality which is termed luminous; but, contrasted by their opposites in tone, they become brilliant; and, when form is superadded, obtain the character of light. The same, though in the contrary degree, is the effect of dark hues, which, without the contrast of lighter ones, produce only a heavy, dull, unmeaning, mass, that merits not the appellation of shade, till opposed by other tones, and rounded into form by the assistance of light.

It was utterly impossible that any artist should have attempted to imitate on a plain surface the appearances of round bodies, without discovering the necessity of lights and shades. However, even this, which may be called natural chiaro-scuro, was but very imperfectly understood till the time of Masaccio, near the middle of the fifteenth century; the painters, prior to this period, having had very little idea of what are called projecting shadows; such as are thrown upon one object, by another intervening between it and the rays of light. Indeed, in the pictures of most of the old painters who preceded Leonardo da Vinci, the ground on which the figures stand, is made so light on that side where this projecting shadow should be thrown, that they frequently seem to have only air to support them. Leonardo da Vinci, towards the end of the fifteenth and the beginning of the sixteenth century, was the first who, in his admirable writings as well as in his pictures, treated the subject scientifically; but although the few remaining works of his pencil have prodigious force, rotundity, and softness, yet the system which he recommends and generally adopted, of relieving the dark side of his figures by a light back-ground, and the light parts by a dark one, prevented that expansion and breadth of effect which the great Coreggio soon after discovered could only be attained by a contrary mode of conduct, that of relieving one shadow by another still darker, and of uniting several light objects into one great mass.

The management of light and shade is the most important of the practical parts of the art; since, without the true arrangement of them, vain must be every effort of the painter to produce a just resemblance of those things which nature offers to our view, and which are the immediate objects of his study. Outline is but as the section of a body; and colour, a simple unvaried colour, added to it, would still in no wise increase its value as the representative of a substance; but let light and shade be superadded, and duly disposed, and what was a flat surface becomes apparently a rounded one, is relieved from its ground, and appears to start from the canvas.

The sources of light are in fact but two; viz. the sun and fire; but to the painter a variety of modifications of these two take place, and become equally separate sources, with distinct qualities, both as to power and colour. Such, for instance, are the moon's reflecting power; that of the atmosphere when the sun is hid; and likewise the illumination proceeding from a window into a room. The effects produced by each of these differ so widely from those of the two former, that we may fairly say there are five general sources of light, at least, applicable

to the purpoſes of painting. Of that proceeding direct from the ſun in full blaze, it can only be obſerved, that, except for landſcape, its uſe is confined in the art; being too powerful, and producing ſhadows too harſh, for the more intereſting and agreeable ſubjects of fancy or hiſtory. The ſofter illumination reflected from thoſe parts of the atmoſphere oppoſed to the ſun, is uſually and reaſonably preferred; or that which the heavens yield when the ſource of its light is hid in clouds, though not when it is too much loſt in the gloom of tempeſt; for then the lights and ſhadows become too indiſtinct and confuſed. The open light of the air has another character diſtinct from the two juſt mentioned; which is, when the ſun is but faintly obſcured by thick clouds, through which its rays penetrate with diminiſhed luſtre, but ſtill in direct lines. In this caſe the light, though direct, and cauſing ſhadows the ſame in form as when its ſource is unobſerved, is yet but weak and ſoft; and the ſhadows it produces, being effected by the general light of the atmoſphere, are tender in their outline and tone. When the reflected light proceeding from the northern parts of the atmoſphere is admitted through a window into a room, it aſſumes a mid-way character. For while the light is weaker, and conſequently ſofter, than ſun-ſhine; the ſhadows, owing to the ſmallneſs of the aperture, become diſtinct, but not harſh; and their diſtinctneſs is heightened by the room wherein is the window (which may be conſidered as an original ſource) receiving only a partial quantity of light; and conſequently little or no reflection takes place, except from ſurrounding and contiguous objects upon each other; whereas, when a figure is ſo placed in open air as to receive the light reflected from the ſky, it partakes of it in every direction, and therefore has little or no ſhadow; for there will be few parts where ſome rays of light will not, under ſuch circumſtances, find admiſſion.

When the light proceeds direct from the ſun, it is uſual, though not ſtrictly correct, to conſider its rays as parallel, and conſequently no enlargement or diminution takes place in lengthened ſhadows. But, in reality, its diſtance, which diminiſhes its ſize apparently, added to the effect of perſpective, produces a real variation in ſhadows of objects whoſe magnitude is at all conſiderable. This is always the caſe when the ſource of light is larger or ſmaller than the illumined body. In the former caſe, the ſhadow of a ſuſpended ball would diminiſh to a point; as that of the earth does from the light of the ſun; and in the latter it would dilate as it was extended, and project a ſhadow at a certain diſtance, large in proportion to the comparative ſmallneſs of the luminous body; as of the flame of a candle, for inſtance, compared to a tennis-ball.

Shadows by day-light ſeldom become totally obſcure; an object muſt be placed in a ſituation where it could receive very little indeed of that peculiar illumination, without having ſome reflections falling into its ſhades, and conſequently yielding ſome viſible effect of the forms on which they fell. But by fire and candle-light, owing to the confined iſſue of their rays, forms hid in the ſhadows they project are often totally loſt; nevertheleſs, theſe ſhadows are not blackneſs, but darkneſs, of a colour whoſe hue depends upon that of the larger maſs of ſurrounding bodies. Under many circumſtances they receive reflections, and have a conſequent degree of colour in the bodies that lie within their range.

There are two cauſes which operate to weaken and even deſtroy the force of reflected light. The one is the diſtance at which the reflecting object is ſituated from the luminary; the other, the diſtance of the ſame from the obſerver. When theſe two circumſtances combine, the effect of light and ſhade is very weak.

To comprehend the principle upon which the illumination and conſequent ſhadows of objects are produced, and to imitate them the moſt effectually, the painter muſt recollect, that light, whenceſoever it iſſues, proceeds rectilineally from its ſource to the ſurface which intercepts it; and is reflected in the ſame way, at an equal angle with the plane of that ſurface, but in an inverſe direction. In the language of optics, *the angle of reflection is equal to the angle of incidence.* This is the ſimple but general rule, which is infallibly to guide the artiſt through all the difficulties of light and ſhade in painting; whether ariſing from direct or reflected illumination, this one principle holds equally good in all; but the lines which it forms in the ſhadows are ſubject to the variations produced by perſpective on all ſolid bodies whereon light can act.

It is ſcarcely neceſſary here to ſpeak of the refraction of light from its original courſe, when paſſing through various ſubſtances, as glaſs or water; except to deprecate paying any attention to it in a picture where any eſſential form is broken in upon by it; or chooſing ſuch ſubjects, where deviation from general rules ſerves rather to confound than to ſatisfy the common underſtanding of mankind. Where copying the poſitive truth would create confuſion, it is moſt juſt, at leaſt moſt uſeful, to vary from it; as in painting the portrait of a man with ſpectacles on. What artiſt in his ſenſes, and who had a true perception of the real object of art, would think of painting exactly that which preſents itſelf to his view, a poſitive deformity, eyes miſplaced, and of monſtrous form; for ſuch they are when ſeen through the glaſſes. Such procedure would totally defeat the object of portraiture; for it would be hardly poſſible to make a likeneſs of the perſon, with ſuch a variation from the poſitive form of his face.

Great grace may be added to figures by light and ſhade when agreeably diſpoſed; and, on the contrary, an unfortunate diſpoſal of them may diminiſh the effect, if not totally deſtroy the moſt beautifully drawn figure imaginable.

The conduct of Coreggio, with reſpect to his lights and ſhadows, is worthy the moſt attentive conſideration; and there never perhaps was a painter, who, independent of the advantage, which he well knew how to take, of the occaſional oppoſition of dark to light-coloured objects, produced ſo ſimple, ſo grand, an effect. His figures, as well as the other objects in his pictures, are at all times ſo diſpoſed, as naturally to receive the light exactly in thoſe parts where it is moſt wanted, and beſt ſuits the effect of the whole; and yet this is done ſo ſkilfully, and at the ſame time with ſuch an appearance of eaſe, that neither propriety nor grace of action ſeems in any wiſe to be ſacrificed in the aſtoniſhing combination.

The principal painters of the Venetian ſchool, Giorgione, Titian, Baſſanio, Tintoret, and Paul Veroneſe, were great maſters of effect; but with them this effect is more frequently the reſult of accordance or oppoſition of the local colours of the different objects compoſing their pictures, than of any very ſtudied or remarkably ſkilful diſpoſition of the maſſes of lights and ſhadows.

Michelangelo da Caravaggio, who flouriſhed at the end of the ſixteenth century, and Guercino, who came ſoon after, produced the moſt powerful effects by means widely different from thoſe adopted by any of their predeceſſors; but, though they rendered their pictures moſt ſtriking, by reaſon of the very ſtrong oppoſitions of light and ſhadow, which they made almoſt conſtantly to pervade them, beauty of form and expreſſion was too frequently ſacrificed to force; and we are taught this truth, that chiaro-ſcuro, like many other parts of painting, cannot be carried beyond certain limits, but at the expenſe, more or leſs, of the other eſſentials of the art.

Gerard Hunthorſt, called by the Italians Gherardo della Notte, and Adam Elſhemer, produced aſtoniſhing effects of chiaro-ſcuro in their candle and moon-light pieces, which are deſervedly in the higheſt eſtimation with the lovers of painting; whilſt Rubens, with his all-commanding genius, graſped the various magic treaſures of the pencil, and, by uniting the wide expanſive effect of Coreggio, the richly-contraſted tints of the Venetians, and the force of Caravaggio, has only left us to regret, that his magni-

ficent inventions were not drawn with the purity of Raffaele, or the correctneſs and grandeur of Buonaroti. If Rubens aſtoniſhes by his unbounded diſplay of light, the parſimonious uſe made of it by Rembrandt is not leſs captivating or ſurpriſing. Rembrandt conſidered the lights in his pictures as ſo many gems, acquiring increaſed luſtre from their rarity; and indeed the ſtriking effect he has produced by the extraordinary means he adopted, happily ſhows, how vain the attempt to limit or reſtrain by rules the workings of genius in the human mind.

The knowledge of light and ſhade is nearly connected with the ſciences of optics and perſpective; and, in particular, when buildings or other regularly-formed objects are to be repreſented. See thoſe articles.

With reſpect to the knowledge of chiaro-ſcuro, poſſeſſed by the ancients, we are but imperfectly informed; however, if we can form any judgment from the paintings diſcovered at Herculaneum, and in the baths of Titus at Rome, this part of painting, as well as perſpective, was but little underſtood by them. Mr. Webbe, however, in his Treatiſe on Painting, ſtrenuouſly ſupports the ancients on this queſtion, but perhaps not upon ſufficient grounds. See the article PAINTING.

Amongſt the beſt-eſtabliſhed maxims, relating to chiaro-ſcuro, are the following: That there ſhould be one principal light in every picture; that other lights may and ought to be admitted, but that they ſhould at all times be either leſs in quantity or lower in tone than the great principal light; that this principal light ſhould either be placed on the moſt important object in the picture, or be ſo managed, as to conduct the eye of the ſpectator to that object; that, independent of the forms of the objects and groups themſelves, each maſs of light and ſhade ſhould in itſelf be of an agreeable ſhape; and that theſe maſſes ſhould be ſo linked as it were together, that no body, either of light or ſhade, may appear like a ſpot unconnected with the reſt.

LIGHT TROO'PS, in military language, generally denote all horſe and foot which are accoutred for detached ſervice.

LIGHT WA'TER-LINE, in naval architecture, the line of floatation of the ſhip, before ſhe takes in her cargo.

To LI'GHTEN, *v. n.* [þıt liꝛt, Sax.] To flaſh with thunder.—The lightning that *lighteneth* out of the one part under heaven, ſhoweth unto the other part. *Luke* xvii. 24.

I have no joy of this contract to-night;
It is too raſh, too unadvis'd, too ſudden,
Too like the light'ning, which doth ceaſe to be
Ere one can ſay it *lightens*. *Shakeſp. Romeo and Juliet.*

To ſhine like lightning:

Yet looks he like a king: behold his eye,
As bright as is the eagle's, *lightens* forth
Controlling majeſty. *Shakeſpeare.*

To fall; to light.—O Lord, let thy mercy *lighten* upon us, as we do put our truſt in thee. *Common Prayer.*

To LI'GHTEN, *v. a.* [from *light, ſ.*] To illuminate; to enlighten:

O Light, which mak'ſt the light which makes the day,
Which ſett'ſt the eye without, and mind within:
Lighten my ſpirit with one heav'nly ray,
Which now to view itſelf doth firſt begin. *Davies.*

[From *light, adj.*] To exonerate; to unload.—The mariners were afraid, and caſt forth the wares that were in the ſhip into the ſea, to *lighten* it of them. *Jonah* i. 7.—To make leſs heavy:

Then let us ſtrive
In offices of love how we may *lighten*
Each other's burden. *Milton.*

To exhilarate; to cheer.—The audience are grown weary of continued melancholy ſcenes; and few tragedies ſhall ſucceed in this age, if they are not *lightened* with a courſe of mirth. *Dryden.*

A truſty villain, very oft,
When I am dull with care and melancholy,
Lightens my humour with his merry jeſt. *Shakeſpeare.*

LI'GHTENING, *ſ.* The act of giving light; the act of making leſs heavy.

LI'GHTER, *ſ.* [from *light*, to make light.] A heavy boat into which ſhips are lightened or unloaded.—They have cock-boats for paſſengers, and *lighters* for burthen. *Carew.*

He climb'd a ſtranded *lighter's* height,
Shot to the black abyſs, and plung'd downright. *Pope.*

A lighter is generally an open flat-bottomed veſſel, managed with oars; but ſome lighters are furniſhed with a deck throughout their whole length, in order to contain thoſe merchandiſes which would be damaged by rainy weather; theſe are uſually called *cloſe lighters.*

LI'GHTER-MAN, *ſ.* One who manages a lighter.—Where much ſhipping is employed, whatever becomes of the merchant, multitudes of people will be gainers; as ſhipwrights, butchers, carmen, and *lighter-men. Child.*

LI'GHTFOOT (John), a very learned Engliſh divine, was the ſon of a clergyman, and born in the rectory-houſe of Stoke upon Trent, in Staffordſhire, in the year 1602. He was inſtructed in grammar-learning at Moreton-green, near Congleton, in Cheſhire; and at fifteen years of age was entered of Chriſt's college, Cambridge, where he was placed under the tuition of Mr. William Chapel, afterwards biſhop of Cork and Roſs. In this ſeminary he applied himſelf with the cloſeſt diligence to his ſtudies, particularly to claſſical learning and eloquence, in which he made ſo great a proficiency, that, in the judgment of his tutor, he was the beſt orator among all the under-graduates of the univerſity. No ſooner had he taken the degree of B. A. when he was only nineteen years of age, than he quitted Cambridge, and engaged in the capacity of aſſiſtant to his former maſter, who had removed from Cheſhire to the ſchool at Repton in Derbyſhire. After having continued in this ſituation about two years, he was admitted into orders, and obtained the curacy of Norton-under-Hales in Shropſhire. Here he was introduced to the acquaintance of ſir Rowland Cotton, of Bellaport, who made him his chaplain, and took him into his family. This gentleman, being a perfect maſter of the Hebrew language, engaged Mr. Lightfoot in the ſtudy of that and the other oriental tongues. He followed his patron to London, and would have proceeded with him to the continent, but the living of Stone, in Staffordſhire, being offered him, he preferred ſettling there, as it likewiſe gave him an opportunity of entering upon the marriage ſtate, which he immediately embraced. Here he found the means of ſtudy exceedingly ſcanty, and in the courſe of a few months reſigned the living of Stone, and removed to Hornſey, near London, a ſituation which he choſe on account of its vicinity to the metropolis, where the ſources of learning were very abundant. He was now a frequent attendant at the library of Sion-college, which afforded him the moſt ample means of ſupplying all his literary wants. In 1629, Mr. Lightfoot publiſhed his firſt piece, entitled *Erubhim*; or Miſcellanies Chriſtian and Judaical. In 1630, he was preſented by ſir Rowland Cotton to the rectory of Aſhly in Staffordſhire, and immediately removed to his pariſh, in which he lived twelve years, applying himſelf with indefatigable diligence in ſearching the ſcriptures; but yet without neglecting any of the duties of his miniſterial function, which he diſcharged in the moſt punctual and conſcientious manner. In theſe employments he ſpent his days very agreeably, and continued retired and unmoleſted, till the great change which took place in public affairs by the means of the long parliament, when he was nominated a member of the aſſembly of divines at Weſtminſter. This appointment was occaſioned by his extraordinary merit; and he accepted it ſolely with the view of ſerving his country, as far as his abilities would permit. He now appears to have thought

thought it his duty to reſign his rectory, ſince he could no longer reſide among his pariſhioners; but he obtained the preſentation for a younger brother. He arrived at London in June 1642; and he had not been long there, before he was choſen miniſter at St. Bartholomew's behind the Royal Exchange. The aſſembly of divines having met in June 1643, Mr. Lightfoot diligently attended their ſeſſions, and became diſtinguiſhed for his eloquence in debate, and activity in buſineſs. He was friendly to the preſbyterian form of church-government, which he declared, in a ſermon before the houſe of commons, he verily believed was "according to the pattern in the mount." In 1643 he was appointed maſter of Catharine-hall, in Cambridge; and in the ſame year he was preſented to the living of Much-munden, in Hertfordſhire. In 1644 he publiſhed the firſt part of his "Harmony of the New Teſtament," with a plan of his whole deſign, and continued afterwards to ſend out, at different periods, the other branches of the ſame work.

In 1652, Mr. Lightfoot took the degree of doctor of divinity, and went through all the regular exerciſes, on that occaſion, with great applauſe. In 1653, (Dr. Spurſtow being ejected by the parliamentary viſitor,) Dr. Lightfoot was choſen vice-chancellor of the univerſity of Cambridge, the duties of which important office he performed with exemplary diligence and fidelity. Upon the reſtoration of king Charles II. Dr. Lightfoot offered to reſign the maſterſhip of Catharine-hall in favour of Dr. Spurſtow; but, upon his declining to accept it, our author obtained a confirmation from the crown of that place, and of his living. For theſe marks of royal favour he was chiefly indebted to the kindneſs of archbiſhop Sheldon, who, out of pure reſpect for his learning and talents, undertook to ſerve him. Soon after this, he was collated, through the intereſt of lord-keeper Bridgman, to a prebend in the cathedral church of Ely. In 1661 he was appointed one of the aſſiſtants at the conference at the Savoy on the ſubject of the liturgy; but he attended only twice, on account of the violence diſplayed in the debates. He now gladly withdrew as much as poſſible from the world, in order that he might ſpend his time in ſtudies to which he was attached, and which he proſecuted with vigour to the laſt. His publications would have been more numerous, but the expenſe of them was more than he could bear; and he never was ſufficiently patronized the public to intereſt the bookſellers in his behalf. A ſhort time before his death he was, however, requeſted by them to collect and methodiſe his works, in order that they might be printed in an uniform manner. He died in December 1675, before he could accompliſh the taſk required of him, in the 74th year of his age.

Dr. Lightfoot was indefatigable in his purſuits, and extremely temperate in his mode of living. He lived in the greateſt harmony among his pariſhioners, being eaſy of acceſs, affable, communicative, hoſpitable, and charitable. As a writer, he was one of the moſt ingenious, as well as learned, of our Engliſh commentators, and has furniſhed his ſucceſſors with very valuable materials in the ſame line of ſtudies; he had few equals and no ſuperior in rabbinical literature; and in this branch of learning his celebrity was ſo great, that many foreigners came to him for aſſiſtance in it. His works were collected and publiſhed in 1684, in two volumes folio. A new edition of them was publiſhed in Holland in 1686, containing all his writings that had been originally given to the world, in the Latin language, and a Latin tranſlation of thoſe which he had written in Engliſh; and a third edition was publiſhed at Utrecht in 1699, by John Leuſden: this impreſſion contained ſome poſthumous pieces, which were compriſed in a third volume. Theſe were, in the following year, publiſhed in an octavo volume by Mr. Strype, under the title of "Some genuine Remains of the late learned and pious Dr. John Lightfoot." The doctor was not only indefatigable in his own purſuits, but an encourager of other learned men in their's. He gave great aſſiſtance in completing the Engliſh Polyglott Bible, by drawing up a chorographical table prefixed to it, and by ſuperintending the ſheets of the Samaritan verſion, as they were printed; he afforded much pecuniary aſſiſtance to Dr. Caſtell in the publiſhing of his Heptaglott Lexicon, which would otherwiſe have occaſioned his entire ruin for want of ſupport from the learned world; and Dr. Lightfoot was the perſon who excited Mr. Pool to undertake his valuable work entitled Synopſis Criticorum.

LI'GHTFOOT (John), a diſtinguiſhed Britiſh botaniſt, chiefly known as the author of the Flora Scotica, was born in 1735. He was educated at Oxford, where he took the degree of M. A. and, having entered into holy orders, became chaplain to the late ducheſs-dowager of Portland, "that great and intelligent admirer and patroneſs of natural hiſtory in general," as he juſtly denominates her in the dedication of his book. By her grace's influence, we believe, he obtained the rectory of Gotham in Nottinghamſhire, and ſubſequently the living of Cowley in Middleſex. In 1772, the late Mr. Pennant, ſo well known as a zoologiſt, invited Mr. Lightfoot to be the companion of his ſecond tour to Scotland and the Hebrides, adviſing him to undertake the "compilation," as he himſelf modeſtly calls it, of a Flora Scotica, which Mr. Pennant offered to uſher into the world at his own expenſe. Theſe generous and flattering offers Mr. Lightfoot gladly accepted; but he was aware that a ſingle ſummer could by no means be ſufficient for the full accompliſhment of ſuch an undertaking; nor would he perhaps have ventured upon it, but for the aſſiſtance of "able and ingenious botaniſts, who had reſided in that country their whole lives," who permitted him "to examine their collections, and freely communicated the obſervations of many years." Theſe were the late Dr. Hope, profeſſor of botany at Edinburgh; the Rev. Mr. (now Dr.) John Stuart of Luſs; and the Rev. Dr. Burgeſs, the venerable paſtor of Kirkmichael in Dumfrieſhire. Mr. Stuart was the companion of our travellers in their excurſion, and ſupplied each, in his own line, with much learned information, reſpecting the Erſe nomenclature, as well as the real or ſuppoſed uſes and hiſtory of the native animals and plants. Thus Mr. Pennant was enabled to prefix a compendious Fauna to the Flora of his friend; and thus Mr. Lightfoot found his path made ſtraight and plain before him, and literally ſtrewed with flowers. When Mr. Lightfoot's materials were got together, the library, herbarium, and perſonal ſuperintendance, of his friend ſir Joſeph Banks, in conjunction with the help of Dr. Solander, were of the moſt eminent and indiſpenſable uſe; and the compariſon of his cryptogamic ſpecimens with thoſe of Dillenius at Oxford, under the eye of the profeſſor, or rather of his ſon Dr. John Sibthorp, gave the finiſhing ſtroke to his labours. Thus the "Flora Scotica" became ready for publication in 1777, when it appeared in two thick volumes 8vo. with thirty-five plates, five of which are zoological. The work is diſpoſed according to the ſyſtem of Linnæus, with ſhort eſſential generic and ſpecific characters copied from that author, and references to a few of the beſt figures of each ſpecies. Engliſh, Scottiſh, and Erſe, names are ſubjoined, with the general or particular places of growth, duration, &c. and the account of every plant finiſhes with a longer or ſhorter deſcription in Engliſh, various botanical remarks, and compiled notes of its economical or medical uſes. Mr. Lightfoot was for ſome years a fellow of the Royal Society; and was one of the original fellows of the Linnæan Society, the formation of which he contemplated with great pleaſure, though his death happened before he could attend any of its public meetings. Having married the daughter of an opulent miller at Uxbridge, he reſided in that town; and died there ſuddenly in the ſpring of 1788, aged 53, leaving a widow and ſeveral daughters: he was buried in Cowley church. He is ſuppoſed never to have recovered from a diſappointment, reſpecting a living,

living, which his patron, the late duke of Portland, ſolicited from lord-chancellor Thurlow, but which the latter did not think fit to beſtow.

LIGHTFOOT'IA, *ſ.* [named by Swartz after the ſubject of the preceding article.] In botany, a genus of the claſs polygamia, order dioecia. The generic characters are—I. Hermaphrodite. Calyx: perianth four-leaved; leaflets ovate, concave, expanding. Corolla: none. Stamina: filaments numerous, filiform, ſeated on the receptacle, permanent; anthers roundiſh. Piſtillum: germ roundiſh; ſtyle none; ſtigma ſeſſile, ſomewhat headed, furrowed. Pericarpium: berry ovate, umbilicated, one-celled. Seeds from three to ſix, oblong, compreſſed, cornered, gloſſy. II. Males on different individuals. Calyx: perianth four-leaved; leaflets oblong, concave, equal, coloured. Corolla none. Stamina: filaments numerous, (twenty-four,) filiform, longer than the calyx, inſerted into the receptacle; anthers roundiſh. Piſtillum: none. III. Females on different individuals. Calyx: as in the male, but larger. Corolla: none. Piſtillum: germ oblong; ſtyle none; ſtigma elevated, quadrangular-headed, furrowed, with convoluted margins; permanent. Pericarpium; berry oblong, ſeated on a very ſmall receptacle, umbilicated, one-celled. Seeds three, five, to ſix, as above.—*Eſſential Character.* Calyx four-leaved; corolla none. Female and hermaphrodite; ſtigma ſeſſile; berry umbilicated, one-celled, with from three to ſix ſeeds.

1. Lightfootia ſerrata, or ſerrated lightfootia: leaves oblong-ovate, ſerrate, acuminate, peduncles lateral, aggregate, one-flowered. Native of Montſerrat.

2. Lightfootia theæformis, or tea-leaved lightfootia: leaves lanceolate-elliptic, ſerrate, bluntiſh, peduncles axillary, ſubſolitary, one-flowered. This has the habit of the tea-ſhrub. Branches, and all the other parts, ſmooth. Leaves petioled, alternate, two inches long and more, nerved and veined, ſometimes emarginate, a little bent at the baſe to the petiole; which is very ſhort, and a little edged by the leaf running down it. Germ conical; ſtigma ſeſſile, flattiſh; berry oblong, one-celled; ſeeds three or four, ſmooth, ſhining. Native of the Iſle of Bourbon.

3. Lightfootia integrifolia, or entire-leaved lightfootia: leaves ſubcoriaceous, oblong and obovate, emarginate, almoſt quite entire, peduncles lateral, ſubaggregate, one-flowered. This is alſo a ſhrub, with round ſmooth branches, covered with an aſh-coloured bark. Leaves an inch and more in length; flowers larger than in the other ſorts.

The ſpecies all agree with Prockia in calyx, ſtamens, and habit, but differ in the ſtigma. Hermaphrodite flowers only having hitherto been obſerved, we are not certain that theſe two ſpecies are polygamous. Gmelin has erred in referring Lightfootia oxycoccoides and ſubulata of l'Heritier to this genus; for they belong to different claſs and order, as under.

LIGHTFOOT'IA, *ſ.* The name of another genus of plants, ſo denominated by l'Heritier after the ſame perſon as the preceding. This genus is of the claſs pentandria, order monogynia, natural order campanaceæ, *Linn.* (campanulaceæ, *Juſſ.*) The generic characters are—Calyx: perianth of five equal acute leaves, broad at the baſe, encompaſſing the middle of the germen. Corolla of one petal, in five deep, equal, regular, oblong, ſpreading ſegments, rather longer than the calyx; the very-ſhort tube, cloſed by five valves, bearing the ſtamens. Stamina: filaments five, linear, flat, equal, much ſhorter than the corolla; anthers ſmall, roundiſh, incumbent. Piſtillum: germen half inferior, ovate, ſtyle thread-ſhaped, about the length of the corolla; ſtigma dilated into three or five, ſomewhat-ſpreading, ſegments. Pericarpium: capſule ovate, with three or five cells, opening at the top by as many valves. Seeds numerous, ſmall, roundiſh.—*Eſſential Character.* Corolla in five deep ſegments, cloſed at the bottom by valves bearing the ſtamens. Calyx of five leaves. Stigma of three or five lobes. Capſule half ſuperior, of three or five cells, and as many valves.

1. Lightfootia oxycoccoides, or cranberry-leaved lightfootia: leaves plain, ovato-lanceolate, alternate, reflexed; ſtigma three-cleft; corolla widely ſpreading. Native of the Cape of Good Hope, as are the two following ſpecies alſo. This was ſent to Kew in 1787, by Mr. F. Maſſon. It is kept in the greenhouſe, and flowers from July to September. The ſtem is perennial, ſhrubby, of humble growth, buſhy and ſpreading, not proſtrate, very much branched, often finely downy. Leaves numerous, ſmall, alternate, ſeſſile, reflexed, ovate or ſomewhat lanceolate, acute, ſmooth, thick-edged, entire, except a ſmall glandular tooth or two at each ſide. Flowers ſmall, on little, terminal, naked, ſimple ſtalks. Corolla white, with a tinge of purple along the middle of each ſegment. Stigma purple; capſule of three pointed valves forming a cone.

2. Lightfootia tenella, or curve-leaved lightfootia: leaves ovato-lanceolate, channelled, cluſtered; ſtigma three-cleft; corolla widely ſpreading, with narrow linear ſegments; ſtigma three-cleft. Gathered by Thunberg at the Cape. It ſeems a ſtranger to our gardens. L'Heritier confounded it with the preceding, from which it differs in its very numerous, cluſtered, recurved, and deeply-channelled, leaves, and the longer and narrower ſegments of the corolla.

3. Lightfootia ſubulata, or awl-leaved lightfootia: leaves awl-ſhaped; calyx almoſt altogether inferior; corolla moderately ſpreading, with linear ſegments; ſtigma five-cleft. Sent to Kew by Mr. Maſſon in 1787, from the Cape. This is diſtinguiſhed by its copious, awl-ſhaped, very-narrow, leaves, ſometimes near an inch long. The ſhrubby ſtem, with downy branches, accords nearly with the two former; the flowers ſtand on ſhorter ſtalks, and have longer and ſharper calyx-leaves, tumid at the baſe, and almoſt perfectly inferior; ſegments of the corolla moderately ſpreading, recurved, narrow, white or bluiſh; ſtigma five-cleft.

LI'GHTING, *ſ.* The act of kindling; the act of giving light; the act of ſettling on any thing.

LIGHTING OF STREETS. See the article LAMP, p. 119.

LI'GHTING-PLACE, *ſ.* A place to reſt or alight upon.—Plant trees and ſhrubs near home, for bees to pitch on at their ſwarming, that they may not be in danger of being loſt for want of a *lighting-place. Mortimer's Huſbandry.*

LI'GHTLESS, *adj.* Wanting light; dark.

LI'GHTLY, *adv.* Without weight:

This grave partakes the fleſhly birth,
Which cover *lightly*, gentle earth. *Ben Jonſon.*

Without deep impreſſion:

The ſoft ideas of the cheerful note,
Lightly receiv'd, were eaſily forgot. *Prior.*

Eaſily; readily; without difficulty; of courſe.—If they write or ſpeak publicly but five words, one of them is *lightly* about the dangerous eſtate of the church of England in reſpect of abuſed ceremonies. *Hooker.*

Believe not *lightly* that your ſon
Will not exceed the common, or be caught
With cautelous baits and practice. *Shakeſpeare.*

Without reaſon.—Let every man that hath a calling be diligent in purſuance of its employment, ſo as not *lightly*, or without reaſonable occaſion, to neglect it. *Taylor.*—Without dejection; cheerfully:

Bid that welcome
Which comes to puniſh us, and we puniſh it,
Seeming to bear it *lightly*. *Shakeſpeare.*

Not chaſtely.—If I were *lightly* diſpoſed, I could ſtill perhaps have offers, that ſome, who hold their heads higher, would be glad to accept. *Swift.*—Nimbly; with agility; not heavily or tardily:

Methought I ſtood on a wide river's bank;
When on a ſudden, Toriſmond appear'd,
Gave me his hand, and led me *lightly* o'er;
Leaping and bounding on the billows heads,
Till ſafely we had reach'd the farther ſhore. *Dryden.*

Gaily; airily; with levity; without heed or care.

LI'GHTNESS, *ſ.* Want of weight; abſence of weight:

the contrary to *heavineſs*.—Suppoſe many degrees of littleneſs and *lightneſs* in particles, ſo as many might float in the air a good while before they fell. *Burnet*.—Inconſtancy; unſteadineſs.—Of two things they muſt chuſe one; namely, whether they would, to their endleſs diſgrace, with ridiculous *lightneſs* diſmiſs him whoſe reſtitution they had in ſo importunate manner deſired, or elſe condeſcend unto that demand. *Hooker*.

For, unto knight there is no greater ſhame,
Than *lightneſs* and inconſtancy in love. *Fairy Queen*.

Unchaſtity; want of conduct in women.—Is it the diſdain of my eſtate, or the opinion of my *lightneſs*, that emboldened ſuch baſe fancies towards me? *Sidney*.

Can modeſty then more betray our ſenſe,
Than woman's *lightneſs*? *Shakeſpeare*.

Agility; nimbleneſs.

LI'GHTNING, *ſ.* [from *lighten*, *lightening*.] The flaſh that attends thunder.—*Lightning* is a great flame, very bright, extending every way to a great diſtance, ſuddenly darting upwards, and there ending, ſo that it is only momentaneous. *Muſchenbroek*.

Senſe thinks the *lightning* born before the thunder;
What tells us then they both together are? *Davies*.

Mitigation; abatement; [from to *lighten*, to make leſs heavy.]—We were once in hopes of his recovery, upon a kind meſſage from the widow; but this only proved a *lightning* before death. *Addiſon's Spectator*.

How oft, when men are at the point of death,
Have they been merry? which their keepers call
A *lightning* before death. *Shak. Romeo and Juliet*.

LIGHTNING is a bright and vivid flaſh of fire, ſuddenly appearing in the atmoſphere, and commonly diſappearing in an inſtant; ſometimes attended with clouds and thunder, and ſometimes not. For an account of the phenomena of lightning, ſee the article ELECTRICITY, vol. vi. p. 408, 431, 2.

Lightning was looked upon as ſacred both by the Greeks and Romans, and was ſuppoſed to be ſent to execute vengeance on the earth: hence perſons killed with lightning, being thought hateful to the gods, were buried apart by themſelves, leſt the aſhes of other men ſhould receive pollution from them. Some ſay they were interred upon the very ſpot where they died; others will have it that they had no interment, but were ſuffered to rot where they fell, becauſe it was unlawful for any man to approach the place. For this reaſon the ground was hedged in, leſt any perſon unawares ſhould contract pollution from it. All places ſtruck with lightning were carefully avoided and fenced round, out of an opinion that Jupiter had either taken offence at them, and fixed upon them the marks of his diſpleaſure, or that he had, by this means, pitched upon them as ſacred to himſelf. The ground thus fenced about was called by the Romans *bidental*. Lightning was much obſerved in augury, and was a good or bad omen, according to the circumſtances attending it.

According to Pliny, Plutarch, Seneca, &c. the olive, fig-tree, and laurel, are never ſtruck by lightning. Porta adopted this opinion, which was that of all the ancients. Toaldo ſays alſo, it is only thoſe trees which contain reſin that can perhaps eſcape the danger of thunder; ſuch as the olive-tree, laurel, fir, and ſome others of the like kind. This, in all probability, is the foundation of the practice, common among the vulgar in France, of keeping in their houſes, and placing on the ſummits of ſteeples and at the corners of fields, branches of olive that have been bleſſed, and of burning them in their houſes during ſtorms. It is poſſible, and even probable, that trees of this kind may be leſs frequently ſtruck by lightning than thoſe which contain a great deal of aqueous juices; but we can aſſert, that theſe preſervatives of the ancients are not equal to our conductors. On the 21ſt of June, 1783, the lightning burnt the leaves of a fig-tree, and all the bark of an olive-tree, in the territory of Sallon; and the ſame thing had happened there formerly, and there even had been fig-trees and olive-trees ſplit and torn to pieces by lightning.

The general effects of lightning are ſo well known, that it is unneceſſary to inſiſt upon them. We may juſt notice a few particulars leſs familiar, and enquire how far ancient and modern obſervations agree.

"Thunder ſometimes (ſays Seneca) renders wine frozen and congealed." Of two perſons killed by thunder at Pelliſanne in 1783, one loſt immediately all his natural heat, and the body was found extremely cold. Thunder muſt ſometimes produce theſe effects by occaſioning a ſtrong and ſpeedy evaporation.

"Bodies ſtruck by thunder (ſays Plutarch) do not corrupt; dogs and birds do not eat them." This may ſometimes be the caſe; but modern experience brings numerous examples of the contrary. On the day of the fair of Villefranche, July 22, 1783, the thunder killed a mule, which corrupted ſo ſoon that it was found neceſſary to remove it. Several ſheep were killed by lightning on the mountain of Sederon in Provence; and the ſhepherds abſtained, for a long time, from approaching the place, on account of the bad ſmell which they emitted. But Mr. Achard's experiments (Mem. de l'Acad. de Berlin) are much more deciſive. He cut a piece of raw beef into three parts, and electrified the firſt poſitively for ten hours without any ſhock; the ſecond he electrified for as long negatively, and the third he did not electrify. Theſe three pieces were left in the ſame apartment, and expoſed to the ſame degree of heat. When examined next day, both the pieces which had been electrified appeared to be tender, but were free from the leaſt bad ſmell. On the fourth day the electrified fleſh had an intolerably fetid ſmell, and that which had not been electrified began to ſmell a little. M. Achard repeated theſe experiments with boiled veal. That which was electrified had the next day an acid ſmell and an unpleaſant taſte; but that which had not been electrified continued ſweet for three days, and only on the fourth day began to have an acid ſmell.

M. Achard then killed ſeveral birds by electric ſhocks, and at the ſame time deprived others of life by ſticking a needle through their heads; and, placing them all in the ſame temperature, covered them with glaſs receivers in order to preſerve them from inſects. Having obſerved the gradual progreſs of corruption in both, he plainly perceived that it took place much ſooner, and advanced more rapidly, in thoſe killed by electric ſhocks than in thoſe deprived of life by the needle. In thoſe alſo to which a ſtronger ſhock had been given, the degree of corruption was far ſtronger than in the others; and the cauſe in all probability was, that in this caſe the veſſels containing the animal fluids were ſuddenly deſtroyed, by which means theſe fluids had diffuſed themſelves through the particles of the body, and might thus accelerate putridity.

It clearly follows from theſe experiments, that electricity accelerates corruption, and that the putrefaction of fleſh after a thunder-ſtorm muſt be aſcribed ſolely to the more abundant accumulation of the electric matter at that time. M. Achard ſaw that this was the caſe in regard to ſeveral perſons killed by lightning. The body of a farmer, who loſt his life in this manner on the 2d of July, between five and ſix o'clock in the evening, emitted next morning a very perceptible fetid ſmell, which in the evening was totally inſupportable.

M. de Lamanon, (Journal de Phyſique,) in his Obſervations on the Nature of the Fog of 1783, (ſee our article FOG, vol. vii. p. 530.) notices what he calls *aſcending thunder*. "On the 21ſt of June, 1783, aſcending thunder was ſeen at Sallon: like phenomena were obſerved the ſame day in ſeveral other places. In ſeveral villages through which I paſſed, I was ſhown a great number of trees ſtripped of their bark by the thunder; and I remarked that the part of the bark, or wood, carried away, was almoſt always broad at the bottom of the tree, and narrow

at the ſummit. It would ſeem as if the lightning had met with obſtacles, and that it had not the ſame force when it attacked the higher parts of the tree. In my opinion the thunder which produced theſe effects was all aſcending; and I often obſerved holes at the roots of the trees which had been deprived of their bark. I obſerved alſo that dry land had been leſs ſtruck with the lightning than moiſt land, which induces me to believe that the greater part of the thunder that year was aſcending." Theſe particulars are collected from the third and fifth volumes of the Philoſophical Magazine.

Conductors of lightning are pointed metallic rods fixed to the upper parts of buildings, to ſecure them from ſtrokes of lightning. Theſe were invented and propoſed by Dr. Franklin for this purpoſe, ſoon after the identity of electricity and lightning was aſcertained; and they exhibit a very important and uſeful application of modern diſcoveries in this ſcience. This ingenious philoſopher, having found that pointed bodies are better fitted for receiving and throwing off the electric fire than ſuch as are terminated by blunt ends or flat ſurfaces, and that metals are the readieſt and beſt conductors, ſoon diſcovered that lightning and electricity reſembled each other in this and other diſtinguiſhing properties; he therefore recommended a pointed metalline rod to be raiſed ſome feet above the higheſt part of a building, and to be continued down into the ground, or the neareſt water. The lightning, ſhould it ever come within a certain diſtance of this rod or wire, would be attracted by it, and paſs through it preferably to any other part of the building, and be conveyed into the earth or water, and there diſſipated, without doing any damage to the building. See the article ELECTRICITY. Many facts have occurred to evince the utility of this ſimple and ſeemingly-trifling apparatus. And yet ſome electricians, of whom Mr. Wilſon was the chief, have objected to the pointed termination of this conductor; preferring rather a blunt end; becauſe, they pretend, a point invites the electricity from the clouds, and attracts it at a greater diſtance than a blunt conductor. This ſubject has indeed been very accurately examined and diſcuſſed; and pointed conductors are almoſt univerſally, and for the beſt reaſons, recommended as the moſt proper and eligible. A ſharp-pointed conductor, as it attracts the electric fire of a cloud at a greater diſtance than the other, draws it off gradually; and, by conveying it away gently, and in a continued ſtream, prevents an accumulation and a ſtroke; whereas a conductor with a blunt termination receives the whole diſcharge of a cloud at once, and is much more likely to be exploded, whenever a cloud comes within a ſtriking-diſtance. To this may be added experience; for buildings guarded by either natural or artificial conductors terminating in a point, have very ſeldom been ſtruck by lightning; but others, having flat or blunt terminations, have often been ſtruck and damaged by it.

The beſt conductor for this purpoſe (ſays Mr. Cavallo) is a rod of iron, or rather of copper, as being a better conductor of electricity, and leſs liable to ruſt, about three quarters of an inch thick, which is either to be faſtened to the walls of a building by wooden cramps, or ſupported by wooden poſts, at the diſtance of a foot or two from the wall; though leſs may do; the upper end of it ſhould terminate in a pyramidal form, with a ſharp point and edges; and, when made of iron, gilt or painted near the top, or elſe pointed with copper; and be elevated five or ſix feet above the higheſt part of the building, or chimneys, to which it may be faſtened. The lower end ſhould be driven five or ſix feet into the ground, and directed away from the foundations of the building, or continued till it communicates with the neareſt water; and, if this part be made of lead, it will be leſs apt to decay. When the conductor is formed of different pieces of metal, care ſhould be taken that they are well joined; and it is farther recommended, that a communication be made from the conductor by plates of lead, eight or ten inches broad, with the lead on the ridges and gutters, and with the pipes that carry down the rain-water, which ſhould be continued to the bottom of the building, and be made to communicate either with water or moiſt earth, or with the main pipe which ſerves the houſe with water. If the building be large, two, three, or more, conductors ſhould be applied to different parts of it, in proportion to its extent.

Chains have been uſed as conductors for preſerving ſhips; but, as the electric matter does not paſs readily through the links of it, copper wires, a little thicker than a gooſe-quill, have been preferred, and are now generally uſed. They ſhould reach two or three feet above the higheſt maſt, and be continued down in any convenient direction, ſo as always to touch the ſea-water.

Mr. B. Cook, after ſtating the frequency of the accounts publiſhed of damages cauſed by lightning, recommends the erection of conductors all over the kingdom, at the diſtance of five or ſix miles; the expenſe of which, he thinks, would be ſaved in a few years, from the miſchief they would prevent; and propoſes that every pariſh ſhould erect four or ſix conductors, according to its ſize, as a mode of putting the above plan into execution.

Mr. Cook next ſtates the great imperfection of iron conductors, ariſing from their liability to ruſt, the irregularity of their ſurfaces, which tends to cauſe the electric fluid to fly off to any other conducting ſubſtance near them, and their not being raiſed to a ſufficient height above the buildings which they are intended to protect, and which height ſhould at leaſt extend to ſix or eight feet. From the ſcale given in our article ELECTRICITY, vol. vi. p. 426. it appears, that gold and ſilver are the beſt conductors, copper and braſs the next, and iron, &c. the worſt. Mr. Cook therefore propoſes to uſe braſs for this purpoſe; and, in order that it may be obtained ſufficiently cheap, and of the proper degree of ſmoothneſs, recommends that it be uſed in the form of coating to iron tubes, and paſſed through poliſhed draw-plates: for performing which operation in a manner that unites the braſs ſo perfectly to the iron, by compreſſion, as to appear but one piece, and ſo as to form a coating of one-ſixteenth of an inch in thickneſs, Mr. Cook has diſcovered a very effectual method, for which he has obtained a patent.

Inſtead of braſs, Mr. Robert Patterſon, of Philadelphia, propoſes to fix upon the top of the iron rod a piece of *black-lead*, of about two inches long, taken out of a good pencil, and terminating in a fine point, projecting but a very little above the end of its metallic ſocket; ſo that, if the black-lead point ſhould happen to be broken off by any accident, ſtill the point of the rod would be left ſharp enough to anſwer the purpoſe of a metallic conductor. "This ſubſtance (Mr. P. obſerves) is well-known to be infuſible by the greateſt heat, and hence its uſe in making crucibles; nor is it evaporable, as remarked by Cronſtedt in his Mineralogy, except in a ſlow calcining heat, to which it could never be expoſed on the top of a lightning-rod. At the ſame time its power, as a conductor of electricity, is perhaps equal, or but little inferior, to that of any of the metals. A line drawn on a piece of paper by a black-lead pencil will, as I have often experienced, conduct an electric exploſion ſeemingly as well as a ſimilar line of gilding would do; and that without ever loſing its conducting power, which is not the caſe with gilding."

Mr. Patterſon then propoſes an improvement in the mode of directing the eſcape of the electric fluid from the lower part of the rod into the ſurrounding earth. "It is in many caſes impracticable, from the interruption of rocks, or other obſtacles, to ſink the rod ſo deep as to reach moiſt earth, or any other ſubſtance which is a tolerably good conductor of electricity. Nor, even if this were practicable, would it, I preſume, be alone ſufficient to anſwer the deſired intention. Iron buried in the earth, and eſpecially in moiſt earth, will preſently contract a

coat of ruſt, which will continually increaſe till the whole is converted into ruſt; but ruſt of iron, and indeed the calx of all metals, is a *non-conductor*, or at moſt but a very imperfect conductor, of the electric fluid. Hence it is eaſy to ſee, that, in a few years after a lightning-rod has been erected, that part of it which is under-ground will contribute little or nothing towards the ſafety of the building. Beſides, the ſurface of this part of the rod is too ſmall to afford an eaſy and copious diſcharge of the electric fluid into the ſurrounding earth, when this is but an imperfect conductor. As a remedy for theſe defects, I would propoſe that the part of the rod under-ground be made of tin or copper, which are far leſs liable to corroſion or ruſt, by lying under-ground, than iron; or, which perhaps would anſwer the purpoſe better, let this part of the rod, of whatever metal it be made, be coated over with a thick cruſt of black-lead, previouſly formed into the conſiſtence of paſte, by being pulverized and mixed with melted ſulphur, (as in the manufactory of the ordinary kind of black-lead pencils,) and then applied to the rod while hot. By this means, the lower part of the rod would, I apprehend, retain its conducting power for ages, without any diminution. In order to increaſe the ſurface of the lower part of the conductor, let a hole or pit of ſufficient extent be dug as deep as convenient, and into this pit let there be put a quantity of charcoal, round the lower extremity of the rod. Charcoal poſſeſſes two properties, which in a peculiar manner fit it for anſwering the purpoſe here in view. Firſt, it is a very good conductor of electricity; and ſecondly, it will undergo little or no change of property by lying ever ſo long in the earth. Thus might the ſurface of that part of the conductor in contact with the earth be increaſed, with little trouble or expenſe, to any extent at pleaſure; a circumſtance which every one acquainted with electrical experiments muſt acknowledge to be of great importance to the end here propoſed." For theſe propoſed improvements, the Magellanic gold medal was voted to Mr. Patterſon by the American Philoſophical Society; and the account was publiſhed in their Tranſactions.

The editor of the London Philoſophical Journal makes light of theſe improvements, being of opinion, that the place where lightning ſtrikes ſeems to be governed in a great meaſure by certain conducting maſſes lying within the earth, which have an influence far beyond the counteracting power of any metallic rod, even ſuppoſing this laſt to be inſerted into the maſs itſelf. For this and other reaſons, deduced from the greatneſs of the ſcale on which electric phenomena are produced by atmoſpheric evaporations and condenſations, he thinks that conducting-rods cannot effectually modify the courſe of theſe effects; and, in ſupport of his opinion, ſtates the caſe of the poor-houſe at Heckingham, which about thirty years ago was ſet on fire by lightning, without its touching any one of the eight elevated metallic conductors attached to the building. *Phil. Journal*, vol. xxix.

If, however, the objections ſtated againſt electrical conductors were ſo ſtrong as the editor of the Philoſophical Journal ſeems to think, it is manifeſt that they would not have been found to be of that benefit which experience has decided them to be of wherever they have been uſed, but particularly in America; and we farther imagine, that, if the diſpoſition of the internal maſſes of the earth abſolutely decided the place of the electric ſtroke, that then certain places muſt be oftener ſtruck than others, (which has never been proved to be the caſe;) and that the practice of the Romans, in marking by a public monument the ſpot ſtruck by lightning, would appear to be a wiſe precaution. See p. 694. On this ſubject the faireſt deciſion ſeems to be, that though conductors, like moſt other human means, are not abſolutely perfect, yet they increaſe the chance of protection ſo much, as to make their adoption extremely adviſeable; and, inſtead of rejecting them on account of a few failures, that theſe latter ſhould rather excite to ſuch an examination of the cauſes, as might ſuggeſt farther improvements in their conſtruction and uſe. The event at Heckingham, for inſtance, might have been cauſed by the very defects in the rods which Mr. Cook mentions; the rods might have been put up without making them terminate in water at all; or the water might at that time have been dried up; they might even have been ſo injudiciouſly placed, as to conduct the lightning to the building, inſtead of drawing it off; and that this has been often the caſe, ſeems probable, from the precaution uſed of late years, in erecting conductors for gunpowder-magazines, by placing them at ſome little diſtance from the building, inſtead of attaching them to it, as formerly.

For the above reaſons, we ſtill think the uſe of conductors for lightning highly neceſſary; and agree with Mr. Cook and Mr. Patterſon that rods tipped with braſs or black-lead would be much ſuperior to any uſed for the purpoſe at preſent. On the point of the propriety of erecting conductors all over the kingdom, in the manner the former propoſes, we cannot, however, coincide with him; for, in the firſt place, the diſtance he mentions for them would be totally inadequate as a general protection; and to have them much cloſer, would coſt a ſum too enormous to be applied to guard againſt an evil, which, formidable as it is, ranks very low in the liſt of thoſe by which mankind in general are ſurrounded, or even of thoſe which we peculiarly labour under in England. The uſe of conductors therefore, we imagine, muſt be ſtill confined to the defence of expenſive public buildings, or to the dwellings of thoſe individuals who can afford them, and are ſo happy as to have no greater evils to contend with.

Dr. Franklin adviſes perſons who are apprehenſive of danger from lightning, to ſit in the middle of a room, provided it be not under a metal luſtre ſuſpended by a chain, ſitting on one chair, and laying their feet on another. It is ſtill ſafer, he ſays, to bring two or three mattraſſes, or beds, into the middle of the room, and, folding them double, to place the chairs upon them; for, as they are not ſo good conductors as the wall, the lightning will not chooſe to paſs through them; but the ſafeſt place of all is in a hammock hung with ſilken cords, at an equal diſtance from all the ſides of a room. Dr. Prieſtley obſerves, that the place of moſt abſolute ſafety muſt be the cellar, and eſpecially the middle of it; for, when a perſon is lower than the ſurface of the earth, the lightning muſt ſtrike it before it can poſſibly reach him. In the fields, the place of ſafety is within a few yards of a tree, but not quite near it. Nevertheleſs, S. Beccaria cautions perſons not to depend upon the neighbourhood of a higher, or, in all caſes, a better conductor than their own body; ſince, according to his repeated obſervations, the lightning by no means deſcends in one undivided track; but bodies of various kinds conduct their ſhare of it at the ſame time, in proportion to their quantity and conducting power. See on this ſubject, Franklin's Letters; Beccaria's Lettre dell' Elettriciſmo; Prieſtley's Hiſtory, &c. of Electricity.

Phoſphorus, when newly made, gives a ſort of *artificial lightning*, viſible in the dark, which would ſurpriſe thoſe who are not uſed to ſuch a phenomenon: the uſual method of keeping this preparation is under water; and, if the corruſcations are deſired to be ſeen to the greateſt advantage, the glaſs in which it is kept ſhould be deep and cylindric, and not more than three-fourths filled with water. The phoſphorus put into this water will ſend up corruſcations at times, which will pierce through the incumbent water, and expand themſelves with great brightneſs in the empty upper part of the bottle. If we compare this artificial corruſcation to the real lightning, we ſhall find, that, as in this the fire paſſes unaltered through the water, ſo in that the flaſhes of lightning, which come at intervals, paſs uninterrupted through the moſt denſe clouds, and are not obſtructed by the heavieſt ſtorms of rain, but, like the beams of the ſun, or any other fire, paſs uninterrupted through glaſs and water. The ſeaſon of the weather, as well as the newneſs of the phoſphorus, muſt

muſt concur to produce theſe flaſhes; for they are as uncommon in winter as lightning is, but in warm weather both are very frequent.

The flame of lightning is generally inoffenſive, and does not, except in particular circumſtances, ſet fire to any thing that it falls upon; and, in like manner, the flaſhings of the phoſphorus through the water will not burn the fleſh, nor even fire the moſt combuſtible things; though the phoſphorus itſelf, like the lightning, under proper circumſtances, may be a very conſuming and terrible fire. The warmth of the air, or the immediate beams of the ſun, will ſet fire to the condenſed body of the phoſphorus, and it then becomes this terrible fire; and in the ſame manner lightning, when condenſed and contracted, and wrapped up in a vehicle of air, ſo that it does not ſo eaſily diffuſe itſelf through the yielding ether, ſets fire to trees, houſes, or whatever it comes near.

The phoſphorus, while burning, acts the part of a corroſive, and when it goes out reſolves into a menſtruum, which diſſolves gold, iron, and other metals; and lightning, in the ſame manner, melts the ſame ſubſtances. From the whole, it appears that there is much more reſemblance between this phoſphorus and lightning than between gunpowder, or aurum fulminans, and that fire; though theſe have often been ſuppoſed to be nearly allied to its nature. See PHOSPHORUS.

LIGHTS, *ſ.* [ſuppoſed to be called ſo from their lightneſs in proportion to their bulk.] The lungs; the organs of breathing; we ſay, *lights* of other animals, and *lungs* of men.—The complaint was chiefly from the *lights*, a part as of no quick ſenſe, ſo no ſeat for any ſharp diſeaſe. *Hayward.*

Feaſt of LIGHTS, or of the dedication. The Jews celebrated the anniverſary of the dedication of their temple every year, for eight days; this was firſt enjoined by Judas Maccabæus, and the whole ſynagogue, in the year of the Syro-Macedonian æra 148, i.e. 165 years before Chriſt, on occaſion of the victory obtained by the Maccabees over the Greeks. 1 *Mac.* iv. 59. It began every year on the 25th day of Ciſleu, and was continued to the 8th day, during all which time they illuminated their houſes, by ſetting up candles at every man's door; whence it was called the *feaſt of lights*. This feſtival Chriſt honoured with his preſence at Jeruſalem. *John* x. 22. Leo of Modena ſays, that they began with one lamp, and added to the number, according to the day of the feaſt; ſo that on the laſt day they had eight lamps in their houſes. Perſius ſeems to refer to this feſtival in his 5th ſatire, v. 179–184; and it is poſſible, that the Maccabee feſtival, of the dedication of the altar, and the commemoration of the inauguration of Herod the Great, might be blended together at the time to which Perſius refers. This coincidence, which is not improbable, accounts for the ſplendour of the illuminations, which he deſcribes.

LI'GHTSOME, *adj.* Luminous; not dark; not obſcure; not opake.—White walls make rooms more *lightſome* than black. *Bacon.*

The ſun exalted through the Ram had run,
Through Taurus, and the *lightſome* realms of love. *Dryd.*

Gay; airy; having the power to exhilarate.—The *lightſome* paſſion of joy was not that which now often uſurps the name; that trivial, vaniſhing, ſuperficial, thing, that only gilds the apprehenſion, and plays upon the ſurface of the ſoul. *South.*

LI'GHTSOMENESS, *ſ.* Luminouſneſs; not opacity; not obſcurity; not darkſomeneſs.—It is to our atmoſphere that the variety of colours, which are painted on the ſkies, the *lightſomeneſs* of our air, and the twilight, are owing. *Cheyne's Philoſophical Principles.*

LI'GIST, a town of the duchy of Stiria: three miles ſouth-eaſt of Voitſberg.

LIG'NA, a river of Hungary, which runs into the Drave ſeventeen miles weſt of Ziget.

LIGNAC', a town of France, in the department of the Indre: thirteen miles ſouth-weſt of Argenton, and eleven ſouth-eaſt of Le Blanc.

LIGNAC' (Joſeph-Adrian le Large de), a learned French abbé in the eighteenth century, was deſcended from a noble family, and born at Poitiers, but in what year we are not informed. He died in Paris in 1762. He was the author of, 1. Memoirs illuſtrative of the Hiſtory of Aquatic Spiders, 1748, 12mo. 2. A Letter to an American, concerning the Natural Hiſtory of M. de Buffon, 2 vols. 12mo. 1751. 3. Elements of Metaphyſics, deduced from Experience, 1753, 12mo. 4. The Poſſibility of Man's corporeal Preſence in different Places at the ſame Time, 1754, 12mo. in which he attempts to prove, that the doctrine of tranſubſtantiation contains nothing incongruous with the principles of ſound philoſophy. 5. An Examination, ſerious and comic, of the Treatiſe *de l'Eſprit* of Helvetius, 1759, 2 vols. 12mo. 6. The teſtimony of internal Senſe and Experience oppoſed to the profane and ridiculous Creed of modern Fataliſts, 1760, 3 vols. 12mo. At the time of his death, he was employed in compoſing a treatiſe on the Evidences of Religion, formed on the plan ſuggeſted by M. Paſcal.

LIGNA'GIUM, *ſ.* A law-term for the right of cutting fuel in woods; and ſometimes it is taken for a tribute or payment due for the ſame.

LIGNA'LOES, *ſ.* [*lignum aloes*, Lat.] Aloes-wood. See ALOE, vol. i.—The valleys ſpread forth as gardens by the river's ſide, as the trees of *lignaloes* which the Lord hath planted, and as cedar-trees beſide the water. *Numb.* xxiv. 6.

LIGNA'NA, a town of France, in the department of the Seſia: ſix miles weſt-ſouth-weſt of Vercelli.

LI'GNE, a town of France, in the department of Jemappe, on the river Dender: thirteen miles north-weſt of Mons, and twenty north of Valenciennes.

LIGNE', a town of France, in the department of the Lower Loire: nine miles north-weſt of Ancenis.

LIGNE' SUR USSEAU', a town of France, in the department of the Vienne: ſix miles north of Châtelleraut, and ſixteen eaſt-ſouth-eaſt of Loudun.

LIGNE'AN, *adj.* Ligneous.

LIG'NEOUS, *adj.* [*ligneus*, Lat.] Made of wood; wooden; reſembling wood.—Ten thouſand ſeeds of the plant harts-tongue hardly make the bulk of a peppercorn: now the covers and the true body of each ſeed, the parenchymous and *lignecus* part of both, and the fibres of thoſe parts, multiplied one by another, afford a hundred thouſand millions of formed atoms; but how many more we cannot define. *Grew.*

LIGNEROL'LES, a town of France, in the department of the Allier: four miles ſouth of Montluçon.

LIGNEVIL'LE, a town of France, in the department of the Voſges: ſix miles north-weſt of Darney, and nine north-eaſt of Marche.

LIGNIE'RE, a town of France, and ſeat of a tribunal, in the department of the Cher: twenty-four miles ſouth of Bourges, and thirteen ſouth-ſouth-eaſt of Iſſoudun. Lat. 46. 45. N. lon. 2. 15. E.

LIGNIE'RE LA DOUCEL'LE, a town of France, in the department of the Mayenne: twelve miles north of Villaine, and thirteen north-weſt of Alençon.

LIGNIE'RES CHATELAI'N, a town of France, in the department of the Somme: eighteen miles ſouth-weſt of Amiens.

LIG'NITE. See the article MINERALOGY.

LIG'NITZ. See LIEGNITZ, p. 628 of this volume.

LIG'NO BRASILIA'NO SI'MILE, in botany. See CÆSALPINIA, vol. iii.

LIGNO'N, a town of France, in the department of the Marne: nine miles ſouth of Vitry le François.

LIG'NUM, *ſ.* [Latin.] In botany, the wood, or woody part of the trunk. The *liber*, or inner bark, of the preceding year, deprived of its juice, hardened and glued faſt together. *Martyn's Language of Botany.*

LIG'NUM ALO'ES. See CORDIA, vol. v. p. 195.

LIG'NUM CAMPECHIA'NUM. See HÆMATOXYLUM, vol. ix.

LIG'NUM COLUBRI'NUM. See STRYCHNOS.

LIG'NUM COR'NEUM. See GARCINIA, vol. viii.

LIG'NUM LÆ'VE. See GLABRARIA, vol. viii.
LIG'NUM MOLUCCEN'SE. See CROTON, vol. v.
LIG'NUM SAPPAN'. See CÆSALPINIA, vol. iii.
LIG'NUM SCHOLA'RE. See ECHITES, vol. vi.
LIG'NUM VI'TÆ. See GUAIACUM, vol. ix. p. 63.

LIGNY', a town of France, in the department of the Meuſe. In 1544, this town was taken by the emperor Charles V. nine miles ſouth-eaſt of Bar le Duc.

LIGNY' LE CHATEAU', a town of France, in the department of the Yonne: ſix miles ſouth of St. Florentin, and nine north-eaſt of Auxerre.

LI'GOR, a town of Aſia, and once capital of a kingdom, now ſubject to Siam, ſituated on a river of the ſame name. The Dutch have a factory here for tin, rice, and pepper. Lat. 8. 18. N. lon. 100. 35. E.

LI'GOR, or TANTALAM', an iſland at the entrance of the gulf of Siam, of a triangular form, and about 130 miles in circumference. Lat. 8. 10. N. lon. 100. 50. E.

LIGO'RIO (Pirro), an artiſt and antiquary of the ſixteenth century, was deſcended from a noble family of Naples. He was by profeſſion a painter and architect; but he had a particular paſſion for antiquities, and ſpent a great part of his life in reſearches of that nature, as well in the kingdom of Naples as in other parts of Italy. As he drew with great facility, he every-where copied what he ſaw, ancient monuments, medals, and inſcriptions, &c. with the intention of making a complete collection of the kind for the illuſtration of the hiſtory and writings of antiquity. His reputation cauſed him to be invited to the court of Alphonſo II. duke of Ferrara, who gave him the title of his antiquary in 1568, with an ample ſtipend. It is extraordinary that a man who was ſo far from learned, that he ſcarcely underſtood Latin, ſhould have intereſted himſelf ſo much in theſe matters. This defect has occaſioned many errors in his compilations with regard to inſcriptions; yet antiquaries have acknowledged that his labours were highly uſeful and meritorious. His manuſcript works filled thirty volumes, which are ſaid to be now depoſited in the archives of the court of Turin, having been purchaſed for 18,000 ducats by Charles Emanuel I. duke of Savoy. Some ſeparate parts of this collection have been committed to the preſs; as, a treatiſe On the Antiquities of Rome, printed in 1553; a tract De Vehiculis, tranſlated from the original into Latin; and a Fragment of the Hiſtory of Ferrara, 1676. As an artiſt, Ligorio deſerted painting, and attached himſelf ſolely to architecture. He was employed in this capacity by the popes Paul III. and IV. and Pius IV. and, after the death of Michael Angelo, was appointed with Vignola to ſuperintend the building of St. Peter's, with directions to follow the plan of that great artiſt. Propoſing to deviate from it, his employment was taken away by Pius V. It was after this period that he went to Ferrara, where he died in 1583.

LIGS, *ſ.* in farriery, a diſeaſe of the mouth incident to horſes.

LIG'TA, *ſ.* in botany. See ALSTROEMERIA.

LIG'UA, a river of Chili, which runs into the Pacific Ocean in lat. 32. S.

LIG'UA, a town of Chili, on the river ſo called: ſeventy-two miles north-north-eaſt of Valparayſo.

LIGU'EIL, a town of France, in the department of the Indre and Loire: nine miles ſouth-weſt of Loches, and twenty-one ſouth of Tours.

LIGUEU'X, a town of France, in the department of the Dordogne: nine miles north-north-eaſt of Perigueux.

LIG'ULA, *ſ.* [Latin.] A little tongue; a latchet for a ſhoe; a lace; a point. The leaſt denomination of liquid meaſure among the Romans. In old records, the copy of a court-roll. In botany, the thin membrane which terminates the ſheath on the ſtems of corn and graſs.

LIG'ULA, *ſ.* the BANDAGE-WORM; in helminthology, a genus of inteſtinal worms. Generic characters—Body linear, equal, long; the fore-part obtuſe; the hind-part acute, with an impreſſed dorſal future. There are only two ſpecies.

1. Ligula inteſtinalis, the inteſtinal bandage-worm: body clear white, and very narrow. Found in the inteſtines of the merganſer and guillemot; about a foot long, and exactly reſembling a piece of tape.

2. Ligula abdominalis, the abdominal bandage-worm: body pale aſh, and rather broad. There are eight varieties, infeſting as many different ſpecies of fiſh. They are found principally in the meſentery, emaciating the fiſh they infeſt, and making them grow deformed; when they eſcape from the body, they penetrate through the ſkin; they are about half a line thick, and from ſix inches to five feet long.

LIG'ULA, *ſ.* The name given to a genus of teſtaceous worms, inſtituted by Mr. Montagu, in the Supplement to his Teſtacea Britannica, 1811; the characters of which he gives as follows: "Animal an aſcidia; ſhell bivalve, equivalve; hinge with a broad tooth in each valve, projecting inwards, furniſhed with a pit or cavity for the reception of the connecting cartilage; in ſome ſpecies, a minute erect tooth." The ſpecies are ſelected from the genera MACTRA and MYA, which ſee.

LIGULA'RIA, *ſ.* in botany. See EUPHORBIA, vol. vii.

LIG'ULATE, *adj.* in botany, ſtrap-ſhaped; applied to the flat corollet of a compound flower.

LIGU'NY, a town of Samogitia: forty-four miles eaſt of Miedniki.

LI'GURE, *ſ.* A precious ſtone.—The third row a *ligure*, an agate, and an amethyſt. *Exodus.*

LIG'URES, the inhabitants of Liguria.

LIGU'RIA, in ancient geography, a country of Italy, bounded on the ſouth by the Mediterranean Sea, on the north by the Apennine mountains, on the weſt by part of Tranſalpine Gaul, and on the eaſt by Etruria; comprehending the greater part of the modern diſtricts of Nice, Piedmont, Montferrat, Genoa, Modena, and Parma. There is a great diſagreement among authors concerning the origin of the Ligurians, though moſt probably they were deſcended from the Gauls. Some carry up their origin as far as the fabulous heroes of antiquity; while others trace them from the Ligyes, a people mentioned by Herodotus as attending Xerxes in his expeditions againſt Greece. Theſe Ligyes are by ſome ancient geographers placed in Colchis; by others, in Albania. According to Diodorus Siculus, the Ligurians led a very wretched life; their country being entirely overgrown with woods, which they were obliged to pull up by the root, in order to cultivate their land, which was alſo encumbered with great ſtones, and, being naturally barren, made but very poor returns for all their labour. They were much addicted to hunting; and, by a life of continual exerciſe and labour, became ſo ſtrong, that the weakeſt Ligurian was generally an overmatch for the ſtrongeſt and moſt robuſt among the Gauls. The women are ſaid to have been almoſt as ſtrong as the men, and to have borne an equal ſhare in all laborious enterpriſes. With all their bravery, however, they were not able to reſiſt the Roman power; but were ſubdued by that warlike nation, about 211 B. C.

The form of their government appears to have been always republican. It is remarkable that, in all the details of the wars of Liguria during the times of the Romans, the name of not a ſingle Ligurian king, prince, or commander-in-chief, occurs; a ſtrong proof of the equality of condition which prevailed among this people. All the hiſtory of the middle ages, as well as that of more recent periods, exhibits the inhabitants of the region formerly known by the name of Liguria as more inclined to independence, to a republican government, and to inſurrections, than any of their neighbours. Their wars, their commerce, their aſperity, and the ſterility of the ſoil which obliged them to inceſſant labour, prevented them for a long period from cultivating the fine arts, or from devoting themſelves to literature. From the time of the Scipios, when the Romans firſt began to acquire a taſte for ſtudy, the Ligurians, who had juſt fallen under their yoke, were treated as an ignorant people. The hiſtory alſo of

Ligusticum Scoticum, or Scotch Lovage.

London, Published as the Act directs, June 10, 1813, by G Jones

the 4th, 5th, and 6th, ages of Roman literature, from Terence to Caſſiodorus, preſents us with only a ſingle Ligurian, viz. Pedo Albinovanus, to whom Horace addreſſes one of his Epiſtles. It muſt be acknowledged, however, that the Ligurians, and their deſcendants the Genoeſe, have always evinced an energetic character; and that, whenever they have had an opportunity of diſplaying their talents, they have conſtantly diſtinguiſhed themſelves. Three or four Genoeſe or Ligurian popes, Innocent IV. Nicholas V. Sixtus IV. and Julius II. have eſtabliſhed remarkable epochs in the hiſtory of the church and of the empire; and we muſt add that they afford a favourable idea of the Ligurian character, but not properly of that of the Genoeſe. *Denina's Picture of Upper Italy*, 1807.

LIGU'RIAN REPUB'LIC. See GENOA, vol. viii. p. 326, 7.

LIGUS'TICUM, *ſ.* [from *Liguria* in Italy.] LOVAGE; in botany, a genus of the claſs pentandria, order digynia, natural order of umbellatæ or umbelliferæ. The generic characters are—Calyx: umbel univerſal, manifold; partial manifold. Involucre univerſal membranaceous, ſeven-leaved, unequal; partial ſcarcely four-leaved, membranaceous; perianthium proper five-toothed, obſcure. Corolla: univerſal uniform; florets all fertile; proper of five petals; which are equal, involute, flat, entire, inwardly keeled. Stamina: filaments five, capillary, ſhorter than the corolla; antheræ ſimple. Piſtillum: germ inferior; ſtyles two, approximated; ſtigmas ſimple. Pericarpium: none; fruit oblong, cornered, five-furrowed, bipartile on each ſide. Seeds: two, oblong, ſmooth, marked on one ſide with five elevated ſtriæ, flat on the other ſide. There are alſo male flowers obſerved.—*Eſſential Character.* Fruit oblong, five-grooved on both ſides; corolla equal, with involute entire petals.

Species. 1. Ligufticum leviſticum, or common lovage: leaves manifold; leaflets gaſhed at top. Root ſtrong, fleſhy, perennial, ſtriking deep into the ground; and compoſed of many ſtrong fleſhy fibres covered with a brown ſkin, and having a ſtrong hot aromatic ſmell and taſte. Leaves large, compoſed of many leaflets ſhaped like thoſe of ſmallage, but larger and of a deeper green. Stems ſix or ſeven feet high, large and channelled, dividing into ſeveral branches, each terminated by a large umbel of yellow flowers. Petals very ſmall, yellowiſh green with a yellow receptacle. Fruit ovate-oblong, crowned with an obſcure rudiment of the calyx, emarginate at top and bottom, winged. Seeds of the ſame form, convex on one ſide, with three narrow approximating wings, and ſurrounded with a broader-ridged not-flexile margin; flat on the other ſide, and marked with a raiſed longitudinal line; whitiſh bay-coloured. Native of the Alps of Italy, the South of France, Sileſia, &c. Cultivated in 1596, by Gerarde. It flowers in June and July, and the ſeeds ripen in autumn. The odour of this plant is very ſtrong, and peculiarly ungrateful; its taſte is warm and aromatic. It abounds with a yellowiſh gummy-reſinous juice, very much reſembling opoponax. Its qualities are ſuppoſed to be ſimilar to thoſe of angelica and maſterwort in expelling flatulencies, exciting ſweat, and opening obſtructions; therefore chiefly uſed in hyſterical diſorders, and in uterine obſtructions. A teacup full of the juice with rheniſh wine, or a decoction of the ſeeds with wine or mugwort-water, was by Foreſtus ſaid to be a ſecret remedy of extraordinary efficacy in flow or laborious parturition. The leaves, eaten as ſalad, are accounted as emmenagogue. The root, which is leſs ungrateful than the leaves, is ſaid to poſſeſs ſimilar virtues, and may be employed in powder.

2. Ligufticum Scoticum, or Scotch lovage: leaves biternate. This has a biennial root, (all other authors ſay, perennial,) of much leſs ſize than the preceding; the leaflets are broader and ſhorter; each leaf having two or three ternate leaflets, indented on their edges. The ſtalk riſes about a foot high, and ſuſtains an umbel of pale yellow flowers, ſhaped like thoſe of the preceding, with red ſtigmas. Linnæus remarks that the leaves are lucid or gloſſy underneath. The leaflets are oblong-wedged-ſhaped, entire below, above irregularly ſerrate, and ſometimes deeply cut. This is repreſented on the annexed Plate. It is a native of North America, Sweden, Denmark, Norway, and Scotland, on rocks near the coaſt. It is much valued in the Iſle of Sky. The root is reckoned a good carminative; and an infuſion of the leaves in whey, a good purge for calves. It is alſo uſed for food, either as a ſalad or boiled as greens.

3. Ligufticum Peloponnenſe, or hemlock-leaved lovage: leaves manifold-pinnate; leaflets pinnately-gaſhed. Root thick, fleſhy, like that of parſnep, ſtriking deep into the ground. Leaves large, deep green, when bruiſed emitting a fetid odour; the leaflets are cut into acute points. Stems three or four feet high, large and hollow, ſuſtaining large umbels of yellowiſh flowers. Native of Swiſſerland, Auſtria, Dauphiné, Sileſia, Italy, Peloponneſus, and Siberia. Cultivated in 1516, by Gerarde.

4. Ligufticum Auſtriacum, or Auſtrian lovage: leaves bipinnate; leaflets confluent, gaſhed, quite entire. Root half a foot long or more, the thickneſs of the human thumb, often branched, yellowiſh-brown on the outſide, pale within and ſpongy. Stem upright, from two to three feet in height, grooved, hollow without any partitions at the joints, the whole leafy, as thick as the thumb or finger, ſimply branched at top only. Root-leaves very large; ſtem-leaves above the middle ſeſſile. Flowers ſtrong-ſmelling, large, all fertile. Petals white, ſubovate, bluntiſh, a little concave, ſpreading very much, not inflex-cordate. Fruit ovate, acute. Seeds ovate, browniſh or pale, flat on one ſide, on the other convex and deeply four-grooved. The whole plant is ſmooth. Native of Auſtria, Sileſia, and Italy; cultivated in 1759 by Mr. Miller; flowers from June to Auguſt.

5. Ligufticum Cornubienſe, or Corniſh lovage: root-leaves decompound, gaſhed; ſtem-leaves ternate, lanceolate, entire. Root perennial, ſpindle-ſhaped. Stem from two to three feet in height, erect, branched, many-flowered, round, ſtriated, roughiſh, purple at the baſe, annual. Flowers white, equal, all hermaphrodite. Calyx of five ſmall, roundiſh, blunt, concave, leaves; petals five times as large as the calyx, oblong, acute, turned in, deeply channelled on the back, equal. Native only of Cornwall, where it was obſerved by Buddle; it grows in thickets, among buſhes, and in hedges. This plant eluded the ſearches of modern botaniſts till Mr. Pennington found it in 1788 in great plenty near Bodmin; ſir Thomas Gery Cullum, bart. gathered it there the year following. In 1793 not a ſingle plant was to be found in the field where Mr. Pennington had diſcovered it; but Dr. Withering found it in another place, farther from Bodmin, among furze. Cattle are ſo fond of it, that they eat it down wherever they can get at it. The root contains a yellow reſinous juice.

6. Ligufticum peregrinum, or parſley-leaved lovage: involucre of the primary umbel ſcarcely any, of the lateral ones membranaceous at the baſe; rays ſomewhat branched. Root biennial. Stem two feet high, rigid, angular, even. It reſembles parſley, even in ſmell and taſte; but all the parts are thicker and more rigid. Native of Portugal; introduced in 1766 by Monſ. Thouin; flowers in June and July.

7. Ligufticum Balearicum, or Balearic lovage: leaves pinnate; loweſt leaflets augmented with a leaflet. Root biennial. Stem round, ſomewhat ſtriated, ſmall in compariſon with the umbel, a foot high. The genus is doubtful, the ſeeds not having been obſerved in a ſtate of perfection. Native of Majorca and Minorca, and about Rome.

8. Ligufticum candicans, or pale lovage: leaves ſuper-decompound; leaflets wedge-form, gaſhed, ſmooth; univerſal involucre two-leaved, ſubfoliaceous; ribs of the ſeeds membranaceous, ſmooth. Native place not known; introduced here about 1780; flowers in July and Auguſt.

Several

Several other ſpecies of Liguſticum are known, but not ſufficiently aſcertained.

Propagation and Culture. Sow the ſeeds in autumn ſoon after they are ripe; for, when kept out of the ground till ſpring, they ſeldom grow the firſt year. When the plants are fit to remove, tranſplant them into a moiſt rich border, at three feet diſtance. The roots of common lovage will abide many years; and, where the ſeeds are permitted to ſcatter, the plants will come up without care. Several of the other ſorts are only biennial, and die when they have perfected their ſeeds. They all love a moiſt ſoil and ſhady ſituation. See ÆGOPODIUM, ÆTHUSA, ATHAMANTA, LASERPITIUM, PHELLANDRIUM, SELINUM, and SIUM.

LIGUS'TICUM MA'RE, the north part of the Tyrrhene Sea, now the Gulf of Genoa.

LIGUSTROI'DES, *ſ.* in botany. See VOLKAMERIA.

LIGUS'TRUM, *ſ.* PRIVET; in botany, a genus of the claſs diandria, order monogynia, natural order of ſepiariæ, (jaſmineæ, *Juſſ.*) The generic characters are—Calyx: perianthium one-leaſed, tubular, very ſmall; mouth four-toothed, erect, obtuſe. Corolla: one-petalled, funnel-form; tube cylindric, longer than the calyx; border four-parted, ſpreading; diviſions ovate. Stamina: filaments two, oppoſite, ſimple; antheræ upright, almoſt the length of the corolla. Piſtillum: germ roundiſh; ſtyle very ſhort; ſtigma two-cleft, obtuſe, thickiſh. Pericarpium: berry globoſe, ſmooth, one-celled. Seeds: four, convex on one ſide, cornered on the other. According to Gærtner, the berry is two-celled; the cells coated with a thin membrane. The ſeeds are two in each cell.—*Eſſential Character.* Corolla four-cleft; berry four-ſeeded.

Species. 1. Liguſtrum vulgare, or common privet: leaves ovate, obtuſe; panicle ſimply trichotomous. Common privet is a ſhrub, uſually about ſix feet in height, branched, the bark of a greeniſh aſh-colour, irregularly ſprinkled with numerous prominent points; branches oppoſite, the young ones flexible and purpliſh. Leaves oppoſite, on very ſhort petioles, ſmooth on both ſides, perfectly entire, the lower ones at the bottom of the ſmall branches leaſt. Flowers ſweet-ſcented; corolla white, but ſoon changing to a reddiſh brown. Berry ſuperior, fleſhy, ſubglobular, ſhining, of ſo dark a purple as to ſeem black; pulp ſucculent, purpliſh red. Seeds two, rarely one, in each cell, oblong, convex on one ſide, angular on the other, ſmooth, ſhining, dark purple, with a whitiſh umbilicus at top.

Privet is found wild in moſt parts of Europe, and in Japan; in woods and hedges; and flouriſhes beſt in a moiſt ſoil. It flowers in July, and the berries ripen in autumn. Privet, in old Engliſh authors, is alſo called *prim*, *print*, and *primprint*; perhaps from its regular appearance, when clipped. In German, Dutch, Daniſh, and Swediſh, it is called *liguſter*; in French it is *troëne*; in Italian, *liguſtro*; in Spaniſh, *alhena*; in Portugueſe, *alſena*; in Ruſſian, *ſchoſt*. In point of utility and ornament few ſhrubs exceed the common privet. Its chief uſe is to form ſuch hedges as are required in dividing gardens for ſhelter or ornament; and for this purpoſe it uſed formerly to be cut into fanciful ſhapes of men, horſes, birds, &c. but ſuch abſurdities are now antiquated. It bears clipping well, is not liable to be diſfigured by inſects; and, having only fibrous roots, it robs the ground leſs than almoſt any other ſhrub. It is one of the few plants that will thrive in the ſmoke of London, though it ſeldom produces any flowers in the cloſer parts after the firſt year. It alſo grows well under the drip of trees; and is not apt to be eaten by cattle; according to Linnæus, kine, ſheep, and goats, eat it, but horſes refuſe it. The Sphinx liguſtri, or privet hawk-moth, and Phalæna ſyringaria, feed on it in the caterpillar ſtate; and the Meloe veſicatorius, cantharides, or bliſter-beetle, is found on it. The leaves are bitter, and ſlightly aſtringent; the wood is very hard, and fit for the turner; from the pulp of the berries a roſe-coloured pigment may be prepared; with the addition of alum, they dye wool and ſilk of a good durable green; but for this purpoſe they muſt be gathered as ſoon as they are ripe: they continue on the ſhrub till ſpring, and in times of ſcarcity are eaten by different ſorts of birds, particularly the bulfinch.

Privet varies in many reſpects. The leaves ſometimes grow by threes, and ſometimes are enlarged at the baſe; they are variegated with white, and alſo with yellow; they frequently continue green great part of the winter, like the Italian privet. The regular number of ſtamens is two, but ſometimes there are three or four in a flower. And it has been found with white berries. Thunberg ſays that in Japan the leaves are ſomewhat broader and more blunt than in the European ſhrub. The Italian or evergreen variety, L. Italicum, is made a diſtinct ſpecies by Miller. It riſes with a ſtronger ſtem; the branches are leſs pliable, and grow more erect; their bark is of a lighter colour; the leaves are much larger, end in acute points, are of a brighter green, and continue till they are thruſt off by the young leaves in the ſpring; the flowers are rather larger, and are not often ſucceeded by berries in England.

2. Liguſtrum Japonicum, or broad-leaved privet: leaves ovate, acuminate; panicle decompoundedly trichotomous. Stem arboreous, very much branched, a fathom and a half in height. Native of Japan, where it flowers in June and July.

3. Liguſtrum Sinenſe, or Chineſe privet: leaves lanceolate; racemes oblong, lateral, and terminating. This is a ſmall tree, about eight feet in height, with diffuſed ſtraight branches. Leaves lanceolate, quite entire, oppoſite dark green; flowers white, ſmall. Native of China, about Canton.

Propagation and Culture. Common privet is eaſily propagated by laying down the tender ſhoots in autumn. In one year's time they may be removed where they are to remain, or planted in a nurſery for two or three years, where they may be trained for the purpoſes deſigned. Alſo by ſuckers, which it ſends forth in great plenty. But theſe are not eaſily kept within bounds, nor do they riſe ſo high as thoſe which are increaſed by layers. Or, thirdly, by cuttings, planted in the autumn on a ſhady border, and in a loamy ſoil. But the ſtrongeſt and beſt plants are raiſed from ſeeds. Gather the berries when ripe, put them into a pot with ſand, and bury them in the ground, as is practiſed with holly-berries and haws. After they have laid a year in the ground, take them up and ſow them in the autumn on a border expoſed to the eaſt, where the plants will come up the following ſpring. The varieties with ſtriped leaves may be increaſed by budding or inarching upon the plain ſort; or by laying down the branches, but they ſeldom ſhoot ſo faſt as to produce branches proper for this purpoſe. Being more tender, they ſhould have a dry ſoil and a warm ſituation; in a rich ſoil, they ſoon loſe their variegation and become plain. The Italian or evergreen privet is now generally found in the nurſeries inſtead of the common one. It is equally hardy, and will thrive in almoſt any ſituation. It is increaſed in the ſame manner; but, as it ſeldom produces berries here, they muſt be procured from Italy. See OLEA, OPHIOXYLUM, SYRINGA, and VOLKAMERIA.

LIGY'ES, a people of Aſia who inhabited the country between Caucaſus and the river Phaſis. Some ſuppoſe them to be a colony of the Ligyes of Europe, more commonly called Ligures.

LIGYR'GUM, a mountain of Arcadia.

LI'HONS, a town of France, in the department of the Somme: eighteen miles eaſt of Amiens, and nine ſouth-ſouth-weſt of Peronne. Lat. 50. 15. N. lon. 2. 51. E.

LI'KA, a county and province of Dalmatia, or Auſtrian Croatia, bordering on the Adriatic, oppoſite the iſland of Pago.

LIKA'VA, a town and caſtle of Hungary, five miles north of Roſenberg.

LIKE, *adj.* [lic, Sax. *liik*, Dut.] Reſembling; having reſemblance.—As the earth was deſigned for the being of men,

men, why might not all other planets be created for the *like* uſes, each for their own inhabitants? *Bentley.*

His ſon, or one of his illuſtrious name,
How *like* the former, and almoſt the ſame! *Dryden.*

Equal; of the ſame quantity.—More clergymen were impoveriſhed by the late war, than ever in the *like* ſpace before. *Spratt.*—[For *likely.*] Probable; credible.—The trials were made, and it is *like* that the experiment would have been effectual. *Bacon.*—Likely; in a ſtate that gives probable expectations. An improper, though frequent, uſe.—If the duke continues theſe favours towards you, you are *like* to be much advanced. *Shakeſpeare's Twelfth Night.*—He is *like* to die for hunger, for there is no more bread. *Jer.* xxxviii. 9.

LIKE, *ſ.* [ſeldom more than the adjective uſed elliptically; *the like* for the *like thing*, or *like perſon.*] Some perſon or thing reſembling another.—Every *like* is not the ſame, O Cæſar! *Shakeſpeare.*—Though there have been greater fleets for number, yet for the bulk of the ſhips never the *like*. *Bacon's War with Spain.*

He was a man, take him for all and all,
I ſhall not look upon his *like* again. *Shakeſpeare.*

One offers, and in offering makes a ſtay;
Another forward ſets, and doth no more;
A third the *like*. *Daniel's Civil War.*

His deſire
By converſation with his *like* to help,
Or ſolace his defects. *Milton's Paradiſe loſt.*

She'd ſtudy to reform the men,
Or add ſome grains of folly more,
To women than they had before;
This might their mutual fancy ſtrike,
Since ev'ry being loves its *like*. *Swift.*

LIKE, *adv.* In the ſame manner; in the ſame manner as: it is not always eaſy to determine whether it be adverb or adjective.—*Like* as a father pitieth his children, ſo the Lord pitieth them that fear him. *Pſal.* ciii. 13.

The joyous nymphs, and lightfoot fairies,
Which thither came to hear their muſic ſweet,
Now hearing them ſo heavily lament,
Like heavily lamenting from them went. *Spenſer.*

What will be my confuſion, when he ſees me
Neglected, and forſaken *like* himſelf! *Phillips.*

In ſuch a manner as befits.—Be ſtrong, and quit yourſelves *like* men. 1 *Sam.* iv. 9.—Likely; probably. *A popular uſe, not analogical:*

I like the work well; ere it be demanded,
As *like* enough it will, I'd have it copied. *Shakeſpeare.*

To LIKE, *v. a.* [lican, Sax. *liiken*, Dut.] To chooſe with ſome degree of preference.—As nothing can be ſo reaſonably ſpoken as to content all men, ſo this ſpeech was not of them all *liked*. *Knolles.*—We *like* our preſent circumſtances well, and dream of no change. *Atterbury.*—To approve; to view with approbation, not fondneſs.—Though they did not *like* the evil he did, yet they *liked* him that did the evil. *Sidney.*

For ſeveral virtues
I have *lik'd* ſeveral women; never any
With ſo full ſoul. *Shakeſpeare's Tempeſt.*

To pleaſe; to be agreeable to. *Now diſuſed.*—This deſire being recommended to her majeſty, it *liked* her to include the ſame within one entire leaſe. *Bacon.*

Well hoped he, ere long that hardy gueſt,
If ever covetous hand, or luſtful eye,
Or lips he laid on thing that *lik'd* him beſt,
Should be his prey. *Spenſer's Fairy Queen.*

Say, my fair brother now, if this device
Do *like* you, or may you to like entice. *Hubberd.*

To liken.—And *like* me to the peaſant boys of France. *Shakeſpeare.*

To LIKE, *v. n.* To be pleaſed with: with *of* before the thing approved. *Obſolete.*—*Of* any thing more than *of* God they could not by any means *like*, as long as whatſoever they knew beſides God, they apprehended it not in itſelf without dependency upon God. *Hooker.*—The young ſoldiers did with ſuch cheerfulneſs *like of* this reſolution, that they thought two days a long delay. *Knolles.*—To chooſe; to liſt; to be pleaſed.—He that has the priſon-doors ſet open is perfectly at liberty, becauſe he may either go or ſtay, as he beſt *likes*. *Locke.*

LI'KELIHOOD, or LI'KELINESS, *ſ.* [from *likely.*] Appearance; ſhow. *Obſolete:*

What of his heart perceive you in his face,
By any *likelihood* he ſhow'd to-day? *Shakeſpeare.*

Reſemblance; likeneſs. *Obſolete.*—There is no *likelihood* between pure light and black darkneſs, or between righteouſneſs and reprobation. *Raleigh.*

As by a low but loving *likelihood*,
Were now the general of our gracious empreſs,
As in good time he may, from Ireland coming,
How many would the peaceful city quit
To welcome him? *Shakeſpeare's Henry* V.

Probability; veriſimilitude; appearance of truth.—Where things are leaſt to be put to the venture, as the eternal intereſts of the other world ought to be; there every, even the leaſt, probability or *likelihood* of danger, ſhould be provided againſt. *South.*—There are predictions of our Saviour recorded by the evangeliſts, which were not completed till after their deaths, and had no *likelihood* of being ſo when they were pronounced by our bleſſed Saviour. *Addiſon on the Chriſtian Religion.*—Thus, in all *likelihood*, would it be with a libertine, who ſhould have a viſit from the other world: the firſt horror it raiſed would go off, as new diverſions came on. *Atterbury.*

It never yet did hurt,
To lay down *likelihood*, and forms of hope. *Shakeſpeare.*

LI'KELINESS, *ſ.* Probability; appearance; comelineſs.

LI'KELY, *adj.* [from to *like.*] Such as may be liked; ſuch as may pleaſe.—Theſe young companions make themſelves believe they love at the firſt looking of a *likely* beauty. *Sidney.*—Sir John, they are your *likelieſt* men; I would have you ſerved with the beſt. *Shakeſpeare's Henry* IV.

Thoſe argent fields more *likely* habitants,
Tranſlated ſaints, and middle ſpirits hold
Betwixt th' angelical and human kind. *Milton.*

Probable; ſuch as may in reaſon be thought or believed; ſuch as may be thought more reaſonably than the contrary: as, a *likely* ſtory; that is, a credible ſtory.

LI'KELY, *adv.* Probably; as may reaſonably be thought.—While man was innocent, he was *likely* ignorant of nothing that imported him to know. *Glanville.*

To LI'KEN, *v. a.* [from *like.*] To repreſent as having reſemblance; to compare.—The prince broke your head for *likening* him to a ſinging-man of Windſor. *Shakeſpeare's Henry* IV.

For who, though with the tongue
Of angels, can relate? or to what things
Liken on earth conſpicuous, that may lift
Human imagination to ſuch height
Of God-like power? *Milton's Paradiſe loſt.*

LI'KENAS, a town of Sweden, in the province of Warmeland: ſixty miles north-north-weſt of Philipſtadt.

LI'KENESS, *ſ.* Reſemblance; ſimilitude.—A tranſlator is to make his author appear as charming as he can, provided he maintains his character, and makes him not unlike himſelf. Tranſlation is a kind of drawing after the life, where there is a double ſort of *likeneſs*, a good one and a bad one. *Dryden.*

They all do live, and moved are
To multiply the *likeneſs* of their kind. *Spenſer.*

Form; appearance.—Never came trouble to my houſe in

the *likeneſs* of your grace; for, trouble being gone, comfort ſhould remain. *Shakeſpeare.*—It is ſafer to ſtand upon our guard againſt an enemy in the *likeneſs* of a friend, than to embrace any man for a friend in the *likeneſs* of an enemy. *L'Eſtrange.*—One who reſembles another; a copy; a counterpart:

Poor Cupid, ſobbing, ſcarce could ſpeak,
Indeed, mamma, I did not know ye:
Alas! how eaſy my miſtake!
I took you for your *likeneſs* Chloe. *Prior.*

LI'KENING, *ſ.* The act of comparing.

LI'KER, *ſ.* One that likes.

LI'KEWISE, *adv.* In like manner; alſo; moreover; too.—Jeſus ſaid unto them, I alſo will aſk you one thing, which if ye tell me, I *likewiſe* will tell you by what authority I do theſe things. *Matt.* xxi. 24.—So was it in the decay of the Roman empire, and *likewiſe* in the empire of Almaigne after Charles the Great, every bird taking a feather. *Bacon.*—Spirit of vitriol poured to pure unmixed ſerum, coagulates as if it had been boiled. Spirit of ſea-ſalt makes a perfect coagulation of the ſerum *likewiſe*, but with ſome different phænomena. *Arbuthnot on Aliments.*

LI'KEWISE, *conj.* Alſo; moreover; too.

LI'KING, *adj.* [perhaps becauſe plumpneſs is agreeable to the ſight.] Plump; in a ſtate of plumpneſs.—I fear my lord the king, who hath appointed your meat and your drink; for why ſhould he ſee your faces worſe-*liking* than the children which are of your ſort? *Dan.* i. 10.

LI'KING, *ſ.* Good ſtate of body; plumpneſs.—I'll repent, and that ſuddenly, while I'm in ſome *liking*; I ſhall be out of heart ſhortly, and then I ſhall have no ſtrength to repent. *Shakeſpeare.*—Their young ones are in good *liking*; they grow up with corn. *Job*, xxxix. 4.—Cappadocian ſlaves were famous for their luſtineſs; and, being in good *liking*, were ſet on a ſtall, when expoſed to ſale, to ſhow the good habit of their body. *Dryden's Notes to Perſius.*—State of trial:

The royal ſoul, that, like the lab'ring moon,
By charms of art was hurried down;
Forc'd with regret to leave her native ſphere,
Came but a while on *liking* here. *Dryden.*

Inclination:

Why do you longer feed on loathed light,
Or *liking* find to gaze on earthly mold? *Fairy Queen.*

LI'KING, *ſ.* [from *To like.*] Delight in; pleaſure in; with *to.*—There are limits to be ſet betwixt the boldneſs and raſhneſs of a poet; but he muſt underſtand thoſe limits who pretends to judge, as well as he who undertakes to write: and he who has no *liking to* the whole, ought in reaſon to be excluded from cenſuring of the parts. *Dryden.*

LIK'KI, [Hebrew.] A man's name.

LI'LA, a town of Abyſſinia, on the coaſt of the Red Sea: forty-eight miles ſouth-ſouth-eaſt of Arkikó.

LIL'AC, *ſ.* A tree. See SYRINGA.—The white thorn is in leaf, and the *lilac* tree. *Bacon.*

LILÆ'A, a town of Achaia near the Cephiſus. *Stat. Theb.*

LIL'BURNE (John), famous for his exertions in the cauſe of liberty during the tyrannies of Charles I. and Cromwell, was born in the year 1618, of an ancient family, in the county of Durham. At an early age he was ſent, with very little education, to London, and put apprentice to Mr. Thomas Hewſon, of London-ſtone, a wholeſale clothier. Having a bold and intrepid mind, he was, from this period, involved in that perpetual ſeries of contention and ſuffering, of which we ſhall proceed to give a brief account. The firſt diſplay of his temper was exhibited in a complaint which he laid before the chamberlain of London, againſt his maſter for ill uſage. He carried his point, and obtained redreſs; and ever afterwards not only lived in peace with him, but he ſays, in his "Legal and Fundamental Liberties, &c." that he had in Mr. Hewſon the trueſt friend that ever ſervant had of a maſter in the day of his trial. While he was in his apprenticeſhip he had much leiſure time, which he ſpent in reading the Bible, the Book of Martyrs, and the works of Luther, Calvin, Beza, &c. From theſe he imbibed an enthuſiaſtic paſſion for encountering all dangers and ſufferings in the cauſe of truth. In 1636 he was introduced to the acquaintance of Dr. Baſtwick, at that time a priſoner in the Gatehouſe. He was ſoon engaged actively in the popular cauſe; and carried to Holland one of the doctor's anti-epiſcopal writings, in order to get it printed. Shortly after his return, he was apprehended, tried, and convicted, in the ſtar-chamber court, of printing and publiſhing libels and ſeditious books. He was ſentenced on this occaſion to receive five hundred laſhes, and then to be ſet in the pillory; which ſentence was executed with great ſeverity, the whipping being inflicted with knotted cords, as ordered by ſir Henry Vane. His ſpirit was not, however, ſubdued; for even on the pillory he uttered many invectives againſt the biſhops, and threw pamphlets from his pockets among the crowd. For this conduct he was remanded to priſon, and, according to his own account, endured a world of other unheard-of miſeries and cruelties for three years together. Though double-ironed, and in one of the worſt cells in the priſon, he contrived while there to get another libel printed and publiſhed. Such was the opinion held reſpecting his deſperate reſolution, that, a fire having taken place near the cell in which he was locked up, he was ſuſpected of being the occaſion of it, for the ſake of obtaining his deliverance; and the other priſoners and neighbours joined in an application to have him removed, by which he obtained a more airy ſituation. On the meeting of the long parliament in 1640, he was allowed the liberties of the Fleet, an indulgence that enabled him to appear as a ringleader of an armed mob which aſſembled at Weſtminſter, and cried out for juſtice againſt the earl of Strafford; for which he was brought to the bar of the houſe of lords on a charge of treaſon, but diſmiſſed. In the following year the houſe of commons voted "That the ſentence of the ſtar-chamber againſt Mr. Lilburne was illegal, barbarous, bloody, and tyrannical; and that reparations ought to be given him for his impriſonment, ſufferings, and loſſes ſuſtained by that illegal ſentence." Nevertheleſs, he tells us, that he never received any remuneration, though he had been put to the expenſe of from 1000 to 1500l. and had endured ſeven or eight impriſonments. When an army was raiſed by parliament, Lilburne entered into it as a volunteer; and, at the battle of Edge-hill, he acted as a captain of infantry. He behaved with diſtinguiſhed bravery at the battle of Brentford, where he was made priſoner, carried to Oxford, and arraigned on a charge of high-treaſon, but was ſaved by a declaration of parliament, threatening repriſals; and was ſoon after exchanged, was received with triumph by his party, and rewarded with 300l. Cromwell and Fairfax would willingly have employed him after they had new-modelled the army in 1645, and given him a high command; but his diſlike to the preſbyterian-church-government would not permit him to ſerve the party then in power; and he laid down his ſword to reſume his pen, which he employed againſt Prynne, Lenthall, and other perſons. He was in conſequence committed to Newgate on a charge of ſeditious practices; but, no bill being found againſt him, he was releaſed without trial. He next was brought before the houſe of lords for certain reflections caſt on the earl of Mancheſter, in a work entitled "The Juſt Man's Juſtification." Being examined upon interrogatories reſpecting the writing of that work, he not only refuſed to anſwer queſtions, but proteſted againſt their juriſdiction over him. He had ſtated the argument on this point, in full, in his "Legal and Fundamental Liberties of the People of England;" which he had maintained in the houſe, but which proved of no avail, as the houſe immediately made an order "that he be committed a cloſe priſoner in Newgate, and that none have acceſs to him but his keeper, until this court doth take farther order;" that is, ſaid Lilburne, "when they

turn honeſt and juſt, which I confidently believe will never be."

So much was he now regarded by the people as a champion of liberty, that a remonſtrance, ſigned by many thouſand names, was preſented to the houſe of commons in his behalf. This failing of effect, he continued to publiſh pamphlets, in which he diſplayed his grievances in ſuch bold and virnlent language, that he rendered the leading men of all parties his enemies. It ſhould however be obſerved, that the leading men alluded to, were thoſe who were either adherents to the king, or thoſe who were attached to Cromwell; but Lilburne, perceiving that both parties were hoſtile to the liberties of the ſubject, did not ſcruple to oppoſe all their projects, which he ſuſpected, and juſtly too, would lead to the eſtabliſhment of a tyranny in ſome ſhape or other. He charged Cromwell with a deſign of uſurping the ſovereignty; and accuſed him and his relation Ireton of high treaſon, for which he was ordered to be tried as a libeller. At this period he had ſo many friends among the people, that the houſe of commons judged it proper to diſcharge him from priſon, and make an order for remunerating him for his ſufferings.

At the time of the king's death, Lilburne was buſy in plans for ſettling a new model of government. Finding the leaders of the army reſolved to keep the power in their own hands, he oppoſed them with his uſual intrepidity, and maintained the right of the people to form a conſtitution for themſelves. So dangerous now did he appear to Cromwell and his council, that he was again committed to the Tower, and was brought to his trial for high treaſon before a ſpecial commiſſion. On this occaſion he defended himſelf with great firmneſs, never once ſhowing a diſpoſition to crouch to his proſecutors or his judges: he felt that he ſtood on firm ground, and was determined not to bend to the circumſtances of the times. The trial laſted many hours; when the jury retired for three quarters of an hour, and then brought in a verdict of Not Guilty: which, ſays the reporter of the trial, was received with unanimous plaudits from within and without, that continued without intermiſſion for more than half an hour. The judges, who ſeem to have ſtrained hard for a verdict of guilty, were abaſhed and confounded. A medal was ſtruck of his head, with the following inſcription: "John Lilburne, ſaved by the power of the Lord and the integrity of his jury, who are *judges of law as well as of fact.*"

A new offence which he gave to parliament cauſed that body to paſs a ſentence of heavy fine and puniſhment againſt him; upon which he retired to Holland. Here he remained till the diſſolution of the long parliament, when he uſed all his intereſt to obtain a paſſport for his return to England; and, not ſucceeding, he ventured, in June 1653, to come back without one. He was very ſoon apprehended, and committed to Newgate; being brought once more to trial, he defended himſelf on the plea of illegality in his ſentence of baniſhment, and was accordingly acquitted by his jury. The government, however, ordered him to be immediately ſent out of the kingdom; but, giving ſecurity for his future quiet behaviour, he was ſuffered to remain. He ſettled at Eltham, in Kent; joined the ſociety of quakers, and even preached at their meetings in Woolwich, and other adjacent places, till his death in 1657, at the early age of thirty-nine. He had a wife, who poſſeſſed the ſame undaunted ſpirit with that of her huſband, and was his faithful and affectionate helpmate in all his ſufferings. By Anthony Wood, Lilburne is ſtyled, "a great trouble-world in all the variety of government:" by other hiſtorians and biographers he has been repreſented to have been of ſo factious and quarrelſome a temper, that, "if there were none living but him, John would be againſt Lilburne, and Lilburne againſt John." Such charges were brought againſt him by his contemporaries; and, in his "Legal and Fundamental Liberties of the People of England," he has taken pains to rebut the calumnies of his adverſaries, and to ſhow that his hand was never lifted up but againſt tyranny and tyrants; and at the cloſe of that work he ſubſcribes himſelf, "An honeſt and true-bred free Engliſhman, that never in his life feared a tyrant, nor loved an oppreſſor."

LI'LEN, a town of South America, in the province of Popayan; fifteen miles ſouth-eaſt of Cali.

LILESWA'RA, in Hindoo mythology, a name of Siva, the regenerative power of the deity. It means "Iſwara (or the Lord) who gives delight;" and was aſſumed with manhood in one of the numerous metamorphoſes detailed in the Puranas, by this deity, who in this form became re-united to his ſpouſe Parvati, *giving delight* to her in her terreſtrial manifeſtation, under the name of Lileſwari. The Puranas abound in this deſcription of incarnation of their male and female deities, which, thus veiled in allegory, are ſuppoſed to conceal hiſtorical and philoſophical facts. Mr. Wilford, in ſeveral of the volumes of the Aſiatic Reſearches, has purſued this allegorical maze with great induſtry. See more particularly vol. iii. vi. and viii.

LIL'IA, *ſ.* in botany, a natural order of plants, ſo called from Lilium, the lily, which is one of them. Tournefort, who underſtood this order in a wider ſenſe than more recent authors, denominated the plants which he referred to it, *Liliacei*; Linnæus, and moſt others, call them *Liliaceæ*.

Lilia conſtitutes the fourteenth order in Juſſieu's ſyſtem, and the fourth of his third claſs. It belongs to the tenth order (Coronariæ) in Linnæus's Fragments of a Natural Method. See BOTANY, vol. iii. p. 295. They are divided among ſeveral (9–11) orders in the Ordines Naturales, at the end of the Genera Plantarum; and are to be found in the claſs Hexandria of the Artificial Syſtem. Linnæus calls his *Lilia* the patrician order, or nobility of the vegetable kingdom, in his fanciful diſtribution of plants at the head of his Syſtema Vegetabilium. We may ſuppoſe that he had in view, in this inſtance, not only the analogies of the other orders, but eſpecially the text ſo often quoted, *Conſider the lilies of the field*; *Solomon, in all his glory, was not arrayed like one of theſe:* in which theſe gorgeous plants ſeem more particularly indicated. The ſpecies, which our Saviour had then perhaps before his eyes, is thought to have been the ſplendid Amaryllis lutea, with which the fields of Paleſtine are over-run at the end of autumn. The learned Olaus Celſius ſeems not to have adverted to this text as alluding to any particular plant. Some have, without any reaſon, taken for granted that the garden-tulip was meant; but that plant is not a native of Paleſtine. Others have ſuppoſed the Fritillaria imperialis to be meant; for a reaſon given under the word FLOWER, vol. vii. p. 468.

The order of liliaceous plants is now receiving moſt magnificent illuſtration at Paris, in a work expreſsly deſtined to that purpoſe, by M. Redouté, of which five volumes in folio have reached this country. The figures are printed in colours, in the modern French manner; and the deſcriptions are in French. Many plants, not properly belonging to the ſame family, are admitted into this publication, as a few of the Orchideæ and Scitamineæ, which, though they interfere with its oſtenſible deſignation, certainly do not leſſen its value, either as to beauty or utility.

LILIA'CEOUS, *adj.* Belonging to the lily, reſembling the lily.

LILIA'GO AND LILIAS'TRUM. See ANTHERICUM.

LIL'IED, *adj.* Embelliſhed with lilies:

Nymphs and ſhepherds dance no more
By ſandy Ladon's *lilied* banks. *Milton.*

LIL'IENDAL, a town of Sweden, in the province of Nyland: fifteen miles north-eaſt of Borga. Lat. 60. 23. N. lon. 26. 3. E.

LIL'IENSTEIN, a huge rock on the ſide of the Elbe, in the marggravate of Meiſſen: one mile north-eaſt of Konigſtein.

LIL'IENTHAL, a town of the duchy of Bremen, ſituated on the Worp river: ten miles north-north-eaſt of Bremen, and twenty north-north-weſt of Verden.

LI'LIN,

LI'LIN, a town of China, of the third rank, in Houquang: forty miles ſouth-eaſt of Tchang-cha.

LIL'IO-ASPHOD'ELUS. See CRINUM and HEMEROCALLIS.

LIL'IO-HYACIN'THUS. See SCILLA.

LIL'IO-NARCIS'SUS. See AMARYLLIS and PANCRATIUM.

LI'LITH, [Heb. the night.] The name of a woman who was ſuppoſed by the Jews to have been the wife of Adam before Eve. An imaginary ſpectre who was ſuppoſed to carry away or deſtroy young children. *Scott.*

LIL'IUM, *ſ.* [λειος, Gr. ſmooth, alſo handſome.] The LILY; in botany, a genus of the claſs hexandria, order monogynia, natural order of coronariæ, (lilia, *Juſſ. Roy, &c.* lileæ, *Saliſb.*) The generic characters are—Calyx: none. Corolla: ſix-petalled, bell-ſhaped, narrowed beneath; petals upright, incumbent, obtuſely carinated on the back, gradually more expanding, wider; with thick, reflex, obtuſe tips. Nectary; a longitudinal tubular line, engraven on each petal from the baſe to the middle. The nectary in ſome is bearded, in others beardleſs; petals in ſome totally revolute, in others not ſo. Stamina: filaments ſix, awl-ſhaped, upright, ſhorter than the corolla; anthers oblong, incumbent. Piſtillum: germ oblong, cylindric, ſtriated with ſix furrows; ſtyle cylindric, length of the corolla; ſtigma thickiſh, triangular. Pericarpium: capſule oblong, ſix-furrowed, with a three-cornered, hollow, obtuſe tip; three-celled, three-valved; the valves connected by hairs diſpoſed in a cancellated manner. Seeds numerous, incumbent in a twin order; flat outwardly ſemi-orbicular.—*Eſſential Character.* Corolla: ſix-petalled, bell-ſhaped; with a longitudinal nectareous line; capſule, the valves connected by cancellated hairs.

Species. 1. Lilium candidum, or common white lily: leaves ſcattered, corollas bell-ſhaped, ſmooth within. The common white lily has a large bulb, from which proceed ſeveral ſucculent fibres. Stem ſtout, round, upright, uſually about three feet in height. Leaves numerous, long, narrow pointed, ſmooth, ſeſſile. Flowers large, white, terminating the ſtem in a cluſter on ſhort peduncles. Petals within of a beautiful ſhining white; on the outſide ridged, and leſs luminous. Native of the Levant. Linnæus aſſigns it to Syria. Thunberg gives it as a native of Japan, and obſerves that the corolla is there near a ſpan in length, and that it varies with a villoſe ſtem. Haller inſerts it in the Swiſs Flora; it is not indigenous there, but muſt have eſcaped from a garden. It flowers in June and July, and has been cultivated in England time immemorial. In Gerard's time (1597) it was in moſt gardens. The flowers of the lily were formerly conſidered as antiepileptic and anodyne; a diſtilled water of them was employed as a coſmetic; and oil of lilies was ſuppoſed to poſſeſs anodyne and nervine powers; but their odorous matter, though very powerful, is totally diſſipated in drying, and entirely carried off in diſtillation either with ſpirit or water, and no eſſential oil can be obtained from them. The roots only are now in uſe; (ſee the firſt Botany Plate, fig. 14. in our third volume;) they are extremely mucilaginous, and are chiefly employed in emollient and ſuppurating cataplaſms, boiled with milk or water: phyſicians however are generally of opinion that bread or meal poultices poſſeſs every advantage of thoſe prepared from the lily-root. From ſome experiments that were made in the year 1802, they ſeem to poſſeſs a much more valuable property; namely, that their mucilaginous quality might make them uſeful as a ſubſtitute for gum-arabic. Mr. Willis had previouſly made experiments with the roots of the Hyacinthus non ſcriptus, or hare-bell; and the mucilage produced from them had been found to anſwer the ſame purpoſe, quantity for quantity, with gum-arabic, in fixing the calico-printer's colours. The ſilver medal of the Society of Arts was voted to him that year; and his next experiments were made with the Scilla verna, or vernal ſquill; and afterwards with the lily. "On the 18th of Auguſt, 1802, I collected four pounds of the white-lily root, which yielded, when dried, rather more than one pound of powder. A dram of it was diſſolved in four ounces of water, by gently boiling it a minute or two; the mucilage was much ſtronger than that made with the vernal ſquill, but ſomewhat darker coloured. This root may poſſibly anſwer the ſame purpoſes better than thoſe above-mentioned. The powder of the lily-root leaves a bitterneſs on the tongue. Twelve ounces of the freſh roots of the white lily, being bruiſed and preſſed, yielded by evaporation one ounce and one quarter of brown gum. There being a ſmall quantity of it, I made no trial with it; but very probably the expreſſed juice might be uſed by the calico-printers with advantage. Theſe roots can be procured at all times, and propagated to any extent; but it muſt be obſerved, that theſe bulbous roots are ſtronger when they are without ſtems, or only beginning to ſhoot out leaves; and the preſent time (March) is as proper as any that can be for procuring them. And I imagine, that, if the roots were bruiſed and uſed freſh, they would anſwer better than when dried and powdered."

The principal varieties of the white lily are, 1. With the flowers ſtriped or blotched with purple. 2. With variegated or ſtriped leaves, or with the leaves edged with yellow. 3. With double flowers. 4. With pendulous flowers, which Miller and others conſider as a diſtinct ſpecies.

The firſt variety has not been in England much longer than the year 1729. It is now become common; but, the purple marks giving the flower a dull colour, the common white is generally preferred. The ſecond variety is chiefly valued for its appearance in winter and ſpring; for the leaves coming out early in the autumn, ſpreading themſelves flat on the ground, and being finely edged with a broad yellow band, make a pretty appearance during the winter and ſpring months. It flowers earlier than the plain ſort. The third variety is of little value, becauſe the flowers never open well unleſs they are covered with glaſſes; nor have they any of the rich odour of the common ſort. The fourth variety (β) came originally from Conſtantinople. The ſtalk is much more ſlender; the leaves are narrower and fewer in number; the flowers not quite ſo large, and the petals more contracted at the baſe; they always hang downwards. The ſtalks are ſometimes very broad and flat (γ), appearing as if two or three were joined together; when this happens, they ſuſtain from ſixty to one hundred flowers, and ſometimes more. This however is merely accidental, for the ſame root ſcarcely ever produces the ſame two years.

2. Lilium Japonicum, or Japan white lily: leaves ſcattered, lanceolate; corollas drooping, ſubcampanulate. Stem round, ſmooth, and even, two feet high. Leaves alternate, petioled, acuminate, margined, ſmooth, a hand and half in length, paler underneath, three-nerved or five-nerved. Flower terminating, reflex and hanging down; corolla white, a hand in diameter. It differs from the preceding, to which it is allied, in having a weaker ſtem, ſuſtaining only one flower; and fewer leaves on the ſtem, remote, very long, petioled and nerved. Native of Japan.

3. Lilium Cateſbæi, or Cateſby's lily: leaves ſcattered, lanceolate; corolla upright, bell-ſhaped, petals with claws. Of the lilies cultivated in this country, this is one of the leaſt, the whole plant when in bloom being frequently little more than a foot high: in its native ſoil it is deſcribed as growing to the height of two feet. The ſtalk is terminated by one upright flower: it is purple, ſlender, upright, round, ſmooth with a ſlight glaucous bloom on it, ſolid, ſtiffiſh. The flower has no ſcent. This lily was firſt obſerved by Cateſby on open moiſt ſavannas in many parts of Carolina. He ſays that the bulb is about the ſize of a walnut; that the petals turn back in a graceful manner, and are tapering, terminating in points, and edged with ſmall indentures; and that the whole flower is variouſly ſhaded with red, orange, and lemon, colours. Mr. Curtis, to whom roots were ſent from South-Carolina by Mr. Robert

The Great Yellow Martagon Lily.

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bert Squibb, at the close of the year 1787, informs us, that it varies considerably in the breadth of its petals, in their colour and spots; and that it flowers usually in July and August.

4. Lilium bulbiferum, bulb-bearing or orange lily: leaves scattered, corollas bell-shaped, erect, rugged within. Bulb subovate, consisting of thick, white, loosely-imbricate, scales, putting out a few thick fibres from the bottom. Stem upright, a foot and half high, striated angular, smooth or slightly hairy, with numerous scattered leaves, the upper ones spreading out horizontally, acute, quite entire, obsoletely hirsute, a little rough to the touch, dark green, slightly nerved, sessile, lanceolate-linear, three or four inches long; each, excepting the lower, frequently producing a roundish shining pale-green bulb or two in the axil. Flower without scent, red-orange within, pale-orange on the outside; all the petals from the base to beyond the middle are rugged with little scales and apophyses, with a few black dots; the border is spreading, but not rolled back; three alternate ones are a little more exterior, lanceolate, narrower, almost equally drawn to a point at both ends, the nectareous tubular floccose line occupying the whole lower part; the other three, from a channelled claw unfold into a broad-ovate lamina, and have the groove of the nectary continued to the very top. Filaments red. Anthers dark purple. Style red. Capsule ovate, with brownish seeds.

Such is the description of the orange-lily, as it is found wild in Austria, and represented on the BOTANY Plate III. fig. 24. It grows in Italy and other southern regions of Europe; in Siberia also and Japan. It varies much in size, leaves, and flowers. Mr. Miller mentions the following varieties. 1. Orange-lily with double flowers, β. 2. Orange lily with variegated leaves. 3. Smaller orange lily, γ. 4. Bulb-bearing fiery lily, ε, ζ. seldom rising more than half the height of the others; the leaves narrower; the flowers smaller, and of a brighter flame-colour, few in number, and more erect. They come out a month before those of the common sort; and the stalks put out bulbs at most of the axils, which, if taken off when the stalks decay, and planted, will produce plants. There are several subordinate varieties of this: as 1. The great broad-leaved, ε. 2. The many-flowered. 3. The small, ζ. 4. The hoary bulb-bearing lily, θ.

5. Lilium pomponium, or pomponian lily: leaves scattered, awl-shaped; flowers turned back, corollas rolled back. This has a pretty large yellow scaly root, from which arises an upright stalk near three feet high, with long narrow leaves, almost triangular, having a longitudinal ridge on their under side; they are deep green, and terminate in acute points. The upper part of the stalk divides into four or five peduncles, each sustaining a single flower of a fine carmine colour, with a few dark spots scattered over it. They appear in July; and, when the season is not hot, they continue a considerable time in beauty. Linnæus distinguishes this species by its linear, sharp, three-sided, channelled leaves, and the chink of the nectary being very much toothed. But Thunberg remarks, that in Japan the leaves are awl-shaped, linear and lanceolate on different individuals, and that the corollas in his specimens were scarcely revolute. Native of the Pyrenees, Siberia, Japan, and China. It was cultivated in 1629, as appears from Parkinson.

6. Lilium Chalcedonicum, or scarlet martagon lily: leaves scattered, lanceolate; flowers turned back, corollas rolled back. Scarlet martagon is from three to four feet in height; the leaves are much broader than those of the preceding, and appear as if they were edged with white; they are placed very closely upon the stalks. The flowers are of a bright scarlet, and seldom more than five or six in number. It flowers late in July, and in cool seasons continues in beauty great part of August. Linnæus remarks, that the raceme, before the flowers open, is scarcely curved in, as in the preceding and next following species, and that the stem is clothed with clustered leaves to the very top. Mr. Curtis observes, that it varies in the number of flowers, from one to six, and that the colour in some is of a blood red. Jacquin describes the smell as disagreeable; whilst Scopoli compares it to that of an orange. This species not being the martagon of Linnæus, Mr. Curtis, to avoid confusion, calls it Chalcedonian lily. Native of the Levant, and of the mountains between Carniola and Carinthia, if Jacquin's plant be the same with that from the East. Clusius informs us, that it was brought from Constantinople to Vienna, before his arrival in that city. It was cultivated here in 1596, by Gerarde. There are some varieties of this in the size and colour of the flowers, which are sometimes of a blood red.

7. Lilium superbum, or great yellow martagon lily: leaves scattered, lanceolate; flowers in a branched pyramid turned back; corollas rolled back. Stem round, very smooth and even, panicled at top, two feet high and more. Branches alternate, divaricating, upright, like the stem, reflex at top, flower-bearing. Stem-leaves alternate, subpetioled, folded together at the base, ovate-oblong, acute, quite entire, smooth, five-nerved beneath, spreading. One flower at the end of each branch; corollas large and handsome; petals oblong, acute, white with large purple spots and smaller black ones from the middle to the base; nectareous keel bearded. Gouan asserts, that the leaves are constantly three-nerved. Catesby says, that the flowers grow alternately on long footstalks, and that they are of an orange and lemon colour, thick spotted with dark brown. From his work the annexed Plate is copied. According to Miller, it rises with a strong stalk from four to five feet high. The flowers are produced in form of a pyramid; and, when the roots are strong, there are forty or fifty flowers on a stalk; they are large, yellow with dark spots, and make a fine appearance, but smell so disagreeably, that few persons can endure to be near them. They appear at the end of June. Native of North America. Introduced into England from Pennsylvania by Peter Collinson, esq. in 1738.

8. Lilium martagon, or purple martagon lily: leaves in whorls, flowers turned back, corollas rolled back. This rises with a strong stalk from three to four feet high. Leaves broad. Flowers dark purple, with some spots of black; they are produced in loose spikes, appear in June, and have a disagreeable odour when near, but not so offensive as the preceding. Native of the south of Europe, and Siberia. Cultivated in 1596, by Gerarde.

β. L. hirsutum. The leaves of this are narrower; the whorls stand farther asunder; the leaves and stalks are somewhat hairy, and the buds of the flowers are covered with a soft down; the flowers are of a brighter colour, with few spots, and come out earlier, though the stalks appear much later above ground. It flowers early in June. Mr. Miller makes a distinct species of it, under the name of L. hirsutum, or red martagon. These flowers in old gardens were known by the name of turk's caps.

9. Lilium Canadense, or Canada martagon lily: leaves in whorls; flowers large, yellow, but little turned back, corollas revolute-bell-shaped. Bulbs oblong and large. Stems from four to five feet high; leaves oblong, pointed. Flowers large, yellow spotted with black, shaped like those of the orange-lily, and the petals not turned back so much as in the other martagons. They come out in the beginning of August, and, when the roots are large, in great numbers, making a fine appearance. There is a variety of this with larger deeper-coloured flowers. This, says Parkinson, was brought into France from Canada by the French colony, and thence unto us, in 1629. It flowers in July and August. It is found in other parts of North America; for Catesby says it was sent to Mr. Collinson from Pennsylvania, and flowered several years in his garden at Peckham. Thunberg also observed it in Japan.

10. Lilium Kamtschatcense, or Kamtschatka lily: leaves in whorls, flower erect; corolla bell-shaped, petals sessile. Bulb roundish, small. Stem quite simple, round, even, a foot high. Leaves as in the martagons; but the flowers small,

ſmall, the ſize and form of Lilium Perſicum or Fritillaria Perſica. The oblong ſtigmas without a ſtyle are ſingular in this genus. Native of Kamtſchatka; and alſo of China and Cochin-china, if Loureiro's plant be the ſame.

11. Lilium Philadelphicum, or Philadelphian martagon lily: leaves in whorls, flowers erect; corolla bell-ſhaped, petals with claws. Root ſmaller than in the other ſorts, ſcaly and white. Stem ſingle, upright, near a foot and a half high; terminated by two flowers, which ſtand erect upon ſhort ſeparate peduncles; they are ſhaped like thoſe of the bulb-bearing fiery lily, but the petals are narrower at their baſe, ſo that there is a conſiderable ſpace between them, but upwards they enlarge and approximate, forming a ſort of open bell-ſhaped corolla, but they terminate in acute points; they are of a bright purple colour, marked with ſeveral dark purple ſpots towards the baſe. It flowers in July, and the ſeeds ripen at the end of September. Linnæus obſerves that it reſembles the preceding very much, but the petals of that are ovate and ſeſſile, whereas in this they are on oblong diſtinct claws. Thunberg ſays, that the lower leaves are alternate, the upper ones three or four together, oblong, nerved underneath, an inch and a half long. Native of North America, and alſo, according to Thunberg, of Japan. Linnæus marks it as growing in Canada. Mr. Miller ſays, that it was ſent to him from Pennſylvania, by Mr. John Bartram. Mr. Miller cultivated it in 1757, as appears from his figures.

Propagation and Culture. The common white lily, with all its varieties, (and indeed all the ſorts,) may eaſily be increaſed from offsets, which the bulbs of this ſend out in ſo great plenty, as to make it neceſſary to take them off every other, or at leaſt every third, year, to prevent their weakening the principal bulb. The time for removing them is the end of Auguſt, ſoon after the ſtalks decay. They will thrive in almoſt any ſoil and ſituation; and, as they grow tall and ſpread, they muſt be allowed room, and in large borders they are very ornamental. They are ſo hardy, that no froſt injures them; and, increaſing very faſt by offsets, are become ſo common as to be little regarded, notwithſtanding the great beauty of the flowers, and their rich odour, which indeed is too powerful for many perſons. The common orange-lily is ſo common, and increaſes ſo readily by offsets, that it is almoſt rejected; however, in large gardens it ſhould not be wanting, ſince it makes a handſome appearance when in flower, if properly diſpoſed. The ſtalks decaying in September, the roots may be then tranſplanted, and the offsets taken off; but, as it does not put out new leaves till towards ſpring, this may be done till near Chriſtmas. It ſhould be repeated once in three years. This ſort will thrive in any ſoil or ſituation, but will be ſtrongeſt in a ſoft gentle loam, not too moiſt. The bulb-bearing varieties may alſo be increaſed without taking up the plants, by means of the little bulbs that are put forth in plenty from the axils of the leaves. Both theſe ſorts, with their varieties, will thrive under the ſhade of trees, and are therefore proper to be introduced in plantations, and on the borders of woods.

5-9. All theſe may be propagated by offsets, which ſome produce in great plenty, but others ſend out very few, and are therefore more ſcarce. The roots may be taken up when the ſtalks decay; and, if there be a neceſſity for keeping them out of the ground, to tranſport them to a diſtant place, they ſhould be wrapped in dry moſs; and they will keep thus for two months. The beſt time to replant them is the beginning of October; but, if the ground be not ready to receive them, they ſhould be covered with dry ſand or wrapped in moſs, to prevent the ſcales from ſhrinking, which weakens the bulbs, and often occaſions them to be mouldy and to rot. The roots ſhould be planted five or ſix inches deep in the ground, eſpecially if the ſoil be light and dry; but, where it is moiſt, raiſe the borders five or ſix inches; for, if the water come near the roots in winter, it will rot them; and, where the ſoil is ſtiff and binding, mix a good quantity of ſea-coal aſhes or rough ſand with it. As the Canada, Pomponian, and Philadelphian, martagons, (9, 5, 11.) are ſomewhat more tender, in very ſevere winters the ſurface ſhould be covered with old tanner's bark or ſea-coal aſhes, to ſecure them from froſt; and in the ſpring the covering may be removed before the ſtalks ſhoot up. The tall-growing ſorts are only proper for large gardens, and may be intermixed with white and orange lilies, tall-growing iriſes, and other flowers of the ſame growth; where, if they be not too much crouded, and are properly diſpoſed, they will make a good appearance. Some of the common martagons thrive under the ſhade of trees, and may therefore be diſpoſed to advantage in plantations. None of the bulbs ſhould ever be tranſplanted after they have made ſhoots, for it weakens them ſo as not to recover in leſs than two or three years.

In Holland they raiſe a great variety of martagons. Thoſe which are moſt generally found in the Engliſh gardens are, the common martagon with double flowers; the white; the double white; the white ſpotted; the imperial; the early ſcarlet; the Conſtantinople vermilion martagon. The way of obtaining theſe and other varieties, is by ſowing the ſeeds of the beſt flowers, in ſquare boxes, ſix inches deep, with holes bored in their bottoms, and filled with freſh light ſandy earth. The beginning of October, ſoon after the ſeeds are ripe, is the proper ſeaſon. Sow them pretty thick, covering them about half an inch with light ſifted earth. Place the boxes where they may have the morning ſun only; and refreſh them often with water, if the ſeaſon prove dry. In November remove them where they may have as much ſun as poſſible, and be ſcreened from wind. About the beginning of April remove them into their former poſition; for now the young plants, which are impatient of heat, will appear; and the earth will dry too faſt, if expoſed to the full ſun at noon. Keep them entirely clear from weeds, and refreſh them gently and cautiouſly with water, when the ſeaſon is dry. Let the boxes remain till the beginning of Auguſt. Then prepare ſome beds of freſh light earth; and, theſe being levelled, take the earth out of the boxes, with the ſmall bulbs, and ſtrew it equally over the beds, covering it half an inch thick with fine ſifted earth. If the ſeaſon prove hot and dry, ſhade the beds in the middle of the day, and refreſh them with water. If the following winter ſhould prove ſevere, cover the beds with peaſe-haulm or other light covering, to keep out the froſt; but this will be injurious to the bulbs in mild weather. At the end of February, or the beginning of March, when hard froſts are over, gently clear off the earth upon the ſurface of the beds, and ſift a little freſh earth over them; but in doing this do not diſturb or injure the bulbs. Keep them clear from weeds; water them gently in dry weather; and in very hot days ſhade them from the ſun. When their leaves are quite decayed, ſtir the ſurface of the beds again; and in September ſift more freſh earth over the beds. During winter and ſpring manage them as before directed. In September following tranſplant the bulbs to a greater diſtance, on beds prepared as above. Place them about eight inches aſunder, with the buds uppermoſt, and four inches deep. This ſhould be done in moiſt weather. In ſevere froſt cover the beds with peaſe-haulm or decayed tan, taking it off in ſpring, and refreſhing the beds as before with new light earth. The ſecond year after being planted in theſe beds, the ſtrongeſt bulbs will begin to flower. Then place a ſtick wherever you obſerve any peculiar varieties; and, when the leaves are decayed, remove theſe bulbs into other beds at a greater diſtance, or into the borders of the flower-garden. But never reject any till they have flowered two years; for frequently ſome will make a mean appearance the firſt year, and afterwards become fair handſome flowers when they have obtained ſtrength. When ſuch have been ſelected as are worth preſerving, the reſt may be planted in ſhady outer walks, or in the borders of plantations.

Cateſby's lily may be raiſed from ſeeds, or offsets, which,

which, however, are not very plentifully produced; nor will it grow in perfection without great care; the roots in particular are to be guarded againſt froſt. The ſoil and ſituation may be the ſame as recommended for Cyclamen coum, vol. v. p. 507. See AGAPANTHUS, AMARYLLIS, CRINUM, FRITILLARIA, GLORIOSA, HÆMANTHUS, HEMEROCALLIS, MEDEOLA, and PANCRATIUM.

To LILL, *v. a.* [uſed by Spenſer for] To loll.—And *lilled* forth his flaming bloody tong. *Fairy Queen.*

LIL'LE. See LISLE.

LILLEBON'NE, a town of France, in the department of the Lower Seine: ſixteen miles eaſt of Havre, and ſeven weſt of Caudebec.

LIL'LECHURCH, a hamlet in the pariſh of Higham, near Graveſend. Lillechurch and Higham have often been improperly confounded together; Higham indeed has by ſome writers been ſtyled Lillechurche; but Lillechurche was a diſtinct pariſh. About a mile and a half from Higham church, and near the road to Cliffe, is a farm-houſe that ſtill retains the name of Lillechurche; and, there being behind the garden of the houſe a field called Church-place, in which human bones have been found, there can hardly be a doubt but this is the ſpot where the church was ſituated. The time of the union of the two pariſhes of Higham and Lillechurche is not known; but moſt probably it was after Henry III. had granted the manor of Lillechurche, with all its liberties and cuſtoms, to a nunnery of the benedictine order in Higham. This convent was founded before the year 1151, by king Stephen, whoſe daughter Mary ſeems to have preſided over it before ſhe became abbeſs of Romſey. For ſome time the ſociety conſiſted of ſixteen nuns, but had been by degrees reduced to three or four. In the year 1513, biſhop Fiſher viſited them in the chapter-room of their convent; and the perſons who appeared before him were the ſub-prioreſs, two more of the nuns, and the old prioreſs. They were accuſed of ſcandalous behaviour, nor did they deny the charge; but, with the moſt humble ſubmiſſion, repeatedly prayed that confinement within their houſe might be the puniſhment inflicted upon them; and, "for certain juſt and lawful cauſes," they entreated his lordſhip to direct that their nunnery ſhould be ſurrounded with a ſtone wall. The reaſons why this precaution was thought needful may be eaſily ſurmiſed; and it was probably owing to the want of it that the conduct of the members of this ſiſterhood had become notoriouſly abandoned. The wall, however, if indeed it was ever built, did not anſwer its intent; and theſe nuns had rendered themſelves ſo infamous, that in the year 1521 it was judged neceſſary to ſuppreſs the community. Oppoſite the eaſt end of the church there is a farm-houſe, of which the ſides and back part are of ſtone, and diſcover marks of antiquity, having Gothic windows. This is thought to be only a ſmall portion of one of the offices belonging to the nunnery, there being in the great field, on the ſouth ſide, many veſtiges of foundations. Plates of the north-weſt and ſouth views of the remains are publiſhed in Mr. Thorpe's Antiquities. There is alſo ſtill ſubſiſting, contiguous to the farm-yard, ſome part of the thick ſtone wall, mantled with ivy, which encloſed the abbey, and was carried quite round the yard. Biſhop Fiſher, after the ſuppreſſion of this religious houſe, obtained from the crown, for the lately-founded college of St. John's in Cambridge, a grant of the manor of Higham, the ſcite of the nunnery, the appropriation of the rectory of that pariſh, and the advowſon of the vicarage; and all of them are ſtill poſſeſſed by that learned body. By a final ſentence of conſolidation, dated in May 1523, the college were always to provide a prieſt to officiate daily in the chapel of the convent, and to celebrate, on the four chief quarter-days of every year, exequies and a maſs of requiem for the ſouls of their founders and benefactors; and, leſt the needy and infirm might ſeem to be neglected in this ſolemn act of union, it was decreed, with the conſent of the maſter, fellows, and ſcholars, of the college, that twelve pence ſhould be by them diſtributed on every Michaelmas-day in the ſaid priory to the poor of Higham. The church is much larger than is neceſſary for the accommodation of the pariſhioners, there not being above forty families in the diſtrict; there is, however, little doubt that formerly the inhabitants were more numerous.

LIL'LENFELD, a village and rich convent of Auſtria, on the Traſen: fourteen miles ſouth of St. Polten.

LIL'LERS, a town of France, in the department of the Straits of Calais; ceded to France by Spain at the peace of the Pyrenées. The fortifications are deſtroyed: ſix miles weſt-north-weſt of Bethune.

LIL'LESHUL, or LILLIES-HALL, a village near Newport in Shropſhire, noted for its abbey, the ruins of which are ſituated in a retired and ſolitary poſition, and partly enveloped in trees. A large portion of the abbey-church remains; but ſo mutilated, as to render it difficult to form a juſt idea of its original architecture, except from the ſtructure of its doors and windows. A fine Norman arch, highly receſſed, with ribs and running foliage, forms the weſtern entrance, and ſeems to have alſo conſtituted the baſis of a tower. The ſouth door, which communicated with the cloiſter, is one of the moſt enriched early Norman arches in the kingdom. The eaſt window is of large dimenſions, with a beautiful pointed arch of the fourteenth century; but the windows of the choir are narrow, plain, and round-headed. The whole meaſures 228 feet in length, and 36 in breadth, excluſive of the ſide-aiſles. The other buildings are in a much more ruinous condition than the church, though, from what yet exiſts of them, they appear to have evidently been of very conſiderable extent. *Beauties of England and Wales*, vol. xiii.

LIL'LIES-LEAF, a town of Scotland, in the county of Roxburgh: eight miles north-weſt of Jedburgh.

LIL'LO, a town of Spain, in New Caſtile; twenty-eight miles eaſt-ſouth-eaſt of Toledo.

LIL'LO, a fortreſs of Brabant, on the eaſt ſide of the Scheldt, built by the Dutch in the year 1584, from which time it has always had a garriſon. Its fortifications are very regular, and its ramparts were lined with cannon, to prevent veſſels of too large a ſize going up to Antwerp, according to the treaty entered into at Munſter, in the year 1648, between Spain and Holland. It was taken by the French in the year 1794: nine miles north-weſt of Antwerp, and twelve ſouth of Berg-op-Zoom.

LIL'LO (George), a dramatic writer, born in London in 1693, was the ſon of a Dutch jeweller, who married an Engliſh woman. He was brought up to his father's trade, and in the religious principles of the proteſtant diſſenters. What was the occaſion of his becoming a writer for the ſtage we are not informed; but he appears not to have forſaken his mercantile occupation, and to have maintained the character of an amiable, worthy, and virtuous, man. His firſt production was Sylvia, a ballad-opera; which is ſaid to have poſſeſſed merit. It was, however, by tragedy that he acquired his fame; and the particular walk that he purſued was that of domeſtic diſtreſs in common life, exhibited for a moral purpoſe. By the choice and judicious management of his ſtories, he ſucceeded in rendering them eminently pathetic; and he diſplayed no inconſiderable knowledge of the human heart. To the higher qualities of dramatic writing he has indeed no pretenſion; he has neither fancy nor elevation; and, when he attempts to raiſe his ſtyle, he produces only frigid bombaſt. The compoſition by which he is moſt known is George Barnwell, or the London Apprentice, founded on a popular ballad. A murder and an execution are the incidents employed for tragic effect; but the author is much to be commended for the moral uſe he has made of the ſtory, which has conſigned the work to an annual holiday-performance for the edification of youth in the ſame claſs with the hero. His play of Fatal Curioſity, which had diſappeared from the ſtage, was recommended to public notice with extraordinary praiſes in the Philological Inquiries of the late James Harris, eſq. who inſtanced it

as an example of the gradual unfolding of a ſcene of horror, not leſs perfect than that which has been ſo much admired in the Œdipus of Sophocles. Its horrors, however, are ſo little alleviated by any beauties of ſentiment or deſcription, that the attempted revival of it by Mr. Colman had only a ſhort-lived ſucceſs. Arden of Feverſham is another piece of Lillo's, of a ſimilar claſs, which did not appear on the ſtage till after his death. His other performances are entirely ſunk in obſcurity. Lillo died in 1739. He ſeems to have moved in a narrow circle in private life; but was by no means in indigent circumſtances, as the editor of one of his poſthumous tragedies (Elmeric) repreſented. Henry Fielding, in his periodical paper of The Champion, gave a handſome atteſtation to the worth of his character. His works were edited in 2 vols. 12mo. 1775, by Mr. Davies, with a ſhort account of his life.

LIL'LY. See LILY.

LIL'LY (John), a dramatic poet, was born in the Wealds of Kent, about the year 1553; and educated in Magdalen-college, Oxford, where he took the degree of bachelor of arts in 1573, and that of maſter in 1575. From Oxford he removed to Cambridge; but how long he continued there, is uncertain. On his arrival in London, he became acquainted with ſome of queen Elizabeth's courtiers, by whom he was careſſed, and admired as a poet and a wit; and her majeſty, on particular feſtivals, honoured his dramatic pieces with her preſence. His plays are nine in number. His firſt publication, however, printed in 1580, was a romance called *Euphues*, which was univerſally read and admired. This romance, which Blount, the editor of ſix of his plays, ſays introduced a new language, eſpecially among the ladies, is, according to Berkenhout, in fact a moſt contemptible piece of affectation and nonſenſe; nevertheleſs it ſeems very certain, that it was in high eſtimation with the women of faſhion of thoſe times, who, we are told by Whalley, the editor of Ben Jonſon's works, had all the phraſes by heart; and thoſe who did not ſpeak *Euphuiſm* were as little regarded at court as if they could not ſpeak French. "He was (ſays Oldys) a man of great reading, good memory, ready faculty of application, and uncommon eloquence; but he ran into a vaſt exceſs of alluſion." When or where he died is not known. Anthony Wood ſays he was living in 1597, when his laſt comedy was publiſhed. After attending the court for thirteen years, and notwithſtanding his reputation as an author, he was under a neceſſity of petitioning the queen for ſome ſmall ſtipend to ſupport him in his old age. His two letters or petitions to her majeſty on this ſubject are preſerved in manuſcript.

LIL'LY (William), a noted Engliſh aſtrologer, was born in 1602, at Diſeworth in Leiceſterſhire. His father not being in circumſtances to beſtow on him an education beyond common writing and arithmetic, he reſolved to ſeek his fortune in London; where he arrived in 1620, and entered into the ſervice of a mantua-maker in the pariſh of St. Clement-Danes. In 1624 he left that place, and became ſervant to the maſter of the Salters' company, who lived in the Strand, and, not being able to write, employed him, among other domeſtic offices, in keeping his accounts. When he had been about three years in this place, his maſter died; and ſoon afterwards Lilly paid his addreſſes to the widow, whom he married, with a fortune of about a thouſand pounds. In 1632 he began to learn judicial aſtrology, under the inſtruction of one Evans, a profligate clergyman, who had been obliged to quit a curacy in Leiceſterſhire, where he had been detected in ſome frauds which he had practiſed under the pretence of diſcovering loſt and ſtolen goods. Lilly does not appear to have continued long his pupil, ſince he informs us, that in ſeven or eight weeks he perfectly underſtood how "to ſet a figure." In the following year he gave to the public the firſt ſpecimen of his aſtrological ſkill, in an intimation that the king had choſen an unlucky horoſcope for his coronation in Scotland. Having buried his wife during the ſame year, in 1634 he married a ſecond, whoſe temper was not of the ſweeteſt. About this time he got poſſeſſion of the manuſcript copy of a book entitled *Ars Notoria*, treating of the pretended occult ſciences, from which he eagerly imbibed the doctrine of the magic circle, the invocation of ſpirits, &c. which he practiſed for ſome time, uſing certain prayers preſcribed in it, addreſſed to ſeveral angels, whom it repreſents to be the inſtructors of men in theſe grand arcana. Previouſly to this, few perſons who practiſed in the aſtrological art pretended to go farther than to endeavour to trace out and recover ſtolen goods; but Lilly treated this part of the myſtery with great contempt, and laid claim to the ſupernatural ſight, and the gift of predicting future events, which he well knew how to turn to his own advantage. In 1636 he ſettled at Herſham, near Walton on Thames, in Surry, where he remained till 1641, when he came to London, with a number of curious books, in his own art, which he had purchaſed in the country, they having been found in pulling down the houſe of another aſtrologer. In 1644, he publiſhed his Merlinus Anglicus, an almanac, which he continued annually till his death. This work, filled with aſtrological predictions, delivered in the enigmatic ſtyle of the ancient oracles, was ſuited to the taſte of the times, and had a rapid ſale. The firſt impreſſion was ſold in a week, though much mangled by the then licenſer of mathematical books, John Booker, who was himſelf an aſtrologer. Of his mutilations Lilly complained to ſeveral members of parliament, to whom he preſented the book, and by that means obtained leave to print a ſecond edition from his own unaltered copy. In the ſame year, the appearance of three ſuns in the heavens, which was ſeen at London on the 29th of May, prince Charles's birth-day, engaging the attention of the public, Lilly pretended to give an interpretation of it, in a treatiſe entitled, The Starry Meſſenger; to which he added an aſtrological judgment concerning the effects of a ſolar eclipſe, which was to take place on the 11th of Auguſt, 1645. This piece was followed, at different periods, by ſeveral aſtrological productions, and prophecies in ambiguous phraſes, which ſometimes appeared favourable to the king's party, and ſometimes to that of the parliament, but moſtly to the latter; by which he ſucceſsfully impoſed on the credulity of the age, and advanced his own fortune.

During the conteſts, in the year 1647, between the preſbyterians who ruled in the parliament, and the independent party who governed the army, the head-quarters of which were at Windſor; our author ſays, that he and Booker were carried thither, and had an audience of general Fairfax. His object in ſending for them appears to have been, a wiſh to impreſs their minds, and, through their repreſentations, the public in general, with a perſuaſion that the army only laboured to procure the general welfare of the nation, and were reſolved to ſacrifice their lives and fortunes to obtain that end. The audience ended in a kind of mutual compliments, the general hoping, and they aſſuring him, that their art was lawful, and that God would be with the general and his army.

In the ſame year, 1647, recourſe was alſo had to our aſtrologer's advice and aſſiſtance on behalf of the king; and thus we have abundant evidence of the univerſal ſuperſtition and ignorance that prevailed at this time. His majeſty, who was then in the cuſtody of the army at Hampton-court, having formed a deſign of eſcaping from the ſoldiery, and of lying private in ſome place at no great diſtance from London; one Mrs. Whorewood came to Lilly, with the king's conſent, as he informs us, to know in what quarter of the nation his majeſty might be ſafely concealed, till he thought proper to diſcover himſelf. Our author, having erected a figure, told her, that the king might continue undiſcovered, if he retired into ſome part of Eſſex, about twenty miles from London; in which county, and about that diſtance, the lady recollected a houſe fit for his majeſty's reception. Early the next morning ſhe went to Hampton-court, to acquaint the king

with

with the refult of her enquiry; but his majefty, in the mean time, after having eluded the vigilance of his guard, unfortunately took an oppofite direction, and placed himfelf in the power of colonel Hammond, in the Ifle of Wight. But, though this project had been rendered abortive by the king's unexpected removal, the fame lady applied to Lilly again, in 1648, to confult him about a plan for his majefty's efcape from Carifbrook-caftle, by fawing through the iron bars of a window to the room to which he was confined; upon which Lilly procured a proper faw to be made by an ingenious lockfmith, and a bottle of aqua-fortis, which were both conveyed to the king. Of thefe means his majefty made fuch ufe, that he had foon an aperture fufficiently large for his purpofe; but he was, by fome accident, prevented from making his efcape. Lilly fays, that when the king had got out, with his legs foremoft, as far as his breaft, his heart failed him; but the tradition at Carifbrook was, that he did actually get out, and walked backwards and forwards on a bank under the window for fome time, in expectation of perfons who were to convey him away; but they not coming, and the moon beginning to rife, he attempted to get in again, when he was difcovered by a centinel. Afterwards the fame lady came a third time to Lilly, in the king's name, when commiffioners had been appointed by parliament to treat with his majefty at Newport. She now inquired about the iffue of the propofitions which were to be offered to his majefty, and the manner in which he fhould conduct himfelf on that occafion. Upon this, our aftrologer fays, that, after perufing his figure, he informed her of the day when the commiffioners would arrive in the ifland, and chofe another day and hour for their reception. He then advifed, "as foon as the propofitions were read, to fign them, and make hafte with all fpeed to come up with the commiffioners to London, the army being then far diftant from London, and the city enraged ftoutly againft them;" infinuating that, if thefe directions were obferved, the iffue would prove favourable. He adds, that the king promifed to follow them, but was perfuaded by lord Say to alter his purpofe.

While Lilly was promoting his own intereft by being thus ferviceable to the king's defigns, he did fo likewife by rendering himfelf ufeful to the parliament party. During the year 1648, while the parliament's army was befieging the royalifts at Colchefter, he and Booker were fent to the camp, to encourage the foldiers by their predictions of a fpeedy furrender of the place, which happened accordingly. In the fame year, the council of ftate prefented him with fifty pounds in cafh, and an order for a penfion of one hundred pounds per annum, for furnifhing them "with perfect knowledge of the chiefeft concernments of France." This he obtained by means of a fecular prieft, with whom he had been formerly acquainted, and who was now confeffor to one of the French fecretaries. Lilly retained his penfion two years, and then threw it up in difguft, owing to an affront which he received from a principal minifter in the council of ftate, and other caufes. In the year 1651, he publifhed a treatife, entitled, "Several Obfervations upon the Life and Death of Charles, late King of England;" which, if we overlook the aftrological nonfenfe, may be read with as much fatisfaction as more celebrated hiftories, the author being not only very well informed, but difcovering great impartiality. About this time our author read public lectures on aftrology for the inftruction of young ftudents in that pretended art; and fucceeded fo well in his impofitions on the credulous and fuperftitious, that, in the years 1651 and 1652, he was able to lay out near two thoufand pounds in the purchafe of fee-farm rents, and a houfe and lands at Herfham. Having in the year 1650 written publicly that the parliament fhould not continue, but a new government arife; and having further aflerted, in his almanac for the year 1653, that the parliamentary government ftood but on a ticklifh foundation, and was in danger of infurrections both among the people and in the army; he received a fummons to attend and anfwer for his conduct. Before the arrival of the meffenger, however, he had notice that complaints were lodged againft him, and applied to Mr. Speaker Lenthall, who was always his friend, by whom the paffages which had given offence were pointed out to him. Thefe he immediately altered, and, by the aflifance of a printer of the cavalier party, was enabled to attend the committee on the following morning with fix copies printed differently from the firft impreffion, and which alone he acknowledged to be his. The others he maintained to be fpurious, and publifhed by fome malignant enemies, in order to ruin him. By this trick he came off with only being detained thirteen days in the cuftody of the ferjeant at arms. In the fame year he made a fcurrilous attack upon the Rev. Thomas Gataker, for expofing the vanity and abfurdity of the pretended fcience of judicial aftrology, as already noticed in the life of that learned man. See vol. viii. p. 273.

In 1655, Lilly had a bill of indictment preferred againft him at Hicks's-hall, for giving his opinion in a cafe of ftolen goods; but, upon trial, he was acquitted. Four years afterwards he received, from the king of Sweden, a prefent of a gold chain and medal, worth more than fifty pounds, on account of his having mentioned that monarch with great refpect in his almanac for 1657. Soon after the reftoration of Charles II. in 1660, it being well known that he had maintained an intimacy with fome of the moft obnoxious of the republican party, and being fuppofed to be mafter of their fecrets, he was taken into cuftody by order of the parliament, and examined by a committee concerning the perfon who had actually cut off the head of the late king; when he declared, that he had been informed by Mr. Robert Spavin, fecretary at the time to Cromwell, who dined with him foon after the fact, that it was Joyce who performed the part of the executioner. Soon after this examination, Lilly fued out his pardon under the great feal; and in 1665, when the plague raged in London, he removed to Herfham. Here he applied himfelf to the ftudy of phyfic, and obtained a licence to practife it from archbifhop Sheldon, through the intervention of his friend Elias Afhmole. At the fame time he continued to practife his aftrological impofitions; and Dr. Halley frequently related, that, after the reftoration, he applied to the miniftry to employ him as their prophet, as thofe who poffeffed authority juft before them had done; but, to his mortification, met with a refufal. In the committee appointed by parliament to examine into the caufe of the great fire of London in 1666, fome of the members, fufpecting that, from the hieroglyphical decorations of one of his tracts publifhed before that event, he might have it in his power to throw light on their enquiries, moved that he fhould be fent for and examined. Accordingly he was called before them, and took that opportunity of infinuating his pretenfions to predictive fkill, by aflerting, that he certainly had foreferen that London would be afflicted with fuch a calamity, but without afcertaining or endeavouring to afcertain the time when it fhould happen. He added, that, with refpect to the caufe, "though he had taken much pains in the fearch, he could not give himfelf the leaft fatisfaction therein;" concluding, "it was only the finger of God; but what inftruments he ufed thereunto I am ignorant." The committee, being fatisfied with this prudent anfwer, very civilly difmiffed him. After this occurrence, we have little information concerning him, excepting that a fhort time before his death, he adopted for his fon, by the name of *Merlin junior*, one Henry Coley, a tailor by trade; and at the fame time gave him the impreffion of his almanac, which had then been printed fix-and-thirty years fucceffively. This Coley was afterwards famous as an aftrologer, and publifhed, in his own name, almanacs and aftrological treatifes. Lilly died of a paralytic attack in 1681, when about feventy-nine years of age; and Mr. Afhmole fet a monument over his grave in the church of Walton-upon-Thames. All his magical inftruments became the

property of the famous Dr. Caſe, his ſucceſſor, who uſed frequently to expoſe them to his friends, in great deriſion; particularly, a dark chamber and pictures, by means of which Mr. Lilly uſed to impoſe on people, pretending to ſhow them perſons who were abſent. The following liſt of his works is copied from Hutton's Mathematical Dictionary: 1. Merlinus Anglicus, junior. 2. Supernatural Sight. 3. The White King's Prophecy. 4. England's Prophetical Merlin: all printed in 1644. 5. The Starry Meſſenger, 1645. 6. Collection of Prophecies, 1646. 7. A Comment on the White King's Prophecy, 1646. 8. The Nativities of Archbiſhop Laud and Thomas earl of Strafford, 1646. 9. Chriſtian Aſtrology, 1647: upon this piece he read his lectures in 1648, mentioned above. 10. The third book of Nativities, 1647. 11. The World's Cataſtrophe, 1647. 12. The Prophecies of Ambroſe Merlin, with a Key, 1647. 13 *Trithemius*, or the Government of the World by Preſiding Angels, 1647. 14. A treatiſe of the Three Suns ſeen in the winter of 1647, printed in 1648. 15. Monarchy or no Monarchy, 1651. 16. Obſervations on the Life and Death of Charles, late King of England, 1651; and again in 1651, with the title of Mr. William Lilly's True Hiſtory of King James and King Charles the 1ſt, &c. 17. *Annus Tenebroſus*; or, the Black Year. This drew him into the diſpute with Gataker, which we have mentioned before.

LILLY HOO', a village or hamlet on a hill, about five miles from Hitchin in Hertfordſhire, where there is a race-courſe.

LIL'LYPUT, a town of the ſtate of North Carolina, on Cape-Fear river: three miles north of Brunſwick.

LILO'AN, a town on the eaſt coaſt of the iſland of Sibu. Lat. 10. 40. N. lon. 123. 45. E.

LIL'SFELD, a town of the duchy of Wurzburg: five miles eaſt-north-eaſt of Volckach.

LILUN'DO, a river of Africa, which riſes in Congo, and runs into the Atlantic in lat. 6. 35. S.

LIL'Y, *ſ.* See LILIUM, p. 704.—There are thirty-two ſpecies of this plant, including white *lilies*, orange *lilies*, red *lilies*, and martagons of various ſorts. *Miller.*

Take but the humbleſt *lily* of the field;
And, if our pride will to our reaſon yield,
It muſt by ſure compariſon be ſhown,
That on the regal ſeat great David's ſon,
Array'd in all his robes, and types of pow'r,
Shines with leſs glory than that ſimple flow'r. *Prior.*

LIL'Y (African blue). See AGAPANTHUS, vol. i. p. 191.

LIL'Y (African ſcarlet). See AMARYLLIS, vol. i. p. 390.

LIL'Y (Aſphodel). See CRINUM and HEMEROCALLIS, vol. ix. p. 387.

LIL'Y (Atamuſco and Belladonna). See AMARYLLIS.

LIL'Y (St. Bruno's and Day). See HEMEROCALLIS, vol. ix.

LIL'Y (Ceylon, Guernſey, Jacobæa, and Japan). See AMARYLLIS, vol. i.

LIL'Y (May). See CONVALLARIA, vol. v. p. 146.

LIL'Y (Mexican). See AMARYLLIS.

LIL'Y (Perſian). See FRITILLARIA, vol. viii. p. 69.

LIL'Y (Superb). See GLORIOSA, vol. viii. p. 620.

LIL'Y (Water). See NYMPHÆA.

LIL'Y (Water, ſmaller). See MENYANTHES.

LIL'Y-DAF'FODIL, *ſ.* A foreign flower. See AMARYLLIS and PANCRATIUM.

LIL'Y-HY'ACINTH, *ſ.* It hath a *lily* flower, compoſed of ſix leaves, ſhaped like the flower of hyacinth: the roots are ſcaly, and ſhaped like thoſe of the *lily*. There are three ſpecies of this plant; one with a blue flower, another white, and a third red. *Miller.*—See SCILLA.

LIL'Y-LI'VERED, *adj.* White-livered; cowardly.—A baſe, *lily-livered*, action-taking, knave. *Shakeſpeare's King Lear.*

LIL'Y-THORN. See CATESBÆA, vol. iii. p. 903.

LILY OF THE VAL'LEY, or MAY LILY, *ſ.* See CONVALLARIA, vol. v. p. 146.—The flower conſiſts of one leaf, is ſhaped like a bell, and divided at the top into ſix ſegments; the ovary becomes a ſoft globular fruit, containing ſeveral round ſeeds. It is very common in ſhady woods. *Miller.*

LIL'Y-WORK, *ſ.* Ornaments reſembling lilies.

LILYBÆ'UM, now *Boco*, a promontory of Sicily, with a town of the ſame name near the Ægates, now *Marſalla*. The town was ſtrong, and very conſiderable; and it maintained long ſieges againſt the Carthaginians, Romans, &c. particularly one of ten years againſt Rome in the firſt Punic war. It had a port large and capacious, which the Romans, in the wars with Carthage, endeavoured in vain to ſtop and fill up with ſtones, on account of its convenience and vicinity to the coaſt of Africa. Nothing now remains of this once-powerful city but the ruins of temples and aqueducts.

LIL'YE, or LILY (William), one of the earlieſt Engliſh grammarians, was born about the year 1466, at Odiham, in Hampſhire. He ſtudied in Magdalen-college, Oxford; and, upon quitting the univerſity, undertook a religious pilgrimage to Jeruſalem. On his return he purſued his ſtudies for a time at Rhodes, which iſland, after the capture of Conſtantinople, was the reſidence of ſeveral learned men under the protection of the knights, its poſſeſſors. For his farther improvement in the Latin and Greek languages, he viſited Rome, and attended the lectures of Sulpitius and Sabinus. With this ſtock of literature, drawn from the pureſt ſources of the age, he returned to his own country, and ſet up a ſchool in London for grammar (or the languages), rhetoric, and poetry, which he was the firſt Engliſhman who taught upon claſſical principles. Such was his reputation, that, when dean Collet founded St. Paul's ſchool, in 1510, he appointed Lily the firſt maſter. This ſtation he occupied during twelve years, to the great advantage of literature, reckoning among his ſcholars ſome who proved eminent proficients in learning, and patrons of it. He died of the plague in February 1523, and was buried in the north yard of St. Paul's. He had the character of an excellent grammarian, and a ſucceſsful teacher of the learned languages. His principal work is *Breviſſima Inſtitutio, ſeu Ratio Grammatices cognoſcendæ*; Lond. 1513; reprinted times without number, and commonly called Lilye's Grammar. The Engliſh rudiments were written by Dr. Collet, dean of St. Paul's; and the preface to the firſt edition, by cardinal Wolſey. The Engliſh ſyntax was written by Lilye; alſo the rules for the genders of nouns, beginning with *Propria quæ maribus*; and thoſe for the preterperfect tenſes and ſupines, beginning with *As in preſenti*. The Latin ſyntax was chiefly the work of Eraſmus. See Ward's Preface to his edition of Lilye's Grammar, 1732.

LIL'YE (George), eldeſt ſon of the preceding, was born in London, and educated at Magdalen-college, Oxford, after which he was made canon of St. Paul's and prebendary of Canterbury. He was the firſt perſon who publiſhed an exact map of Britain. He died in 1559, and left behind ſeveral works of merit; as, 1. Anglorum Regum Chronices Epitome. 2. Regum Angliæ Genealogia. 3. Catalogus five Series Pontificum et Cæſarum Romanorum, &c. He left likewiſe a manuſcript life of biſhop Fiſher, which is depoſited in the library of the Royal Society.

LIM-CHE'OU, a town of China, of the third rank, in Pe-tche-li: twelve miles north-weſt of Tching-tin.

LI'MA, an audience of Peru, erected in the year 1542, containing one archbiſhopric, viz. Lima, and four biſhoprics, viz. Truxillo, Guamanga, Cuſco, and Arequipa. The archbiſhopric of Lima contains fifteen juriſdictions. The dioceſe of Truxillo contains ſeven; Guamanga, nine; Cuſco, fourteen; and Arequipa, ſix.

LI'MA, a city of South America, and capital of the audience, in the viceroyalty of Peru. This city is alſo called *Civdad de los Reyes*, or City of Kings, being founded on the feaſt of the Epiphany in the year 1535, by Francis Pizarro. It is ſituated in the ſpacious and delightful valley

valley of *Rimac*; an Indian word, and the true name of the city itſelf, from a corrupt pronunciation of which word the Spaniards derived *Lima*. Rimac is the name by which both the valley and the river are ſtill called. This appellation is derived from an idol to which the native Indians uſed to offer ſacrifice, as did the yncas after they had extended their empire hither; and, as it was ſuppoſed to return anſwers to the prayers addreſſed to it, they called it by way of diſtinction Rimac, or "he who ſpeaks." Its ſituation is one of the moſt advantageous that can be imagined; for, being in the centre of that ſpacious valley, it commands the whole without any difficulty. Northward, though at a conſiderable diſtance, is the Cordillera, or chain of the Andes. The river waſhes the walls of Lima; and, when not increaſed by the torrents from the mountains, is eaſily forded; but at other times, beſides the increaſe of its breadth, its depth and rapidity render fording impoſſible; and accordingly a very elegant and ſpacious ſtone bridge is built over it, having at one end a gate, which forms the entrance into the city, and leads to the grand ſquare. The form of this city is triangular; the baſe, or longeſt ſide, extending along the banks of the river. Its length is 1920 toiſes, or exactly two-thirds of a league. Its greateſt breadth, from north to ſouth, that is, from the bridge to the angle oppoſite to the baſe, is 1080 toiſes, or two-fifths of a league. It is ſurrounded with a brick wall, flanked with thirty-four baſtions, but without platforms or embraſure; the intention of it being merely to encloſe the city, and render it capable of ſuſtaining any ſudden attack of the Indians. It has, in its whole circumference, ſeven gates and three poſterns. On the ſide of the river, oppoſite to the city, is a ſuburb called St. Lazaro. All the ſtreets of this ſuburb, like thoſe of the city, are broad, parallel, or at right angles, ſome running from north to ſouth, and others from eaſt to weſt, forming ſquares of houſes, each 150 yards in front. The ſtreets are paved, and along them run ſtreams of water, conducted from the river a little above the city; and, being arched over, contribute to its cleanlineſs, without the leaſt inconvenience. The houſes, though for the moſt part low, are commodious, and make a good appearance. They are all of wood, and the walls of wattled oſiers or canes, covered with clay, and painted; as the beſt ſecurity againſt earthquakes. Theſe houſes are in leſs danger than if built of more compact materials; for the whole building yields to the motions of the earthquakes, and the foundations, which are connected with the ſeveral parts of the building, follow the ſame motion, and by that means are not ſo eaſily thrown down. The wood of the canes is very ſolid, and little ſubject to rot. Moſt of the principal houſes have gardens for entertainments, being continually refreſhed with water by means of the canals.

Lima is the ſee of an archbiſhop; and is divided into five pariſhes. The convents are very numerous. All the churches, both conventual and parochial, and alſo the chapels, are large, conſtructed partly of ſtone, and adorned with paintings and other decorations of great value; the whole is covered with plate, or ſomething equal to it in value; ſo that ſervice in theſe churches is performed with a magnificence ſcarcely to be imagined; and the ornaments, even on common days, with regard to their quality and richneſs, exceed thoſe which many cities of Europe pride themſelves with diſplaying on the moſt extraordinary occaſions. The viceroys, whoſe power extends over the greater part of Peru, uſually reſide at Lima; this government is triennial, though at the expiration of that term the ſovereign may prolong it. This office is of ſuch importance, that the viceroy enjoys all the privileges of royalty. He is abſolute in all affairs, whether political, military, civil, criminal, or relating to the revenue, having under him officers and tribunals for executing the ſeveral branches of government; ſo that the grandeur of this employment is in every particular equal to the title. For the ſafety of his perſon, and the dignity of his office, he has two bodies of guards; one of horſe, conſiſting of 160 men, a captain, and a lieutenant. The corporation of Lima conſiſts of *regidores*, or aldermen, an *alferez real*, or ſheriff, and two *alcades*, or royal judges; all being noblemen of the firſt diſtinction in the city. Theſe have the direction of the police, and the ordinary adminiſtration of juſtice. The alcades preſide alternately every month; for, by a particular privilege of this city, the juriſdiction of its corregidor extends only to the Indians. Here is a court for the effects of deceaſed perſons, which takes cogniſance of the goods of thoſe dying inteſtate, and without lawful heir; and likewiſe of thoſe entruſted with the effects of other perſons. Another tribunal is that of commerce, or the *conſulada*. Lima has alſo a corregidor, whoſe juriſdiction extends to all Indians both within the city and fifteen miles round it. Here is an univerſity, and colleges for the education of natives.

The number of inhabitants in this city, according to the lateſt enumeration, amounts to 52,627; the monks and clergy being 1392; the nuns 1585; the Spaniards, in general, 17,215; with 3219 Indians, and 8960 negroes, the reſt being meſtizos, and perſons of other caſts. The rich eccleſiaſtics, proprietors of entailed eſtates, military and civil officers, and phyſicians, advocates, attorneys, and artiſans, may amount to 19,000; the reſt being ſlaves or domeſtics. The population has declined ſince the erection of the new vice-royalty of La Plata; and it is likely ſtill farther to decreaſe, notwithſtanding an influx of 1400 perſons of all ſexes and conditions, who annually arrive as a ſupply; not to mention the Spaniſh girls, who, from the province of Piura in the north, and Ica in the ſouth, come hither to diſpoſe of their charms either in marriage or love, thoſe provinces being celebrated for female beauty. All the inhabitants of Lima, from the higheſt to the loweſt, are fond of fine clothes, and they indulge their paſſion to great exceſs. The women's dreſs conſiſts of a pair of ſhoes, a chemiſe, a petticoat of dimity, an open petticoat, and a jacket, which, in ſummer, is of linen, and in winter of ſtuff, to which ſome add a mantelette. Women of the loweſt condition, whoſe whole ſtock of apparel conſiſts merely of two chemiſes and a petticoat, wear bracelets, roſaries, and ſmall gold images, about their necks and arms, to the value of fifty or ſixty crowns. The females are, in general, of a middling ſtature, handſome, genteel, of a very fair complexion, with beautiful hair, and enchanting luſtre, and dignity in their eyes. They are naturally gay, ſprightly, jocoſe without levity, and remarkably fond of muſic.

The temperature of the air at Lima is agreeable; and, though the difference of the four ſeaſons is perceptible, they are all moderate, and none of them troubleſome. Spring begins towards the cloſe of the year, i. e. towards the end of November, or beginning of December; this is ſucceeded by ſummer, the heat of which is moderated by the ſouth winds; at the latter end of June, or beginning of July, the winter begins, and continues till November or December, the autumn intervening. As rain is ſeldom or never ſeen at Lima, the place is equally free from tempeſts, and the inhabitants are totally ſtrangers to thunder and lightning; there are, however, other inconveniences and evils to which they are obnoxious. In ſummer they are tormented with fleas, bugs, and moſquitoes; but the moſt dreadful calamity to which this country is ſubject is the recurrence of earthquakes, of which they have had ſeveral, which have almoſt ruined the city. Theſe have occurred in 1582, 1586, 1609, 1630, 1655, 1678, 1687, 1690, 1697, 1699, 1716, 1725, 1732, 1734, 1745, and 1746; the latter being the moſt tremendous and deſtructive. As the beſt ſecurity againſt earthquakes, they build their houſes moſtly of wood, and the walls of wattled oziers or canes, covered with clay, and painted. The diſtempers moſt common at Lima are malignant, intermittent, and catarrhous, fevers, pleuriſies, and conſtipations; and theſe rage continually in the city. The ſmall-pox is alſo known here; and when it occurs proves fatal to many.

The

The wealth of this city is chiefly derived from the mines in the provinces to the north and ſouth; but agriculture proſpers very much; though it would be natural to think, that a country, where rain is ſeldom or never known, muſt of neceſſity be totally barren; whereas the country of Lima enjoys a fertility to be envied, producing all kinds of grain, and a prodigious variety of fruits; for induſtry and art ſupply that moiſture which the clouds ſeem to withhold; and the ſoil is, by this means, rendered remarkably fruitful, amidſt a continual drought. One of the principal cares of the yncas was the cutting and diſpoſing, in the moſt advantageous manner, trenches, or ſmall canals, in order to conduct the waters of the rivers to nouriſh every part, and render large fields capable of producing grain. The Spaniards, finding theſe uſeful works ready executed to their hands, took care to keep them in the ſame order; and by theſe are watered the ſpacious fields of wheat and barley, large meadows, plantations of ſugar-canes and olive-trees, vineyards, and gardens of all kinds; all yield uncommon plenty. Before the earthquake in 1687, when this city ſuffered in ſo deplorable a manner, the harveſts of wheat and barley were ſufficient to ſupply the country, without any importation, eſpecially of wheat; but by this convulſion of nature the ſoil was ſo vitiated, that the wheat rotted ſoon after it was ſown, occaſioned probably by the vaſt clouds of ſulphureous particles then exhaled, and the prodigious quantities of nitrous effluvia diffuſed through it. This obliged the owners of the lands to apply them to other uſes. After the land had continued forty years in the ſtate of ſterility, it again ſo far recovered itſelf as in a conſiderable degree to become fit for grain as before. However, repeated earthquakes have been unfavourable: the fields in the neighbourhood of Lima are chiefly ſown with clover, of which there is a very great conſumption, as it is the common fodder for all beaſts, particularly mules and horſes, of which there is an inconceivable number. The bread at Lima is the beſt in all this part of America, both with regard to colour and taſte. The mutton and beef are alſo very good; and here is alſo plenty of poultry, pork, and fiſh; which latter article is ſupplied by the Indians of the coaſt, from the bay of Callao, and the villages of Cherillo and Luria. The river of Lima, and the coaſts, furniſh anchovies and various ſorts of ſhell-fiſh. The wines at Lima are of different ſorts, white, red, and dark-red, and of each ſort ſome are peculiarly excellent: they are imported from the coaſts of Naſca, Piſco, Lucumba, and Chili; but the latter produces the beſt. Many of the dried fruits are brought from Chili; and, by the trade carried on between the two kingdoms, Lima is ſupplied with all ſorts of fruits known in Spain.

At Lima there are no fabrics nor manufactures of any kind: the city therefore owes its magnificence and ſplendour to its being the capital of Peru, and the general ſtaple of the kingdom. As it is the reſidence of the government and chief tribunals, it is alſo the common factory for commerce of every kind, and the centre of the products and manufactures of the other provinces, together with thoſe of Europe, brought over in the galleons or regiſter-ſhips; and diſtributed from hence through the wide extent of theſe kingdoms. At the head of the commerce is the tribunal del conſulado, which appoints commiſſaries to reſide in the other cities of its dependencies, extending through all Peru. The chief commerce of Lima is with Valparaiſo, Concepcion, Coquimbo, in the kingdom of Chili; the Iſle of Chiloe, and Arica, Ilo, and Piſco, in the ſouth; towards the north with Truxillo, Pacaſmayo, and Payta, in the viceroyalty of Peru; with Guayaquil and Panama in the viceroyalty of New Granada; and with Realejo in Guatamala, and Acapulco, in Mexico. This trade is conducted by ten ſhips, eleven merchant-frigates, nineteen packet-boats, and a balandra, or ſmall tranſport-boat; amounting in all to 351,500 quintals of tonnage, navigated by 460 ſeamen. After the deſtruction of the ſea-port town of Callao by an earthquake in 1746, (ſee CALLAO,) a new town or village was founded, at the diſtance of a quarter of a league, called *Ballaviſta*. There is a fortreſs called San Fernando, with a ſufficient garriſon to defend the bay, which in the ſouth-weſt is fenced by a barren iſland called San Lorenzo. Here all the ſhips anchor, about two leagues from Lima. The coaſts of Naſca and Piſco ſend to Lima wine, brandy, raiſins, olives, and oil; and the kingdom of Chili, wheat, flour, lard, leather, cordage, wines, dried fruits, and ſome gold. Every Monday, during the whole year, there is a fair at Callao, or Ballaviſta, whither the traders or proprietors of commodities reſort from all parts; and the goods are carried, according to the directions of the buyers, on droves of mules kept for this purpoſe by the maſters of the warehouſes. Copper and tin in bars are brought from Coquimbo; from the mountains de Caxamarea and Chacapoyas, canvas made of cotton for ſails, and other ſtuffs of that kind; and Cordovan leather and ſoap are made all over Valles, the valley in which Lima is ſituated. From the ſouthern provinces, as Plata, Oruro, Potoſi, and Cuzco, is ſent Vicuna wool, for making hats and ſome ſtuffs of a peculiar firmneſs. From Paraguay, the herb called by that name is ſent, of which there is a great conſumption. The produce of the ſales in the inland parts of the kingdom is ſent to Lima in bars of ſilver, and pignas, which are porous and light maſſes of ſilver, being an amalgam of mercury and duſt taken out of the mines. The ſilver is coined at the mint in this city. Lima has alſo its particular trade with the kingdoms both of North and South America. The moſt conſiderable commodity received from the former is ſnuff, which is brought from the Havannah to Mexico, and after having been there improved is forwarded to Lima, and conveyed from thence to the other provinces. There is no province in Peru, that does not tranſmit to Lima its products and manufactures; and ſupply itſelf from thence with the neceſſary commodities. Lima alſo receives from the ports of New Spain, naptha, tar, iron, and ſome indigo for dying. The kingdom of Terra Firma ſends to Lima, leaf-tobacco and pearls, which find here a good market, as no mulatto woman is without ſome ornament made of them. The ladies and women of all ranks have an ancient cuſtom of carrying in their mouths a *limpion*, or cleanſer, of tobacco. The limpions are ſmall rolls of tobacco, four inches long and nine lines in diameter, tied with a thread which they untwiſt as the limpion waſtes. One end of this they put into the mouth, and, after chewing it for ſome time, rub the teeth with it, thus keeping them always clean and white. All the timber uſed in building houſes, refitting ſhips, or conſtructing ſmall barks at Callao, is brought from Guayaquil, together with the cacao. Thus Lima is the emporium to which people reſort from all parts; and, trade being always in a conſtant circulation, beſides the continual reſort of ſtrangers, the families of rank are enabled to ſupport the expenſes of that ſplendour already mentioned; for, without ſuch continual aſſiſtance, they muſt either contract their expences, or fall victims to their oſtentation. Lima, according to the obſervations of Don Ulloa, from whom this account is taken, is ſituated in lat. 12. 2. 31. S. lon. 299. 27. E. the Peak of Teneriffe, or 282. 27. E. Greenwich.

LI'MA, a river of Spain, which riſes in the province of Galicia, croſſes the Portugueſe province of Entre Duero e Minho, and runs into the Atlantic two miles below Viana, in lat. 41. 40. N. lon. 8. 30. W.

LI'MA, a town of Arabia, in the province of Oman, near the coaſt: thirty-two miles ſouth-eaſt of Julfa.

LI'MA, *ſ.* in botany. See CYNOSURUS.

LIMA'CEOUS, *adj.* [from *limax*.] Belonging to a ſnail; ſlimy.

LIMACHU', a river of Chili, which runs into the Pacific Ocean in lat. 30. 25. S.

LIMA'CIA, *ſ.* [ſo named by Loureiro, from *limax*, a ſnail, in alluſion to the ſpiral furrows on its nut.] In botany, a genus of the claſs dioecia, order hexandria, natural order ſarmentaceæ, *Linn.* (aſparagi, *Juſſ.*) The generic characters are—Male-flowers nearly terminal, crowded together.

together. Calyx: perianth inferior, ſhort, of ſix acute leaves, the alternate ones ſmaller, arranged altogether horizontally in a triangle. Corolla: petals three, triangular, almoſt erect, longer than the calyx; nectary equal to the calyx, divided into ſix roundiſh concave fleſhy ſegments. Stamina: filaments ſix, very ſhort, each placed upon a ſegment of the nectary, and altogether forming a triangle; anthers of two cells, roundiſh. Female flowers axillary, in pairs, on a ſeparate plant. Calyx: as in the male. Corolla: petals ſix, roundiſh, curved, unequal; nectary equal to the calyx, divided into ſix turbinate connivent ſegments. Piſtillum: germen ſuperior, ſomewhat triangular; ſtyle none; ſtigmas three, many-cleft, ſpreading. Pericarpium: drupe fleſhy, rather kidney-ſhaped, containing a ſingle ſeed. Nut ſpirally furrowed like a ſcrew, the kernel ſimple.—*Eſſential Character.* Male; calyx of ſix leaves; corolla of three petals. Female, calyx of ſix leaves; corolla of ſix petals; ſtigmas three; drupe kidney-ſhaped, ſpiral.

Limacia ſcandens, a ſingle ſpecies; the *cay-me-ga* of the Cochin-chineſe, and found in the woods of Cochin-china. Stem ſhrubby, climbing, without tendrils, long, much branched. Leaves alternate, ovate-oblong, acuminate, entire, ſmooth. Flowers both male and female, yelloviſh-green. Drupe ſmall, ſmooth, acid and eſculent. *Loureiro's Cochin-china.*

LIMADI'SI, a town of Curdiſtan, on an iſland in Lake Van.

LIMÆ'A, in ancient geography, a river of Luſitania. *Strabo.*

LIMAI'L, *ſ.* The filings of metal.

LIMA'LE, a town of France, in the department of the Dyle: fifteen miles ſouth-eaſt of Bruſſels, and twelve ſouth of Louvain.

LIMASO'VA, one of the ſmaller Philippine iſlands, near Leyta. Lat. 10. 1. N. lon. 125. 2. E.

LIMASSO'L. See LIMISSO.

LIMATAM'BA, a town of Peru, in the dioceſe of Cuſco: twenty-five miles weſt of Cuſco.

To LI'MATE, *v. a.* [from the Sax. *limo*, to file.] To file; to poliſh. *But not much uſed. Bailey.*

LIMA'TION, *ſ.* The act of filing; the act of poliſhing.

LI'MATURE, *ſ.* [*limatura*, Lat.] Filings of any metal; the particles rubbed off by a file.

LIMA'Y, a town of France, in the department of the Seine and Oiſe, on the Seine, oppoſite Mantes.

LI'MAX, *ſ.* in helminthology, the SLUG, or NAKED SNAIL; a genus of the order of molluſca, or gelatinous worms. Generic characters: Body oblong, creeping, with a fleſhy kind of ſhield above, and a longitudinal flat diſk beneath; aperture on the right ſide, within the ſhield; feelers four, ſituate above the mouth, with an eye at the tip of each of the larger ones. There are fifteen ſpecies: they commit great depredations in fields and gardens, eſpecially in wet weather.

1. Limax levis, the ſmooth ſlug. Specific character, body black, and almoſt without wrinkles. It is found among moſs late in the autumn; and is about half an inch long. The body is gloſſy, with undulate tranſverſe ſtriæ on the ſhield; narrower, and not ſo much wrinkled as the following.

2. Limax ater, the black ſlug: body black, and furrowed with deep wrinkles. Of this ſpecies five varieties are enumerated: α. Colour deep black, pale beneath. β. Black, with a pale greeniſh ridge down the back. γ. Black, beneath white; mouth yelloviſh. δ. Cheſnut-brown, beneath white; mouth yelloviſh. ε. Duſky-brown, with a yelloviſh mouth and ſtreak each ſide. Common in woods, meadows, fields, and gardens; from an inch and a half to five inches in length. Crawls very ſlowly, and leaves a ſlime upon whatever it paſſes over; feelers always black; back convex; ſhield rough, with numerous dots; abdomen wrinkled.

3. Limax albus, the white ſlug; body white. This ſpecies contains four varieties. α. The entirely white. β. White edged with yellow. γ. White, an orange margin and hind-head. δ. White, with black feelers. It inhabits woods and groves, and is from a quarter to half an inch in length.

4. Limax ſuccineus, the amber-coloured ſlug: body, above pale rufous, beneath white. It inhabits ſhady damp places, and the bottom of hills, is about an inch and a half long; the body has neither ſpots nor belts; its feelers are larger than thoſe of the ater.

5. Limax flavus, the yellow ſlug: body amber-colour ſpotted with white; found in herbage.

6. Limax cinereus, the grey ſlug: body cinereous, with or without ſpots. There are ſix varieties: α. Body immaculate; ſhield black-blue. β. Shield ſpotted with black; body with black longitudinal ſtripes. γ. Shield and body ſpotted with black. δ. Body with five whitiſh ſtreaks, the lower one interrupted. ε. Body with white and cinereous wrinkles, and black ſpots in a double row. ζ. Body edged with white; inhabits woods, gardens, and damp cellars; and is from four to five inches long.

7. Limax hyalinus, the wrinkled ſlug: body with a hyaline or glaſſy appearance; feelers obſolete, with a brown line reaching from the feelers to the ſhield. Found in damp moſſy places, and is very deſtructive to the young ſhoots of kidney-beans; belly with numerous interrupted wrinkles.

8. Limax agreſtis, the ruſtic ſlug: body whitiſh, with black feelers. This ſpecies is divided into four varieties.

α. Entirely whitiſh, without any ſpots.

β. The ſpinning ſlug: whitiſh, with a yellow ſhield. This variety, and probably many others, has the power of ſecreting a large quantity of mucus from the under ſurface, and forming it into a thread, like a ſpider's web; by this means it often ſuſpends itſelf, and deſcends from the branches of trees, or any height it had crawled up to. It inhabits woods and other ſhady places; and is commonly about three quarters of an inch long. It was firſt particularly noticed by Mr. Hoy, and deſcribed in the Tranſactions of the Linnæan Society; vol. i. At firſt he ſaw it ſuſpended from the branch of a fir-tree, and was not aware that it was a living creature. It was hanging by a ſingle line or thread attached to its tail. This thread was in the upper part extremely fine, but near the animal it became thicker and broader, till at length it exactly correſponded with the tail. Its deſcent was at the rate of an inch in three minutes, a motion ſufficiently ſlow for the minuteſt obſervation. The line by which it deſcended was drawn from the ſlimy exudation gradually ſecreted from the pores that covered its whole body. Apparently there was much exertion required to produce a ſufficient ſupply of the liquid, and to force it towards the tail; it alternately drew back its head, and turned it as far as poſſible, firſt to one ſide, and then to the other, as if to preſs its ſides, and thus promote the ſecretion. Dr. Shaw had obſerved the ſame thing about ten years before, namely, on the 27th of September, 1776.

In addition to Mr. Hoy's account, we ſhall give ſome farther particulars, taken from a curious paper by Dr. John Latham, in the fourth volume of the ſame Tranſactions. Speaking of the curious property belonging to the ſpinning ſlug, the doctor ſays, "that it is a cuſtom not unuſual for this ſpecies to paſs from an height ſecurely to the ground, by means of a thread of its own conſtruction, ſeems manifeſt; for, on my friend's (Col. Montague, F. L. S.) putting one of them on the projecting frame of a window, it immediately crawled forwards till it came to the projecting angle, from whence, without attempting to fix itſelf by its fore parts to any thing, it became viſibly ſuſpended by a thread from its tail. When it had deſcended two feet, the colonel took it up by the thread, and carried it to a diſtant room; but trying to fix it afreſh, in order more accurately to obſerve its progreſs, the thread broke. He then put it on a frame about four feet from

the ground; in a few minutes it was again ſuſpended; and, obſerving by his watch, it deſcended at the rate of three inches and a half in a minute." After repeated trials, the colonel, by means of glaſſes, was enabled to aſcertain that the ſecretion, of which the thread was formed, was wholly from the under parts, and not from the back and ſides, both of which appeared nearly dry; nor did it proceed from any orifice in the tail, becauſe in ſome inſtances the animal was ſuſpended by the tip of the tail, and in others from the ſide, full an eighth of an inch from the tip. This creature ſeems quite ſenſible of its abilities, for it extended itſelf from the bottom of the frame, with its head downwards, till the tail became ſuſpended; and it was by means of an undulating motion of the belly that the flow of the viſcous ſecretion was produced towards the tail, but in doing this the belly was contracted, being furniſhed with numerous tranſverſe rugæ; at the ſame time the body and tentacula were fully extended, indicating no alarm whatever; the head was occaſionally moved from ſide to ſide, which gave ſeveral turns to the right or left, as the centre of gravity lay; but, as it as frequently turned one way as the other, the thread was not in the leaſt twiſted. The thread, on firſt leaving the tail, was five times as broad as it was at the eighth of an inch diſtant therefrom, but afterwards ſeemed of an equal ſize, and conſiderably ſmaller than the fineſt human hair. When a portion of this thread was placed under a microſcope, it appeared contracted; it was pellucid and elaſtic. By another writer on this ſubject we are told, that, by the application of the microſcope, the ſlimy humour will be ſeen to come out inſenſibly from the glandular pores of the ſkin, like clear and minute points; theſe, by continuing a gentle preſſure on the ſkin, will become ſmall drops, and in the end form a conſiderable collection of matter. It may be alſo obſerved, that colonel Montague found ſeveral individuals of this variety that he could not induce to ſpin, and, as if ſenſible of their inability ſo to do, they turned back when approaching the projected edge; while others at once let themſelves down without heſitation; ſo that it might be known by their motion, when near the brink of the precipice, whether they were endued with the faculty or not. After theſe animals have ſpun for ſome time, their ſpinning power ſeems to be for a while loſt; but, in all thoſe on which experiments have been made, it has been recovered again by keeping them for a few hours among wet moſs. Fig. 1, on the annexed Plate, exhibits this animal ſuſpended by its thread; fig. 2, the ſame, ſeen from beneath; fig. 3, the ſame, in progreſſive motion on the ground; fig. 4, the ſame, in a ſtate of repoſe on a leaf.

γ. Whitiſh, with a black head.

δ. Whitiſh, with a cinereous back.

ε. Whitiſh, with ſcattered black ſpecks. Found in gardens, paſtures, and groves, from May till the end of the year, and is the animal which has been recommended to be ſwallowed by conſumptive perſons. It is about half an inch in length, and when touched it ſticks to the fingers as if dead.

9. Limax cinctus, the belted ſlug: yelloviſh, with a cinereous belt on the ſhield and body. It is commonly found in groves, and is about two inches long. Body without ſpots; beneath white.

10. Limax marginatus, the margined ſlug: cinereous; ſhield with a duſky ſtreak on each ſide; body pale bluiſh. It is found on the beech. Back with a white ridge, each ſide of which is bluiſh-aſh; abdomen ſometimes ſpotted black.

11. Limax reticulatus, the netted ſlug: brown, with black dots on the ſhield and lines on the body. Inhabits gardens in Denmark and Germany; it is an inch and a half long.

12. Limax aureus, the golden ſlug: yellow, immaculate, with black feelers. Inhabits the groves of Denmark and Norway; about half an inch long. The body beneath is white, with a black line between the feelers.

13. Limax fuſcus, the brown ſlug: this is of a reddiſh hue, with a blackiſh lateral line and back.

14. Limax tenellus, the tender ſlug: greeniſh, with black head and feelers. Found early in the ſpring, in hollows of woods filled with dry leaves; about an inch long; the ſhield whitiſh with a yelloviſh caſt.

15. Limax lanceolatus, the ſpear-ſhaped ſlug: linear lanceolate, and very ſharp at each end; the margin ſurrounded with a membranaceous border; without tentacula or feelers. Found on the coaſt of Cornwall.

LIMB, *ſ.* [lim, Sax. and Scot. *lem*, Dan.] A member; a jointed or articulated part of animals:

A ſecond Hector, for his grim aſpect,
And large proportion of his ſtrong-knit *limbs*. *Shakeſpeare.*

Now am I come each *limb* to ſurvey,
If thy appearance anſwer loud report. *Milton's Agoniſtes.*

[*Limbe*, Fr. *limbus*, Lat.] An edge; a border. The outermoſt border, or graduated edge, of a quadrant, aſtrolabe, or ſuch like mathematical inſtrument. The arch of the primitive circle, in any projection of the ſphere in plano. The outermoſt border or edge of the ſun or moon; as, the upper limb, or edge; the lower limb; the preceding limb, or ſide; the following limb.—Aſtronomers obſerve the upper or lower *limb* of the ſun or moon, to find their true height, or that of the centre, which differs from the others by the ſemi-diameter of the diſc. *Hutton's Math. Dict.*

LIMB, or *Limbus*, in botany, the border, or upper dilated part, of a monopetalous corolla.—Since we have only the word *border* in Engliſh, to expreſs the upper ſpreading part, both in this and the polypetalous corolla, it would perhaps be better to preſerve the Latin terms *limbus* for the firſt, and *lamina* for the ſecond. For *limb* applied to border we have the authority of the aſtronomers. *Martyn's Language of Botany.*

To LIMB, *v. a.* To ſupply with limbs:

As they pleaſe,
They *limb* themſelves, and colour, ſhape, and ſize,
Aſſume, as likes them beſt, condenſe, or rare. *Milton.*

To tear aſunder; to diſmember.

LIM'BACH, a town of Saxony, in the circle of Erzgebirg: five miles weſt of Chemnitz.

LIM'BAT, the name of a periodical wind, common in the iſland of Cyprus, and of great ſervice in moderating the heats of the climate, which would otherwiſe be intolerable. According to the abbé Mariti, it begins to blow at eight in the morning the firſt day; increaſes as the ſun advances till noon; then gradually weakens, and at three falls entirely. On the ſecond day it ariſes at the ſame hour; but it does not attain its greateſt ſtrength till about one in the afternoon, and ceaſes at four preciſely. On the third day it begins as before; but it falls an hour later. On the five ſucceeding days, it follows the ſame progreſſion as on the third; but it is remarked, that a little before it ceaſes it becomes extremely violent. At the expiration of five days it commences a new period like the former. By narrowly obſerving the ſea on that ſide from which it is about to blow, a little before it ariſes, one may determine what degree of ſtrength it will have during the day. If the horizon is clear, and entirely free from clouds, the wind will be weak, and even almoſt inſenſible; but if it is dark and cloudy, the wind will be ſtrong and violent. This limbat wind, notwithſtanding its utility in moderating the exceſſive heat, often becomes the cauſe of fevers, eſpecially to Europeans, from their being leſs habituated to the climate, and more apt than the natives to ſuffer themſelves to be ſurpriſed by the cool air when in a ſtate of perſpiration. This wind, the falling of which happens an hour ſooner or later, is ſucceeded by a calm, accompanied by a certain moiſture that renders the air ſomewhat heavy. This moiſture diſappears in the evening, being diſſipated by a wind which ariſes every day at that period. This wind is conſidered as a

land-

Fig. 1 to 4. The Spinning Slug.
5. Tall Limodorum; from Martyn's Hist. Plant. rar.

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J. Parr. sc

land-breeze by the inhabitants of the ſouthern and eaſtern parts of the iſland; but it is called a *ſea-breeze* by thoſe in the northern and weſtern, who indeed receive it immediately from the ſea. In ſummer it blows till four o'clock in the morning; and, when it ceaſes, it leaves a profound calm, which continues till the hour when the limbat commences. In autumn and winter it never falls till day-break, when it is ſucceeded by other winds, which proceed from the irregularity of the ſeaſon. In ſpring it does not continue longer than midnight; and is then ſucceeded by that happy calm, during which thoſe refreſhing dews are formed that moiſten the earth at ſun-riſing. The limbat winds, which ariſe in the beginning of ſummer, ceaſe about the middle of September; and this is the period when the moſt inſupportable heats commence, becauſe their violence is not moderated by the ſmalleſt breeze. They are, however, luckily not of long duration; and about the latter end of October they decreaſe ſenſibly, as the atmoſphere begins to be loaded with watery clouds.

LIM'BE, an iſland in the Eaſtern Indian Sea, about twelve miles long, and three broad, near the eaſt coaſt of Celebes. Lat. 1. 18. N. lon. 125. 10. E.

LIM'BEC, *ſ.* [corrupted by popular pronunciation from *alembic.*] A ſtill.—The earth, by ſecret conveyances, lets in the ſea, and ſends it back freſh, her bowels ſerving for a *limbec. Howel.*

Fires of Spain, and the line,
Whoſe countries *limbecs* to our bodies be,
Canſt thou for gain bear? *Donne.*

Call up, unbound,
In various ſhapes, old Proteus from the ſea,
Drain'd through a *limbec* to his naked form. *Milton.*

He firſt ſurvey'd the charge with careful eyes,
Yet judg'd, like vapours that from *limbecs* riſe,
It would in richer ſhowers deſcend again. *Dryden.*

LIM'BED, *adj.* [from *limb.*] Formed with regard to limbs.

A ſteer of five years age, large-*limb'd*, and fed,
To Jove's high altars Agamemnon led. *Pope's Iliad.*

LIM'BER, *adj.* Flexible; eaſily bent; pliant; lithe.—The muſcles were ſtrong on both ſides of the aſpera arteria; but on the under ſide, oppoſite to that of the œſophagus, very *limber. Ray on Creation.*

At once came forth whatever creeps the ground,
Inſect, or worm: thoſe wav'd their *limber* fans
For wings; and, ſmalleſt lineaments exact,
In all the liveries deck'd of ſummer's pride. *Milton.*

LIM'BER, *ſ.* A two-wheel carriage, upon which the trail of the gun is fixed in travelling, and taken off when preparing for action; this gives the term unlimbering the guns.

Limbers, or Limber-Holes, in a ſhip, are little ſquare holes cut through her floor-timbers, ſerving to let the water to the well of the pump, which otherwiſe would lie between thoſe timbers where the keel-rope runs. Every floor-timber has two limber-holes cut through it; viz. one on each ſide of the keelſon.

Limber-Boards, ſhort pieces of plank, which form a part of the cieling or lining of a ſhip's floor, cloſe to the keelſon, and immediately above the limbers. They are occaſionally removed, in order to examine and clear the limber-holes.

Limber-Rope, a long rope, frequently retained in the limber-holes of a ſhip, and communicating from one to another, in order to clear them, by pulling the rope backwards and forwards, ſo as to looſen the ſand or dirt by which they may occaſionally be choaked.

LIM'BERG, a town of the duchy of Stiria: twelve miles ſouth of Voitſberg.

LIM'BERNESS, *ſ.* Flexibility; pliancy.

LIMBEU'O, a town on the eaſt coaſt of the iſland of Celebes. Lat. 0. 18. N. lon. 123. 18. E.

LIM'BING, *ſ.* The furniſhing with limbs; the act of tearing limb from limb.

LIM'BMEAL, *adv.* In pieces.—O! that I had her here to tear her *limbmeal. Shakeſpeare's Cymbeline.*—Tears cards *limbmeal* without regard to age, ſex, or quality. *Butler's Characters.*

LIM'BO, *ſ.* [*eo quod ſit* limbus *inferorum.* Du Cange.] A region bordering upon hell, in which there is neither pleaſure nor pain. Popularly hell:

No, he's in tartar *limbo*, worſe than hell.
A devil in an everlaſting garment hath him,
One whoſe hard heart is button'd up with ſteel. *Shakeſp.*

Oh what a ſympathy of woe is this!
As far from help as *limbo* is from bliſs. *Shakeſpeare.*

Any place of miſery and reſtraint.—Friar, thou art come off thyſelf, but poor I am left in *limbo. Dryden's Spaniſh Fryar.*

For he no ſooner was at large,
But Trulla ſtraight brought on the charge;
And in the ſelf-ſame *limbo* put
The knight and ſquire, where he was ſhut. *Hudibras.*

LIMBOBARY'A, a town of Bengal; thirty miles north-weſt of Nattore.

LIM'BORCH (Philip), a learned writer among the remonſtrants, born at Amſterdam in 1633. After having made great proficiency in his ſtudies, he was, in 1655, admitted to preach in public, which he did firſt at Haerlem. His ſermons had in them no affected eloquence; but were ſolid, methodical, and edifying. He was choſen miniſter of Goudja; from whence he was called to Amſterdam, where he had the profeſſorſhip of divinity, in which he acquitted himſelf with great reputation till his death, which happened in 1712. He had an admirable genius, and a tenacious memory. He had many friends of diſtinction in foreign parts as well as in his own country. Some of his letters to Mr. Locke are printed with thoſe of that celebrated author. He had all the qualifications ſuitable to the character of a ſincere divine, lived an example of every virtue, and preſerved the vigour of his body and mind to a conſiderable age. He wrote many works, which are eſteemed; the principal of which are, 1. Amica Collatio de Veritate Religionis Chriſtianæ cum Erudito Judæo, 12mo. 2. A Complete Body of Divinity, according to the opinions and doctrines of the Remonſtrants. 3. A Hiſtory of the Inquiſition; which has been tranſlated into Engliſh, and enlarged, by Dr. Samuel Chandler. Limborch alſo publiſhed the works of the famous Epiſcopius, who was his great-uncle by the mother's ſide.

LIM'BOURG (John Philip de), a phyſician at Spa, who obtained a great reputation by his knowledge of the properties of the mineral waters, and by the ſucceſs with which he preſcribed them in many obſtinate diſeaſes, which had reſiſted other remedies. He reſided at Spa during the ſeaſon of drinking the waters. He publiſhed ſeveral works, the principal of which detail the reſult of his obſervations on their properties and uſes; viz. 1. Diſſertation ſur les Eaux de Spa, ſoutenue à Leyde, le 7 Août, 1736, &c. Liege, 1749, 12mo. 2. Traité des Eaux Minérales de Spa, Leyden, 1754, 12mo. 3. Diſſertations ſur les Bains d'Eau ſimple, tant par immerſion, qu'en douches et en vapeurs; Liege, 1757, 12mo. 4. Caractères des Médecins, ou l'idée de ce qu'ils ſont communément, et celle de ce qu'ils devroient être, &c. ibid. 1760, 12mo. 5. Diſſertation ſur les Affinités chymiques, qui a remporté le prix de Phyſique de l'an 1758, au jugement de l'Académie de Rouen; ibid. 1761, 12mo. 6. Nouveaux Amuſemens des Eaux Minérales de Spa; ibid. 1763, 12mo. 7. Diſſertation ſur les Douleurs vagues, connues ſous le nom de Goutte vague et de Rheumatiſme goutteux, &c. a prize-

eſſay, ibid. 1763. 8. Recueil des Effets des Eaux Minérales de Spa, de l'an 1764; avec des Remarques ſur le Syſtème de M. Lucas ſur les mêmes Eaux minérales; ibid. 1765.

LIM'BOURG, in geography. See LIMBURG.

LIM'BRA, a town of Hindooſtan, in Guzerat: thirty-five miles weſt of Gôgo.

LIM'BRY, a town of Hindooſtan, in Guzerat: ſixty-eight miles weſt of Amedabad.

LIM'BURG (late Duchy of), a principality of Germany, and a province of the Netherlands, bounded on the north by the duchy of Juliers, on the eaſt by the electorate of Cologne and duchy of Juliers, and on the ſouth and weſt by the biſhopric of Liege; about thirty miles in length, and twenty-four in breadth. It yields good arable ground, and abounds in particular in a fine breed of cattle. In the neighbourhood of Limburg are found iron, lead, and calamine. The origin of the ancient counts of Limburg is obſcure. Probably this houſe took its riſe about the middle of the tenth century. Henry I. count of Limburg, who lived in the year 1071, married Judith, only daughter to Frederic of Luxemburg, and duke of the Lower Lorraine, with whom he obtained conſiderable eſtates on the rivers Ourthe and Ambleve. His ſon Henry II. was elected duke of Lower Lorraine, and bore the title thereof inſtead of that of a count, and his poſterity were ſtyled *dukes* of Limburg after him. The male branch of theſe dukes, however, becoming extinct in Waleran, a very bloody war was kindled on account of this country. Adolph count of Bergen, who was next heir, in the years 1282 and 1283 ceded all his right in the duchy of Limburg to John I. duke of Brabant; who upon that became involved with Reynald or Reinhold I. count of Guelders, who had taken poſſeſſion of the duchy, in a grievous war, which was concluded with a battle near Woringen; after which the duke of Brabant took poſſeſſion of Limburg. The duchy afterwards, together with the other provinces of the Netherlands, devolved to the dukes of Burgundy; and from them to the houſe of Auſtria. A part of the counties of Fauquemont and Dalem, as alſo of the country of Rolduc, deſcended, as well by virtue of the peace of Munſter, as of the ſtipulation made in the year 1661 at the Hague, to the States General. It is now annexed to France, and forms part of the department of the Ourthe.

LIM'BURG, a town of France, in the department of the Ourthe, late capital of the duchy ſo called, ſituated near the river Weſe or Weze, in a fertile country, on an agreeable mountain. It was heretofore regularly fortified, with a caſtle, built on a rock, and defended by towers and baſtions, built of freeſtone. Near Limburg are many quarries of different kinds of marble; the precipices, mountains, and rocks, round about, are romantic; the air is wholeſome, and the inhabitants have hardly any diſeaſe except old age. The magiſtracy conſiſts of a mayor, ſeven echevins, and a greffier; who muſt be licentiates in law of the univerſity of Louvain, and equally ſkilled in the French and Flemiſh languages. They have a conſiderable manufacture of woollen cloth; and ſome excellent cheeſe is made in the environs; there are alſo ſome iron-mines near it: twenty miles eaſt-ſouth-eaſt of Liege, and forty-ſix north of Luxemburg. Lat. 50. 36. N. lon. 23. 31. E.

LIM'BURG, a lordſhip and principality of Germany, belonging to the circle of Franconia, but lying in Swabia, ſurrounded by Wurtemberg, the provoſtſhip of Elwangen, the principality of Anſpach, and the territory of the imperial city of Swabian-Hall; and in its greateſt extent from ſouth to north is almoſt twenty miles, but from weſt to eaſt only eighteen. The laſt count of Limburg dying in the year 1713, the king of Pruſſia took poſſeſſion of his country; but at length ceded it to the allodial heirs, and the emperor ſequeſtrated the imperial fiefs; but, in 1728, conferred the inveſtiture of them on king Frederic-William, as imperial ſub-vaſſal. In the year 1742, Frederic II. transferred theſe Limburg imperial fiefs to the houſe of Brandenburg-Anſpach. The whole lordſhip contributed to one Roman month 64 florins, and to each chamber term 43 rix-dollars, 19 kruitzers.

LIM'BURG, a town of France, in the department of the Roer: two miles north-weſt of Sittart.

LIM'BURG, a town of Germany, ſituated on the Lahn, formerly governed by its particular counts, who became extinct in the beginning of the fifth century: twenty-ſix miles north of Mentz, and ſeventy-ſix eaſt-north-eaſt of Treves. Lat. 50. 20. N. lon. 8. 3. E.

LIM'BURG, or HOHEN LIMBURG, a town and citadel of Germany, which gives name to a county, a fief of the county of Mark, in which it is inſulated. After the demolition of the caſtle of Iſenburg, the brother-in-law of the laſt count, who was executed as an aſſaſſin in 1225, erected for the children of this unhappy man a caſtle which he called Limburg, which name they adopted. The territory annexed is about fifteen miles long and twelve broad. It was lately under the protection of the king of Pruſſia, who received from it every year 3056 rix-dollars: four miles north-north-weſt of Altena, and thirty eaſt of Duſſeldorp.

LIM'BUS, a term in the Roman theology, uſed for that place where the patriarchs are ſuppoſed to have waited for the redemption of mankind, and where they imagine our Saviour continued from the time of his death to that of his reſurrection. Du-Cange ſays, the fathers call this place *limbus*, as being the margin or frontier of the other world.

LIMBUS is alſo uſed by catholics for the place deſtined to receive the ſouls of infants who die without baptiſm; who have not deſerved hell, as dying in innocence; nor yet are worthy of heaven, becauſe of the imputation of original ſin.

LIMBUYAN', a town on the ſouth coaſt of the iſland of Maſbate. Lat. 12. 8. N. lon. 123. 36. E.

LIME, *ſ.* [lim, ȝelýman, Sax. to glue.] A viſcous ſubſtance drawn over twigs, which catches and entangles the wings of birds that light upon it.—A thruſh was taken with a buſh of *lime*-twigs. *L'Eſtrange.*

Poor bird! thou'dſt never fear the net or *lime*,
The pitfall, nor the gin. *Shakeſpeare's Macbeth.*

Matter of which mortar is made: ſo called becauſe uſed in cement.—The *lime* we have in London is uſually made of chalk, which is weaker than that made of ſtone. *Hill's Materia Medica.*—They were now, like ſand without *lime*, ill bound together, eſpecially as many as were Engliſh, who were at a gaze, looking ſtrange one upon another, not knowing who was faithful to their ſide. *Bacon.*

As when a lofty pile is rais'd,
We never hear the workmen prais'd,
Who bring the *lime*, or place the ſtones,
But all admire Inigo Jones. *Swift.*

Of the chemical properties of lime, we have already treated under CHEMISTRY; and of its uſe as manure, under HUSBANDRY. See the Indexes to thoſe articles; alſo *Creta* under the article MINERALOGY.

LIME, *ſ.* [*limé*, Fr.] A ſpecies of lemon. See CITRUS, vol. iv. p. 626.

Bear me, Pomona! to thy citron groves;
To where the lemon and the piercing *lime*,
With the deep orange glowing through the green,
Their lighter glories blend. *Thomſon's Summer.*

LIME, a town of the ſtate of Connecticut: ſeven miles weſt of New London.

To LIME, *v. a.* To entangle; to enſnare.—Example, that ſo terribly ſhows in the wreck of maidenhood, cannot, for all that, diſſuade ſucceſſion, but that they are *limed* with the twigs that threaten them. *Shakeſpeare.*

Oh boſom, black as death!
Oh *limed* ſoul, that, ſtruggling to be free,
Art more engag'd! *Shakeſpeare's Hamlet.*

To

To ſmear with lime.—Thoſe twigs in time will come to be *limed*, and then you are all loſt if you do but touch them. *L'Eſtrange.*

Myſelf have *lim'd* a buſh for her,
And plac'd a quire of ſuch enticing birds,
That ſhe will light to liſten to their lays. *Shakeſpeare.*

To cement. *Out of uſe:*

I will not ruinate my father's houſe,
Who gave his blood to *lime* the ſtones together,
And ſet up Lancaſter. *Shakeſpeare's Henry* VI.

To manure ground with lime.—All ſorts of peaſe loved *limed* or marled land. *Mortimer.*

LIME (Brook). See VERONICA.

LIME (Quick). Lime in its moſt powerful or cauſtic ſtate, before it has been rendered mild by the abſorption of carbonic acid gas, or fixed air, from either the atmoſphere or the ſoil.

LI'ME-BURNING, *ſ.* The proceſs of converting lime-ſtone, chalk, marble, ſhells, and other calcareous ſubſtances, into lime, by means of heat, in kilns properly conſtructed for the purpoſe. See LIME-KILN.

LI'ME-GALLS, *ſ.* In natural hiſtory, a ſort of vegetable protuberances formed on the edges of the leaves of the lime-tree in ſpring-time; they are very common in the plantations of limes, and are irregularly ſhaped, but uſually oblong and rugged, and of a reddiſh colour. As theſe are very plentiful, M. Reaumur was of opinion, that they might be of ſervice in the dying-trade; he made trial by rubbing them on ſome parts of his linen, and found that they gave a very beautiful red colour, which did not come out in the firſt waſhings afterwards. It is extremely probable, that there wants only inquiry to prove that we have many valuable productions of this kind, which, though diſregarded at preſent, might prove of great uſe in the ſeveral mechanical arts, as well as in medicine. Theſe galls of the lime-leaves are formed by a worm, which inhabits them during its term of life, being found in them of all ſizes, from the moſt minute to that of the full growth, which is about half an inch in length; but when its period of life, as a worm, draws near, it deſerts this habitation, and goes elſewhere to paſs into its chryſalis ſtate. See GALLS, vol. viii. and CYNIPS, vol. v.

LI'ME-HOUND, *ſ.* A blood-hound.—All the *lime-hounds* in the city ſhould have drawn after you by the ſcent. *B. Jonſon's Barthol. Fair.*

But Talus, that could like a *lime-hound* wind her,
And all things ſecrete wiſely could bewray,
At length found out, where as ſhe hidden lay. *Fairy Queen.*

I have ſeen him ſmell out
Her footing like a *lime-hound*, and know it
From all the reſt of her train. *Maſſinger's Baſhful Lover.*

LI'ME-JUICE, *ſ.* The juice of the lime. The following method of preſerving lime-juice and limes, in India, is copied from the Calcutta Gazettes of Sept. 1805. "The limes come in between the latter end of October and the middle of November; and, as they arrive ſucceſſively, the juice is to be ſqueezed into gomlehs, holding about one maund and a half, (a maund is ten gallons,) and in the evening poured into large caſks or pipes, from which rum, brandy, or Madeira, has been lately taken out. But, before the juice be poured out of the gomlehs into theſe caſks in which it is to be collected for purification, a red-hot iron bar, about eight inches long, four inches broad, and two inches thick, having an iron chain fixed to it by a hook, muſt be twice quenched in it, turning it equally round on all ſides. When the caſk in which the juice is collected in this manner is nearly full, put into it for every maund, or ten gallons, of juice, half a gallon of Bengal rum full-proof; and it will then ſettle and clarify itſelf by the beginning of December; when it may be drawn off for uſe, either into ſmall caſks or bottles.

"The limes are in their higheſt perfection in the month of December; and five hundred, being put into a well-dried fifteen gallon keg, will fill about one-half. The remaining part is then to be completely filled up with lime-juice that has ſettled and clarified itſelf in the caſk as now deſcribed. The keg, being thus filled with lime-juice, is to be ſlightly bunged up the firſt day, but the next day is to be completely ſecured againſt the admiſſion of air. In about one month the kegs will be found to want about two bottles of juice, which has been ſoaked up. This deficiency is to be ſupplied by means of a ſmall tapering pointed funnel introduced by boring a hole with a gimlet an inch from the bung; which being cloſed again, the keg is then ready for ſea. But, whether at ſea or on land, it will be neceſſary to fill it up again in the ſame way. Theſe kegs muſt have eight ſtrong new hoops; and, being prepared in this manner, the limes are warranted to keep twelve months and longer in high preſervation.

LI'ME-KILN, *ſ.* Kiln where ſtones are burnt to lime.—The counter-gate is as hateful to me as the reek of a *lime-kiln. Shakeſp. Merry Wives of Windſor.*

Lime-kilns are built of different forms or ſhapes, according to the manner in which they are to be wrought, and the kinds of fuel which are to be employed. It has been remarked, in a work on landed property, that, in places where materials are dear, from their being fetched from a diſtance, and where the fuel is coals, and alſo expenſive, the form of a kiln is moſtly that of an inverted cone, a form which has its inconveniences; but, in diſtricts where the art of burning lime is practiſed with ſuperior attention and correctneſs, the form has of late years been gradually changing from conical to elliptical. But, in his opinion, "the beſt form of a lime-furnace, in the eſtabliſhed practice of the preſent day, is that of the egg placed upon its narrower end, having part of its broader end ſtruck off, and its ſides ſomewhat compreſſed, eſpecially towards the lower extremity; the ground-plot or bottom of the kiln being nearly an oval, with an *eye*, or draft-hole, toward each end of it." It is ſuppoſed that "two advantages are gained, by this form over that of the cone. By the upper part of the kiln being contracted, the heat does not fly off ſo freely as it does out of a ſpreading cone. On the contrary, it thereby receives a degree of reverberation which adds to its intenſity." But the other, and ſtill more valuable, effect is this: "When the cooled lime is drawn out at the bottom of the furnace, the ignited maſs, in the upper parts of it, ſettles down, freely and evenly, into the central parts of the kiln; whereas, in a conical furnace, the regular contraction of its width, in the upper as well as the lower parts of it, prevents the burning materials from ſettling uniformly, and levelling downward. They hang upon the ſides of the kiln, and either form a dome at the bottom of the burning maſs, with a void ſpace beneath it, thereby endangering the ſtructure, if not the workmen employed; or, breaking down in the centre, form a funnel, down which the under burnt ſtones find their way to the draft-holes. The contraction of the lower part of the kiln has not the ſame effect; for, after the fuel is exhauſted, the adheſion ceaſes, the maſs looſens, and, as the lime cools, the leſs room it requires. It therefore runs down freely to the draft-holes, notwithſtanding the quick contraction of the bottom of the kiln or furnace."

The moſt ancient kind of lime-kiln is probably that which is made by excavating the earth in the form of a cone, of ſuch a ſize as may be neceſſary; and afterwards building up the ſides, or not, according to the circumſtances of the caſe; the materials being then laid in, in alternate layers of fuel and ſtone, properly broken, until the whole is filled up. The top is then covered with ſods, in order that the heat may be prevented from eſcaping; and the fire lighted at the bottom, and the whole of the contents burnt, in a greater or leſs ſpace of time, in proportion to the nature of the ſtone, and the quantity that is contained in the kiln. From the circumſtance of the top parts of theſe kilns, in ſome diſtricts, being covered over, and the ſides ſometimes built up with ſods, they are term-

ed *ſod-kilns*, in order to diſtinguiſh them from the other ſorts. When the whole of the contents of ſuch kilns are grown cold, they are drawn or taken out from the bottom; and the kiln again filled, if neceſſary. Theſe kilns are obviouſly intended for burning only one kiln-full at a time. But, as the burning of lime in this way is tedious and uneconomical, other methods and forms of kilns have been had recourſe to. Where lime is much wanted, either for agriculture or other purpoſes, they therefore uſe perpetual kilns, or what are more generally known by the name of *draw-kilns*. Theſe, as all lime-kilns ought to be, are, the author of Modern Agriculture ſays, ſituated by the ſide of a riſing bank, or ſheltered by an artificial mound of earth. They are generally built either of ſtone or brick; but the latter, as being better adapted to ſtand exceſſive degrees of heat, is conſidered as preferable. The outſide form of ſuch kilns is ſometimes cylindrical, but more generally ſquare. The inſide ſhould be formed in the ſhape of a hogſhead, or an egg, opened a little at both ends, and ſet on the ſmalleſt; being ſmall in circumference at the bottom, gradually wider towards the middle, and then contracting again towards the top. In kilns conſtructed in this way, it is obſerved, fewer coals are neceſſary, in conſequence of the great degree of reverberation which is created, above that which takes place in kilns formed in the ſhape of a ſugar-loaf reverſed. Near the bottom, in large kilns, two or more apertures are made; theſe are ſmall at the inſide of the kiln, but are ſloped wider, both at the ſides and the top, as they extend towards the outſide of the building. The uſes of theſe apertures are for admitting the air neceſſary for ſupplying the fire, and alſo for permitting the labourers to approach with a drag and ſhovel, to draw out the calcined lime. From the bottom of the kiln within, in ſome caſes, a ſmall building, called a horſe, is raiſed in the form of a wedge, and ſo conſtructed as to accelerate the operation of drawing out the burned lime-ſtone, by forcing it to fall into the apertures which have been mentioned above. In other kilns of this kind, in place of this building, there is an iron grate near the bottom, which comes cloſe to the inſide wall, except at the apertures where the lime is drawn out. When the kiln is to be filled, a parcel of furze or faggots is laid at the bottom; over this a layer of coals; then a layer of lime-ſtone, which is previouſly broken into pieces about the ſize of a man's fiſt; and ſo on alternately, ending with a layer of coals, which is ſometimes, though ſeldom, covered with ſods or turf, in order to keep the heat as intenſe as poſſible. The fire is then lighted in the apertures; and when the lime-ſtone towards the bottom is completely calcined, the fuel being conſiderably exhauſted, the lime-ſtone at the top ſubſides. The labourers then put in an addition of lime-ſtone and coal at top, and draw out at bottom as much as they find thoroughly burned; and thus go on, till any quantity required be calcined. When lime-ſtone is burned with coals, about three buſhels of calcined lime-ſtone are produced for every buſhel of coals uſed in the proceſs.

A lime-kiln of this ſort is deſcribed in count Rumford's Eſſays, which is in poſſeſſion of the Dublin Society, as well as the principal objects that ought to be had in view in conſtructing of the kiln pointed out; the firſt of which is, "to cauſe the fuel to burn in ſuch a manner as to conſume the ſmoke, which has here been done by obliging the ſmoke to deſcend and paſs through the fire, in order that as much heat as poſſible might be generated. Secondly, to cauſe the flame and hot vapour, which riſe from the fire, to come in contact with the lime-ſtone by a very large ſurface, in order to economize the heat, and prevent its going off into the atmoſphere; which was done by making the body of the kiln in the form of a hollow truncated cone; and very high in proportion to its diameter; and by filling it quite up to the top with lime-ſtone, the fire being made to enter near the bottom of the cone. Thirdly, to make the proceſs of burning lime perpetual, in order to prevent the waſte of heat which unavoidably attends the cooling of the kiln, in emptying and filling it, when, to perform that operation, it is neceſſary to put out the fire. And, fourthly, to contrive matters ſo, that the lime in which the proceſs of burning is juſt finiſhed, and which of courſe is ſtill intenſely hot, may, in cooling, be made to give off its heat in ſuch a manner, as to aſſiſt in heating the freſh quantity of cold lime-ſtone with which the kiln is repleniſhed, as often as a portion of lime is taken out of it. To effectuate theſe purpoſes, the fuel is not mixed with the lime-ſtone, but is burned in a cloſe fire-place, which opens into one ſide of the kiln, ſome diſtance above the bottom of it. For large lime-kilns on theſe principles, there may be ſeveral fire-places all opening into the ſame cone, and ſituated on different ſides of it; which fire-places may be conſtructed and regulated like the fire-places of the furnaces uſed for burning porcelain."

It is a common practice to burn lime-ſtone with furze in ſome places. The kilns which are made uſe of in theſe caſes are commonly known by the denomination of *flame-kilns*, and are built of brick; the walls from four to five feet thick, when they are not ſupported by a bank or mound of earth. The inſide is nearly ſquare, being twelve feet by thirteen, and eleven or twelve feet high. In the front wall there are three arches, each about one foot ten inches wide by three feet nine inches in height. When the kiln is to be filled, three arches are formed of the largeſt pieces of lime-ſtone, the whole breadth of the kiln, and oppoſite to the arches in the front wall. When theſe arches are formed, the lime-ſtone is thrown promiſcuouſly into the kiln to the height of ſeven or eight feet, over which are frequently laid fifteen or twenty thouſand bricks, which are burned at the ſame time with the lime-ſtone. When the filling of the kiln is completed, the three arches in the front wall are filled up with bricks almoſt to the top, room being left in each ſufficient only for putting in the furze, which is done in ſmall quantities, the object being to keep up a conſtant and regular flame. In the ſpace of thirty-ſix or forty hours, the whole lime-ſtone, about one hundred and twenty or one hundred and thirty quarters, together with the fifteen or twenty thouſand bricks, are thoroughly calcined. Kilns conſtructed in this way may be ſeen near Wellingborough in Northamptonſhire, and other places in the northern parts of the kingdom. And in many of the northern counties of Scotland, which are ſituated at a great diſtance from coal, it is alſo a common practice to burn lime-ſtone with peat; and, conſidering the rude ill-conſtructed kilns which are uſed for the purpoſe, it is aſtoniſhing with what ſucceſs the operations are performed. In ſome of theſe diſtricts, it is ſtated that lime-ſtone is ſufficiently calcined with peats, laid *ſtratum ſuper ſtratum*, in kilns formed of turf; but, owing to the quantity of aſhes which fall from the peat, the quality of the lime is conſiderably injured; and, from the open and expoſed ſituation of many of theſe kilns, the waſte of fuel is immenſe. Mr. Dodſon, however, has had much ſucceſs in burning lime by the uſe of peats; as he ſtates, in the Farmer's Magazine, that he is "convinced, from experience, that lime-ſtone can be burnt to better purpoſe, and at leſs expenſe, with peat than with coal. When coal is uſed, the lime-ſtones are apt, from exceſſive heat, to run into a ſolid lump, which never happens with peat, as it keeps them in an open ſtate, and admits the air freely. The proceſs of burning, alſo, goes on more ſlowly with coal. No lime can be drawn for two or three days; whereas, with peat, it may be drawn within twelve hours after fire is put to the kiln; and in every ſucceeding day nearly double the quantity of what could be produced by the uſe of coal. The expenſe is comparatively ſmall. A man and a boy will dig as many peats in one day as will burn 180 buſhels of lime; and the expenſe, including drying, will not exceed five ſhillings; while the coal neceſſary for burning the ſame quantity of lime would have coſt twelve ſhillings at the pit. The wetneſs of ſeaſons is no argument

againſt

againſt the uſe of peats, as they can be ſtacked near the kiln, when half dry, at any time of ſummer; the moiſture will be exhaled from them during winter, and they will be in a fit ſtate for burning in the month of April or May. He lives in the north-eaſtern diſtrict of Cumberland, where the farmers, in general, burn their own lime; and, though there is coal in the immediate neighbourhood, he gives a decided preference to peat, for the reaſons above mentioned." In the practice here ſtated, no particular form of kiln was found neceſſary, nor any particular ſort of management in the proceſs of calcination; the proportion of peat depending upon the nature of the lime-ſtone employed, and other circumſtances.

In the Communications to the Board of Agriculture, Mr. Rawſon aſſerts, that he has produced a conſiderable ſaving in the burning of lime, by conſtructing his kiln in the following manner: "It is made twenty feet in height; at the bottom a metal plate is placed one foot in height, intended to give air to the fire; over this plate the ſhovel that draws the lime runs. The ſloped ſides are ſix feet in height, the breadth at the top of the ſlope is eight feet, the ſides are carried up perpendicular fourteen feet, ſo as that every part of the inſide, for fourteen feet, to the mouth, is exactly of the ſame dimenſions. On the mouth of the kiln a cap is placed, built of long ſtones, and expeditiouſly contracted, about ſeven or eight feet high. In the building of the cap, on one ſide of the ſlope, the maſon is over the centre of the kiln, ſo that any thing dropping down will fall perpendicularly to the eye beneath. He is here to place an iron door of eighteen inches ſquare, and the remainder of the building of the cap is to be carried up, until the hole at the top be contracted to fourteen inches. The kiln is to be fed through the iron door, and, when filled, the door cloſe ſhut. The outſide wall muſt be three feet at the bottom to batter up to two feet at top, and made at ſuch a diſtance from the inſide wall of the kiln, that two feet of yellow clay may be well packed in between the walls, as every kiln built without this precaution will certainly ſplit, and the ſtrength of the fire be thereby exhauſted. At eight feet high from the eye of the kiln, two flues ſhould be carried through the front wall, through the packed clay, and to the oppoſite ſides of the kiln, to give power to the fire." It is obſerved, that, with this kiln, he has produced one-third more lime from a given quantity of fuel; and ſtones of bad quality will be here reduced into powder, and may be put into the kiln without the neceſſity of being broken ſo ſmall as is uſual. As many ſituations will not admit of building a kiln twenty feet high, while other ſituations may allow of its being built thirty or even forty feet (for it cannot be made too high), the diameter of the kiln ſhould be proportioned to the height to which it is carried up. And it is further ſtated, as another application of this ſort of contrivance, that "for ſeveral years he has made uſe of a ſmall kiln in an outſide kitchen, the height nine feet, the diameter three feet and a half. In the ſide of the kiln next the fire, he had three ſquare boilers placed, one of them large, containing half a barrel, with a cock, which ſupplied the family with conſtant boiling water; for the two others, he had tin veſſels made to fit the inſide with cloſe covers, in which meat and vegetables with water were placed and put into the two ſmaller boilers, which never had any water, but had cloſe covers. The tin boilers were heated ſooner than on the ſtrongeſt fire; and, when the meat, &c. were ſufficiently dreſſed, the whole was taken out of the metal boilers. At one ſide he had an oven placed for roaſting and boiling meat; the bottom was metal of twenty-ſix inches diameter, and one inch and a half thick; a flue from the fire went underneath. Even with the bottom of the oven, a grating nine inches ſquare was placed, which opened a communication between the oven and the hot fire of the kiln. The height of the oven was fourteen inches, ſhut cloſe by a metal door of eighteen inches ſquare; and the top, level with the mouth of the kiln, was covered by another metal plate of half an inch thick, on which was placed a ſecond oven; the heat which eſcaped through the half-inch plate, though not near the fire, was ſufficient to do all ſmall puddings, pies, breakfaſt-cakes, &c. &c. The meat in the large oven was placed on an iron frame which turned on a pivot and ſtood on a dripping-pan, and was turned by the cock each half-hour. And over the kiln he had a tiled ſtage for drying corn, and a chimney at one ſide, with a cawl on the top, which carried off all ſteam and ſulphur; a large granary was attached to the building. It is added, that the lime, if ſold, would more than pay for fuel and attendance; and he has frequently had dinner dreſſed for fifty men, without interfering with his family-buſineſs in any great degree."

It has been found by experience, in ſome of the northern diſtricts, that lime-kilns are rendered much leſs liable to crack and burſt by having the outſide walls carried up in a ſquare manner, than on the uſual circular plan.

LI'ME-KILN-BAY', a bay on the ſouth coaſt of the iſland of St. Chriſtopher: one mile weſt of Baſſeterre.

LI'ME-KILNS, a ſeaport town of Scotland, in Fifeſhire, on the Forth. The harbour at high tides will admit veſſels of 300 tons with eaſe. It belongs to the pariſh of Dumfermline, and takes its appellation from the lime-works which belong to the earl of Elgin.

LIME RE'GIS. See LYME.

LI'ME-STONE, *ſ.* The ſtone of which lime is made.—Fire-ſtone and *lime-ſtone*, if broke ſmall, and laid on cold lands, muſt be of advantage. *Mortimer.*

LI'ME-TREE, or LINDEN-TREE. See TILIA.

For her the *limes* their pleaſing ſhades deny,
For her the lilies hang their heads, and die. *Pope.*

LI'ME-TREE-BAY', a bay on the ſouth-coaſt of the iſland of Santa Cruz. Lat. 17. 45. N. lon. 63. 27. W.

LI'ME-TWIG, *ſ.* A twig ſmeared with bird-lime:

It ſtands upright
Like *lime-twigs* ſet to catch my winged ſoul. *Sha. Hen.* VI.

LI'ME-WATER, *ſ.* *Lime-water*, made by pouring water upon quick-lime, with ſome other ingredients to take off its ill flavour, is of great ſervice internally in all cutaneous eruptions, and diſeaſes of the lungs. *Hill.*—He tried an experiment on wheat infuſed in *lime-water* alone, and ſome in brandy and *lime-water* mixed; and had from each grain great increaſe. *Mortimer's Huſbandry.*

When lime-water is expoſed to the air, it ſoon becomes covered with a pellicle, exhibiting the priſmatic colours, which gradually thickens into a cruſt, and by its weight falls to the bottom of the liquid. This has been called the *cream of lime.* It is produced by the lime combining with the carbonic acid of the atmoſphere, by which it becomes inſoluble, and is ſeparated from the water. The ſame ſeparation takes place by breathing through lime-water, from the preſence of the carbonic acid afforded by reſpiration.

It is aſſerted, that in India cloth is bleached by the ſteam of lime-water, and that the Indians brought to France by admiral de Suffrein employed this method. To us, however, it would appear very ſtrange, if it really ſucceeded, that it ſhould have been ſo long neglected. In theory, we find nothing that can warrant an opinion of the ſucceſs of ſuch an operation, except that the vapour, which iſſues from quick-lime when ſlaked, changes the colour of vegetables expoſed to its action; on this account alone the fact deſerves to be put to the teſt of experiment.

Lime-water, for medical uſes, is prepared by pouring twelve pints of boiling diſtilled water on half a pound of lime, and ſtirring them together; let the veſſel be immediately covered, and left to ſtand for three hours; then keep the ſolution upon the remaining lime in ſtopped glaſs bottles, and pour off the clear liquor when it

is wanted for uſe. Lime is ſoluble in about 450 times its weight of water, or little more than one grain in one fluid-ounce, forming a tranſparent ſolution; hence the proportion here directed, is in fact more than is required for the ſaturation of the water; but the larger quantity allows, moreover, for any impurity contained in the lime, and, as it is a cheap article, the quantity uſed is ſcarcely of any importance. The proceſs here adopted is ſimple, efficacious, and convenient; and, by keeping the ſolution ſtanding upon the lime, it will always be ſaturated; and the place of any cruſt of carbonat of lime which forms upon the ſurface, if expoſed, will be ſupplied from the lime, which remains in a ſtate ready for ſolution. *Lond. Pharm.* 1809.

The general opinion of lime acting as a cauſtic, and conſuming the bodies it was made to act upon, by means of the great quantity of particles of fire it contained, long denied any preparation of it a place among internal medicines; at length, water poured upon it was found to take in a part of its virtues, and to be a valuable medicine, and very ſafely to be given internally in large quantities. For this purpoſe, a gallon and a half or two gallons of water were poured by degrees upon a pound of freſh-burnt quick-lime; the veſſel ſhaken when the ebullition ceaſed, and then ſet by, till the undiſſolved lime had ſettled; after which, the liquor was poured off, and paſſed through a filtre. Only a ſmall portion of the lime is diſſolved by the water, and the remainder gives a ſtrong impregnation to large quantities of freſh water, though not ſo ſtrong as the firſt; great part remaining at laſt undiſſolved: this reſiduum, calcined again, becomes quick-lime, as before; and by repetitions of this proceſs, nearly the whole may be diſſolved. The ſolution has a ſtrong ſtyptic taſte; and its effects in chemical mixtures are ſimilar to thoſe produced by quick-lime. In veſſels quite filled with lime-water, and exactly cloſed, it may be kept unchanged for many months. All lime is not equally good for the making of this water; but the ſeveral kinds differ, according to the ſubſtances they are made from. In Holland they make lime of ſea-ſhells, which they find in vaſt abundance on their ſea-ſhores. This was alſo a practice in the time of Dioſcorides; but the lime thus made, it has been ſaid, is not fit for making lime-water. The water made from it does not keep long, and is leſs ſtyptic, and ſweetiſh to the taſte, and is greatly inferior to the water made with lime burnt from ſtones. The newer the lime is, the leſs it has been expoſed to the air, and the drier it has been kept, and finally, the more it has held together without crumbling, or mouldering to powder, the better it is for making lime-water. *Mem. Acad. Par.* 1700.

It appears now, from the experiments of the ingenious Dr. Alſton, that one part of quick-lime is ſufficient for ſix hundred parts of water. Water will diſſolve but a certain portion of quick-lime; and how much that is cannot be eaſily aſcertained. So far ſeems certain from Dr. Alſton's experiments, that one pound of quick-lime is ſufficient for making ſix hundred pounds of good lime-water; and that thoſe who with Charas have ſuppoſed, that the ſecond and third lime-water is weaker than the firſt, have been led into an error by the ſmall quantity of water they uſed. It has been generally believed, that, in order to obtain good lime-water, the quick-lime muſt not only be recent and fully calcined, but alſo that for one part of quick-lime only eight, ten, or at moſt twelve, parts of water ſhould be taken; as if it could impregnate no more. But the doctor found, by many experiments, that it is altogether indifferent whether the water be hot or cold, poured on gradually, or at once, the water poured on the lime, or the lime thrown into the water; whether the quick-lime be in ſhells or ſlaked; or even expoſed to the air for ſeveral months, for ſuch quantities of the water as are commonly uſed; and, if the quick-lime be freſh, whether for one pound of it, eight, ten, twenty, fifty, or five hundred, pounds of water be taken. Only it is neceſſary, even for the firſt water after the ebullition is over, to ſtir and mix the lime with the water, and allow it time to impregnate itſelf; which is beſt known by the cruſt formed on its ſurface. Filtration indeed is not neceſſary, if it be not to prevent any undiſſolved lime being mixed with it; or cruſts diminiſhing its tranſparency. The doctor, for his own uſe, poured about eight pounds of boiling water upon a pound of ſtone quick-lime in a glazed earthen veſſel. He drank about a pint and a half of this lime-water daily for about ſixteen months; filling up the veſſel, when neceſſary, with freſh water, ſometimes hot and ſometimes cold, without obſerving any difference in the lime-water, which he conſtantly filtered through grey paper before he drank it. He obſerved, that the lime was not exhauſted after two years and two months, nor was the water ſenſibly weaker, when it ſtood a ſufficient time on the lime, which he knew by the cruſts that were formed. But, the lime becoming conſiderably lighter after it is long thus uſed, it at length requires ſeveral days to ſubſide, and form the cruſts; and, after the cruſts are formed, it does not leave half the water clear as it did at firſt. On the whole, this ſingle pound of lime afforded the doctor about ſix hundred pounds of lime-water. He adds, that, having taken lime-water made indifferently of lime-ſtone, or of chalk, or of ſhells, and ſometimes made of all the three together, he was never able to diſcover any difference in their effects. But ſo much lime-water is not to be obtained from quick-lime, unleſs it be freſh, completely calcined, and free from heterogeneous ſubſtances; for, if defective in any of theſe, it will yield proportionably leſs lime-water. *Lewis's Mat. Med. Macquer's Chem. Dict.*

Experience has ſhown lime-water to be an excellent medicine in many caſes; in the gravel and ſtone particularly. And it has alſo been found very ſerviceable in the gout, in habitual relaxations of the bowels, and in other caſes of relaxation. In ſome kinds of the ſcurvy likewiſe it is of uſe; and is often applied with ſucceſs externally to ulcers, &c.

Fabricius ab Aquapendente aſſures us, he cured a ſcirrhous ſpleen, and the dropſy, by a continued uſe of ſponges dipped in common lime-water, and placed near the part affected. *Boyle's Works*, Abr. vol. i. p. 80.

Lime-water, which was long looked on as a cauſtic, was, in the laſt century, found to be a very ſafe and valuable remedy. It is uncertain who firſt ventured to give it inwardly; but Willis, Bates, and Moreton, ſeem to have uſed it much. Lime-water kills worms, and many other, if not all, inſects. Hence Dr. Alſton concluded that it might prove a good anthelmintic for children; and experience has confirmed this notion. It is probable, that lime-water may be of great uſe in long ſea-voyages, preventing the corruption of water, or inſects breeding in it, as well as curing the diſeaſes to which ſea-faring people are moſt ſubject. The experiment is certainly ſafe, eaſy, and attended with no expenſe; one pound of freſh well-burnt quick-lime of any kind being enough for a hogſhead of water, which may not only be uſed for common drink by the diſeaſed, or for prevention by the healthy; but alſo, by boiling and expoſing it to the air for a ſhort time, it may be reduced to ſweet water, and uſed in dreſſing the victuals of the moſt delicate. Dr. Alſton alſo thinks that quick-lime in a ſhip's well would effectually prevent the corruption of the water, and conſequently the putrid ſteams, or foul air, thence ariſing, which ſometimes prove fatal to the crew.

The virtues of lime-water outwardly applied in many diſeaſes of the ſkin, in excoriations, ulcers, gangrenes, &c. are well known. Perhaps there is not a better gargariſm for ſeveral ſorts of ſores in the mouth and throat than lime-water. It has alſo been known to be of great uſe in the tooth-ache. Inwardly taken, lime-water has all the virtues of pure element, which are not a few; and on which probably depend the good effects of mineral waters, more than on the minerals they contain. Dr. Alſton never found it cauſed thirſt; on the contrary, he found

it quenched thirſt as well as ſimple water, and cuſtom rendered it agreeable. Lime-water is notably detergent and attenuating, even more ſo than ſoap itſelf, of mucous, viſcid, and other animal ſordes, which makes it preferable, in many caſes, to the pureſt, as well as to mineral, waters. In a word, lime-water may be ſaid, in general, to purify the blood, with as good reaſon as any other medicine whatever, eſpecially from any putrid, purulent, or ſcorbutic, foulneſſes. Dr. Lewis obſerves, that lime-water, drunk to the quantity of a quarter of a pint three or four times a-day, has been found ſerviceable in ſcrophulous complaints, fluxes, ſeminal weakneſſes, and other diſorders proceeding from an impurity of the fluids, or laxity and debility of the ſolids. It generally promotes urine; oftentimes the cuticular diſcharge; and, where the ſtomach is oppreſſed with viſcid phlegm, expectoration. It for the moſt part binds the belly, and ſometimes occaſions a troubleſome coſtiveneſs, unleſs this effect be occaſionally provided againſt by the interpoſition of proper laxatives. It anſwers beſt in cold, ſluggiſh, phlegmatic, and corpulent, habits; and is to be uſed more cautiouſly in hot bilious diſpoſitions, and where the patient is much emaciated, or the appetite weak, and at the time of any critical or periodical evacuation. It has been cuſtomary to impregnate lime-water with different materials, partly for rendering it more acceptable to the palate and ſtomach, and partly for improving its medicinal efficacy againſt cutaneous defedations. The College of Edinburgh directed, in this view, three ounces of the ſhavings of the wood and bark of ſaſſafras, one ounce and a half of ſhaved liquorice, and four drams and a half of bruiſed nutmegs; the College of London, half an ounce of ſaſſafras-bark, and one ounce of liquorice, with the addition, in ſome caſes, of four ounces of raſped guaiacum-wood, and three drams of coriander-ſeeds; to be macerated for four days in three quarts of lime-water, and the liquid ſtrained off for uſe. Theſe infuſions are taken in the ſame quantities as the ſimple lime-water, by themſelves, or with the addition of milk. But Dr. Macbride obſerves, that the activity of lime-water is impaired by infuſing vegetable ſubſtances therein, which contain much fixed air, ſuch as the guaiacum, or ſaſſafras; for theſe woods, abounding in reſin, give out their cementing principle, which, uniting with the diſſolved quick-lime, reſtores it to its original ſtate of an inactive calcareous earth; therefore, when it is intended that theſe woods, or any other ſubſtance of the like nature, ſhould give out their virtue to lime-water, and that the water ſhould, at the ſame time, contain its due proportion of diſſolved lime, ſome quick-lime ought to be added during the time of maceration. He alſo obſerves, that, as milk contains a large proportion of fixed air, it ought not to be mixed with lime-water, ſince it muſt neceſſarily take off from its activity. To the ſame purpoſe, Dr. Alſton has obſerved, that there is ſcarcely any thing that is uſually mixed and given along with lime-water, that does not, more or leſs, deſtroy its efficacy; for which reaſon he recommended it always to be taken alone.

Of the various ſubſtances examined by Dr. Hales, with a view of determining their reſpective quantities of fixed air, the human calculus was found to contain the largeſt proportion; above one-half of this maſs conſiſting of fixed air. Nevertheleſs, if the cauſtic alkali, or lime-water, could be ſafely conveyed to it, it would abſorb the fixed air; and the earthy parts, deprived of what bound them together, muſt preſently fall to pieces. That lime-water is lithontriptic has been ſhown ſufficiently by Dr. Hales, and more fully by Dr. Whytt. This gentleman prefers calcined oyſter-ſhell lime-water to any other; which, he ſays, proves a more active menſtruum for this concrete, than that made from the ſtone-limes; the diſſolving power of the oyſter-ſhell lime-water ſeeming, from Dr. Whytt's experiments, to be more than double to that of the ſtone lime-waters. Dr. Alſton ſeems to think this a matter of indifference; and was himſelf cured chiefly by the ſtone quick-lime water before mentioned. This lithontriptic quality of lime-water has been farther confirmed by Dr. Alſton, who has ſhown the efficacy of lime-water in this reſpect, not only when made by the firſt infuſion, and aſſiſted by artificial heat, but even after fifty or more infuſions, and in the common air. The doctor thinks that the energy of lime-water in this caſe probably conſiſts in its penetrating detergency, whereby, inſinuating itſelf among the ſolid parts of the calculi, or into their pores, it ſeparates them, or diminiſhes their coheſion, but does not diſſolve them.

But the efficacy of quick-lime and cauſtic alkali in this intention, is now known to depend principally, if not entirely, on its power of abſorbing the air which binds calculous ſubſtances together. However, the alkali, when combined with oil, and made into ſoap, is not only ſo greatly obtunded thereby as to loſe much of its power, but the ſoap itſelf is ſo nauſeous, that few perſons can be induced to take it in a quantity ſufficient to prove of much effect; it would, therefore, be a happy diſcovery, if any vehicle could be found out that would ſheathe the acrimony of the cauſtic alkali, ſo as to allow it to be taken in large and continued doſes. Poſſibly, ſays Dr. Macbride, veal broth, or a decoction of marſh-mallow roots, might be found to anſwer this purpoſe; and lime-water might be taken at the ſame time, which would not at all interfere with the operation of the alkali, but rather add to its activity. Dr. Chittick's noſtrum, which is found, after a perſeverance of ſome months, actually to diſſolve the ſtone, is ſaid to be nothing more than the cauſtic alkali given in veal broth. But lime-water, when taken alone, muſt often fail in producing any conſiderable effect as a lithontriptic, becauſe it will loſe much of its power, as Dr. Macbride has ſhown, from the fixed air of the alimentary ſubſtances in the firſt paſſages; who therefore recommends it to be drunk when the ſtomach is empty; and alſo, as Dr. Whytt and Dr. Macbride have proved by experiments, from the fixed air of the urine itſelf, which will ſaturate great part of the quick-lime, even when it has reached the bladder. *Macbride's Eſſays.*

Since there is but a ſmall proportion of lime in the water, it may be thought that taking a few grains of the quick-lime in ſubſtance would prove much more effectual in the ſtone, than large quantities of lime-water. But this is a miſtake; and hence Mrs. Stephens's egg-ſhells and ſnail-ſhells, if burnt to quick-lime, can never be equally ſucceſsful with lime-water for the ſtone. As for the *aquæ benedictæ compoſitæ*, or compound lime-waters, they are not to be compared with ſimple lime-water in the gravel; nor, in Dr. Alſton's opinion, in any diſeaſe requiring this water.

The doctor adds, in his Appendix, that, though he cannot yet determine how far lime-water may be proper, even in acute diſtempers, yet he has found it ſafe in feveriſh colds; and, by the caſes he there mentions, it ſeems probable that lime-water, by its diluent and diuretic qualities, may prove more uſeful in fevers than is at preſent believed. However this may prove on farther trials, it may be ſaid, in general, that lime-water is diluent, detergent, antiſeptic, anthelmintic, diuretic, and vulnerary; uſeful in all diſeaſes proceeding from, or accompanied with, obſtructions in the bowels or glands, viſcid phlegm, calculous concretions, or putrefaction; and commended for the ſcurvy, ſcrophula, gravel, conſumptions, empyema-aſthma, arthritis vaga, œdematous ſwellings, diabetes, fluor albus, fluxes, &c. and outwardly for diſeaſes of the ſkin, ulcers, gangrenes, &c. It may be taken to the quantity of a pound, once, twice, or thrice, a-day; or uſed for common drink. See Dr. Alſton's Diſſertation on Quick-lime, and Lime-water, Edinb. 1752.

For gardeners, an uſeful kind of water is prepared by ſlaking cauſtic lime in ſoft water, in the proportion of half a peck of the former to thirty-two gallons of the latter, letting them remain ſome time before they are made uſe of, ſtirring them well two or three times a-day, for two or three days. It is a liquid which, when the lime has

ſubſided, is found highly uſeful in clearing fruit-trees from the ravages of the Aphis puceron, or vine-fretter. It ſhould be applied once a-day by means of an engine, ſo as to be thrown as much as poſſible on the under ſides of the leaves, and with conſiderable force, preſſing the fore finger upon the end of the pipe, to make it ſpread like ſmall rain, and taking care that every part of the tree be well watered. It ſhould be done as much as poſſible in cloudy weather, and when the ſun is off the walls. Where the trees have an eaſterly aſpect, they may be watered about half-paſt eleven o'clock in the forenoon, and in a northern one the firſt thing in the morning; but, in a ſouthern aſpect, about four o'clock in the afternoon. But, when northerly or eaſterly winds and froſty nights prevail, it ſhould be diſcontinued till the weather becomes mild. The trees ſhould always get dry before night, and never be watered when the ſun is upon them. Care muſt likewiſe be taken that the grounds of the lime be not made uſe of, as it would make the trees have a diſagreeable appearance, and perhaps be injurious.

A gentleman in Dorſetſhire, having imagined that the crevices in the walls afforded a nidus for the eggs of the inſect we have mentioned, determined on making an experiment on a peach-tree, which was nearly deſtroyed by them, having had its young ſhoots, for ſeveral years, regularly curled by the aphis in the month of May; he therefore began by unnailing and matting the tree, and then had the wall white-waſhed with a very thick ſolution of lime, and after it was quite dry the tree was again nailed; the reſult was, that this year every tree in the garden, except the one on the white-waſhed wall, was covered with the aphides, that not having any aphis (or blight) of any kind on it, except on the extremity of a branch that extended beyond the white-waſhed wall; and the tree is in a moſt vigorous and healthy ſtate. If a darker colour is preferred, on account of its greater abſorption of heat, ſoot may be added to the lime, and perhaps may contribute to the deſtruction of the inſects. Care muſt be taken to fill up all crevices in the wall, and not let the tree be touched with the white-waſh. Whether the lime deſtroys the eggs of the aphis, or is ſo deſtructive or diſagreeable to the inſect itſelf, as to cauſe it to avoid the white-waſhed wall, is a queſtion to be reſolved by naturaliſts.

LI'MEHOUSE, a village and pariſh at the extremity of London, eaſt of Shadwell. Its original name was *Limehurſt*, which, according to Stow, is a Saxon word, ſignifying "a grove of lime-trees," and was given to this village on account of the number of thoſe trees anciently in that neighbourhood. Limehouſe was formerly a hamlet belonging to Stepney; but, being joined to the metropolis by the great increaſe of buildings in that part, the commiſſioners for erecting the fifty new churches ordered one of them to be built on this ſpot. The foundation of this ſtructure was laid in the year 1712, and it was completely finiſhed in 1724; but, the inhabitants neglecting to apply to parliament, to have the hamlet erected into a pariſh, till the year 1729, the church was not conſecrated till the 12th of September, 1730, when it was dedicated to St. Anne. This edifice is of a very ſingular conſtruction; the body is not one plain building, but is continued under ſeparate portions: the door under the tower has a portico, covered with a dome, ſupported by pilaſters; and to this door there is an aſcent by a flight of ſteps: the tower, which is ſquare, has a Corinthian window, adorned with columns and pilaſters. The corners of the tower are alſo ſtrengthened with pilaſters, which ſupport vaſes on their tops. The upper ſtage of the tower is plain, and exceeding heavy; and from this part riſes a turret at each corner, and a more lofty one in the middle. This church is a rectory, the patronage of which, like that of St. Dunſtan's, Stepney, is in the gift of King's hall and Brazen-noſe college, Oxford. The north ſide of the church-yard is bounded by the new Commercial Road from the Weſt-India docks, acroſs Stepney-fields to Whitechapel. This road is of ſufficient width to permit the paſſage of five carts abreaſt: the centre is paved with Scotch granite, over which is laid a ſtratum of gravel, eight inches in depth, which, being ſupported by the ſtone pavement underneath, is always firm and free from mud.

Adjoining to this pariſh is the hamlet of Poplar, which formerly belonged to the pariſh of Stepney, and received its name from the vaſt number of poplar-trees that grew in its neighbourhood. In 1654, the village beginning to increaſe in the number of its inhabitants, the Eaſt-India company gave them a piece of ground whereon to build a chapel, and ſettled an annual ſalary on the miniſter; but this chapel, for want of an endowment, has never yet been conſecrated. In Poplar are alſo two alms-houſes, and an hoſpital ſupported by the Eaſt-India company. Poplar-canal, or, as it is commonly, though improperly, called, Poplar-gut, was made about forty years ago, to avoid the great circuit from Bow, near which it joins the river Lea, to the junction of that river with the Thames, and from thence round the Iſle of Dogs, a navigation often impeded by contrary winds and tides, and frequently ſo adverſe as to occaſion great delays. This canal is about a mile and a quarter in length. See ISLE OF DOGS, vol. xi. p. 408. and the article LONDON.

LI'MEHOUSE RIVER, a river of Honduras, which runs into the bay in lat. 15. 55. N. lon. 85. 54. W.

LI'MENARCH, *ſ.* in antiquity, an officer or centinel to prevent robberies and other diſorders on the highway. A warden of a ſea-port.

LIME'NIA, in ancient geography, a town of Cyprus. *Strabo.*

LIMENTI'NUS, in heathen mythology, the god ſuppoſed to preſide over the threſhold.

LIM'ERIC, a county of Ireland, in the province of Munſter, called from the town of the ſame name, which was, from the earlieſt times in Iriſh hiſtory, a place of conſiderable importance. At the time when the Iriſh chieftains did homage to Henry II. Daniel O'Brien, king of Limeric, was of the number. This prince appears to have been alſo ſovereign of Clare, which was then called Thomond. Limeric is bounded on the north by the counties of Clare and Tipperary, being ſeparated from the former by the river Shannon, on the weſt by Kerry, on the ſouth by Cork, and on the eaſt by Tipperary. Its length from eaſt to weſt is 40 Iriſh (51 Engliſh) miles. Its breadth from north to ſouth 25 Iriſh (32 Engliſh) miles. It contains 386,750 acres, or 604 ſquare miles, Iriſh, equal to 622,975 acres, or 970 ſquare miles, Engliſh. There are 125 pariſhes, which by unions form 60 benefices, of which 33 only had pariſh-churches at the time Dr. Beaufort publiſhed. The population was ſtated by Dr. Beaufort at 170,000, but it muſt have conſiderably increaſed. The ſoil of Limeric is extremely good for tillage, and very productive of graſs; eſpecially thoſe grounds which are called the *coreachs*, whoſe fertility is proverbial, and is cauſed by the rich manure which is annually depoſited by the overflowings of the Shannon. The heavieſt and fatteſt beaſts that are ſlaughtered at Cork are fed in this county; much butter is exported from it; the orchards produce a very fine cider, and it is by no means deſtitute of trees and plantations. The paſture-ſyſtem, which has been on the decline in moſt parts of Ireland ſince the introduction of corn-bounties, propoſed by Mr. Foſter when chancellor of the exchequer, ſtill continues in Limeric, but is on the decline. Even when Mr. Young wrote in 1778, he obſerved a great increaſe of tillage; "thrice the corn grown that there was formerly; much paſturage broken upon this account, ſome bullock-land and ſome ſheep-land." The ſame intelligent writer alſo ſpeaks of improvement in the ſtate of the poor; but this ſtill wants amelioration. Limeric, though diverſified by ſmall hills, is not at all mountainous, except on the ſouth-eaſt, where it is bounded by the Galtees, a ridge of formidable mountains, that extend into Tipperary, and

on the borders of Kerry, where it grows uneven, and forms a grand amphitheatre of low but ſteep mountains, which extends in a wide curve from Loghil to Drumcollohen. In the firſt of theſe riſes the river Maig, which croſſes the county, and falls into the Shannon; as do many fine ſtreams by which it is plentifully watered.

A colony of Palatines from Germany was ſettled in this county about a century ago, by a former lord Southwell. Of theſe Mr. Young mentions ſome particulars which are intereſting. "They have in general leaſes for three lives, or 31 years, and are not cottars to any farmer, but, if they work for them, are paid in money. The quantities of land are ſmall, and ſome of them have their feeding-land in common by agreement. They are different from the Iriſh in ſeveral particulars. They put their potatoes in with the plough in drills, horſe-hoe them while growing, and plough them out. One-third of the dung does in this method, for they put it only in the furrows, but the crops are not ſo large as in the common method. They plough without a driver; a boy of twelve has been known to plough and drive four horſes, and ſome of them have a hopper in the body of their ploughs, which ſows the land at the ſame time it is ploughed. They preſerve ſome of their German cuſtoms; they ſleep between two beds; they appoint a burgomaſter, to whom they appeal in caſe of all diſputes; and they yet (1778) preſerve their language, but that is declining. They are very induſtrious; and in conſequence are much better fed, clothed, and lodged, than the Iriſh peaſants. We muſt not, however, conclude that all is owing to this; their being independent of other farmers, and having leaſes, are circumſtances which will create induſtry." There are three villages of them, about ſeventy families in all: they are remarkable for the goodneſs and cleanlineſs of their houſes: the women are very induſtrious, reap the corn, plough the ground ſometimes, and do whatever work may be going on; they alſo ſpin, and make their children do the ſame." The late Silver Oliver, eſq. of Caſtle Oliver, planted another colony, taken from this firſt, of about 66 families, amounting to 700 proteſtants, on his eſtate; and of theſe Mr. Young gives a ſimilar account. But, with theſe exceptions, the huſbandry of the county of Limeric is perhaps the worſt in Munſter, which is attributed to the natural richneſs of the ſoil, and to the greater prevalence of the grazing-ſyſtem. Mr. Young, ſpeaking of the land near Caſtle Oliver, ſays, "It is a rich, mellow, crumbling, putrid, ſandy, loam, eighteen inches to three feet deep; the colour a reddiſh brown. It is a dry ſound land, and would do for turnips exceedingly well, for carrots, for cabbages, in a word for every thing. I think, upon the whole, it is the richeſt ſoil I ever ſaw, and ſuch as is applicable to every purpoſe you can wiſh; it will fat the largeſt bullock, and at the ſame time do equally well for ſheep, for tillage, for turnips, for wheat, for beans, and in a word for every crop and circumſtance of profitable huſbandry." Yet, after ſome other particulars, he concludes thus: "The face of the country is that of deſolation; the grounds are over-run with thiſtles, ragwort, &c. to exceſs; the fences are mounds of earth, full of gaps; there is no wood, and the general countenance is ſuch, that you muſt examine into the ſoil before you will believe that a country, which has ſo beggarly an appearance, can be ſo rich and fertile." Theſe remarks were written above thirty years ago, and improvement has ſince taken place; but they are ſtill too applicable. Limeric is repreſented in the imperial parliament by three members, two for the county, and one for the city.

LIM'ERIC, a city of Ireland, capital of the county of the ſame name, ſtrongly ſituated on the river Shannon, on an iſland in which it is partly built. It is a poſt-town, and is repreſented in parliament. The new port, which is connected with the old city by a bridge, is called Newtown Pery, from the Pery family, the head of which is now earl of Limeric. See the article HERALDRY, vol. ix. p. 657. The buildings are of brick, large and uniform; ſo that, whilſt the old town has a very ruinous appearance, this port will bear compariſon with the beſt ſtreets in almoſt any other city, except where public buildings contribute to ornament them. The public buildings are not many, nor deſerving of much notice. The cuſtom-houſe is a plain building. The cathedral is an ancient and venerable pile. The biſhop's palace is a comfortable modern houſe at the weſt end of the city. The whole town is three miles in circumference; having weekly markets on Wedneſday and Saturday, and fairs on Eaſter Tueſday, July 1, Auguſt 4, and December 12. There is a privilege annexed to the fair held on 4th of Auguſt, that, during fifteen days, no perſon can be arreſted in the city or liberties, on any proceſs iſſuing out of the tholſel-court of Limeric. Ardfert and Aghadoe, in the county of Kerry, are united to the biſhopric of Limeric. The corporation of Limeric is what may be called a cloſe one, as no perſon can become a freeman, except by favour of the council; freeholders, however, can vote at the election of members of parliament. The magiſtrates are a mayor, two ſheriffs, a recorder, a town-clerk, aldermen, and burgeſſes; it has alſo a military governor, conſtable and town-major, and is the reſidence of the general commanding a diſtrict. It appears that Limeric obtained the privilege of having mayors ten years before that right was allowed to the citizens of London. It was before governed by provoſts, of which the firſt was John Spafford in 1195 and 1197; during the provoſtſhip of Henry Troy a charter was granted, 9 Richard I. whereby the citizens were allowed to chooſe mayors and bailiffs; Adam Servant, in 1198, being the firſt mayor. It continued to be governed by mayors and bailiffs, until the office of bailiff was changed into that of ſheriff in 1609. The population of Limeric probably exceeds 50,000. The trade is very extenſive, and is increaſing: its export of corn is perhaps the greateſt in Ireland, and its corn-market is very convenient. It muſt more and more derive benefit from the canal connecting the Shannon with the Liffey. There are ſix churches, a preſbyterian meeting-houſe, a methodiſt meeting-houſe, a quakers' meeting-houſe, and ſeveral chapels for Roman catholics, who form the greateſt part of the population. There are alſo ſome charitable inſtitutions well attended to, and a public library, lately inſtituted. The inhabitants are reckoned gay and fond of ſociety, and public amuſements are in general well ſupported.

Limeric, being naturally a city of ſtrength, and formerly well fortified by art, has always been deemed a place of conſiderable importance. In 1651 it was taken by Ireton, in the ſervice of the parliament, after a vigorous ſiege. In 1690, it was unſucceſsfully beſieged by king William in perſon. In 1691, it ſurrendered to general Ginkel, afterwards earl of Athlone, on terms of capitulation very advantageous to the beſieged, and all who profeſſed the Roman-catholic religion; but theſe terms were not faithfully kept. It will be ſeen, by referring to our article IRELAND, vol. xi. p. 326. that the parliament of England, in legiſlating for Ireland, ſoon began to encroach upon the treaty of Limeric. Mr. Burke (Poſthumous Tracts on the Popery-Laws) is very ſevere upon the government for their violation of that treaty. Speaking of the laws ſoon after made againſt the catholics, he ſays; "Even if theſe laws could be ſuppoſed agreeable to thoſe of nature; they are yet unjuſt, as being contrary to poſitive compact, and the public faith moſt ſolemnly plighted. On the ſurrender of Limeric and ſome other Iriſh garriſons, in the war of the revolution, the lords juſtices of Ireland and the commander-in-chief of the king's forces, ſigned a capitulation with the Iriſh, which was afterwards ratified by the king himſelf, by *Inſpeximus*, under the great ſeal of England. It contains ſome public articles relative to the whole body of the Roman-catholics in that kingdom, and ſome with regard to the ſecurity of the greater part of the inhabitants of five counties. What the latter were, or in what manner they

were

were obſerved, is at this day of much leſs public concern. The former are two, the firſt and the ninth. The firſt is of this tenor: "The Roman-catholics of this kingdom (Ireland) ſhall enjoy ſuch privileges, in the exerciſe of their religion, as are conſiſtent with the laws of Ireland, or as they did enjoy in the reign of king Charles II. And their majeſties, *as ſoon as their affairs will permit* them to ſummon a parliament in this kingdom, will endeavour to procure the ſaid Roman-catholics ſuch farther ſecurity in that particular as may *preſerve them from any diſturbance on account of their religion*." The 9th article is to this effect: "The oath to be adminiſtered to ſuch Roman-catholics as ſubmit to their majeſties' government, ſhall be the oath aforeſaid, and no other, viz. the oath of allegiance, made by act of parliament in England, in the firſt year of their then majeſties, as required by the ſecond of the articles of Limeric." Compare this latter article with the penal laws as they are ſtated in the ſecond chapter, and judge whether they ſeem to be the public acts of the ſame powers; and obſerve whether other oaths are tendered to them, and under what penalties. Compare the former with the ſame laws from the beginning to the end, and judge whether the Roman-catholics have been preſerved, agreeably to the ſenſe of the article, from any *diſturbance upon account of their religion*; or rather, whether on that account there is a ſingle right of nature or benefit of ſociety, which has not been either totally taken away or conſiderably impaired."

And Mr. Parnell obſerves, that, though William had bound himſelf by this treaty to call a parliament *as ſoon as his affairs would admit*, and to obtain from it the ratification of the treaty, he diſſolved the firſt parliament of his reign, which had met on the 5th of October, 1692, in Sept. 1693, without propoſing to them any ſuch meaſure. He was further guilty of a want of attention to his engagement, by not ſummoning another parliament till the 27th of April, 1695; and, when this parliament did meet, he ſeems to have entirely forgotten that his own faith, and the faith of the Engliſh nation, was plighted to the catholics by a ſolemn treaty; for, inſtead of recommending to them, in the ſpeech of his lord deputy, to proceed to confirm the articles of Limeric, he told them that he was intent upon the great work of a firm ſettlement of Ireland upon a *proteſtant* intereſt. The parliament were not backward in promoting his object. They firſt of all paſſed an act to deprive the catholics of the means of educating their children either at home or abroad, and of the privilege of being guardians either of their own or of any other perſon's children. Thus a profligate ſon, on renouncing his religion, was enabled to diſinherit his father and the reſt of his family; and the perfidious wife alſo had the ſame encouragement held out to her to throw off all ties of religion, and turn her huſband out of doors. Then they paſſed an act to diſarm the catholics; another to baniſh their prieſts; and, ſtrange as it may appear, they then thought proper, in the year 1697, to paſs an act to *confirm the articles* of Limeric. Of this act it is to be obſerved, in the firſt place, that the very title of it is a proof of its injuſtice; for it is ſtyled "An Act for the Confirmation *of Articles* (and not, as it ought to be, of *the* Articles) made at the ſurrender of Limeric. The preamble affords further evidence of the intention of the framers of it to evade its proper object. It runs thus: "That the ſaid articles, or *ſo much of them* as may conſiſt with the ſafety and welfare of your majeſty's ſubjects of this kingdom, may be confirmed," &c. But the whole act goes to convict the parliament, and (as this parliament was completely under the controul of the lord deputy) even William himſelf, of groſs injuſtice towards the catholics. For the firſt article of the treaty is wholly omitted, which guarantees to the catholics the free exerciſe of their religion, and an exemption from all diſturbance on account of it; and each clauſe of the act has the effect of limiting the terms of the other articles, and depriving the catholics of the benefit of them, inſtead of ratifying and confirming them. In ſhort, this act, under the name of conferring favours on the catholics, really placed them in a worſe condition than that in which they were before it paſſed into a law. *Hiſt. of Penal Laws againſt the Catholics.* The matter was certainly not mended in the reign of queen Anne, nor in that of her ſucceſſor; though we do not exactly know in what reign was paſſed a ſtatute we find noticed in Cruttwell's Gazetteer; which enacts, that "no papiſts, except labourers and fiſhermen, ſhall reſide in the city of Limeric as houſekeepers; nor are theſe to rent any tenement of above 40s. a-year." We need dwell no longer, however, on theſe vexatious ſtatutes, ſince, to the honour of his preſent majeſty, they have been for the moſt part repealed during his reign. But, as to the queſtion of total emancipation as it is called, or of putting catholics and proteſtants entirely upon a par, we have already delivered our ſentiments fully in the article LIBERTY *of* CONSCIENCE, p. 589—601; and the deciſion of the legiſlature, ſince that article was printed, has been in conformity with thoſe ſentiments. Limeric is forty-five miles north of Cork, ninety-two weſt-ſouth-weſt of Dublin. Lat. 52. 39. N. lon. 8. 32. W.

LIM'ERIC, is alſo the name of a fair-town in the county of Wexford and province of Leinſter; the fairs are four in the year.

LIM'ERIC, a poſt-town of America, in York county and ſtate of Maine, near the confluence of Oſſipee river with Saco, and oppoſite to Gorham; incorporated in 1787, and containing 995 inhabitants.—Alſo, a townſhip in Montgomery county, Pennſylvania, containing 999 inhabitants.

LIMESO'L. See LIMISSO.

LIMEU'IL, a town of France, in the department of the Dordogne, on the Dordogne: nine miles north-north-weſt of Belvez, and nineteen ſouth of Perigueux.

LIME'UM, *ſ.* [appears from Pliny to be a name of Gallic origin for a plant with which the ancient Gauls poiſoned their arrows. This appellation, however, could not have been originally applied to the preſent genus, all the ſpecies of which are natives of the Cape of Good Hope.] In botany, a genus of the claſs heptandria, order digynia, natural order of holoraceæ, (portulaceæ, *Juſſ.*) The generic characters are—Calyx: perianthium five-leaved; leaflets ovate, acuminate, keeled, membranaceous on the margin; two exterior; permanent. Corolla: petals five, equal, ovate, ſomewhat clawed, obtuſe, ſhorter than the calyx. Nectary: a margin ſurrounding the germ, bearing the ſtamens. Stamina: filaments ſeven or fewer, awl-ſhaped, ſhorter than the corolla; antheræ ovate. Piſtillum: germ globoſe; ſtyle two-parted, cylindric, ſhorter than the ſtamens; ſtigmas rather obtuſe. Pericarpium: none; fruit bipartile into two hemiſpheric hollow naked ſeeds, ſhaped like a meniſcus.—*Eſſential Character.* Calyx five-leaved; petals five, equal; capſules globular, two-celled.

Species. 1. Limeum Africanum, or African limeum: leaves oblong, petioled, (ovate-lanceolate, ſubpetioled, *Th.*) Stems proſtrate, weak, a ſpan long, angular, naked, perennial at the baſe. Leaves alternate, remote, linear-lanceolate, ſmall: but they ſeem to vary much. In the ſpecimens of the Bankſian herbarium, we have linear, oblong, ovate, roundiſh, and ſpatulate, leaves, if the ſpecimens be all one ſpecies. Seeds united into a ſpherical fruit, ſpontaneouſly ſplitting when ripe: they are erect, dirty ſtraw-coloured, on one ſide convex, excavated and rugged, and having a wide cavity on the other; outer coat coriaceous, of a middling thickneſs; inner very thin, pale; embryo of the ſame ſhape with the ſeed, or meniſcus-form, farinaceous, very white; embryo roundiſh, ſemi-circular, milky; cotyledons ſemi-cylindric; radicle long, bowed, inferior. Introduced in 1774, by Mr. Francis Maſſon.

2. Limeum incanum, or hoary limeum: leaves ovate, with a ſtrong midrib underneath, tomentoſe. This ſeems to be a ſmall plant, as far as we can judge from Maſſon's

ſpecimen in the Bankſian herbarium. We are at a loſs to account for the younger Linnæus giving it the name of *aphyllum*, and ſaying that it ſeems to be leafleſs, when he has deſcribed the leaves as ovate and ſeſſile, and there are abundance of root-leaves, and no want of ſtem-leaves.

3. Limeum Æthiopicum, or Ethiopic limeum: leaves linear-lanceolate. Of this we have no deſcription; but it is only mentioned by Thunberg in his Prodromus. We have here a deplorable inſtance of the inſufficiency of trivial names, in *Africanum, Capenſe, Æthiopicum*, which diſtinguiſh nothing; all theſe plants being natives of the Cape of Good Hope.

There is a fourth ſpecies in the Bankſian herbarium, ſent from the ſame country by Maſſon, which is truly a ſhrub, and may be called *Limeum fruticans*. See RANUNCULUS THORA.

LIM'INARY, *adj.* [*limen*, Lat. a threſhold.] Set at the head; preliminary. *Cole.*

LI'MING, *ſ.* The act of ſmearing with lime.

LIMIN'GO, a town of Sweden, in the government of Ulea: eleven miles ſouth of Ulea.

LIM'INGTON, a town of America, in York county, and ſtate of Maine, bounded north and eaſt by Saco river: fifty miles north of York.

LIM'INGTON, in England. See LYMINGTON.

LIMIS'SO, LIMESOL, or LIMASSOL; formerly called *Nemoſia*, from the multitude of woods by which it was ſurrounded; and ſtill more anciently *Amathus*; a ſeaport-town of Cyprus, in the ſouth of the iſland. Of the ancient city nothing but ruins now remains; though it was a celebrated place, even under the government of the dukes. King Richard, the conqueror of the laſt of theſe vaſſals of the empire, razed it in 1191, and it was never afterwards rebuilt. As AMATHUS, or Amathonte, it was famous for its temple erected in honour of Venus and Adonis, in which was preſerved, according to Pauſanias, a rich necklace of precious ſtones, ornamented with gold, the work of Vulcan, and given in the firſt inſtance to Hermione. Amathus was the reſidence of the nine firſt kings of the iſland; and, amongſt others, of Oneliſtus, who was ſubjected afterwards by the arms of Artabanes, the Perſian general. This city, erected into an archbiſhopric in the time of the Chriſtians, has produced a number of perſonages celebrated for their knowledge and the ſanctity of their lives. In the neighbourhood there are ſeveral copper-mines, which the Turks have been forced to abandon. The following lines, in the tenth book of Ovid's Metamorphoſes, prove that they were known in the time of that poet:

Capta viri forma, non jam Cytherea curat
Littora, non alto repetit Paphon æquore cinctam,
Piſcoſamque Gnidon, gravidamque Amathunta metallis.

After Richard king of England had deſtroyed Amathonte, or rather Nemoſia, Guy of Luſignan laid the foundation of Limiſſo, which the Greeks called *Neopoleos*. The family of Luſignan, who continued to embelliſh and fortify it, built there palaces, and Greek and Latin churches; and made it the ſeat of a biſhop. When the iſland was taken by the Turks in 1570, the Ottoman army entered this city on the 2d of July, and ravaged it without mercy. It was then deſtroyed by the flames; and at preſent it is only a wretched place, in which one can ſcarcely diſtinguiſh any remains of its ancient edifices. It is governed by a commiſſary and a cadi; the latter judges caſes only proviſionally, before they are carried to the ſuperior tribunal of Nicoſia. The harbour is very commodious; and, being ſheltered from impetuous winds, it affords a ſafe and calm aſylum to veſſels when overtaken by a ſtorm. The carob-tree is here more abundant than anywhere elſe; and it is from the port of Limiſſo that the greateſt quantity of its fruit is exported. The inhabitants export alſo ſalt, procured from a lake near Salines. Cotton, wheat, barley, and mulberry-trees, are both plentiful and well-cultivated in this part of the iſland; the ground alſo produces all kinds of garden-ſtuff. The beſt Cyprus wine is made from the vines that grow on the hills of Limiſſo. All the wines of the country are collected in this city to be tranſported to Larnic, where there are the largeſt cellars, and which on that account becomes the natural centre of commerce.

Near Limiſſo, to the eaſt of it, is the moſt ſouthern promontory of the iſland, formerly named the promontory of *Agrotiri*, at preſent Cape di Gatti, or *Gatto*, on account of the number of cats kept by the monks, who, in the fourth century, obtained permiſſion to eſtabliſh themſelves there, as well as on Mount Olympus, on condition of keeping many of thoſe animals for hunting and deſtroying ſnakes, which had multiplied in the iſland. Limiſſo is ſtill the ſee of a biſhop, ſuffragan of Nicoſia. Lat. 34. 45. N. lon. 32. 30. E.

LIM'IT, *ſ.* [*limite*, Fr. from *limitor*, Lat.] Bound; border; utmoſt reach.—The whole *limit* of the mountain round about ſhall be moſt holy. *Exod.* xliii. 12.

We went, great emperor, by thy command,
To view the utmoſt *limits* of the land;
Ev'n to the place where no more world is found,
But foaming billows beating on the ground. *Dryden.*

To LIM'IT, *v. a.* To confine within certain bounds; to reſtrain; to circumſcribe; not to leave at large.—If a king come in by conqueſt, he is no longer a *limited* monarch. *Swift.*

Thanks I muſt you con, that you
Are thieves profeſt; for there is boundleſs theft
In *limited* profeſſions. *Shakeſpeare's Timon of Athens.*

To reſtrain from a lax or general ſignification: as, The univerſe is here *limited* to this earth.

LIMITANE'I, *ſ.* Among the ancient Romans, an appellation given to the ſoldiers who were ſtationed on the frontiers of the empire.

LIMITA'NEOUS, *adj.* Belonging to the bounds or limits. *Scott.*

LIM'ITARY, *adj.* Placed at the boundaries as a guard or ſuperintendant:

Then, when I am thy captive, talk of chains,
Proud *limitary* cherub! *Milton's Paradiſe loſt.*

LIMITA'TION, *ſ.* Reſtriction; circumſcription.—If a king come in by conqueſt, he is no longer a limited monarch; if he afterwards conſent to *limitations*, he becomes immediately king de jure. *Swift.*

Am I yourſelf,
But, as it were, in ſort of *limitation?* *Shakeſpeare.*

Confinement from a lax or undeterminate import.—The cauſe of error is ignorance, what reſtraints and *limitations* all principles have in regard of the matter whereunto they are applicable. *Hooker.*—Limited time:

You 've ſtood your *limitation*, and the tribunes
Endue you with the people's voice. *Shakeſp. Coriolanus.*

LIMITATION, in law, is a certain time, aſſigned by ſtatute, within which an action muſt be brought. The time of limitation is two-fold: firſt, in writs by divers acts of parliament; ſecondly, to make a title to any inheritance, and that is by the common-law. *Co. Lit.* 114, 115. Before the ſtat. 32 Hen. VIII. c. 2, certain remarkable periods were fixed upon, within which the titles, whereon men deſigned to be relieved, muſt have accrued; thus by the ſtatute Weſtm. 1. (3 Edw. I.) c. 39, and Weſtm. 2. (3 Edw. I.) c. 46, the writ of right was limited to the firſt coronation of Henry III. This date of limitation continued ſo long unaltered, that it became indeed no limitation at all; it being above three hundred years from Henry III's coronation to the year 1540, when the ſtatute of limitation, 32 Hen. VIII. c. 2. was made.

There are now ſeveral *Statutes of Limitation*, by which a certain time is preſcribed, beyond which no plaintiff can lay his cauſe of action. This, by ſtat. 32 Hen. VIII. c. 2, in a writ of right is ſixty years; in aſſiſes, writs of en-

try, or other poſſeſſory actions real, of the ſeiſin of one's anceſtors in lands; and either of their ſeiſin or one's own, in rents, ſuits, and ſervices; fifty years. And in actions real for lands grounded upon one's own ſeiſin or poſſeſſion, ſuch poſſeſſion muſt have been within thirty years. By ſtat. 1 Mary II. c. 5, this limitation does not extend to any ſuit for advowſons.

By ſtat. 21 Jac. I. c. 2, a time of limitation was extended to the caſe of the king, viz. ſixty years precedent to February 19, 1623. 3 *Inſt.* 189. But, this becoming ineffectual by efflux of time, the ſame term of limitation was fixed, by ſtat. 9 Geo. III. c. 16, (extended to Ireland by 48 Geo. III. c. 47,) to commence and be reckoned backwards, from the time of bringing any ſuit or other proceſs, to recover the thing in queſtion; ſo that a poſſeſſion for ſixty years is now a bar even againſt royal prerogative, in derogation of the ancient maxim, *Nullum tempus occurrit regi.* See the article KING, vol. xi. p. 733.

By ſtat. 21 Jac. I. c. 16, the time of limitation in any writ of *formedon* is twenty years; and, by a legal conſequence, the ſame term is alſo the limitation in every action of ejectment. And by ſtat. 4 and 5 Ann. c. 16, no entry ſhall be of force to ſatisfy the ſaid ſtatute of limitations, or to avoid a fine levied of lands, unleſs an action be thereupon commenced within one year after, and proſecuted with effect. See EJECTMENT, and ENTRY.

By the ſame ſtatute, 21 Jac. I. c. 16, which is uſually termed emphatically *The Statute of Limitations*, all actions of treſpaſs, (*quare clauſum fregit*, or otherwiſe,) detinue, trover, replevin, account, and caſe, (except upon accounts between merchants,) debt on ſimple contract, or for arrears of rent, are limited to ſix years after the cauſe of action commenced. Actions of aſſault, menace, battery, mayhem, and impriſonment, muſt be brought within four years; and actions for words within two years after the injury committed.

Under the head of *actions upon the caſe*, are included actions for libels, criminal converſation, ſeduction, and for ſuch words as are not actionable without a ſpecial damage. It hath been adjudged, that an action of debt on ſtat. 2 and 3 Edw. VI. c. 13, for not ſetting out tithes, is not within the ſtatute; the action being grounded on an act of parliament, which is the higheſt record. So an action of debt for rent reſerved on a leaſe by indenture is out of the ſtatute, the leaſe by indenture being equal to a ſpecialty. Alſo an action of debt for an eſcape is not within the ſtatute; not only becauſe it is founded *in maleficio*, and ariſes on a contract in law, which is different from thoſe actions of debt on a lending or contract mentioned in the ſtatute, but alſo becauſe it is grounded on ſtat. 1 Rich. II. c. 12, which firſt gave an action of debt for an eſcape, there being no remedy for creditors before, but by action on the caſe. So this ſtatute cannot be pleaded to an action of debt brought againſt a ſheriff for money by him levied on a *fieri facias*; becauſe the action is founded *in maleficio*, as alſo upon the judgment on which the *fieri facias* iſſued, which is a matter of record. An action of debt on an award under the hand and ſeal of the arbitrators, though the ſubmiſſion was by parol, is not within the ſtatute. An action of debt for a fine of a copyholder is not within the ſtatute.

This ſtatute cannot be a bar unleſs the ſix years are expired after there hath been complete cauſe of action; as if a man promiſe to pay 10l. to J. S. when he comes from Rome, or when he marries, and ten years after J. S. marries, or comes from Rome, the right of action accrues from the happening of the contingency; from which time the ſtatute ſhall be a bar, and not from the time of the promiſe. *Godb.* 437. So in an action on the caſe wherein the plaintiff declared, that, in conſideration that he would forbear to ſue the defendant for ſome ſheep killed by the defendant's dog, the defendant promiſed to make him ſatisfaction upon requeſt, and that at ſuch a time he requeſted, &c. it was held, that the right of action accrued from the requeſt, not from the time of killing the ſheep; that therefore the defendant could not plead the ſtatute of limitations, the requeſt being within ſix years, though the killing the ſheep and promiſe of ſatisfaction was long before. 1 *Keb.* 177. So if a note or bill of exchange is given, payable at a certain time after date, the cauſe of action does not accrue until after the expiration of the time ſpecified; and, if an action is brought within ſix years after that time, the ſtatute is not a bar. But, if the ſuit is not commenced within ſix years after that time, the defendant may plead that the cauſe of action *did not accrue* within ſix years, but he muſt not plead that he did *not promiſe* within ſix years, i. e. if he is the perſon firſt liable to the payment, becauſe the *promiſe* is made at the time of making the note, &c. It may be otherwiſe in the caſe of an indorſer, who is not liable until default made by the drawer of the note, or acceptor of the bill; but in his caſe, *Non accrevit infra ſex annos*, is a ſafe and good plea.

It is clearly agreed, that, if after the ſix years the debtor acknowledges the debt, and *promiſes payment*, this revives it, and brings it out of the ſtatute. Alſo it hath been adjudged, that a *conditional promiſe* will revive a debt barred by the ſtatute of limitations; as where to an *aſſumpſit* by an executor for goods ſold and delivered by the teſtator, the defendant pleaded the ſtatute, and upon evidence it appeared, that the defendant within ſix years, being applied to by the executor for the debt, ſaid, "If you prove that I have the goods, I will pay you;" which being fully proved at the trial, it was held that this conditional promiſe revived the debt; and that, though made to the executor, after the death of the teſtator, it was ſufficient to maintain the iſſue; becauſe the promiſe did not give any new cauſe of action, but only revived the old cauſe, and was of no other uſe but to prevent the bar by the ſtatute of limitations. So it hath been held that *a bare acknowledgment* of the debt within ſix years of the action, is ſufficient to revive it, and prevent the ſtatute, though no promiſe was made. *Carth.* 470. Alſo it hath been ruled in equity, that if a man has a debt due to him by note, or a book-debt, and has made no demand of it for ſix years, ſo that he is barred by the ſtatute of limitations; yet if the debtor, or his executor, after the ſix years, puts out an advertiſement in the Gazette, or any other newſpaper, that all perſons who have any debts owing to them may apply to ſuch a place, and that they ſhall be paid; this (though general, and therefore might be intended of legal ſubſiſting debts only) yet amounts to ſuch an acknowledgment of that debt which was barred, as will revive the right, and bring it out of the ſtatute again. *Abr. Eq.* 305. In ſhort, any acknowledgment of the exiſtence of the debt, however ſlight, will take it out of the ſtatute, and the limitation will then run from that time; and, where an expreſſion is ambiguous, it ſhall be left to the conſideration of the jury, whether it amounts or not to ſuch acknowledgment. 2 *Term Rep.* 760. It is ſaid in general, that where one brings an action before the expiration of ſix years, and dies before judgment, the ſix years being then expired, this ſhall not prevent his executor. But the executor ſhould make a recent proſecution, to which the clauſe in the ſtatute, § 4, that provides *a year* after the reverſal of a judgment, &c. may be a good direction, or ſhow that he came as early as he could. Under the equity of the above-mentioned ſection, in all caſes of executors, if the ſix years be not elapſed at the time of the teſtator's death, and the executor takes out proper proceſs within the year, it will ſave the bar by reaſon of the limitation, even though the ſix years, within which the demand accrued, be elapſed before proceſs ſued out. *Bull. N. P.* 150. *Cawer* v. *James*, *Trin.* 15 *Geo.* II. *B. C.* If there be no executor againſt whom the plaintiff may bring his action, he ſhall not be prejudiced by the ſtatute of limitations, nor ſhall any laches in ſuch caſe be imputed to him. 2 *Vern.* 695.

It has been a matter of much controverſy, whether the exception relative to merchants' accounts extends to all actions and accounts relating to merchants and merchandiſe,

diſe, or to actions of accounts open and current only; the words of the ſtatute being, "All actions of treſpaſs, &c. all actions of account and upon the caſe, other than ſuch actions as concern the trade of merchants;" ſo that by the words, *other than ſuch actions*, not being ſaid actions of account, it has been inſiſted that all actions concerning merchants are excepted. But it is now ſettled, that *accounts open and current only* are within the ſtatute; that therefore, if an account be ſtated and ſettled between merchant and merchant, and a ſum certain agreed to be due to one of them, if in ſuch caſe he to whom the money is due does not bring his action within the limited time, he is barred by the ſtatute. 1 *Jon.* 401. 2 *Saund.* 124, 125. 1 *Lev.* 287, 298. 2 *Vern.* 456. An open current account, between tradeſmen or others, is not within the ſtatute, ſuppoſing the laſt article of the debt in the account was contracted within ſix years; otherwiſe, in ſuch caſe, the ſtatute is a bar. But this exception does not extend to a tradeſman's account with his cuſtomer; for in this caſe there are not mutual dealings; and the tradeſman is barred by the ſtatute from recovering for more than thoſe articles which have been ſold within ſix years. *Bull. N. P.* 149. If there be a *mutual account* of any ſort between a plaintiff and defendant, for any item of which credit has been given within ſix years, that is evidence of an acknowledgment of there being ſuch an open account between the parties, and of a promiſe to pay the balance, ſo as to take the caſe out of the ſtatute. 6 *Term Rep.* 189.

By ſtat. 27 Geo. III. c. 44, ſuits in eccleſiaſtical courts for defamatory words muſt be commenced within ſix months. By 31 Eliz. c. 5, all ſuits, indictments, and informations upon any penal ſtatutes, where any forfeiture is to the crown alone, ſhall be ſued within two years; and, when the forfeiture is to a ſubject, or to the crown and a ſubject, within one year after the offence committed; unleſs where any other time is ſpecially limited by the ſtatute. By 10 Will. III. c. 14, no *writ of error, ſcire facias*, or other ſuit, ſhall be brought to reverſe any judgment, fine, or recovery for error, unleſs it be proſecuted within twenty years. By 4 & 5 Ann. c. 16, all ſuits in the court of admiralty for ſeamen's wages ſhall be commenced and ſued within ſix years next after the cauſe of ſuit ſhall accrue.

No ſtatute has fixed any limitation to a bond or ſpecialty; but, where no intereſt has been paid upon a bond, and no demand proved thereon for twenty years, the judges recommend it to the jury to preſume it diſcharged, and to find a verdict for the defendant.

It ſeems to be the doctrine of courts of equity, that mortgages are not within the ſtatute of limitations; yet, where a man comes in at an old hand, it has been ſometimes decreed, that the poſſeſſor ſhould account no farther than for the profits made in his own time, to diſcourage the ſtirring in ſuch dormant titles; alſo the courts have allowed length of time to be pleaded in bar, where the mortgaged eſtate hath deſcended as a fee without entry or claim from the mortgagor, and where the poſſeſſor would be intangled in a long account; and in theſe caſes the ſtatute of limitations has been mentioned as a proper direction to go by. 1 *Chan. Ca.* 102. See MORTGAGE.

There is no limitation with regard to the time within which any actions touching advowſons are to be brought; at leaſt none later than the times of Richard I. and Henry III. And this upon very good reaſon; becauſe it may eaſily happen, that the title to an advowſon may not come in queſtion, nor the right have opportunity to be tried, within ſixty years; which is the longeſt period of limitation aſſigned by the ſtat. 32 Hen. VIII. c. 2. For ſir Edward Coke ſays, that there was a parſon of one of his churches that had been incumbent there above fifty years; nor are inſtances wanting where two ſucceſſive incumbents have continued for upwards of a hundred years. Had therefore the laſt of theſe incumbents been the clerk of an uſurper, or had been preſented by lapſe, it would have been neceſſary and unavoidable for the patron, in caſe of a diſpute, to have recurred back above a century, in order to have ſhown a clear title and ſeiſin, by preſentation and admiſſion of the prior incumbent. But though, for theſe reaſons, a limitation is highly improper with reſpect only to the length of time, yet, as the title of advowſons is, for want of ſome limitations, rendered more precarious than that of any other hereditament, (eſpecially ſince the ſtat. 7 Ann. c. 18, has allowed poſſeſſory actions to be brought upon any prior preſentation, however diſtant,) it might perhaps be better, if a limitation were eſtabliſhed, with reſpect to the number of avoidances; or rather if a limitation were compounded of the length of time and the number of avoidances together; for inſtance, if no ſeiſin were admitted to be alleged in any of theſe writs of patronage after ſixty years *and* three avoidances were paſt.

LIMITATION OF THE CROWN. See the article KING, vol. xi. p. 729.

LIMITATION OF ESTATE, a modification or ſettlement of an eſtate, determining how long it ſhall continue; or a qualification of a precedent eſtate. As to the origin and progreſs of the limitation of eſtates, ſee 1 *Inſt.* 271 *b. in n.* and the articles CONVEYANCE, ESTATE, DEED, &c.

LIM'ITER, *ſ.* A friar licenſed to beg within certain limits. *Tyrwhitt.*

I mean me to diſguize
In ſome ſtrange habit after uncouth wize,
Or like a pilgrim, or a *limiter*. *Spenſer's Hubberd.*

LIM'ITING, *ſ.* The act of ſetting bounds; reſtraining.

LIM'ITLESS, *adj.* Boundleſs:

To your divining tongue is given a power
Of uttering ſecrets large and *limitleſs*. *Davies.*

LIMITROTO'PHI, *ſ.* Among the Romans, the ſame with LIMITANEI.

LIM'MA, or LEIM'MA, *ſ.* [Greek.] An interval of the Greek muſic, which is a comma leſs than the ſemitone major.

LIM'MAT, a river of Swiſſerland, which riſes in the Alps, about eleven miles ſouth of Glarus, where it firſt takes the name of *Lint*, or *Linth*; paſſes Glarus, and near the lake of Wallenſtadt joins the Mat, when it changes its name to *Limmat*; paſſes through the lake of Zurich, and joins the Aar three miles north of Baden.

LIM'ME, a town in Kent, near Hithe, and four miles from Romney, was formerly a port, till choked up by the ſands; and, though it is thereby become a poor town, yet it has the horn and mace, and other tokens left of its ancient grandeur; and uſed to be the place where the warden of the cinque-ports was ſworn at his entrance upon his office. The Roman road from Canterbury, called Stane-ſtreet, ended here; and from the brow of its hill may be ſeen the ruinous Roman walls almoſt at the bottom of the marſhes; and Roman coins have been found in the neighbourhood. Here formerly was a caſtle, now converted into a farm-houſe. When, or by whom, this edifice was erected, is not known. It has, however, great marks of antiquity, as has alſo the adjoining church; one of which is its weſt door; and in it are ſeveral old tomb-ſtones with croſſes on them.

LIM'MEN, a town of Holland: five miles ſouth of Alomaer.

LIM'MER, *ſ.* A mongrel; an animal generated between different ſpecies; one born of parents of different nations. *Ainſworth.*

To LIMN, *v. a.* [*enluminer*, Fr. to adorn books with pictures.] To draw; to paint any thing.—How are the glories of the field ſpun, and by what pencil are they *limned* in their unaffected bravery? *Glanville.*

Mine eye doth his effigies witneſs,
Moſt truly *limn'd*, and living in your face. *Shakeſpeare.*

LIM'NÆ, a fortified place on the borders of Laconia and Meſſenia.—A town of the Thracian Cherſoneſus, with a temple of Diana.

LIMNÆ'US (John), an eminent German juriſt, was born

born in 1592 at Jena, where his father was profeſſor of mathematics. He ſtudied at Weimar, and afterwards at the univerſity of his native place, whence, on the death of his father in 1614, he removed to Altdorf. Being engaged in 1618 as travelling tutor to two young gentlemen of Nuremberg, he accompanied them to France, England, and Holland. He was afterwards preceptor to different perſons of rank, the laſt of whom was Albert margrave of Brandenburg. This prince gave him the poſt of chamberlain and member of his privy-council, which offices he exerciſed till his death in 1663. His works are, 1. Tractatus de Academiis, 4to. 1621. 2. Notitiæ Regni Galliæ, 2 vols. 4to. 1655. 3. De Jure Imperii Romano-Germanici, 5 vols. 4to. 1629 & ſeq. 4. Obſervationes in Bullam Auream Caroli IV. 4to. 1662. 5. Capitulationis Imperatorum et Regum Romano-German. a Carolo V. ad Ferdinandum III. edit. Germanice cum J. Limnæi Annotamentis, 4to. 1651. 6. Dan. Ottonis Diſſertatio de Jure Publico Imperii Romani, cum notis J. Limnæi, 8vo. 1632. The works of this writer are valued for their erudition; but he is reckoned deficient in judgment reſpecting the choice of his authorities.

LIMNA'DES, in the mythology of the poets, the nymphs frequenting lakes and ponds.

LIMNANTHE'MUM, *ſ.* in botany. See MENYANTHES.

LIMNATID'IA, a feſtival in honour of Diana, ſurnamed *Limnatis*, from Limnæ, a ſchool of exerciſe at Trœzene, where ſhe was worſhipped; or from λιμναι, ponds, becauſe ſhe preſided over fiſhermen.

LIM'NER, *ſ.* [corrupted from *enlumineur*, a decorator of books with initial pictures.] A painter; a picture-maker.—That divers *limners* at a diſtance, without either copy or deſign, ſhould draw the ſame picture to an undiſtinguiſhable exactneſs, is more conceivable than that matter, which is ſo diverſified, ſhould frame itſelf ſo unerringly, according to the idea of its kind. *Glanville's Sceppſis.*

Poets are *limners* of another kind,
To copy out ideas in the mind;
Words are the paint by which their thoughts are ſhown,
And nature is their object to be drawn. *Granville.*

LIM'NIA, *ſ.* in botany. See CLAYTONIA.

LIM'NING, *ſ.* [from *enluminer*, Fr. to adorn books with paintings.] As theſe paintings, or illuminations, were always done in water-colours, limning is never properly employed, except it be to deſignate that ſpecies of art, which is now commonly known by the name of *miniature-painting*, wrought in thoſe colours, and on paper; and in contradiſtinction to *painting*, which is done in oil-colours. Limning is much the more ancient kind of painting. Till a Flemiſh painter, one John Van Eyck, better known by the name of *John of Bruges*, found out the art of painting in oil, the painters all painted in water and in freſco, both on their walls, on wooden boards, and elſewhere. When they made uſe of boards, they uſually glued a fine linen cloth over them, to prevent their opening; then laid on a ground of white; laſtly, they mixed up their colours with water and ſize, or with water and yolks of eggs, well beaten with the branches of a fig-tree, the juice whereof thus mixed with the eggs; and with this mixture they painted their pieces.

LIMNOPEU'CE, *ſ.* in botany. See HIPPURIS.

LIMNOPH'ILA, *ſ.* in botany. See HOTTONIA INDICA.

LI'MO, *ſ.* in botany. See CITRUS.

LIMOCINC'TI, *ſ.* among the ancient Romans, a kind of prieſts who officiated at public ſacrifices, and were dreſſed with a garment called *limus*.

LIMODO'RUM, *ſ.* [of Cluſius, probably from λειμονος δωρον, Gr. the gift of the meadows.] In botany, a genus of the claſs gynandria, order diandria, natural order of orchideæ. The generic characters are—Calyx: ſpathes vague; ſpadix ſimple; perianth none. Corolla: petals five, ovate-oblong, about equal, ſpreading; the ſuperior ones converging. Nectary one-leafed, concave, foot-ſtalked, within the loweſt petal: the length of the petals. Stamina: two; filament an oblong aſcending body, the length of the corolla; anthers two, ovate, looking forwards. Piſtillum: germ columnar, the length of the corolla; inferior; ſtyle filiform, growing to the body of the filaments; ſtigma funnel-form. Pericarpium: capſule columnar, three-valved, one-celled, gaping at the corners. Seeds numerous ſaw-duſt-like. Scarcely different from Serapias, except in the inflorescence or ſcape.—*Eſſential Character.* Nectary one-leafed, concave, pedicelled, within the loweſt petal.

Species. 1. Limodorum tuberoſum, or tuberous-rooted limodorum: flowers ſubſpiked, bearded. Root tuberous. Stem a foot and a half high. The number of flowers not exceeding five, dark purple. In a more luxuriant ſtate, it is probably a larger plant, and produces more flowers. Native of North America; as Virginia and South Carolina. Introduced in 1788 by Mr. Curtis, from bog-earth brought over with plants of Dionæa muſcipula. This ſpecies was long confounded with the next.

2. Limodorum altum, or tall limodorum, the Helleborina Americana of John Martyn. Root ſhaped like that of the true ſaffron, but the outer cover of a darker-brown colour; from this come out two or three leaves, nine or ten inches long, and near three quarters of an inch broad in the middle, being contracted towards both ends, terminating with long acute points, folding over each other at their baſe; they have five longitudinal furrows, like the firſt leaves of young palms. The flower-ſtalk ariſes immediately from the root, on one ſide of the leaves; it is naked, ſmooth, and of a purpliſh colour towards the top. It is near a foot and a half high, and terminated by a looſe ſpike of purpliſh red flowers on ſhort peduncles; the three outer petals are upright, ſpreading; the two inner bent in, forming a helmet with the middle upper one; all equal, converging a little, the inner ones paler. According to Swartz, this is the tenth Satyrium of Browne, who calls it *Jamaica Salep*, and recommends the root, properly cured, as a ſtomachic. Native of the Weſt Indies, particularly Jamaica, in the cooler parts of the mountains. It was ſent to Mr. Miller by Dr. Houſtoun, and therefore was cultivated by him at Chelſea before 1733, in which year Dr. Houſtoun died. Mr. Miller ſays he alſo received the roots from the Bahama iſlands, and from Pennſylvania. Probably this might be the firſt ſpecies. He alſo mentions that he received a ſpecies from Maryland with oval obtuſe leaves, of a thicker conſiſtence. It ſometimes flowers here in April and May, ſometimes not till September or October, but the moſt uſual time of flowering is June and July: in Jamaica it flowers in ſummer. This beautiful ſpecies is repreſented at fig. 5 on the preceding Plate.

3. Limodorum Tankervilliæ, or Chineſe limodorum: flowers beardleſs, in racemes. Monſ. l'Heritier obſerves, that, although the lip of the nectary in this ſplendid plant ends behind in a very ſhort ſpur, it ought not however to be ſeparated from this genus. Native of China. It flowers in March and April.

4. Limodorum utriculatum, or bottle-limodorum: root tuberous, root-leaves twin-ſheathed, radical ſheath inflated; ſcape ſheathed, flowers ſeſſile. Native of Jamaica and St. Domingo.

5. Limodorum gentianoides, or gentian limodorum: root tuberous, leafleſs, ſtem ſheathed, flowers peduncled. Native of Jamaica.

6. Limodorum ſtriatum. See EPIDENDRUM ſtriatum, vol. vi. p. 866.

7. Limodorum enſatum. See EPIDENDRUM enſatum, vol. vi.

8. Limodorum falcatum, or ſickle-ſhaped limodorum: horn filiform, very long; leaves enſiform-channelled ſickled. This is Orchis falcata of Thunberg's Flora Japonica. Leaves radical, ſeveral, equitant, convoluted, revolute-ſickled,

ſickled, ſmooth, a finger's length, the lower ones ſhorter. Scape upright, ſmooth, ſhorter than the leaves. Flowers in ſpikes, terminating. Native of Japan.

9. Limodorum monile. See EPIDENDRUM moniliforme.

10. Limodorum virens, or greeniſh limodorum: root ſcaly, ſcape branched, ſpotted, bractes acute, flowers remote, greeniſh yellow. Bulbs many, connected near the baſe, conical, pointed, ſurrounded with the circular marks of the inſertions of the leaves, greeniſh; many fleſhy fibres iſſuing from the baſe. Leaves all radical, ſeveral, linear, ſlightly nerved, nearly the length of the ſcape, about an inch broad, ſmooth. Scape axillary, erect, often branched, from one to two feet high, round, ſmooth, coloured with purple ſpots; here and there a ſheathed acute bracte. Flowers ſtriated; petals nearly equal, erect or aſcending. Under lip of the nectary projecting, broader but ſhorter than the petals, laterally lobed; lobes involute; middle diviſion large, heart-ſhaped, fringed. Native of Coromandel, on dry uncultivated ground; flowering during the cold ſeaſon.

11. Limodorum recurvum, or bent limodorum: root tuberous, ſcape bending, nodding, ſhorter than the leaves, leaves broad-lanceolate, five-nerved, ſpike globular, nodding. Bulbs ſtriated, nearly round, ſurrounded with one or two rings, and having many thick fleſhy fibres from their lower parts. Stem from the ſide or baſe of the bulb: it is no other than the ſheathed petioles of the three or four leaves united, ſcarcely appearing above ground. Leaves ſlender in ſubſtance, a little waved round the margins, ſmooth, from ſix to twelve inches long, and three or four broad. Scape from the ſame part of the bulb with the ſtem, and even ſometimes involved in the lowermoſt ſheath or two of the ſcape, about ſix inches long, or rather leſs than half the length of the leaves; a few ſheaths ſurrounding it here and there. Flowers numerous crowded, white with a ſmall tinge of yellow. Native of Coromandel, in moiſt valleys among the hills, flowering at the beginning of the rainy ſeaſon.

12. Limodorum nutans, or nodding limodorum: root tuberous, ſcape arched, longer than the leaves, ovate, five-nerved, ſpike oblong, pendulous. This differs from the preceding in having the bulbs ſmooth, the leaves oval, the ſcape longer than the leaves, the ſpike oblong and pendulous, with the flowers at ſome diſtance from one another, of a beautiful roſe-colour, and the under lip of the nectary ſharp-pointed. Native of the ſame places, and flowering at the ſame time.

13. Limodorum aphyllum, or leafleſs limodorum: root fibrous; leafleſs, flowers ſolitary, naked, ſeſſile. Stems perennial, ſeveral, moſt ſimple, ſpreading or pendulous as the ſituation admits, naked, round, jointed at every inch, and at each joint ſmall membranaceous annular ſcales, without the leaſt veſtige of a leaf. Flowers generally iſſuing ſingle from the joints of the ſtems: nectary large, near the baſe, the ſides incurved, ſo as to form as it were a tube, the exterior part expanded, margins curled, waved and ciliated; it is of a pale purple colour. Native of Coromandel, but very rare there, on dry rocky hills; flowering in the beginning of the hot ſeaſon.

Propagation and Culture. From the little experience we have had of the management of the firſt ſpecies, it appears to be ſcarcely hardy enough for the open border, yet not tender enough to require a ſtove. The firſt plants were produced here by planting the roots in pots filled with bog-earth, and plunging them into a tan-pit which had a gentle heat, for the purpoſe of raiſing plants or ſeeds, and for ſtriking cuttings. The other ſorts are much too tender to thrive in the open air in England, and ſeldom flower in a green-houſe. They are kept therefore in the tan-bed in winter; and, if in ſummer the pots be plunged in a tan-bed under a deep frame, the plants will thrive, and flower ſtrongly. They are propagated by offſets from the roots, which are ſent out pretty freely (from the ſecond ſort) when the plants are in vigour. Theſe ſhould be taken off and tranſplanted, when the plants are moſt deſtitute of leaves. They ſhould have a ſoft loamy ſoil, and little water, eſpecially in winter. See ORCHIS and SATYRIUM.

LIMO'GES, a city of France, and capital of the department of the Upper Vienne. Before the revolution the ſee of a biſhop. It is a place of conſiderable trade, and contains about 20,000 inhabitants: twenty-ſeven poſts north-eaſt of Bourdeaux, and 46¾ ſouth-ſouth-weſt of Paris. Lat. 45. 50. N. lon. 1. 20. E.

LIMOL'OGY, *ſ.* [from λοιμος, Gr. peſtilence.] A treatiſe on the plague. *Bailey.*

LIMOMA'CHIA, *ſ.* [from the Gr. λιμος, hunger, and μαχη, a fight.] The utmoſt diſtreſs of hunger. *Bailey.*

LI'MON, a ſmall iſland on the weſt ſide of the gulf of Bothnia. Lat. 60. 44. N. lon. 17. 9. E.

LI'MON, *ſ.* The LEMON. See the article CITRUS, vol. iv. p. 626.

LIMO'NA DE LA TROU, a town of the iſland of Hiſpaniola, near the north coaſt: ten miles ſouth-eaſt of Cape François.

LIMO'NE, a town of France, in the department of the Maritime Alps: ſix miles north-north-eaſt of Tenda, and ten ſouth of Coni.

LIMO'NE, a town of the iſland of Negropont: twenty miles ſouth of Negropont.

LIMO'NES, a river of Cuba, which runs into the ſea ſixty-five miles weſt-ſouth-weſt of Bayamo.

LIMO'NES (Grande), a town of the iſland of Cuba: fifty miles ſouth of Havannah.

LIMONEST', a town of France, in the department of the Rhône, and chief place of a canton, in the diſtrict of Lyons. The place contains 750, and the canton 11,089, inhabitants.

LIMON'HE, a town of France, in the department of the Lot, and chief place of a canton, in the diſtrict of Cahors; thirteen miles eaſt of Cahors. The place contains 1175, and the canton 9279, inhabitants.

LIMO'NIA, *ſ.* [from its reſemblance to the lemon-tree.] In botany, a genus of the claſs decandria, order monogynia. The generic characters are—Calyx: perianthium one-leafed, three or five cleft, acute, very ſmall, permanent. Corolla: petals three to five, oblong, obtuſe, upright, ſpreading at the tip. Stamina: filaments ſix to ten, awl-ſhaped, upright, ſhorter than the corolla; antheræ linear, upright. Piſtillum: germ oblong, ſuperior; ſtyle cylindric, length of the ſtamens; ſtigma headed, flat. Pericarpium: berry ovate or ſubgloboſe, three-celled; partitions membranaceous. Seeds: ſolitary, ovate.—*Eſſential Character.* Calyx five-parted; petals five; berry three-celled; ſeeds ſolitary.

Species. 1. Limonia monophylla, or ſimple-leaved limonia: leaves ſimple; ſpines ſolitary. Trunk irregular, with a ſmooth greeniſh-aſh-coloured bark; branches numerous, very irregular; ſpines very ſtrong and ſharp, but in many plants entirely wanting. Leaves alternate on ſhort petioles, emarginate, ſmooth, firm, from two to three inches long, an inch or an inch and a half broad. Berry ſize of a nutmeg, very like a lime, whence comes the Hindoo name *adavie-nima*, or wild lime. It is commonly four-celled, and the ſeeds are generally ſolitary. Native of Coromandel, in the large foreſts on the coaſt, where it grows to a ſmall tree, though oftener found in the ſtate of a large ſhrub. Introduced in 1777, by Dan. Charles Solander, LL. D.

2. Limonia lucida, or ſhining limonia: unarmed; leaves ſimple; peduncles axillary. Native of the iſland of Mallicollo, in the South Seas.

3. Limonia trifoliata, or three-leaved limonia: leaves ternate; ſpines in pairs. This tree has the appearance of an orange, with flexuoſe branches. Leaves alternate, petioled, quite entire, with pores ſcattered over them, the ſame ſize with thoſe in Jaſminum fruticoſum. Berry peduncled, globular, ſmooth, red, the ſize of thoſe of Vaccinium. Juſſieu informs us that he has ſeen this ſpecies with three petals and five ſtamens. Jacquin deſcribes it with three petals and ſix ſtamens, and remarks that in a few

few flowers he obſerved four petals and eight ſtamens. According to him, the whole tree is ſmooth, the height of a man (in the ſtove), with a trunk the thickneſs of the human arm, covered with a browniſh aſh-coloured bark, very much branched, the branchlets alternate, ſpreading. Spines awl-ſhaped, ſtraight, ſpreading, on each ſide at the leaves and branchlets, the older ones near half an inch long. Flowers ſweet-ſmelling, on very ſhort peduncles, axillary, in pairs or three together, ſucceeding each other ſlowly; calyx ſomewhat villoſe, green. Corolla and filaments white; antheræ pale yellow; ſtigma yellow; fruit red-bay, ſoft, the ſize of a hazel-nut; pulp colourleſs, very ſweet, with a ſlight taſte of turpentine; before it is ripe glutinous and taſting ſtrong of turpentine. Seeds pale coloured with green and purple, large, ſmooth, containing a green two-lobed kernel of an unpleaſant acrid taſte. One or two ſeeds only uſually ripen; and then the partitions are ſo preſſed together, that the number of cells cannot eaſily be diſcerned. It is a native both of China and Cochin-china, where it is much cultivated both for the beauty and ſmell, and the pliancy of its branches. Jacquin's plant alſo came originally from China, though immediately from the iſland of Mauritius. He ſays that it flowers very well in the open air from May to July, and bears abundance of fruit in September. According to Burman, it is a native of Java.

4. Limonia pentaphylla, or five-leaved limonia: unarmed; leaves commonly quinate; leaflets oblong, entire. Trunk ſcarcely any, with an aſh-coloured bark. Branches numerous, nearly erect. Leaves in threes, fours, or fives, but generally in fives, feather-form; leaflets alternate, oblong, ſmooth, ſhining, from two to three inches long, and about an inch and a half broad. Petiole round, ſmooth. Flowers white, very fragrant. Berry round, red, ſmooth, ſize of a ſmall cherry, pulpy. One or two ſeeds only come to maturity, though the germ has always the rudiments of five. It is an elegant fragrant ſhrub, very common in moſt uncultivated lands in Coromandel, but chiefly under large trees, where birds have dropped the ſeeds. It flowers all the year there. The whole plant, when drying in the ſhade, diffuſes a pleaſant permanent ſcent; the flowers are exquiſitely fragrant; birds eat the berries greedily.

5. Limonia acidiſſima, or ſharp limonia: leaves pinnate; ſpines ſolitary. This tree is ſaid to attain the height of thirty feet, with a trunk ten inches in diameter. The leaves have the ſmell of aniſe, and ſo has the fruit, whence Rumphius calls it Aniſum Moluccanum. Native of the Eaſt Indies.

6. Limonia arborea, or branching limonia: ſtem arboreous, unarmed; leaves quinate; leaflets linear, ſerrate. Leaves alternate, in fives; leaflets alternate ſmooth, five inches long, and about two broad. The reſt as in L. pentaphylla. The berries are alſo eaten by birds, and the flowers are equally fragrant with thoſe of the fourth ſort. In their habit theſe two agree, and the ſerrate leaves are the chief diſtinction. Native of the mountainous parts of the Circars, where it grows to a middle-ſized tree, with a large branching head. This is repreſented on the annexed Plate, at fig. 1. the flower is ſhown ſeparate at *a*.

7. Limonia crenulata, or notched limonia: leaves alternate or faſcicled; leaflets two or three pairs with broad-winged petioles; ſpines ſolitary. Flowers white, ſmall, fragrant, collected in ſmall umbels or racemes over various parts of the branchlets. Native of Coromandel, on the low lands near the coaſt. It is there a ſhrub, but in the mountains it grows to a middle-ſized tree. It flowers in the hot ſeaſon.

LIMO'NIA, an iſland in the Mediterranean, about three miles long, and one broad: ſix miles weſt of Rhodes. Lat. 36. 27. N. lon. 27. 22. E.

LIMONI'ADES, in the mythology of the poets, the nymphs of the meadows.

LIMONIAS'TRUM, *ſ.* in botany. See STATICE.

LIMO'NIUM. See SARRACENIA and STATICE.

LIMO'NUM, a town of Gaul, afterwards Pictavi, now *Poictiers*.

LIMOSA'NO, a town of Naples, in the county of Moliſe: ſeventeen miles north-eaſt of Moliſe.

LIMOSEL'LA, *ſ.* [from *limus*, Lat. mud; in which it delights to grow.] MUDWORT; in botany, a genus of the claſs didynamia, order angioſpermia, natural order of preciæ, (lyſimachiæ, *Juſſ.*) The generic characters are—Calyx: perianthium one-leafed, five-cleft, upright, ſharp, permanent. Corolla: one-petalled, bell-ſhaped, upright, equal, five-cleft, acute, ſmall; diviſions ſpreading. Stamina: filaments four, upright, of which two are approximated to the ſame ſide, ſhorter than the corolla; antheræ ſimple. Piſtillum: germ oblong, obtuſe, two-celled; ſtyle ſimple, length of the ſtamens, declinate; ſtigma globoſe. Pericarpium: capſule ovate, half involved by the calyx, one-celled, divided below by the partition, two-valved. Seeds: very many, oval; receptacle ovate, large.—*Eſſential Character.* Calyx five-cleft; corolla five-cleft, equal; ſtamina approximating by pairs; capſule one-celled, two-valved, many-ſeeded.

Species. 1. Limoſella aquatica, common mudwort, or baſtard plantain: leaves lanceolate. Root annual, throwing out naked cylindrical proſtrate runners, which take root at their extremities, and form new plants. Leaves radical, on long foot-ſtalks, ſpatulate, ſmooth, entire. Flowers ſmall, radical, on ſimple flower-ſtalks, which become inflexed as the fruit ripens; corolla with a ſwelling tube; the limb in five equal ſegments, whitiſh without, red on the inſide, the two uppermoſt of which are a little inflexed. Seeds very numerous. Linnæus remarks, that the leaves are involute. Dr. Smith ſays he has not found them ſo. Native of many parts of Europe, in muddy and gravelly places liable to be flooded, and where water has ſtood during the winter; flowering from July to September. See fig. 2 of the Plate.

2. Limoſella diandra: leaves ſublinear. This has entirely the habit of the preceding, but it is only one-fourth of the ſize, ſo that it is one of the leaſt plants we are acquainted with. It increaſes like the laſt by runners, and theſe are very ſhort. Leaves radical, linear, ſcarcely widening in the middle, blunt at the end. Scapes capillary, one-flowered, the length of the leaves. Stamens no more than two. Found by Koenig at the Cape of Good Hope, on the coaſt.

LIMOSIN', before the revolution a province of France, of which Limoges was the capital.

LIMOS'ITY, *ſ.* The ſtate of being muddy.

LIMOU'GNE, a town of France, in the department of the Lot: thirteen miles eaſt of Cahors, and nine north of Caylus.

LIMOU'RS, a town of France, in the department of the Seine and Oiſe: nine miles ſouth of Verſailles, and ſixteen ſouth-ſouth-weſt of Paris.

LI'MOUS, *adj.* [*limoſus*, Lat.] Muddy; ſlimy.—That country became a gained ground by the muddy and *limous* matter brought down by the Nilus, which ſettled by degrees unto a firm land. *Brown's Vulgar Errours.*

LIMOU'X, a town of France, and principal place of a diſtrict, in the department of the Aude: 2½ poſts ſouth of Carcaſſonne, and ninety-ſeven ſouth of Paris. Lat. 43. 3. N. lon. 2. 18. E.

LIMOUZINIE'RE, a town of France, in the department of the Lower Loire: nine miles eaſt of Machecoul.

LIMP, *adj.* [*limpio*, Ital.] Vapid; weak. *Not in uſe.*—The chub eats wateriſh, and the fleſh of him is not firm, but *limp* and taſteleſs. *Walton's Angler.*—It is uſed in ſome provinces, and in Scotland, for *limber*, flexile.

To LIMP, *v. n.* [limpen, Sax.] To halt; to walk lamely.—When Plutus, with his riches, is ſent from Jupiter, he *limps* and goes ſlowly; but, when he is ſent by Pluto, he runs and is ſwift of foot. *Bacon.*

Son of ſixteen,
Pluck the lin'd crutch from thy old *limping* ſire. *Shakeſp.*

LIM'PACH,

J.Pass sc.

1. Branching Limonia. 2. Common Mudwort.

London. Published as the Act directs July 26th 1813. by Jones.

LIM'PACH, a town of Auſtria: four miles north-north-eaſt of Altenmarkt.

LIM'PET. See HELMINTHOLOGY, vol. ix. p. 454. and the article PATELLA.

LIM'PID, *adj.* [*limpide*, Fr. from *limpidus*, Lat.] Clear; pure; tranſparent.—The ſprings which were clear, freſh, and *limpid*, become thick and turbid, and impregnated with ſulphur as long as the earthquake laſts. *Woodward.*

The brook that purls along
The vocal grove, now fretting o'er a rock,
Gently diffus'd into a *limpid* plain. *Thomſon's Sum.*

LIMPID'ITY, *ſ.* Limpidneſs. *Bailey.*

LIM'PIDNESS, *ſ.* Clearneſs; purity.

LIM'PING, *ſ.* The act of halting.

LIM'PINGLY, *adv.* In a lame halting manner.

LIM'PITUDE, *ſ.* [from *limpid.*] Pureneſs; clearneſs. *Scott.*

LIM'PNESS, *ſ.* [from *limp.*] Limberneſs; flexibleneſs.

LI'MUS, *ſ.* Among the Romans, a garment reaching to the ground, and worn by the prieſts, who on that account were called *limocincti.*

LI'MY, *adj.* Viſcous; glutinous:

Striving more, the more in laces ſtrong
Himſelf he tied, and wrapt his winges twain
In *limy* ſnares the ſubtil loops among. *Spenſer.*

Containing lime.—A human ſkull covered with the ſkin, having been buried in ſome *limy* ſoil, was tanned, or turned into a kind of leather. *Grew's Muſæum.*

To LIN, *v. n.* [ablinnan, Sax.] To yield; to give over:

Unto his foe he came,
Reſolv'd in mind all ſuddenly to win,
Or ſoon to loſe before he once would *lin.* *Fairy Queen.*

LIN, a town of China, of the third rank, in Ho-nan: twenty-five miles weſt of Tchang-te.

LIN, a town of China, of the third rank, in Chan-ſi: thirty-five miles north of Yung-ning.

LIN-CHAN', a town of China, of the third rank, in Ho-nan: fifty-ſeven miles ſouth-ſouth-eaſt of Ho-nan.

LIN-CHAN-CHI'A, a town of Mexico, in the province of Yucatan: twenty-five miles north of Merida.

LIN-CHAN-OE'I, a fort of China, in Chan-tong: twenty-two miles ſouth of Kiao.

LIN-FOU', a town of Corea: twenty miles ſouth of Hai-men.

LIN-HING', a town of China, of the third rank, in Ho-nan: fifteen miles ſouth of Hiu.

LIN-KA'O, a town of China, of the third rank, in the iſland of Hainan, on the weſt coaſt: thirty-ſeven miles ſouth-weſt of Kiong-tcheou.

LIN-KE'OU, a town of China, of the third rank, in Chan-tong, on the Mi-ho river: eleven miles ſouth-ſouth-eaſt of Tcin-tcheou.

LIN-KIANG', a city of China, of the firſt rank, in Kiang-ſi, on the river Yu. The ſoil is good, and the climate healthy, yet the city is thinly inhabited; one of the villages in its juriſdiction is the general mart for all the drugs ſold in the empire. It is 737 miles ſouth of Pekin. Lat. 27. 58. N. lon. 115. E.

LIN-NGAN', a town of China, of the third rank, in Tche-kiang: twenty-two miles weſt of Hang-tcheou.

LIN-OU', a town of China, of the third rank, in Ho-quang: thirty miles ſouth of Koue-yang.

LIN-PA'O, a town of China, of the third rank, in Ho-nan, on the river Ho-ang: twelve miles weſt of Tchen.

LIN-PI', a town of China, of the third rank, in Kiang-nan: twenty-ſeven miles eaſt-ſouth-eaſt of Sieou.

LIN-SIANG', a town of China, of the third rank, in Hou-quang: fifteen miles north-north-eaſt of Yo-tcheou.

LIN-TCHANG', a town of China, of the third rank, in Ho-nan: twenty-two miles north-eaſt of Tchang-te.

LIN-TCIN', a city of China, of the ſecond rank, in Chan-tong, on the grand canal, much frequented by veſſels, and may properly be called a magazine of all kinds of merchandiſe. It is 187 miles ſouth of Pekin. Lat. 36. 56. N. lon. 115. 31. E.

LIN-TIN', a town of China, of the ſecond rank, on a ſmall iſland of Quang-tong: fifteen miles north-eaſt of Macao.

LIN-TONG', a town of China, of the third rank, in Chen-ſi: fifteen miles eaſt-north-eaſt of Si-ngan.

LIN-Y', a town of China, of the third rank, in Chang-tong: thirty-two miles ſouth-eaſt of Te.

LIN-YE'OU, a town of China, of the third rank, in Chen-ſi: twenty miles north-eaſt of Fong-tſiang.

LINACAGAN', one of the iſlands called Calamianes, in the Eaſtern Indian Sea. Lat. 11. 40. N. lon. 120. 10. E.

LIN'ACRE (Thomas), phyſician, was born at Canterbury about the year 1460, and there educated under the learned William Selling; thence he removed to Oxford, and in 1484 was choſen fellow of All-Souls' college. Selling, alias Tilly, his former inſtructor, being at this time appointed ambaſſador from Henry VII. to the court of Rome, Linacre accompanied him to Italy, where he attained the higheſt degree of perfection in the Greek and Latin languages. At Rome, he applied himſelf particularly to the ſtudy of Ariſtotle and Galen, in the original. On his return to Oxford, he was incorporated doctor of phyſic, and choſen public profeſſor in that faculty. But he had not been long in England, before he was commanded to court by king Henry VII. to attend the young prince Arthur as his tutor and phyſician. He was afterwards appointed phyſician to the king, and, after his death, to his ſucceſſor Henry VIII. Dr. Linacre founded two medical lectures at Oxford, and one at Cambridge; but that which moſt effectually immortalized his name among the faculty, is his being the firſt founder of the college of phyſicians in London. He beheld with vexation the wretched ſtate of phyſic in thoſe times; and, by an application to cardinal Wolſey, obtained a patent in 1518, by which the phyſicians of London were incorporated. The intention of this corporation was to prevent illiterate and ignorant medicaſters from practiſing the art of healing. Dr. Linacre was the firſt preſident, and held the office as long as he lived. Their meetings were at his own houſe in Knight-rider ſtreet, which houſe he bequeathed to the college.

Our doctor, when about the age of fifty, took it into his head to ſtudy divinity; entered into orders; and was collated, in 1509, to the rectory of Merſham: in the ſame year he was inſtalled prebendary of Wells, in 1518 prebendary of York, and in the following year was admitted precentor of that cathedral. This, we are told, he reſigned for other preferments. He died of the ſtone in the bladder in October 1524, aged 64; and was buried in St. Paul's. Thirty-three years after his death, Dr. John Caius cauſed a monument to be erected to his memory, with a Latin inſcription, which contains the outlines of his life and character. He was a man of great natural ſagacity, a ſkilful phyſician, a profound grammarian, and one of the beſt Greek and Latin ſcholars of his time. Eraſmus in his epiſtles ſpeaks highly of the doctor's tranſlations from Galen, preferring them even to the original Greek. His works are, 1. De Emendata Structura Latini Sermonis, libri ſex; London, printed by Pynſon, 1524, 8vo. and by Stephens, 1527, 1532. 2. The Rudiments of Grammar, for the uſe of the Princeſs Mary, printed by Pynſon. Buchanan tranſlated it into Latin; Paris, 1536. He likewiſe tranſlated into very elegant Latin ſeveral of Galen's works, which were printed chiefly abroad at different times. Alſo Procli Diadachi Sphæra, tranſlated from the Greek; Venet. 1499, 1500.

LINAGROS'TIS, *ſ.* in botany. See ERIOPHORUM.

LIN'AMENT, *ſ.* [*linamentum*, Lat.] A tent for a wound made of linen; lint. *Bailey.*

LI'NAN, a river of Wales, which runs into the Iriſh Sea five miles ſouth of Caernarvon.

LINAN'GE. See LEININGEN, p. 463.

LINA'RES, a town of Spain, in Arragon: twenty-four miles eaſt-ſouth-eaſt of Teruel.

LINA'RIA, *ſ.* in botany. See ANTIRRHINUM, CHENOPODIUM,

NOPODIUM, CHRYSOCOMA, STELLERA, THESIUM, and UTRICULARIA.

LINA'RIÆ AFFI'NIS. See SENECIO.

LINARYD', a town of Sweden, in the province of Smaland: eleven miles ſouth-ſouth-eaſt of Wexio.

LINA'TO, a town of Italy, in the department of the Olona, on the Lambro: five miles ſouth-eaſt of Milan.

LIN'BO, a ſmall iſland in the Adriatic. Lat. 44. 37. N. lon. 14. 57. E.

LINCH, *ſ.* [Saxon.] A cauſey, a bank to diſtinguiſh bounds.

LIN'CH-CLOUT, *ſ.* in the artillery, a flat iron under the ends of the arms of an axle-tree, to ſtrengthen them, and diminiſh the friction of the wheels.

LIN'CH-PIN, *ſ.* An iron pin that keeps the wheel on the axle-tree.—Through which ſomething of a lace or bobbin might be drawn, as a nail through the *linch-pin* of an axle-tree to keep the wheel on. *Clubb's Wheatfield.*

The frequent and fatal accidents which have happened from linch-pins breaking or working out, may be avoided by a contrivance introduced by Mr. Varty, a coachmaker of Liverpool, and for which he received a ſilver medal from the Society of Arts in the year 1809. The contrivance conſiſts of an additional linch-pin, which is fixed in a receſs cut for it in the axle, and turns on a pin.

LINCK'IA, *ſ.* in botany. See TREMELLA noſtoc.

LIN'COLN, an ancient city in the county of that name, and a place of conſiderable importance in the eccleſiaſtical and military annals of the kingdom, is ſingularly ſituated on the top and ſide of an eminence, which ſlopes with a ſteep deſcent to the ſouth, where the river Witham runs at its baſe. A large portion of the city, or rather ſuburbs, extends, in a long ſtreet, from the foot of the hill to the ſouth. On the northern ſide of it, without the walls, is another ſuburb, called Newport, ſuppoſed to have been an outwork of the Roman ſtation. Camden, and ſome other antiquaries, ſtate, that this place was occupied as a ſtation, or ſtrong hold, by the Britons, anterior to the Roman colonization of the iſland; and that then it bore the name of *Lindcoit*, from the woods. By Ptolemy and Antoninus the name of the place is written *Lindum*; and, from having the privilege of a colony, it was called *Lindum colonia*. As a military ſtation, occupied by a colony of Romans, it muſt have been a place of ſome extent and conſequence. This is evident from the veſtiges that remain, and from the various diſcoveries that have been made at different periods. The form of the fortified ſtation was that of a parallelogram, divided into four equal parts by two ſtreets, which croſſed it at right angles. At the extremities of theſe were four fortified gates, nearly facing the four cardinal points. The whole was encompaſſed by an embattled wall, which, on three ſides, was flanked by a deep ditch, but on the ſouth ſide the ſteepneſs of the hill rendered a foſs unneceſſary. The walls have been levelled with the ground; and three of the gates have been long ſince demoliſhed. The remaining gate, to the north, which is called Newport gate, is deſcribed by Dr. Stukeley as the nobleſt remnant of this ſort in Britain; and he expreſſes much ſurpriſe, that it had not been taken notice of before his time. The great or central gateway has a ſemi-circular arch, ſixteen feet in diameter, formed with twenty-ſix large ſtones, apparently without mortar. The height is twenty-two feet and a half, of which eleven are buried beneath the ground. On each ſide of the arch are ſeven courſes of horizontal ſtones, called ſpringers, ſome of which are from ſix to ſeven feet in length. On each ſide of the arch are two ſmall lateral doorways, or poſterns. A maſs of the old Roman wall is ſtill to be ſeen eaſtward of this gate; and to the weſt is another large maſs, called the mint-wall, which was about ſixteen feet high and forty feet long, and had ſcaffold-holes and marks of arches. Mr. Gough ſuppoſed this to be part of a Roman granary. Southward of the ſtation above deſcribed were other Roman works, which extended from the brow to the bottom of the hill.

Various coins and other remains of antiquity have been diſcovered here. In 1739, three ſtone coffins were found at the ſouth-weſt corner of the cloſe, near the Checquer-gate. Beneath theſe was a teſſelated pavement, and under that a Roman hypocauſt. A ſimilar diſcovery was made in 1782. In the tenth volume of the Archæologia is a deſcription of an ancient place of ſepulture, diſcovered in an open field, half a mile from the eaſt gate of the ancient Lindum. In 1790 was found, about three or four feet below the ſurface, a very curious ſepulchral monument, evidently Roman, and of ſome perſon of high rank. Many fragments of antiquity were preſerved by the Rev. Dr. Gordon, the precentor of the cathedral, who gives an account of ſeveral earthen and glaſs urns, which were diſcovered in the ſame field, ſome of which were of ſingular ſhape. He alſo deſcribes a room, twenty feet by ſixteen, which was diſcovered in a quarry. The ſame field having been broken up for the purpoſes of quarrying, ſeveral ſtone coffins of various ſhapes have at different times been diſcovered in the looſe ground, which covers a ſubſtratum of rock. From theſe, and from other circumſtances, it is highly probable that this was a Roman burial-ground.

At the time of the Norman conqueſt, Lincoln appears to have been one of the richeſt and moſt populous cities in England; and of great importance as an emporium of trade and commerce. The Domeſday ſurvey mentions 1070 manſions, 900 burgeſſes, and 12 lagemen, having ſac and ſoke. On the acceſſion of the Conqueror to the throne, he ordered four ſtrong caſtles to be built; of which one was at Lincoln: the building was 644 yards in circumference, and occupied the ſpace on which it is aſſerted that one hundred and ſixty-ſix houſes had ſtood; ſeventy-four more were at the ſame time demoliſhed without the limits, that the whole might be inſulated. In the reign of Henry I. a navigable canal was made, or enlarged, from the river Witham at Lincoln to the Trent near Torkſey; and was probably the firſt canal of the ſort ever made in England. This was about ſeven miles in length, and is at preſent called the Foſs-dyke. By this a communication was formed with the Trent, and down that by the Humber to the ſea. Being thus acceſſible for foreign veſſels, and having alſo the advantage of an inland navigation, the city became populous and wealthy; and, according to Alexander Necham, a poet of that age, "Lincoln was now ſtored with good things, and became the ſupport of the neighbouring country." At this period, it appears to have poſſeſſed a large ſhare of the import and export trade of the kingdom. During the conteſt between the empreſs Maud and king Stephen, in 1140, Lincoln acquired great notoriety; and thence obtained a degree of conſequence in the eſtimation of future monarchs. When Henry II. had been crowned in London, he was afterwards, according to Speed, crowned at Lincoln in the year 1155. We find this city and its caſtle materially concerned in the contentions between king John and the aſſociated barons. The caſtle and bail of Lincoln appear to have continued in the occupation of the crown till the time of Edward I. when Henry de Lacy died ſeized of them, and they paſſed, with other parts of his inheritance, to the earl of Lincoln, and ſo became annexed to the duchy of Lancaſter. John of Gaunt, duke of that palatinate, greatly improved the caſtle, and made it his ſummer-reſidence; having, according to a local tradition, built himſelf a winter-palace below the hill, in the ſouthern ſuburbs. Several parliaments were held at Lincoln in the reigns of Edward I. II. and III. In the year 1352, the ſtaple of wool was removed from Flanders to England; and Lincoln was one of the ſtaple-towns appointed on that occaſion. It was alſo made a ſtaple for leather, lead, and various other articles. This proved highly beneficial to the place; for it thereby recovered from the loſſes it had ſuſtained by military ravages, and was ſoon reſtored to a flouriſhing condition.

The dioceſe of Lincoln, after the ſee was removed from Sidnaceſter, ſoon acquired a vaſt accumulation of territorial

jurisdiction and wealth. It included so many counties, that it was described as ready to sink under the weight of its own greatness; and, though Henry II. took out of it the diocese of Ely, and Henry VIII. those of Peterborough and Oxford, it is still considered the largest in England. As the jurisdiction was great, so, prior to the reformation, the revenues were proportionably abundant. Except the two archbishoprics, and those termed the principality-bishoprics, Winchester, Durham, and Ely, no see was so well endowed, which was the reason that there is no record, prior to the time of Elizabeth, of any bishop of this see having been translated to another, except Winchester; though since that time, Willis observes, "no less than ten out of seventeen have left this for more valuable ones." Nor was it less remarkable for the number of episcopal palaces within the diocese. Previous to the year 1547, it had eight; but all these, except that at Lincoln, with about thirty manors, were given up, in the first year of Edward VI. by Holbech, the first married bishop; who, in order to gratify the wishes of some courtiers, and to raise his own family, exchanged almost every species of landed property annexed to the see for impropriations; so that now only four manors remain of the ancient demesnes. The present revenues, therefore, principally arise from rectorial property or tythes.

The cathedral is not only the most prominent object of this city, but is the most interesting as a subject of history, antiquity, and art. This magnificent structure, from its situation on the summit of a hill, and from the flat state of the country to the south-east and south-west, may be seen at the distance of twenty miles. Raised at a vast expense, by the munificence of several prelates, it discovers, in many parts, singular skill and beauty, particularly in its western front, which must attract the attention of every traveller. It consists of a nave, with its aisles; a transept at the west end; and two other transepts, one near the centre, and the other towards the eastern end; also, a choir and chancel, with their aisles, of corresponding height and width with the nave and aisles. The great transept has a nave towards the east; attached to the western side of this transept is a gallilee, or grand porch; and on the southern side of the eastern aisle are two oratories, or private chapels; while the northern side has one of nearly similar shape and character. Branching from the northern side are the cloisters, which communicate with the chapter-house. The church is ornamented with three towers; one at the centre, and two at the western end; these are lofty, and are decorated with varied tracery, pillars, pilasters, windows, &c. That nothing might be wanting to render this church as splendid in its furniture as it was elegant in its workmanship, it received the most lavish donations. So sumptuously was it supplied with rich shrines, jewels, &c. that, Dugdale informs us, Henry VIII. took away 2621 ounces of gold, and 4285 ounces of silver, besides precious stones of great value. This cathedral had formerly a great number of costly sepulchres and monumental records; of many, not a veltige remains; nor are the places known where they stood. At the reformation, what the ravages of time had left, the zealots pulled down or defaced; so that, at the close of the year 1548, there was scarcely a perfect tomb remaining. Among the illustrious persons who were buried here, and had monuments erected to their memory, were Catharine Swinford, wife of John of Gaunt, duke of Lancaster; Joan, countess of Westmoreland, their daughter; and Bartholomew lord Burghersh, brother to the bishop of that name. Many of the bishops were interred here. It has been lately discovered, by the commissioners of public records, that the most correct and authentic manuscript of Magna Charta is that now in the archives of Lincoln cathedral, which is supposed to be the charter transmitted by the hands of Hugh, the then bishop of Lincoln, who is one of the bishops named in the introductory clause. The parchment on which it is written measures about eighteen inches square, but has no seal.

On the north side of, and connected with, the cathedral, are the cloisters, of which only three sides remain in the original state. Attached to the eastern side is the chapter-house, a lofty elegant structure: it forms a decagon, the groined roof of which is supported by an umbilical pillar, consisting of a circular shaft, with ten small fluted columns attached to it; having a band in the centre, with foliated capitals: one of the ten sides forms the entrance; in the other sides are nine windows, having pointed arches with two lights each. Over the north side of the cloisters is the library, which contains a large collection of books, and some curious specimens of Roman antiquities: it was built by dean Honeywood.

Besides monasteries, nunneries, and other edifices for pious uses, Lincoln had formerly more than fifty churches. Eleven only, exclusive of the cathedral, now remain; and scarcely any of them merit a particular description. Those most worthy of notice, are St. Bennet's, St. Mary de Wigford's, and St. Peter's at Gowts; these have lofty square towers in the Norman style. St. Peter's is a very ancient structure, and appears to have been the chapel of some religious house, of which the remains are not extant. The places of worship for the different denominations of dissenters, are, one for Roman-catholics, one for independent baptists, one for presbyterians, and one for methodists. The number of parishes within the city is twelve, which, with the four townships within its jurisdiction, make sixteen. These, according to the government-survey in the year 1810, were inhabited by 8600 persons. Many of the houses are old; but there are some very good buildings, both upon and below the hill. The city has of late been considerably improved, by making a new road, paving the footways, and erecting a new market-place.

Lincoln has an extensive trade in corn and wool, of which great quantities are exported into Yorkshire, by vessels which obtain a back-freightage of coals and other necessary articles for the use of the interior. This city is a county of itself, having subject to it four townships in the vicinity; Bracebridge, Canwick, Branston, and Waddington, called the Liberty of Lincoln. This privilege was conferred in the third year of George I. and in official acts it is denominated, The City and County of the City of Lincoln. Its viscountial jurisdiction extends twenty miles round; a privilege unequalled by that of any city in the kingdom. In the 26th year of Edward I. anno 1298, Willielmus Disney and Johannes Marmion were summoned to parliament as its first representatives. In the History of the Boroughs of Great Britain, it is said, "This city had summons, with London and York, to send members to parliament, the forty-ninth of Henry III." The right of election is considered to be in the freemen; and the number of voters is about eleven hundred. The political influence, though by no means absolute, is possessed by lord Delaval, who has a seat at Doddington, in the neighbourhood. The civil government of Lincoln is vested in a corporation, consisting of a mayor, twelve aldermen, two sheriffs, twenty-eight common-councilmen, and four chamberlains; with a recorder, deputy-recorder, steward of the courts of borough-mote, a town-clerk, four coroners, four serjeants of the key, or bailiffs, and other inferior officers. The city was incorporated so early as the seventh year of Edward II. Henry Best being then the first mayor.

Leland, in his description of Lincoln, enumerates five "gates in the waulles of the citie;" and observes, "It is easy to be perceived, that the towne of Lincoln hath been notably builded at three tymes." Of the castle, built by the Conqueror, little now remains; and the area is occupied by buildings appropriated to uses of the municipal power. The walls are above seven feet in thickness. In a corner of the area is a curious small building, appearing on the outside like a tower, called Cob's hall; which Mr. King thinks was originally used as a chapel. Few places in the kingdom exhibit so many ancient remains as Lincoln: Saxon, Norman, and pointed, arches; and door-

ways with turrets, walls, mullions of windows, and other fragments of old dilapidated buildings, appear in every direction: the very barns, ſtables, out-houſes, and even ſome of the pig-ſties, are built with arched doors and windows.

Checquer-gate, at the weſt end of the cathedral, had two gate-houſes; the weſtern one has been recently taken down; the remaining one, to the eaſt, has three gateways, and two turrets between them. In Eaſtgate-ſtreet are two very ancient gateways, one of which is nearly entire. At the bottom of the town, near Brayford-water, are remains of a fort, called Lucy-tower. In the minſter-yard is a large gateway, with grooves for a portcullis. A large oblong building, in Broadgate-ſtreet, was appropriated to the grey friars, and ſtill diſplays much of its ancient architecture; part of this edifice is now uſed as a free-ſchool, and the other part as a library. The deanery-houſe was founded by dean, afterwards biſhop, Graveſend, in 1254. The vicar's college, called the Old Vicars, formed a quadrangle, of which there remain only four good houſes, inhabited by the vicars. The biſhop's palace, on the ſouth ſide of the hill, which, from being ſituated near the ſummit, Leland deſcribed as "hanging in declivio," was built by biſhop Cheſney, to whom the ſcite was granted by king Henry II. It was enlarged by ſucceeding prelates, and was ſcarcely exceeded in grandeur by any of our ancient caſtles. Adjoining to St. Andrew's churchyard formerly ſtood the palace of the celebrated John of Gaunt. Oppoſite to this houſe is a large building, called John of Gaunt's ſtables. It was a large ſtructure, in the Norman ſtyle, and formerly conſiſted of a quadrangle, encloſing a ſpacious area; of which only the north and weſt fronts remain. The Jew's houſe, on the ſide of the hill, is an object of great curioſity; it is ſingularly ornamented in front, and ſome of its mouldings are ſimilar to thoſe round the weſt doors of the cathedral; in the centre of the front is a ſemicircular arched door-way, with a projecting pilaſter. This houſe was poſſeſſed by Belaſet de Wallingford, a Jeweſs, who was hanged for clipping in the 18th of Edward I. The Stone-bow, a large tower-gateway, croſſing the High-ſtreet, is ſaid to have been erected in the reign of Richard II. but the ſtyle indicates a later date. The High-bridge, over the main ſtream of the Witham, conſiſting of one arch, is conſidered to be at leaſt five hundred years old. Formerly here were two grammar-ſchools, one in the cloſe, the other in the city; they were united in 1583. The principal modern buildings are, the market houſe, erected 1736; the blue-coat-ſchool, on the plan of Chriſt's hoſpital, London; the county hoſpital; the county gaol, conſtructed on the plan of Mr. Howard for ſolitary confinement; two aſſembly-rooms, and a ſmall theatre. Lincoln is fifty-three miles north-eaſt of Derby, and 133 north of London. Lat. 53. 13. N. lon. 1. 44. W.

About two furlongs eaſtward of Lincoln is a heap of ruins called Monk's Houſe, ſuppoſed to have been a convent for monks. The walls of the chapel, and the outwalls of ſeveral other apartments, remain almoſt entire, but have been diſrobed of their roofs and other ornaments from time immemorial. Part of the old wall, with which it was incloſed, ſtill remains. On the top of the hill, at the end of Eaſtgate, are the remains of another chapel or church, with a houſe contiguous, called St. Giles's; the houſe is ſtill kept in tolerable good repair, but the chapel is a heap of ruins. In a cloſe adjoining is the entrance into a ſubterraneous cavern, called St. Giles's Hole; how far it extends, not even the moſt curious inſpector can give account; and whether this ſurpriſing cavern be the work of nature, or an ancient military retreat, admits room for much diſpute.

Hareby, near Lincoln, is noted for the death of Eleanor, wife to king Edward I. who cauſed croſſes to be ſet up in her memory in all the places where the hearſe reſted that carried her from hence to Weſtminſter.

Torkſey, near the influx of the Eeſdyke into the Trent, north-weſt of Lincoln, was once a town of great note and privileges; by virtue of which the inhabitants were obliged, whenever the king's ambaſſadors came that way, to carry them down the Trent in their barges, and to conduct them as far as York. By an old charter, ſtill in being, it takes toll from ſtrangers, for cattle or goods paſſing this way; and has a fair on Whit-Monday. Here was formerly a nunnery, the remains of which ſhow it to have been conſiderably large; it was founded by king John, but by its preſent appearance was never very magnificent.

Stow, between Lincoln and Gainſborough, is ſuppoſed to be the ancient Sidnaceſter. Its privileges are greater than thoſe of any place hereabouts, except Lincoln, and did once exceed even that, it having been famous before Lincoln was a biſhop's ſee; and the common notion is, that this was heretofore its mother-church. The church, which is a very large fabric, was founded by one of the biſhops of Dorcheſter in Oxfordſhire, and rebuilt by the firſt biſhop of Lincoln. In Stow-park, one mile from the church, there was once an abbey, which was afterwards made a biſhop's palace; but there is little even of the ruins now to be ſeen.

Scampton is four miles from Lincoln. In this pariſh the foundation of a Roman villa was diſcovered in the year 1795. There appears to have been a grand entrance from the weſt into a long gallery or portico, and thence into a ſuite of ſmall rooms dividing two courts; that at the eaſt end was the principal building, having two wings on the north and ſouth ſides of the two courts, the baths occupying the ſouth wing, and the ſervants' apartments being in the north; the number of apartments diſcovered was upwards of forty; but it is preſumed that many more had exiſted, and that the principal rooms extended conſiderably towards the eaſt. The foundations were generally two or three feet beneath the ſurface; yet, as little more of them remained than a foot or two in height, no traces were diſcoverable of entrances into the ſeveral apartments. The whole was conſtructed of the ſtone of the country, and the walls were in general from two and a half to three, though in ſome inſtances four, and even five and a half, feet thick. The remaining walls of ſeveral apartments, particularly of that in which the large teſſellated pavement was diſcovered, were painted on ſtucco in various colours; ſome green, others in ſtripes of red and white, and blue and white; the ſtucco compoſed of the lime of the country. The teſſellated pavements, about thirteen in number, though none perfect but one, were bedded on a body of clay in ſtrong cement, and from three to four feet under ground. They were compoſed of cubical teſſeræ of different ſizes, from half an inch to an inch and an half ſquare, made from the lime-ſtone of the neighbourhood. Great quantities of broken urns, fluted and figured tiles, glaſs, and culinary veſſels, were diſcovered, but none perfect; alſo ſeveral fragments of plaſter floors, compoſed of lime, fine gravel, and pounded red brick. Theſe articles, together with ſeveral copper coins of the later empire, particularly a perfect one of Conſtantine the younger, having the following legend, CONSTANTINVS-IVN NOB C; and on the reverſe GLORIA EXERCITVS, ſome fibulæ, two ſtyles, and the head of a lance, lay ſcattered over the whole foundations. It was impoſſible to form an adequate idea of the nature of the ſuperſtructure; but, from the appearance of fire and of melted lead on the ſurface of the pavements, and from the fragments of burnt timber, it was probably built of wood; and the whole had evidently been deſtroyed by fire. This conjecture is ſtrengthened by the circumſtance of tiles being found lying confuſedly upon the pavements, and which had ſerved for roofs. Some tiles had grooves, others a ſmooth ſurface. The ſcene was rendered more ſeriouſly intereſting by the diſcovery of an incredible number of human ſkeletons, which lay principally on the foundations. Some of them were rather beyond the uſual ſtature, and the teeth remarkably white. This ſight produced ſtrong reflections upon the elegance of a Roman villa, in a moment reduced to ruins

by

LINCOLNSHIRE.

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Neele sculp.

by fire, converted into ſolitude and ſilence, and become the dreary manſion of the dead. At the time of the preſent diſcovery, the ſcene had again changed; exhibiting, in a richly-cultivated corn-field, in its buſy huſbandmen, and in the flocks of the adjacent grounds, an intereſting picture of animated nature. It was evident, from the coins of the younger Conſtantine being diſcovered here, that the villa had been inhabited by ſome Roman commander as late at leaſt as that reign; and it is probable that, ſo long as the Romans remained in Britain, this elegant villa continued to be the ſummer-reſidence of the commander of the Roman army in theſe parts; the head of the colony, Lindum, being diſtant only five miles. The principal entrance into the villa was through a gateway, where was diſcovered a large ſtone lying north and ſouth on the foundation of the outward wall, of an oblong form, ſix feet ten inches long, three feet four inches wide, (the width of the outward wall,) and one foot thick; and this threſhold was in the centre of the paſſage or narrow gallery, which was one hundred and forty feet long, thirteen feet wide in the centre, fifteen feet at the north and eight at the ſouth end, being probably intended to lead to the north and ſouth wings. In one of the eaſtern apartments, he ſays, was diſcovered a beautiful teſſellated pavement, thirty-one feet in length, and ten feet in width, which is compoſed of four large compartments of ſquare and oblong forms, elegantly diverſified, having at the ſouth end part of a large circle; and, from the nature of the pattern, there is reaſon to ſuppoſe it extended to the end of the room. The teſſeræ, or dies, of which it is compoſed, are of a cubical form, and various in their ſize and colour. The inner compartments are of ſlate-blue, white, and deep red, half an inch ſquare. Theſe are ſurrounded by a border of circles, in which are quarter-circles inverted, of a deep red, inlaid amongſt teſſeræ of a pale yellow. Beyond the circles are ſeveral rows of plain teſſeræ of the latter colour, an inch and an inch and a half ſquare; evidently compoſed of the ſtone of the country. When firſt diſcovered, the colours of this pavement were extremely bright; which circumſtance, added to the curiouſly-artificial workmanſhip, afforded a pleaſing ſpecimen of the Roman art. But it ſhortly after loſt much of its original elegance, ſeveral of the teſſeræ having been picked up by the country people, who flocked in numbers to view it. In order, however, to prevent the pavement ſuſtaining any further injury, a building was erected over it. Notwithſtanding this precaution, it is ſtill to be lamented that the decay of its beauty becomes viſibly rapid, from the effects produced by the hands of idle curioſity.

About eleven miles from Lincoln is a place called Spittal, all round which are great foundations, ſuppoſed generally to be Roman; and ſome writers have aſſerted, that Lincoln once extended itſelf northwards as far as here. This village at preſent conſiſts but of two farm-houſes, a chapel, an inn, and a ſeſſions-houſe; upon the latter is the following inſcription:

Hæcce domus dat, amat, punit, conſervat, honorat,
Æquitiam, pacem, crimina, jura, bonos.

This court does right, loves peace, preſerves the laws,
Detects the wrong, rewards the righteous cauſe.

LIN'COLN, a maritime county of North America, in the ſtate of Maine, bounded north by Kennebeck county, ſouth by the ocean, eaſt by Hancock county, and weſt by that of Cumberland. The ſea-coaſt extends from that part of Penobſcot bay, oppoſite to Deer-iſland eaſtward, to Cape Small-point weſtward. The ſea-coaſt of the counties of Cumberland and Lincoln is 100 miles in extent meaſured in a ſtraight line, but ſaid to be above 200 by the courſe of the waters. It abounds with ſafe and commodious harbours; and the whole ſhore is covered by a line of iſlands, among which veſſels may generally anchor in ſafety. Acroſs the country there is a water-communication by lakes, ponds, and rivers, from the weſtern to the eaſtern bounds; ſo that the productions of the country may be conveyed to the different ſea-ports. The chief towns are Wiſcaſſet, Waldoborough, and Warren.

LIN'COLN, a county of Upper Canada, divided into four ridings and 20 townſhips, containing about 6000 inhabitants, and furniſhing five battalions of militia. It is ſaid that 19 covered waggons brought families to ſettle in the vicinity of the county of Lincoln, in June 1799.

LIN'COLN, a county of Morgan diſtrict, North Carolina, containing 12,568 inhabitants, of whom 1479 are ſlaves. In this county are mineral ſprings and mines of iron. The manufacture of iron is carried on in this county. Lincolntown is the capital.

LIN'COLN, a county of Georgia, formed in 1796, containing ſeven townſhips, and 4766 inhabitants, including 1433 ſlaves.

LIN'COLN, a county of Kentucky, containing 8555 inhabitants, of whom 1750 are ſlaves. The road from Danville on Kentucky river paſſes through ſouth-weſterly, and over Cumberland mountain to Virginia.

LIN'COLN, a town in Mercer county, Kentucky, on the road from Danville to Virginia: twelve miles ſouth-eaſt of Danville.—A townſhip in Grafton county, New Hampſhire, incorporated in 1764, and containing 41 inhabitants.—A townſhip in the north-eaſt part of Addiſon county, Vermont, containing 97 inhabitants.—A townſhip in Middleſex county, Maſſachuſetts, incorporated in 1754, and containing 756 inhabitants; 16 miles north-weſt of Boſton.

LINCOLN-GREEN', *ſ.* A particular colour, formerly uſed at Lincoln for dying garments:

All in a woodman's jacket he was clad
Of *Lincolne-green.* *Spenſer.*

Who ſees ſo pleaſant plains, or is of fairer ſeen,
Whoſe ſwains in ſhepherd's gray, and girls in *Lincoln-green.*
Drayton.

LIN'COLNSHIRE, a county of England, bounded on the north by the river Humber, which ſeparates it from Yorkſhire; on the eaſt by the German ocean; on the ſouth by Cambridgeſhire and Northamptonſhire; and on the weſt by the counties of Rutland, Leiceſter, Nottingham, and York. It is in length ſeventy-ſeven miles, and about forty-eight in breadth; and contained, according to the return made to parliament in 1810, 245,900 inhabitants; the area of this county is ſtated to be 2787 ſquare ſtatute miles, equal to 1,783,680 ſtatute acres; the average of the deaths for ten years appears to be as 1 to 51 of the population.

That part of Britain which is now called Lincolnſhire, was, anterior to the Roman conqueſt, poſſeſſed by a claſs of Britons known by the name of *Coritani.* During the Roman dominion, this diſtrict was included within the province of *Britannia prima*; and was interſected by different roads, occupied by military ſtations, and ſome of its natural inconveniences removed by Roman ſcience and induſtry. The principal roads were the Britiſh Ermin-ſtreet, afterwards adopted by the Romans, and the Foſs-way. A great work of this county, generally attributed to the Romans, is the Car-dyke, a large canal or drain, which extends from the river Welland, on the ſouthern ſide of the county, to the river Witham, near Lincoln. Its channel, for nearly the whole of this courſe, an extent of upwards of forty miles, is ſixty feet in width, and has a broad flat bank on each ſide. This great canal receives from the hills all the draining and flowing waters, which take an eaſterly courſe, and which, but for this Catch-water drain, as it is now appropriately called, would ſerve to inundate the fens. Several Roman coins have been found on the banks of this dyke. The whole of the preſent county is ſuppoſed to have been named by the Romans *Lindum*, and the principal ſtation or town *Lindum colonia.* See LINCOLN.

During the Anglo-Saxon dominion in England, Lincolnſhire was incorporated within the kingdom of Mercia, which, according to an old chronicle quoted by Leland,

was then divided into two provinces, north and south; and, as the Trent was the line of separation, the county of Lincoln constituted a considerable part of South Mercia. Crida was the first Mercian sovereign, and began his reign in 586. At this time Mr. Turner (History of the Anglo-Saxons) supposed that the whole island was governed by eight Anglo-Saxon monarchs; whence it should rather be denominated an octarchy than an heptarchy. The Danes in the year 870 laid waste great part of Lincolnshire, and burned the monasteries of Bardney, Croyland, and Medenhamsted, putting all the monks to the sword. After the defeat of the Danes by Alfred, the sovereignty of Mercia fell into his power, and was soon afterwards annexed to Wessex, but some places were still held by the Danes; among these were the towns of Stamford and Lincoln, even so late as 941, when Edmund the Elder expelled them.

The maritime counties of England being more directly exposed to attack from invading armies and piratical plunderers, and in the early part of our civil establishments being more populous than the midland country, were therefore frequently exposed to the conflicts of warfare; and hence it is found that these districts abounded with military works, and castles, or castellated mansions. Besides the permanent stations of the Romans in Lincolnshire, they threw up castrametations in different places; to guard the valleys, protect the great roads, and defend the mouths of the rivers. In the continued wars between the Anglo-Saxon kingdoms, these were again occupied by the contending parties; and, after the Norman conquest, some of the most commanding were adopted by the conqueror's captains and barons, and then became heads of extensive lordships. To describe or discriminate them, is, and ever will be, impossible; for documents are wanting, and the innovations of the latter occupiers generally obscured or annihilated all traces of their predecessors.

Lincolnshire at present consists of three great divisions; Holland, Kesteven, and Lindsey; which are subdivided into 32 hundreds, wapentakes, and sokes; containing, in the whole, one city, 31 market-towns, and 657 villages. Twelve members are returned to parliament; two for the shire, two for the city, and two from each of the boroughs of Boston, Grantham, Great Grimsby, and Stamford. Spalding and Waynfleet were represented in the eleventh year of Edward III. This county, from its extent and opulence, is not under the influence of any individual; and in contested elections the freedom of the people is not so liable to corruption as in smaller counties and property-boroughs.

This county has long been famous for a breed of fine horses; but the adjoining county of York has now the credit for rearing many that are actually bred in this county. In some districts great numbers of mares are kept for the sole purpose of breeding. In Holland division almost every farmer keeps some; and the number of colts reared is very great. The neat cattle of this county are described by Mr. Stone as being, for the greatest part, of a large sort, having great heads and short horns; stout in the bone, and deep in the belly; with short necks and fleshy quarters, narrow hips and chines, high in their rumps, and bare on the shoulders. The cows, he remarks, when fat, weigh from eight to nine hundred, and the oxen from ten to twelve hundred. The most profitable stock of the county appears to be sheep. Numbers are bred and fattened in this part of the kingdom. Large quantities of wool are thence obtained, to supply the demands of the neighbouring districts. It is a curious fact, that, while so much has been said in commendation of the Leicestershire breed, the Lincolnshire, which is the same, should have been passed over in silence. Mr. Stone says, these sheep are not even varieties. The Lincolnshire, a large-horned animal, adapted for the rich grazing and marsh land of the county, generally weighs well when fat, and bears a heavy fleece of coarse but long-stapled wool. Mr. Young mentions a sheep fold at Smithfield, which clipped, the first year, 23lb. of wool, and in the second year 22½lb.

Few manufactures are established in this county; but here are two objects of considerable merchandise, rabbits' fur, and goose-feathers. The rabbit-warrens were formerly much more extensive than at present, and were preserved on a principle of improvement; some being broken up for tillage, and others, which had been under tilth, being again laid down for this purpose. The soil of old warrens, by the rabbits continually stirring and ventilating the earth in burrowing, has been found incomparably better than lands of a like nature left in their original state. The fecundity of rabbits was a circumstance of no small consequence, when the skins of large well-chosen rabbits would produce 2s. 6d. or 3s. each; at that time they were used in making muffs, tippets, &c. the down was also employed in hats. The trade is now on the decline, not only from the diminution in the value of the skins, but also from the means of conducting it becoming daily more circumscribed; it being now thought good husbandry to destroy the warrens, and apply the land to other uses. The number of warrens in this county has been greatly reduced, yet many thousand acres are still devoted to this kind of stock. Many of what are called the *fens*, are in a state of waste, and serve for little other purpose than breeding and rearing geese, which are considered the fenman's treasure. They are a highly-valuable stock, and live where, in the present state of those lands, nothing else will; they are very prolific, and the young quickly become saleable, or speedily contribute to increase the stock. The feathers are very valuable; and, however trifling it may appear, the sale of quills alone amounts, on a large stock, to a considerable sum. Mr. Young states, that "the feathers of a dead goose are worth sixpence, three giving a pound; but plucking alive does not yield more than threepence a-head per annum. Some wing them only once every quarter, taking ten feathers from each goose, which sell at five shillings a thousand. Plucked geese pay, in feathers, one shilling a-head in Wildmore Fen." The common mode of plucking live geese is considered a barbarous custom; but it has, perhaps, prevailed ever since featherbeds came into general use. The mere plucking is said to hurt the bird but little, as the owners are careful not to pull before the feathers are ripe, that is, just ready to fall; if forced from the skin sooner, they are of inferior value. See the article ANAS, vol. i. p. 518.

The general improvements that have been effected in this county within the last twenty years, and that are now gradually making, have co-operated to alter the general appearance, the agriculture, climate, &c. so materially, that the surface has assumed a new aspect; the value of land is greatly increased, the means of social and commercial communication have been facilitated, and the comforts of domestic life greatly promoted. Yet there is still scope for material improvements; for the roads, in many parts of the county, are in a very bad state; and the traveller has not advantages adequate to the tolls levied on him. In the vicinity of Boston, Spalding, and Louth, the commissioners have commenced a plan for forming firm and substantial roads: this is mostly done by laying shingles, brought from the Norfolk coast, in the centre of the road, and mixing them with the silt of the place. The *wolds* extend from Spilsby, in a north-westerly direction, for about forty miles, to Barton, near the Humber. They are, on an average, nearly eight miles in breadth, of sand and sandy loam, upon flinty loam, with a substratum of chalk. Beneath this line lies an extensive tract of land at the foot of the wolds, called the *marsh*, which is secured from the encroachments of the sea by embankments, and is agriculturally divided into north and south marshes by a difference in the soil.

The *fens* of this county form one of its most prominent features. They consist of lands which, at some distant period, have been inundated by the sea, and by human art have been recovered from it. In the summer they

they exhibit immenſe tracts, chiefly of grazing-land, interſected by deep ditches, called *droves*, which ſerve both for fences and drains. Theſe are accompanied generally by parallel banks, upon which the roads paſs, and are intended to keep the waters, in flood-time, from overflowing the adjacent lands. They not only communicate with each other, but alſo with larger canals, called dykes and drains, which, in ſome inſtances, are navigable for boats and barges. At the lower end of theſe are ſluices, guarded by gates, termed *gowts*. During the ſummer, numerous flocks and herds are ſeen grazing over this monotonous ſcene, and many of the paſtures afford a luxuriant herbage; but in the winter, or in the autumn, if it ſhould prove wet, the aſpect is changed; the cattle quickly diſappear, and the eye muſt paſs over thouſands of acres of water or ice, before it can find an object on which to reſt. Several cauſes combine to produce this drowning of the lands. Many of the fens lie below the level of the ſea; ſome are lower than the beds of the rivers; and all are beneath the high-water mark of their reſpective drains. The ſubſtratum of the fens is *ſilt*, or ſea-ſand, which is a well-known conductor of water. Through this, when the drains are full, the ſea-water filters; and, unable to paſs by the drains, riſes on the ſurface, and is known by the name of *ſoak*. Dugdale was of opinion, that there was a time when theſe parts were not inundated. In his hiſtory of embanking, he obſerves, that the iſle of Axholme, though for many ages it hath been a fenny tract, was not anciently ſo, but was originally a *woody* country, not annoyed with theſe inundations, as is evident from the great numbers of trees which had been found in the moor. The ſame author, ſpeaking of the *great level*, gives his opinion that it was formerly firm and dry land, neither annoyed with ſtagnation of freſh waters, nor inundations from the ſea; and this he ſuppoſes was the caſe of the fens in Lincolnſhire, and the adjoining counties; for it is an eſtabliſhed fact, that large timber-trees will not thrive in watery lands; and yet ſuch have been found lying in the earth abundantly in this country.

The principal rivers which either riſe in the county, paſs through it, or are connected with it, are the Trent, the Ancholme, the Witham, the Welland, and the Glen. The Trent, though not properly a river of this county, forms the boundary of it on the north-weſtern ſide, from the village of North Clifford to that of Stockworth; whence it conſtitutes the eaſtern boundary of the iſle of Axholme; it thence flows to Aldborough, and, having received the Dun and the Ouſe, mingles its waters with the Humber. From Gainſborough, where it is croſſed by a handſome bridge, it is navigable for coals, corn, and various articles of commerce. The Ancholme is a ſmall river, riſing in the wolds, near Market-Raiſin, whence it is navigable to the Humber, into which it falls ſome miles below the junction of the Trent. The Welland has its ſource near Sibertoff, in Northamptonſhire; and, being increaſed by numerous ſtreams, paſſes Market-Deeping; where, entering the fens, it leaves a portion of its waters and ſludge, which it had accumulated in its previous paſſage through the rich lands of Northamptonſhire, Leiceſterſhire, and Rutlandſhire. It afterwards meets the contributory Glen, and empties itſelf into Foſs-dyke-Waſh, eaſt of Boſton. The Witham, which is completely a river of this county, derives its origin near South Witham; and thence flows almoſt due north, through the park of Eaſton, and to Great Ponton. It proceeds through a wide valley to Lincoln; continuing its courſe to Boſton, it unites its waters with the ſea at a place called Boſton-Deeps. Much of the preſent bed of the river, from Boſton upwards, is a new cut, made for the purpoſe of widening the channel, rendering it more commodious for navigation, and better adapted to receive and carry off the water of the contiguous fens. Theſe rivers, with thoſe of the Grant, Ouſe, and Nene, in the adjacent counties, from the obſtructions they meet in delivering their waters to the ocean, form one great cauſe of inundating ſo large a portion of valuable land. In viewing the various inlets of the ſea, it is ſurpriſing to obſerve the immenſe quantity of ſand and ſludge which is continually depoſiting on the ſhore. This is owing to the nature of the tides, which, from the form of the channel, flow with more violence than they ebb. Hence the mouths of the rivers are choked up, and the deſcending waters are thrown back on the low-lands. The great bay, or eſtuary, into which the different rivers, paſſing through the fens, are emptied, is very ſhallow, and full of ſhifting ſands and ſilt. That this diſtrict was thus flooded at a very remote period, is evident from the plans of embanking and draining which the Romans adopted, in order to counteract the miſchievous effects of ſuch inundations. Since their departure, much has been done at various times for the improvement of the fen-country; and an immenſe expenſe has been occaſionally, and is ſtill annually, incurred, to prevent the encroachment of the water, and to ameliorate the ſoil. To the north and north-eaſt of the Witham, are the large fenny tracts called Wildmore Fen, Weſt Fen, and Eaſt Fen; in the latter of which, it appears by a writ, 41 Elizabeth, 5000 acres were drowned. A plan is now executing under the direction of that very ſcientific and able engineer Mr. John Rennie, by which theſe three fens will be effectually drained, and the low-lands of this part of the county be rendered productive and profitable. The encloſure of Wildmore Fen alone will bring into immediate cultivation 40,000 acres of inundated, and conſequently of hitherto unprofitable, land. It is ſo rich, that conſiderable part of it is now ſelling at 50l. per acre, and the reſt is of equal value. The aggregate amount, therefore, is 2,000,000l. The expenditure of incloſing, draining, &c. has coſt 400,000l. ſo that the net profit to the owners of this great work is 1,600,000l. ſterling.

Mr. Young obſerves, that there is not probably a county in the kingdom that has made equal exertions in this very important work of draining. "The quantity of land thus added to the kingdom, has been great; fens of water, mud, *wild fowl, frogs, and agues*, (theſe are his words,) have been converted to rich paſture and arable, worth from 20s. to 40s. an acre. Health improved, morals corrected, and the community enriched. Theſe, when carried to ſuch an extent, are great works, and reflect the higheſt credit on the good ſenſe and energy of the proprietors. Without going back to very remote periods, there cannot have been leſs than 150,000 acres drained and improved, on an average, from 5s. an acre to 25s. or a rental created of 150,000l. a-year. But ſuppoſe it only 100,000l. and that the profit has on an average been received during the period of thirty years; the rental has in that time amounted to three millions, and the produce to near ten; and when, with the views of a political arithmetician, we reflect on the circulation that has attended this creation of wealth through induſtry; the number of people ſupported; the conſumption of manufactures; the ſhipping employed; the taxes levied by the ſtate; and all the claſſes of the community benefited; the magnitude and importance of ſuch works will be ſeen; and the propriety well underſtood of giving all imaginable encouragement and facility to their execution. Theſe undertakings prove the reliance of a people on the ſecure poſſeſſion of what their induſtry creates; and, had it not been for common-rights, all England would long ago have been cultivated and improved; no cauſe preſerves our waſtes in their preſent ſtate, but the tenderneſs of government in touching private property." Mr. Young gives a bad account of the women of Lincolnſhire; who are ſaid to be "very lazy, and to do nothing but bring children and eat cake: the men milk the cows." He adds, however, that "it is impoſſible to ſpeak too highly in praiſe of the cottage-ſyſtem of this county, where land, gardens, cows, and pigs, are ſo general in the hands of the poor. Upon views only of humanity and benevolence, it is gratifying to every honeſt heart to ſee that claſs of the people comfortable, upon which all others depend: this motive alone

ought to operate ſufficiently to make the practice univerſal through the kingdom; but there are alſo others that ſhould ſpeak powerfully to the feelings even of the moſt ſelfiſh: wherever this ſyſtem is found, poor's-rates are low; upon an average of the county, they do not amount to one-third of what is paid in Suffolk; and another object yet more important, is the attachment which men muſt inevitably feel to their country, when they partake thus in the property of it." Theſe ideas ſuggeſt a ſyſtem much preferable to that well-meant, but not perhaps well-conſidered, plan of making the earth groan under immenſe poor-houſes, called Houſes of Induſtry. The poor will neither be improved nor be made grateful by being crowded together, like invalids or culprits, in large buildings, by whatever name they may be called. Let them appear as members of the community, and not as diſſevered parts. *Young's View of the Agriculture of the County of Lincoln.*

The high wind which prevailed on Saturday, November 10, 1810, may be regarded as the moſt awful viſitation with which this county has ever been afflicted. The calamity produced by the gale was twofold; at ſea and on ſhore its effects were ſo extenſively fatal, that, in the eſtimate of injury ſuffered, it is impoſſible to ſay whether the adventurous mariner or the peaceful huſbandman had the greater weight of affliction to ſuſtain. The centre of diſtreſs ſeems to have been the town of Boſton. A tremendous gale from the eaſt was experienced there throughout Saturday; it ſet directly into the mouth of the haven; and the conſequence was, that the evening tide came in with that irreſiſtible force which an accumulated impetus of twelve hours' continuance muſt neceſſarily give it. What is called the *eagre* of the tide, although expected to be ſtronger than uſual, aſtoniſhed thoſe who ſaw it come up the channel, and was the harbinger of dreadful miſchief. By ſeven o'clock the tide had riſen higher by four inches than on any preceding occaſion upon record, and had filled the houſes in many ſtreets to a conſiderable depth with water. At this height it continued for about an hour, without perceptible change. The cauſe of this was, that the tide had overtopped its barriers, the banks of the channel were inſufficient to hold it, and, being invaded by the overfalling ſurge on the land ſide, yielded to the action of the flood. Friſkney and Leverton new ſea-banks were broken in many places; Frieſton new bank entirely ſwept away, and the old bank in that pariſh demoliſhed in various parts; as alſo were Boſton eaſt old bank, and the banks at Shirbeck Quarter, Wyberton, Frampton, and Foſdyke. By theſe ſeveral breaches of banks the tide got vent in a new and leſs ſtraitened channel, and the whole ſurrounding country was deluged by the ſea. Had the banks been ſufficiently high to have confined the tide in its accuſtomed courſe, the town of Boſton, it is probable, would have been utterly ruined, for the water would have riſen ſome feet higher in it, and have waſhed down and deſtroyed every thing. The diſtreſs which this fierce and unlooked-for invaſion of the neighbouring lands occaſioned, is beyond all deſcription. The flood ſwept cattle and every thing before it in its progreſs to find a level; and the burſting of the water through the apertures of the banks, as thoſe barriers ſucceſſively gave way, added a noiſe like thunder to the horrors of the night. The inhabitants of many farm-houſes were environed by the water before they knew of danger; and eſcape was impoſſible, had the formation of the country permitted any exemption from the inundation; owing, however, to its unvariable flatneſs, there was not, in ſeveral pariſhes, a foot of ground unflooded. The conſternation and affliction produced by this event can ſcarcely be imagined, and much leſs adequately deſcribed; the whole country about Boſton, to the north and ſouth of that town, experienced this overwhelming calamity; the lands on the eaſtern ſide were ſaved, in conſequence of thoſe capacious drains, Hobhole, and Maud Foſter, (heretofore condemned as uſeleſs,) having received the weight of waters. The number of ſheep drowned in the diſtreſſed tract of country between Wainfleet and Sutterton (to which latter town the inundation extended ſouthwardly) is computed at 15,000; beſides horſes and other cattle. Implements of every deſcription were ſwept in a general wreck; ſtacks of corn and hay to a great amount were carried like litter over the country; and the hopes of the huſbandman blaſted, not merely for the preſent, but, on account of the ponds, wells, and ditches, being, without exception, filled with ſalt water, for a conſiderable time in the future. At Foſdyke the tide came upon the lands ſo ſuddenly, that a ſervant maid of Mr. Birkett, of that place, was ſurrounded by the ſea, whilſt milking the cows in a paſture not far from the houſe, and periſhed before aſſiſtance could be given. Another perſon of that pariſh, an elderly woman, was in the courſe of the night waſhed out of an upper window of her cottage, and drowned. At Fiſhtoft, a Mr. Jeſſop loſt his life in endeavouring to reſcue ſome of his father's ſheep. His death was not leſs extraordinary than that of the other two perſons above-mentioned. About ſeven o'clock in the evening, his father, looking out into the ſtorm, miſtook the approaching deluge from the ſea for a fall of ſnow on the paſtures, and exclaimed to his ſon, that care ſhould be taken of the ſheep. The latter immediately went forth; and, before he had recovered from his aſtoniſhment at the coming waters, fell a ſacrifice to them, by getting out of his depth. Plomer's hotel, at Frieſton ſhore, was for a long time expected to be completely waſhed away: the great bow-window was forced from the building by the water, and carried to the diſtance of ſeveral fields. Small tenements, and barns and ſheds, ſhared a common deſtruction in ſeveral pariſhes. Not leſs than 20,000 acres of the richeſt land in England were flooded. The water ran over the London road in ſeveral places within ſeven miles of Boſton; it was in ſome ſituations a foot deep on the road. The performance of divine ſervice, on the Sunday, in the pariſh-church of Boſton, was prevented, by the tide on the preceding evening having completely flooded the extenſive area appropriated to public worſhip. The water from the river, entering chiefly at the weſtern door, and partly at the ſouthern, covered the whole floor of the church, as far as the ſteps into the chancel; and, in the northern aiſle, to a conſiderable depth: the height of the water againſt the weſtern end of the ſteeple, was two feet eight inches and a half. That beautiful fabric, the ſteeple however, ſuſtained no injury; of the church, part of the florid parapet on the external roof, between the body of the building and the chancel, was blown down; but the injury is not extenſive. In October 1793, the tide at Boſton flowed remarkably high; on the 30th of September, 1807, it flowed ſeven inches higher than at that time; and at the time we are ſpeaking of it attained a height exceeding by four inches and a half the tide of 1807. A barge drifted over the bank near the Scalp, and appeared in the midſt of the paſtures, with the ſheep grazing round her. Three veſſels of burden were driven up the Waſhway by the tide, nearly as far as Foſdyke Inn. A large hay-ſtack, on the farm of Mr. Day, of Frieſton, (near the ſhore-houſes,) was moved entire by the tide, from one end of a paſture to the other, (a diſtance of three or four hundred yards,) and there ſtood erect and perfect! At Wiſbech the gale was ſeverely felt; the tide roſe to an unuſual height, and flowed with ſuch rapidity, that ſeveral craft loaded with grain broke from their moorings, and ſunk. The banks in ſeveral places were overflowed, and the lands near the town inundated. Several of the inhabitants ſuſtained a ſerious loſs; as the warehouſes and other buildings, near the river, were filled with ſalt water. There were nearly three hundred trees blown down by the ſide of the road between Leiceſter and Stamford; and ſeveral hundred trees in Burgheley, Grimſthorpe, Exton, and Walcot, parks. The loſſes at ſea were truly dreadful all along the coaſt; the number of veſſels wrecked between the Humber and Boſton Deeps only, being no leſs than forty. *Monthly Mag.* for Dec. 1810.

LINCOLNVIL'LE,

LINCOLNVILLE, a town of Hancock county, in the ſtate of Maine, on the weſt ſide of Penobſcot bay; twelve miles from Belfaſt.

LINCO'NIA, *ſ.* [ſo called by Linnæus, but whence derived we know not.] In botany, a genus of the claſs pentandria, order digynia. The generic characters are—Calyx: perianthium inferior, four-leaved: leaflets ovate, permanent; the inferior oppoſite pair ſhorter. Corolla: petals five, lanceolate, ſeſſile, upright; nectary, a dell impreſſed on the bottom of the petal, girt beneath by the margin. Stamina: filaments five, awl-ſhaped, margined, upright, middling; antheræ obtuſe, ſagittated with nutant gaping auricles. Piſtillum: germ half-inferior with reſpect to the corolla; with reſpect to the calyx, ſuperior; ſtyles two, filiform, ſtriated; ſtigmas ſimple. Pericarpium: capſule two-celled. Seeds two. The perianthium perhaps might be taken for bractes; and then the flower would be entirely ſuperior.—*Eſſential Character.* Petals, five, with a nectareous excavation at the baſe; capſule, two-celled.

Linconia alopecuroidea, the only ſpecies of which we have a deſcription. It is a ſhrub with a few wandlike branches, irregular from the baſe of the falling leaves, as in the fir-tree. Leaves ſcattered, in a ſort of whorl, five or ſix together, ſubpetioled, linear, three-ſided, ſtiffiſh, ſhining, an inch long, rugged at the angles; the uppermoſt ciliate. Flowers at the ends of the branches; not however in bundles, but ſeparate, lateral, ſeſſile, the length of the leaves; leaflets of the calyx not diſpoſed in a ring, but by pairs alternately oppoſite, villoſe at the edge; corollas tenacious, fleſh-coloured or white. Native of the Cape of Good Hope, in watery places among the mountains.

There is another ſpecies from the ſame country in the Bankſian Herbarium, with the flowers in bundles and heads.

LINC'TUS, *ſ.* [from *lingo*, Lat.] Medicine licked up by the tongue.

LIN'DA, a ſmall iſland in the Indian Sea, near the coaſt of Africa, at the mouth of the Zambeſe.

LIN'DA, a town of Germany, in Upper Heſſe: four miles ſouth-ſouth-weſt of Gieſſen.

LIN'DAHL, a town of Norway: 140 miles north of Chriſtiania.

LIN'DANUS (William), a celebrated catholic divine, was born at Dort, in Holland, in the year 1525. He purſued his academical ſtudies at Louvain, and afterwards went to France to perfect himſelf in the Greek and Hebrew languages. Having returned to Louvain, he was ordained a prieſt, and admitted a licentiate in divinity. This was in the year 1552; and in the following year he undertook the office of lecturer on the ſacred ſcriptures at Dillengen, which poſt he filled for three years with high reputation. He took his degree of D.D. in 1556, after which he was appointed dean of the Hague; counſellor to the king; vicar to the biſhop of Utrecht, and inquiſitor of the faith within the ſame eccleſiaſtical juriſdiction. On account of his great zeal in the latter office, the duties of which he performed with much ſeverity, he was nominated, by the bigoted Philip II. of Spain, to the biſhopric of Ruremond; but the troubles in which the country was involved prevented him from taking poſſeſſion of his ſee till ſeven years afterwards. In 1568, he paid a viſit to Rome, where he was received by the pope Gregory XIII. and the cardinals with ſingular marks of eſteem. On his return to his flock, he found them reduced to a miſerable ſtate by the ravages of famine and the peſtilence; on which occaſion he exerciſed the functions of a Chriſtian biſhop in a very honourable manner, applying the revenues of his ſee to the relief of the indigent, and viſiting every part of his dioceſe, for the purpoſe of perſonally comforting, inſtructing, and aſſiſting, the diſtreſſed. In 1584, he took a ſecond journey to Rome; and after his return was tranſlated, in 1588, to the biſhopric of Ghent. He ſurvived this promotion, however, only three months, and died towards the cloſe of the year laſt-mentioned, about the age of ſixty-three. Lindanus was well verſed in the fathers, and councils, and eccleſiaſtical antiquities. He was alſo a good Greek and Hebrew ſcholar; well read in divinity; poſſeſſed a vigorous intellect; and was an acute and able reaſoner. His writings are diſtinguiſhed by energy and purity of ſtyle, though ſometimes too much inflated; and the author is eſteemed by the catholics as one of their firſt-rate controverſialiſts. His moſt valued publication is entitled, *Panoplia Evangelica*, which was publiſhed at Cologne in 1563, in folio, and in the following year at Paris, in 12mo. It is boaſted of as containing a maſterly and unanſwerable defence of the doctrine and diſcipline of the church of Rome, againſt the objections of proteſtants. Lindanus alſo was the author of a great number of polemical treatiſes; paraphraſes on many of the pſalms; and a corrected edition of the Pſalter, illuſtrated with the Greek and Hebrew texts.

LIN'DAR, a town of Iſtria: five miles north-eaſt of Mitterburg.

LINDAU', an imperial city of Germany, on an iſland, in the lake of Conſtance, which communicates with the continent by means of a bridge. This iſland is divided by an arm of the lake in ſuch a manner as to form another ſmaller iſland, which is ſeparated from the city, and conſiſts of vineyards and gardens, being walled quite round. On account of this ſituation it is, that Lindau has been ſtyled the Venice of Swabia. The greateſt part of the burghers here are Lutherans. The pariſh-church is dedicated to St. Stephen. This town has alſo a well-endowed hoſpital, and a grammar-ſchool conſiſting of four claſſes. The caſtle, and the *Heyden Maur*, or Heathen Wall, as it is called, ſtanding near the gate at the bridge which leads to the continent, are reckoned Roman works; the latter of which is attributed to Tiberius Nero, and the former to Conſtantius Chlorus, at the time of the encampments in this iſland, during their expeditions againſt the Vindelici and Alemanni. It is alſo ſuppoſed that near this caſtle formerly ſtood a town; and that the little church of St. Peter here was built on the firſt introduction of Chriſtianity into this country. By the peace of Preſburg, in 1805, it was given to Bavaria. Its territory comprehends fourteen villages: nineteen miles eaſt of Conſtance, and forty-ſix eaſt-north-eaſt of Zurich. Lat. 47. 28. N. lon. 10. 35. E.

LINDAU', a town and caſtle of Hungary: ſeventeen miles north-north-weſt of Cſakathurn.

LINDAU', a town of Weſtphalia, in the territory of Eichfeld, ſituated on the Rhine: twelve miles north-weſt of Duderſtadt.

LINDAU', a town of Germany, in the principality of Anhalt Zerbſt: five miles north of Zerbſt.

LINDAU', a town of Germany, in the principality of Bayreuth: eight miles north-weſt of Bayreuth.

LINDAU'. See LINDOW.

LIN'DE, or LINDESBERG, a town of Sweden, in Weſtmanland, ſituated in a narrow ſandy tract between two lakes; built in the year 1644, by queen Chriſtina. Near it is a medicinal ſpring. It is thirty-four miles weſt-north-weſt of Stroemſholm, and eighty-ſix weſt-north-weſt of Stockholm. Lat. 59. 35. N. lon. 14. 56. E.

LIN'DE, a town of Germany, in the county of Henneberg: five miles eaſt-ſouth-eaſt of Romhill.

LIN'DE, a town of Germany, in the principality of Querfurt: four miles north-weſt of Juterbock.

LIN'DE, a town of France, in the department of the Dordogne: ten miles eaſt of Bergerac, and ſeven weſt of Sarlat.

LINDEAL', a town of Hindooſtan, in the circar of Cuddapa: twenty-five miles north of Gandicotta.

LINDEBEU'F, a town of France, in the department of the Lower Seine: twelve miles ſouth-eaſt of Cany, and ſix north-north-weſt of Rouen.

LIN'DECK, a town of the duchy of Stiria: eight miles north of Cilley.

LIN'DEN,

LIN'DEN, *f.* [linb, Sax.] The lime-tree. See TILIA. —Hard box, and *lindan* of a ſofter grain. *Dryden.*

Two neighb'ring trees, with walls encompaſs'd round,
One a hard oak, a ſofter *linden* one. *Dryden.*

LIN'DEN, a town of Germany, in the principality of Culmbach: ſix miles ſouth of Neuſtadt.

LIN'DEN (John-Antonides Vander), a learned phyſician, was born at Enchuyſen in North Holland, in 1609. His father, Antony-Antonides, practiſed phyſic both at Enchuyſen and in Amſterdam, and wrote ſeveral profeſſional works. John-Antonides took his degree of doctor of phyſic at Franeker in 1630, and was appointed to the medical chair in that univerſity in 1639; which office he held till 1651, when he accepted the ſame profeſſorſhip at Leyden. He died there in 1664. Vander-Linden, who was at firſt a ſtaunch follower of Hippocrates, became at length attached to the chemical ſect, and is ſaid by Guy Patin to have loſt his life by taking antimony and refuſing to be blooded in a pleuriſy. He wrote ſeveral works, of which the beſt known is his book *De Scriptis Medicis*, firſt publiſhed in 1637, and ſeveral times re-edited. It is a dry catalogue of medical authors and their works, but highly uſeful to thoſe engaged in ſimilar enquiries; and Haller confeſſes, that he ſhould not have been able to make his own Bibliotheca Medica tolerably perfect without the aid of Linden. It was continued and much augmented by G. A. Mercklin, under the title of *Lindenius renovatus*; Norimb. 1686. Vander-Linden publiſhed an edition of Celſus de Re Medica, Leid. 1657. He employed much labour in preparing an edition of the works of Hippocrates, which was publiſhed after his death by his ſon, in 2 vols. 8vo. Gr. and Lat. Leid. 1665; reprinted at Naples 1754, and Venice 1757. He adopts the verſion of Cornarius, and divides the text commodiouſly into heads; ſo that his edition is reckoned one of the beſt for uſe, though it has incurred the cenſure of critics. He illuſtrated this author in his Selecta Medica et ad ea Exercitationes, 1656, conſiſting of diſſertations relative to various places in Hippocrates, and likewiſe in other ancient authors; and he gave a ſyſtem of Hippocratic doctrine in his Meletemata Medicinæ Hippocraticæ, 1660.

LIN'DENAU, a town of Pruſſia, in the circle of Natangen: twenty-four miles ſouth-weſt of Brandenburg.

LIN'DENAU, a town of Pruſſia, in the palatinate of Thorn: twenty miles north-eaſt of Culm.

LIN'DENAU, a town of Sileſia, in the principality of Neyſſe: ſix miles north-weſt of Patſchkau.

LIN'DENBERG, a town of Germany, in the principality of Bayreuth: nine miles eaſt-ſouth-eaſt of Bayreuth.

LIN'DENBRONN, a town of Germany, in the principality of Hohenlohe: two miles eaſt of Langenburg.

LIN'DENBRUCH (Frederic), a learned philologiſt, was a native of Flanders, and died about 1638. He wrote annotations on Terence, on the fragments of certain Latin poets, and on Ammianus Marcellinus. He alſo publiſhed a curious work entitled, Codex Legum Antiquarum, ſeu Leges Wiſigothorum, Burgundionum, Longobardorum, &c. Francof. fol. 1613.

LIN'DENFELS, a town of Germany, in the palatinate of the Rhine: fourteen miles north-north-eaſt of Manheim, and eight weſt of Erbach.

LIN'DENHARDT, a town of Germany, in the principality of Bayreuth: nine miles ſouth of Bayreuth.

LIN'DER, a town of Iſtria: twelve miles north-north-eaſt of Pedena.

LINDE'RA, *f.* [ſo named by Thunberg, in memory of *John Linder*, a phyſician at Stockholm, afterwards ennobled by the name of Lindeſtolpe, who was born in the year 1678, and died in 1724. He was a celebrated Swediſh botaniſt, and author of the Flora Wikſbergenſis, publiſhed at Stockholm in 1728. His inaugural theſis, De Heſperidum Pomis, was publiſhed at Abo in 1702. About ſix years afterwards appeared his treatiſe De Venenis, printed at Leyden; a poſthumous edition of which was publiſhed at Leipſic in 1739, under the direction of M. Stenzelius. This is ſaid to be a maſterly diſſertation on vegetable poiſons. He was alſo the author of an eſſay upon the colouring properties of ſeveral Swediſh plants, particularly of ſome lichens.] In botany, a genus of the claſs hexandria, order monogynia. The generic characters are—Calyx: none. Corolla: petals ſix, ovate, obtuſe. Stamina: filaments ſix, many times ſhorter than the corolla: antheræ minute. Piſtillum: germ ovate, ſmooth, ſuperior; ſtyle upright, rather ſhorter than the corolla: ſtigmas two, reflex. Pericarpium: capſule two-celled.—*Eſſential Character.* Corolla ſix-petalled.

Lindera umbellata, a ſingle ſpecies. The ſtem is ſhrubby, and looſe: branches and branchlets alternate, flexuoſe, ſmooth, ſpreading very much; leaves aggregate at the ends of the branchlets, petioled, oblong, acute, entire, above green and ſmooth, underneath pale and villoſe, an inch long. Flowers terminating, in a ſimple many-flowered umbel; peduncles a little hairy, unguicular; pedicels tomentoſe, about half the length. The Japoneſe uſe the wood for making ſoft bruſhes to clean their teeth with.

LINDERA is alſo the name of a genus in Adanſon, (Familles des Plantes, v. 2. 499.) by which he ſeems to have intended to honour Dr. Lindern. See LINDERNIA. His plant appears to be a Chærophyllum.

LIN'DERKREUZ, a town of Saxony, in the circle of Neuſtadt: eight miles north-weſt of Weyda.

LINDER'NIA, *f.* [ſo called by Allioni in honour of *Francis Balthazar von Lindern*, a phyſician at Straſburg, who appears to have graduated at Jena, where his inaugural diſſertation, *de Vermibus*, was publiſhed in 1707. As a botaniſt he is known from the following works; *Tournefortius Alſaticus*, publiſhed in 8vo. at Straſburg, in 1728; and *Hortus Alſaticus*, in 1747. The latter contains an account of the plants growing in the province of Alſatia, and eſpecially about Straſburg. Both the works are accompanied by plates.] In botany, a genus of the claſs didynamia, order angioſpermia, natural order of perſonatæ, (ſcrophulariæ, *Juſſ.*) The generic characters are—Calyx: perianthium five-parted: diviſions linear, ſharp, permanent. Corolla: one-petalled, ringent, two-lipped. Upper lip very ſhort, concave, emarginated; lower lip upright, three-cleft; the middle one rather larger. Stamina: filaments four, twin: the two ſuperior ones ſimple: the two inferior aſcending: with a terminal upright tooth; antheræ twin: the inferior ones ſublateral. Piſtillum: germ ovate; ſtyle filiform; ſtigma emarginated. Pericarpium: capſule oval, one-celled, two-valved. Seeds: numerous; receptacle cylindric.—*Eſſential Character.* Calyx five-parted; corolla ringent, with the upper lip very ſhort; ſtamina the two lower with a terminating tooth and a ſublateral anther; capſule one-celled.

Species. 1. Lindernia pyxidaria: leaves ſeſſile, quite entire; peduncles ſolitary. Root annual; ſtem ſmooth, ſquare, brittle, ſometimes branched and putting forth runners. Leaves ſmall, ſlightly crenate, like thoſe of Anagallis, oppoſite. Flowers axillary, ſolitary, on a long ſlender peduncle; calyx cut into five acute ſegments almoſt to the bottom; corolla pale blue. Native of Virginia, in watery and boggy places, flowering in July and Auguſt. Hence it has migrated into Europe, and is now found in like ſituations in Alſace and Piedmont.

2. Lindernia dianthera: leaves petioled, ovate-roundiſh, ſubſerrate; ſtem creeping. This alſo is an annual plant, a native of Hiſpaniola. Mr. Miller's deſcription has been already given under ERINUS procumbens, vol. vi. p. 903. It muſt have been cultivated by him before 1733, the year of Dr. Houſtoun's death.

3. Lindernia Japonica: leaves obovate, toothed; the loweſt petioled. Root annual; ſtem herbaceous, branched, weak: branches alternate, ſomewhat villoſe, from an inch to a ſpan in length. Native of Japan, where it flowers through the ſpring.

Theſe two ſpecies laſt deſcribed are ſaid by the ingenious Mr. Brown, in his Prodromus to the Flora of New Holland, to be certainly different in genus from L. pyxidaria. The ſame author deſcribes the three following

Fig 1. Lindsæa falcata. 2. Lindsæa trapeziformis.

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new ſpecies of Lindernia, all natives of the tropical part of New Holland, though he remarks that they do not altogether accord with the original character of this genus.

4. Lindernia alſinoides: leaves ovate, entire or ſlightly toothed; ſtem-leaves diſtant; floral ones ſmall. Tube of the corolla a little longer than the calyx. Stem erect.

5. Lindernia ſcapigera: leaves broad-ovate, nearly entire; lower ones crowded together; thoſe of the ſtem few and ſmall; floral leaves minute. Tube of the corolla twice as long as the calyx.

6. Lindernia ſubulata: leaves linear-awl-ſhaped, entire. Found by ſir Joſeph Banks only.

LINDERU'POE, a ſmall iſland of Denmark, in the Little Belt, near the coaſt of Sleſwick: eight miles weſt-ſouth-weſt of Aſſens, in the iſland of Funen.

LIN'DES NESS'. See NAZE.

LIN'DEWIESE, a town of Sileſia, in the principality of Neiſſe: eleven miles ſouth-eaſt of Neiſſe.

LIN'DICH, a town of the duchy of Wurzburg: five miles north of Volkach.

LIN'DISFARN. See HOLY ISLAND, vol. x. p. 248.

LIN'DO, a town in the iſland of Rhodes, anciently called *Lindus*, and celebrated for a temple dedicated to Minerva, whence that goddeſs had the ſurname of Lindia. This temple is ſaid to have been built by Danaus king of Egypt, on landing here in his flight from his own kingdom. A certain feſtival was celebrated annually in this city, not with bleſſings and prayers, as Lactantius informs us, but with curſes and imprecations; inſomuch that, if one good word eſcaped any of thoſe that were preſent, it was deemed a very bad omen, and the whole ceremony began anew. Lindus gave birth to Chares, the architect of the Coloſſus; and to Cleobulus, one of the ſeven wiſe men of Greece. It is fourteen miles ſouth-ſouth-weſt of Rhodes. Lat. 36. 17. N. lon. 27. 38. E.

LIN'DON, a ſmall iſland on the weſt ſide of the gulf of Bothnia. Lat. 60. 55. N. lon. 16. 57. E.

LIN'DOW, a town of Brandenburg, in the Middle Mark: thirty-three miles north-north-weſt of Berlin, and thirty-five north-north-eaſt of Brandenburg. Lat. 52. 57. N. lon. 13. E.

LIN'DOW, a town of Brandenburg, in the Middle Mark: eight miles ſouth-ſouth-weſt of Frankfort on the Oder.

LIN'DOW, a town of Hinder Pomerania: three miles weſt of Balm.

LIN'DRIDGE, a village in Worceſterſhire, to the weſt of Aberly, on the borders of Shropſhire near the river Teine; in whoſe church are ſeveral ancient monuments.

LINDSÆ'A, *ſ.* [ſo named by the late Mr. Dryander, after *Mr. John Lindſay*, an aſſiduous and ſkilful botaniſt of Jamaica, author of a paper, printed in the Tranſactions of the Linnæan Society, vol. ii. on the germination and raiſing of ferns from the ſeed; as well as of another paper, in the ſame volume, concerning the raiſing of ſeveral other cryptogamic plants in the ſame manner.] In botany, a genus of the claſs cryptogamia, order ſilices, or ferns. The generic characters are—Capſules annulated, in continued, nearly-marginal, lateral or terminal, lines; involucrum ariſing from the ſurface of the leaf, membranous, continued, entire or ſlightly crenate, at length reflexed, permanent.—*Eſſential Character.* Fructification in continued, nearly-marginal, lines; involucrum from the ſurface of the leaf, continued, ſeparating at the ſide towards the margin. Nine ſpecies are deſcribed in Mr. Dryander's original eſſay in the 3d vol. of the Linn. Tranſ. to which five are added by Dr. Swartz, one by M. Labillardiere, and one by Mr. Brown.

Species. 1. Lindſæa ſagittata: frond ſimple, arrow or heart ſhaped, with a taper point. Native of woods and fiſſures of rocks in Guiana. The root is creeping, bearing five or ſix fronds in a cluſter, near a ſpan high; the ſtalks black and ſhining; leaf ſmooth, with dichotomous veins all ſpringing from its baſe where the ſtalk is inſerted; line of fructification about a ſtraw's breadth from the edge. In ſir Joſeph Banks's Herbarium are ſix fronds of this ſpecies from M. Aublet, out of which only one is ſagittate; all the reſt are cordate.

2. Lindſæa reniformis: frond ſimple, kidney-ſhaped, obtuſe. This ſpecies comes very near to the foregoing, but differs in the frond being broader than it is long, and entirely without any apex. The ſinus at the baſis of the frond is alſo more open than in the foregoing. The ſtipes is of a gloſſy brown colour, as in the firſt. In both, the line of fructifications is at a diſtance from the margin. It is perhaps a variety. Native of Guiana and Surinam.

3. Lindſæa enſifolia: frond pinnate; leaflets alternate, ſword-ſhaped. From the iſland of Mauritius. Very nearly allied to the following.

4. Lindſæa lanceolata: frond pinnate; leaflets alternate, linear-lanceolate, ſometimes pinnatifid; ſtalk ſquare. Found by Labillardiere at Van Diemen's Land; by Mr. Brown in the tropical part of New Holland. Each leaflet is about one inch and a half or two inches long, nearly ſeſſile. If the dichotomous form and great diſtance of the lateral veins from each other, which are very remarkable characters in Labillardiere's plate, be correct, this ſpecies is eſſentially diſtinct from the laſt, whoſe veins compoſe an uniform ſort of network, interbranching with each other over the whole diſk of the leaf.

5. Lindſæa grandifolia: frond pinnate; leaflets oppoſite, elliptic-lanceolate, pointed; fructification half-way between the rib and the margin. Gathered in Malacca. A remarkable ſpecies. The frond conſiſts of two pair of oppoſite, ſlightly-ſtalked, leaflets, three or four inches long, with a terminal one ſtill longer. A line of fructification lies midway between the rib and the margin, on each ſide of the former; but none of the lines extend either to the baſe or the ſummit, by near an inch.

6. Lindſæa linearis; frond pinnate, linear; leaflets very numerous, fan-ſhaped, finely crenate and fructifying at their outer edge. Native of various parts of New Holland. About a foot high, with a dark poliſhed ſtalk, tapering and zigzag at the baſe. The leaflets are imperfectly oppoſite, deflexed, ſmall, broad and very ſhort, ſo as to give a remarkable narrowneſs to the ſhape of the whole frond.

7. Lindſæa falcata: frond pinnate; leaflets ſomewhat creſcent-ſhaped, entire, wavy. Gathered by Aublet in Guiana. About a foot high, with ſeveral pair of rather-cloſe leaflets, each about an inch long, ſlightly falcate backward, wavy at their upper edge, along which runs the line of fructification. The terminal leaflet is irregularly ſhaped. See the Plate, fig. 1.

8. Lindſæa heterophylla: frond pinnate; leaflets entire or ſerrated; the lower ones ſomewhat rhomboid-lanceolate, pointed; the upper rhomboid and very obtuſe; the uppermoſt confluent. Gathered by Mr. Robertſon at Malacca. A ſpan high, with very various ſlightly-diſtant leaflets, the longeſt of which meaſure ſcarcely an inch.

9. Lindſæa cultrata: frond pinnate; leaflets oblong, obtuſe, wavy at their upper margin; the terminal one elongated jagged. Native of the coaſt of Malabar. Frond about five inches high, with a green ſtalk, ten or twelve pair of alternate, ſtalked, horizontal leaflets, and a ſingularly-jagged, elongated, upright, terminal one.

10. Lindſæa flabellulata: frond pinnate: leaflets fan-ſhaped, finely toothed; the lower ones of the old plants compound. Native of China, Macao, and Sumatra. The leaflets are almoſt ſemi-circular at their fructifying edge, which ſtands outwards, not uppermoſt.

11. Lindſæa trapeziformis: frond doubly pinnate; leaflets quadrangular, abrupt; the lowermoſt fan-ſhaped. Gathered in Grenada by Smeathman. A large and handſome fern, each branch of whoſe frond conſiſts of above a dozen pair of oblong quadrangular leaflets, fructifying at their upper and outer margins. This is ſhown at fig. 2.

12. Lindſæa Guianenſis: frond doubly pinnate; its branches ſpreading, tapering; leaflets crowded; the lower lunate;

lunate; middle ones ſquare; upper fan-ſhaped. Gathered by Aublet at the bottoms of little hills in the foreſts of Guiana. This is a very handſome fern, two or three feet high, with a longiſh ſtalk, and about ſix pair of nearly-oppoſite, tapering, widely-ſpreading, branches, each compoſed of innumerable crowded light-green leaflets, more or leſs rounded in their upper or fore part, which is bordered with a broad brown line of fructification.

13. Lindſæa ſtricta: frond doubly pinnate; branches erect, contracted; leaflets trapeziform. Native of Jamaica, Porto Rico, and Panama. No figure of this ſpecies has yet appeared; but we may expect a figure and deſcription in profeſſor Swartz's larger work on his newly-diſcovered plants of the Weſt Indies.

14. Lindſæa media: frond doubly pinnate; deltoid; leaflets obovato-rhomboid, coriaceous; the lower ones lobed; the reſt entire; with a ſolitary uninterrupted line of fructification at the fore edge; the barren ones ſerrated at the top; ſtalk ſquare. Gathered by Mr. Brown in the tropical part of New Holland.

15. Lindſæa trichomanoides: frond doubly pinnate; leaflets membranous, linear-club-ſhaped, abrupt. Gathered at Duſky-bay, New Zealand, by Mr. A. Menzies. A delicate ſpecies, a ſpan high, with ſlender creeping downy roots, and ſmooth brown ſtalks. The leaflets vary in ſize and breadth, but are nearly wedge-ſhaped, decurrent and confluent, of a light-green colour, and ſomewhat membranous texture, ſo as much to reſemble a Trichomanes or Hymenophyllum; their ſummit abrupt, crenate or jagged.

16. Lindſæa tenera: frond triply pinnate, triangular; leaflets obovate, ſomewhat rhomboid, cut. Native of the Eaſt Indies; ſent to ſir Joſeph Banks by the Moravian miſſionaries from the iſland of Nicobar.

17. Lindſæa microphylla: frond lanceolate, triply pinnate; leaflets wedge-ſhaped, dilated and crenate at the top. Gathered near Port Jackſon, New South Wales, by Dr. White. This elegant ſpecies is a foot and a half, or more, in height; the whole frond of a narrow lanceolate figure, with ſlender, lax, pinnate, branches, and ſmall, light-green, dotted, leaflets, which are wedge-ſhaped, tapering at the baſe, always crenate at the ſummit, as is alſo the involucrum. Every leaflet is ſuddenly dilated oppoſite to each end of the fructifying line.

LIND'SAY (Sir David), a celebrated Scots poet, was deſcended of an ancient family, and born in the reign of king James IV. at his father's ſeat, called the Mount, near Cupar in Fifeſhire. He was educated at the univerſity of St. Andrew's; and, after making the tour of Europe, returned to Scotland in the year 1514. Soon after his arrival, he was appointed gentleman of the bedchamber to the king, and tutor to the young prince, afterwards James V. From the verſes prefixed to his Dream, we learn that he enjoyed ſeveral other honourable employments at court; but, in 1533, he was deprived of all his places, except that of Lion king at arms, which he held to the time of his death. His diſgrace was moſt probably owing to his invectives againſt the clergy, which are frequent in all his writings. He died in the year 1553. His poetical talents, conſidering the age in which he wrote, were not contemptible; but he treats the Romiſh clergy with great ſeverity, and writes with ſome humour; but, whatever merit might be formerly attributed to him, he takes ſuch licentious liberties with words, ſtretching or carving them for meaſure or rhime, that the Scots have a proverb, when they hear an unuſual expreſſion, that "there is nae ſic a word in a' Davie Lindſay." He is ſaid to have firſt introduced dramatic poetry into Scotland. One of his comedies was played in 1515. He was contemporary with John Heywood, the firſt Engliſh dramatic poet. His poems are printed in one ſmall volume; and fragments of his plays, in manuſcript, are in Mr. William Carmichael's collection.

There was another of this family, named David likewiſe, who was born about the year 1527; he was a zealous promoter of the reformation, and died in 1592. He wrote the hiſtory of Scotland from 1437 to 1542.

LIND'SAY (John), a learned nonjuring divine, who was educated at St. Mary-Hall, Oxford. He had a congregation in London, among whom he regularly officiated; and was employed by Mr. Bowyer as a corrector of the preſs. He tranſlated Maſon's Vindication of the Church of England; and wrote A ſhort Hiſtory of the Royal Succeſſion; and Remarks on Whiſton's Scripture Politics. He died in 1768, aged 82.

LIND'SEY, the third and largeſt diviſion of the county of Lincolnſhire in England. It had its name from Lincoln, the capital of the county, which ſtands in it, and by the Romans called *Lindum*, though the Normans called it *Nichol*. It gives title of earl to the family of Bertie. See LINCOLNSHIRE.

LIND'SEY (Theophilus), was born at Middlewich, in Cheſhire, June 20th, 1723, old ſtyle. His father, Mr. Robert Lindſey, was an opulent proprietor of the ſalt-works in that neighbourhood; his mother's name was Spencer, a younger branch of the Spencer family in the county of Buckingham. Theophilus was the ſecond of three children, and ſo named after his godfather, Theophilus earl of Huntingdon. From his early attachment to books, and the habitual ſerioufneſs of his mind, he was intended by his mother for the church. At the age of eighteen he was admitted of St. John's college, Cambridge. As ſoon as he had finiſhed his ſtudies, taken his firſt degree, and had been admitted to deacon's orders, he was nominated by ſir George Wheeler to a chapel in Spital-ſquare, London. Soon after this, he was, by the recommendation of the earl of Huntingdon, appointed domeſtic chaplain to Algernon duke of Somerſet; but an early death deprived Mr. Lindſey of his illuſtrious patron. In 1754, he accompanied the preſent duke of Northumberland to the continent; and on his return he ſupplied, for ſome time, the temporary vacancy of a good living in the north of England, called Kirkby-Wiſk; here he became acquainted with archdeacon Blackburne, and in 1760 married his daughter-in-law. From Kirkby Mr. Lindſey went to Piddletown in Dorſetſhire, having been preſented to the living of that place by the earl of Huntingdon; this, through the intereſt of the ſame patron, he exchanged, in 1764, for the vicarage of Catterick in Yorkſhire. Here he reſided nearly ten years, highly reſpected and beloved by the people committed to his charge.

At what time Mr. Lindſey began to diſapprove of the doctrines of the church of which he was a member, we are not told; but in the year 1771 we find him very zealouſly co-operating with archdeacon Blackburne, Dr. John Jebb, Mr. Wyvill, and others, in their exertions to obtain relief in the matter of *ſubſcription* as it is called. The object of theſe gentlemen was no leſs than this; "That the clergy might be permitted to hold their preferments in the eſtabliſhed church, without ſubſcribing to the articles of that church, but merely on the condition of teſtifying, generally, their belief in the holy ſcriptures." A petition to this effect was drawn up by Mr. Blackburne; and Mr. Lindſey, in a letter to Dr. Jebb, complains of the little ſucceſs he had met with in obtaining ſignatures to it; and of his unabating zeal to proceed by writing, and perſonal application: "I have offered (ſays he), and, if health be permitted, will carry the petition to Kendal in Weſtmoreland; to Newcaſtle in Northumberland; to York and Wakefield; all places at a very great diſtance from me, and in which labours I am alone, without any aſſiſtance whatever." The reſult of Mr. Lindſey's long journey was the addition of a few names only to the petition; it was, however, in the end ſigned by about two hundred perſons, and preſented to the houſe of commons on the 6th of February, 1772; but, after a long, very animated, and intereſting, debate, rejected by a large majority. After this event, ſo unfavourable to his hopes, Mr. Lindſey began to conſider what courſe he ſhould take to ſatisfy his conſcience; and in a ſhort time expli-

citly avowed his intention of reſigning his living. Early in the year 1773, an anonymous writer, under the ſignature of Lælius, ſtarted the ſubject of the impropriety of perſons remaining in the church who could not conſcientiouſly conform to her principles: to this Mr. Lindſey, in a letter to a friend, moſt feelingly alludes; "The ſubject of Lælius's laſt letter may give one many a pang. I cannot ſay that I have been for many years a day free from uneaſineſs about it." In the following November he wrote to the prelate of his dioceſe, informing him of his intention to quit the church, and ſignifying, that in a few days he ſhould tranſmit to him his deed of reſignation. The biſhop endeavoured to perſuade him to remain at his poſt; but he had made up his mind that duty required the ſacrifice, and he was reſolved to bear the conſequences. When the act was done, he ſaid he felt himſelf delivered from a load which had long laid heavy upon him, and at times nearly overwhelmed him. Previouſly to his quitting Catterick, Mr. Lindſey delivered a farewell addreſs to his pariſhioners, in which he ſtated his motives for quitting them in a ſimple and very affecting manner, pointing out the reaſons why he could no longer conduct nor join in their worſhip, without the guilt of continual inſincerity before God, and endangering the loſs of his favour for ever. He left Catterick about the middle of December; and, after viſiting ſome friends in different parts of the country, he arrived in London in January 1774, where he met with friends, who zealouſly patronized the idea which he entertained of opening a place of worſhip devoted entirely to unitarian principles. A large room was at firſt fitted up for the purpoſe in Eſſex-ſtreet in the Strand, which, after overcoming ſome legal obſtacles thrown out by the magiſtrates in the way of regiſtering it, was opened April 17, 1774. The ſervice of the place was conducted according to the plan of a liturgy which had been altered from that uſed in the eſtabliſhed church by the late Dr. Samuel Clarke, rector of St. James's, Piccadilly; but with ſtill farther alterations. Mr. Lindſey publiſhed the ſermon which he preached on the opening of his chapel, to which was added an account of the liturgy made uſe of. About the ſame time he publiſhed his Apology, of which ſeveral editions were called for in the courſe of a few years. This was followed by a ſtill larger volume, entitled A Sequel to the Apology, which was intended as a reply to his various opponents, and likewiſe to vindicate and eſtabliſh the leading doctrines which he profeſſed, and on account of which he had given up his preferment in the church. This work was publiſhed in 1776; and in 1778 he was enabled, by the aſſiſtance of his friends, to build the chapel of Eſſex-ſtreet, and to purchaſe the ground on which it ſtands. Till the ſummer of 1793, Mr. Lindſey, with the aid of his friend the Rev. Dr. Diſney, conducted the ſervices of the place, upon ſtrict unitarian principles, to a reſpectable and numerous congregation. He then reſigned the whole into the hands of his very able coadjutor, notwithſtanding the earneſt wiſhes of his hearers that he ſhould ſtill continue a part of the ſervices. Though he had quitted the duties of the pulpit, he continued to labour in the cauſe, by his publications, till he had attained his eightieth year. About that time Mr. Belſham propoſed ſome more alterations in the unitarian liturgy, in which Mr. Lindſey concurred; and Mr. B. became miniſter.

Mr. Lindſey died on the third of November, 1808, in the 86th year of his age. The following is a correct liſt of his publications. 1. Farewell Addreſs to the Pariſhioners of Catterick, 1773. 2. Apology on reſigning the Vicarage of Catterick, 1774. 3. Sequel to the Apology, 1776. 4. Sermon preached at the Opening of the Chapel in Eſſex-ſtreet, 17th of April, 1774. 5. Book of Common Prayer reformed for the Uſe of the Chapel in Eſſex-ſtreet, with Hymns, 1774. 6. Sermon preached in Eſſex-ſtreet on opening the new Chapel, 29th of March, 1778. 7. Two Diſſertations: On the Preface to St. John's Goſpel; and, On Praying to Chriſt; 1779. 8. Catechiſt, or an Enquiry concerning the only true God and Object of Worſhip; 1781. 9. Hiſtorical View of the State of the Unitarian Doctrine and Worſhip; 1783. 10. *Vindiciæ Prieſtleinæ*; an Addreſs to the Students of Oxford and Cambridge; 1788. 11. Second Addreſs to the ſame, 1790. 12. Examination of Mr. Robinſon's Plea for the Divinity of Chriſt; 1785. 13. Liſt of Falſe Readings and Miſtranſlations of the Scriptures; 1790. 14. Conſiderations on the Expediency of Reviſing the Liturgy, by a Conſiſtent Proteſtant; 1790. 15. Converſations on Chriſtian Idolatry; 1791. 16. Sermon on Forms of Prayer; 1793. 17. Sermon addreſſed to the Congregation in Eſſex-ſtreet, on reſigning the Paſtoral Office; 1793. 18. Converſations on the Divine Government, ſhowing that every thing is from God, and for good to all, 1802. 19. Sermons, 2 vols. publiſhed after his death. *Monthly Mag.* vol. xxvi.

LIN'DUM, in ancient geography, a town of Britain, in the country of the Coretani, which by the 5th Iter of Antonine is ſituated between Cauſennæ, or Ancaſter, and Segelocum, or Littleborough. This is now univerſally agreed to be Lincoln, which was a Roman colony, and a place of great importance in ancient times; though Baxter, without ſufficient authority, contends that Lindum was the *Lendinium* in which ſo many of the Romans were ſlain by the Britons in their great revolt under Boadicea. See LINCOLN and LINCOLNSHIRE.

LIN'DUM was alſo the name of a place in the country of the Dumnii; which, in both the ſound and ſignification of the name, bears ſo great a reſemblance to Linlithgow, that it is moſt probably the ſame place, though its ſituation does not exactly agree with that aſſigned by Ptolemy, who is far from being correct in this particular.

LIN'DUS. See LINDO, p. 741.

LIN'DY, a town of Africa, in Querimba. Lat. 9. 58. S. lon. 41. 4. E.

LINE, *ſ.* [*linea*, Lat.] Longitudinal extenſion.—Even the planets, upon this principle, muſt gravitate no more towards the ſun; ſo that they would not revolve in curve *lines*, but fly away in direct tangents, till they ſtruck againſt other planets. *Bentley.*—A ſlender ſtring:

Well ſung the Roman bard; all human things,
Of deareſt value, hang on ſlender ſtrings:
O ſee the then ſole hope, and in deſign
Of heav'n our joy, ſupported by a *line*. *Waller.*

A thread extended to direct any operations:

We as by *line* upon the ocean go,
Whoſe paths ſhall be familiar as the land. *Dryden.*

The ſtring that ſuſtains the angler's hook:

Victorious with their *lines* and eyes,
They make the fiſhes and the men their prize. *Waller.*

Lineaments, or marks in the hand or face.—I ſhall have good fortune; go to, here's a ſimple *line* of life; here's a ſmall trifle of wives. *Shakeſpeare.*

Long is it ſince I ſaw him,
But time hath nothing blurr'd thoſe *lines* of favour
Which then he wore. *Shakeſpeare.*

Delineation; ſketch.—You have generous thoughts turned to ſuch ſpeculations; but this is not enough towards the raiſing ſuch buildings as I have drawn you here the *lines* of, unleſs the direction of all affairs here were wholly in your hands. *Temple.*—The inventors meant to turn ſuch qualifications into perſons as were agreeable to his character, for whom the *line* was drawn. *Pope.*—Contour; outline:

Oh laſting as thoſe colours may they ſhine,
Free as thy ſtroke, yet faultleſs as thy *line!* *Pope.*

As much as is written from one margin to the other; a verſe.—In the preceding *line*, Ulyſſes ſpeaks of Nauſicaa, yet immediately changes the words into the maſculine gender. *Broome.*

In moving *lines* theſe few epiſtles tell
What fate attends the nymph who loves too well. *Garth.*

Rank of ſoldiers.—They pierce the broken foe's remoteſt *lines*. *Addiſon.*—Work thrown up; trench:

Now ſnatch an hour that favours thy deſigns,
Unite thy forces, and attack their *lines*. *Dryden.*

Method; diſpoſition:

The heavens themſelves, the planets, and this center,
Obſerve degree, priority, and place,
Inſiſture, courſe, proportion, ſeaſon, form,
Office and cuſtom, in all *line* of order. *Shakeſpeare.*

Extenſion; limit:

Eden ſtretch'd her *line*
From Auran eaſtward to the royal tow'rs
Of great Seleucia. *Milton's Paradiſe Loſt.*

Equator; equinoctial circle:

When the ſun below the *line* deſcends,
Then one long night continued darkneſs joins. *Creech.*

Progeny; family, aſcending or deſcending.—They hail'd him father to a *line* of kings. *Shakeſpeare.*—Some *lines* were noted for a ſtern, rigid virtue, ſavage, haughty, parſimonious and unpopular; others were ſweet and affable. *Dryd.*

He ſends you this moſt memorable *line*,
In ev'ry branch truly demonſtrative,
Willing you overlook this pedigree. *Shakeſpeare's Henry V.*

One tenth of an inch.—[In the plural] A letter.—I receive your *lines*, my dear princeſs. *Suckling.*—Lint or flax.—In diaper, in damaſk, or in *lyne*. *Spenſer's Muiopotmos.*

LINES in muſic. Three, four, five, or ſix, horizontal and parallel lines compoſe the ſtaff, upon which and between which all muſic, ſince the invention of counterpoint, has been written. The ſtaff in canto fermo, or plain ſong, conſiſted only of a ſingle line, drawn through or between the points or dots of different elevation, to aid the prieſts in chanting; then two, three, and finally four, lines compoſed the ſtaff for Gregorian notes in the miſſals and maſs-books, in Roman-catholic churches; and theſe have never been increaſed. Secular muſic for the virginal, ſpinnet, harpſichord, and organ, from the time of queen Elizabeth to the end of the ſeventeenth century, was written on a ſtaff of ſix lines, both in the treble and the baſe. At the beginning of the laſt century, all muſic, except the tablature for the lute and guitar, began to be conſtantly written on and between five lines, called *ſpaces*, with the occaſional uſe of ſhort additional lines, for notes that go higher or lower than the regular ſtaff. The lines and ſpaces in all muſic are counted from the bottom, ſo that the loweſt is the firſt, the higheſt in canto fermo the fourth, and in figurative muſic the fifth. See the article MUSIC.

The LINE is a term frequently uſed to diſtinguiſh the regular army of Great Britain from other eſtabliſhments of a leſs military nature. All numbered or marching regiments are called *the line*. The guards are an exception to this rule. The marines, fencible, militia, volunteer, and yeomanry, corps, together with the life-guards, are not comprehended under this denomination. The term line, however, has not been applied with ſufficient preciſion and diſcrimination. Strictly ſpeaking, line, in military matters, denotes that ſolid part of an army which is called the main body, and has a regular formation from right to left. Upon the whole, it may be obſerved, that the term is generally miſapplied; and that it cannot, with ſtrict propriety, be uſed to diſtinguiſh any particular eſtabliſhment from another.

LINE *of* DEMARCATION, or *Alexandrian Line*, is a meridian paſſing over the mouth of the river Maragnon, and by the capes of Houmas and Malabrigo; ſo called from pope Alexander VI. who, to end the diſputes between the crowns of Caſtile and Portugal about their boundaries, in 1493, drew an imaginary line on the globe, which was to terminate the pretenſions of each. By which partition the Eaſt Indies fell to the lot of the Portugueſe; and the Weſt Indies, then newly diſcovered, to the Caſtilians.

To LINE, *v. a.* [ſuppoſed by *Junius* from *linum*, linings being often made of linen.] To cover on the inſide.—A box *lined* with paper to receive the mercury that might be ſpilt. *Boyle.*—To put any thing in the inſide: a ſenſe rather ludicrous.—The charge amounteth very high for any one man's purſe, except *lined* beyond ordinary, to reach unto. *Carew.*—Her women are about her: what if I do *line* one of their hands? *Shakeſpeare's Cymbeline.*

He, by a gentle bow, divin'd
How well a cully's purſe was *lin'd*. *Swift.*

To guard within.—Notwithſtanding they had *lined* ſome hedges with muſqueteers, they were totally diſperſed. *Clarendon.*—To ſtrengthen by inner works:

Line and new repair our towns of war
With men of courage, and with means defendant. *Shakeſp.*

To cover with ſomething ſoft:

Son of ſixteen,
Pluck the *lin'd* crutch from thy old limping ſire. *Shakeſp.*

To double; to ſtrengthen with help.—The two armies were aſſigned to the leading of two generals, both of them rather courtiers, and aſſured to the ſtate, than martial men; yet *lined* and aſſiſted with ſubordinate commanders of great experience and valour. *Bacon.*

My brother Mortimer doth ſtir
About his title, and hath ſent for you
To *line* his enterpriſe. *Shakeſpeare's Henry IV.*

To impregnate: applied to animals generating:

Thus from the Tyrian paſtures *lin'd* with Jove
He bore Europa, and ſtill keeps his love. *Creech.*

LIN'EA, *ſ.* [Latin.] A line.

LIN'EA AL'BA, [from the Latin *linea*, a line, and *alba*, white.] In anatomy, the complication of tendons in the oblique muſcles of the abdomen.

LIN'EAGE, *ſ.* [*lignage*, Fr.] Race; progeny; family, aſcending or deſcending.—This care was infuſed by God himſelf, in order to aſcertain the deſcent of the Meſſiah, and to prove that he was, as the prophets had foretold, of the tribe of Judah, and of the *lineage* of David. *Atterbury.*

No longer ſhall the widow'd land bemoan
A broken *lineage*, and a doubtful throne;
But boaſt her royal progeny's increaſe,
And count the pledges of her future peace. *Addiſon.*

LIN'EAL, *adj.* [*linealis*, from *linea*, Lat.] Compoſed of lines; delineated.—When any thing is mathematically demonſtrated weak, it is much more mechanically weak; errors ever occurring more eaſily in the management of groſs materials than *lineal* deſigns. *Wotton.*—Deſcending in a direct genealogy.—To re-eſtabliſh, de facto, the right of *lineal* ſucceſſion to paternal government, is to put a man in poſſeſſion of that government which his fathers did enjoy, and he by *lineal* ſucceſſion had a right to. *Locke.*—Hereditary; derived from anceſtors:

Peace be to France, if France in peace permit
Our juſt and *lineal* entrance to our own. *Shakeſpeare.*

Allied by direct deſcent:

O that your brows my laurel had ſuſtain'd!
Well had I been depos'd if you had reign'd:
The father had deſcended for the ſon;
For only you are *lineal* to the throne. *Dryden.*

LIN'EALLY, *adv.* In a direct line.—If he had been the perſon upon whom the crown had *lineally* and rightfully deſcended, it was good law. *Clarendon.*

LIN'EAMENT, *ſ.* [Fr. from *lineamentum*, Lat.] Feature; diſcriminating mark in the form.—There are not more differences in men's faces, and the outward *lineaments* of their bodies, than there are in the makes and tempers of

their

their minds; only there is this difference, that the diſtinguiſhing characters of the face, and the *lineaments* of the body, grow more plain with time, but the peculiar phyſiognomy of the mind is moſt diſcernible in children. *Locke.*—The utmoſt force of boiling water is not able to deſtroy the ſtructure of the tendereſt plant; the *lineaments* of a white lily will remain after the ſtrongeſt decoction. *Arbuthnot.*

Man he ſeems
In all his *lineaments*, though in his face
The glimpſes of his father's glory ſhine. *Milton.*

LIN'EAR, *adj.* [*linearis*, Lat.] Compoſed of lines; having the form of lines.—Where-ever it is freed from the ſand-ſtone, it is covered with *linear* ſtriæ, tending towards ſeveral centres, ſo as to compoſe flat ſtellar figures. *Woodward on Foſſils.*—In natural hiſtory, narrow, and nearly of an uniform breadth; whether applied to the form of a complete animal, or to the prominences, or indentations.

LIN'EATE, *adj.* Marked with lines. In botany, it is particularly applied to a leaf having the ſurface ſlightly marked longitudinally with depreſſed parallel lines. *Lined* is improper, as being uſed in a different ſenſe. This term has been ſometimes confounded with *linear*, which reſpects the form of the leaf. The terms being ſo alike, and this occurring ſeldom, it may perhaps be better to write "a leaf marked with lines." *Martyn's Language of Botany.*

LINEA'TION, *ſ.* [from *linea*, Lat.] The draught of a line, the appearance of lines.

LI'NEHAM, a village in Oxfordſhire, not far from Chadlington. Here is a barrow, ſuppoſed to have been the work of the Danes. Between this place and Pudlicot, a ſubterraneous paſſage leads down to Evenlode river.

LIN'EN, a town of Germany, in the county of Tecklenburg: ſeven miles ſouth-ſouth-eaſt of Tecklenburg.

LIN'EN, *ſ.* [*linum*, Lat.] Cloth made of hemp or flax.—Here is a baſket, he may creep in; throw foul *linen* upon him, as if going to bucking. *Shakeſpeare.*

Unſeen, unfelt, the fiery ſerpent ſkims
Between her *linen* and her naked limbs. *Dryden.*

Linen was not worn by the Jews, Greeks, or Romans, as any part of their ordinary dreſs. Under-tunics of a finer texture ſupplied the place of ſhirts: hence the occaſion for frequent bathing. Alexander Severus was the firſt emperor who wore a ſhirt; but the uſe of ſo neceſſary a garment did not become common till long after him.

The linen-manufacture was probably introduced into Britain with the firſt ſettlements of the Romans. The flax was certainly firſt planted by that nation in the Britiſh ſoil. The plant itſelf indeed appears to have been originally a native of the eaſt. The woollen-drapery would naturally be prior in its origin to the linen; and the fibrous plants from which the threads of the latter are produced, ſeem to have been firſt noticed and worked by the inhabitants of Egypt. In Egypt, indeed, the linen-manufacture appears to have been very early; for even in Joſeph's time it had riſen to a conſiderable height. From the Egyptians the knowledge of it proceeded probably to the Greeks, and from them to the Romans. Even at this day the flax is imported among us from the eaſtern nations; the weſtern kind being merely a degenerate ſpecies of it.

The linen-trade of Europe is chiefly in the hands of the Ruſſians, Germans, Swiſs, Flemings, Hollanders, and French. Linen is the ſtaple of Ireland, as it was of Scotland; but it was long neglected. The Scots at preſent are not, however, in ſo bad a ſituation in reſpect to this trade, as the French were in the reign of king Henry IV. or the Iriſh at the revolution; where, by the force of public encouragement, it has arrived to an extraordinary pitch, and it is to be hoped will daily advance; the Scots have it not to begin, and they are improving and extending it to a very great degree. The balance of trade between England and Scotland, and England and Ireland, is on the Engliſh ſide; and ſo far as England and its dependencies can be ſerved with linen from Scotland and Ireland, inſtead of Holland, France, Germany, and Ruſſia, ſo far will England be a gainer by this change in the courſe of trade. The more linen the Scots and Iriſh can ſell in England, the more of the Engliſh commodities will they be able to purchaſe; and it may be reaſonably ſuppoſed that their demands from England will always increaſe in proportion to the increaſe of their people and linen-manufactures. It is then evidently the intereſt of England to promote and advance the manufacture of linen in Scotland and Ireland, and to give them all reaſonable advantages in the trade, in preference to foreigners, where the balance of trade is againſt us; and this ſeems to be the ſenſe of the nation, ſince all foreign linen, for home-conſumption, pays a duty. *Poſtlethwayte's Dict. Com.*

The linen-trade of this country is regulated by ſeveral ſtatutes. No perſon ſhall put to ſale any piece of dowlas linen, &c. unleſs the juſt length be expreſſed thereon, on pain of forfeiting the ſame. 28 *Hen.* VIII. *c.* 4. Uſing means whereby linen cloth ſhall be made deceitfully, incurs a forfeiture of the linen, and a month's impriſonment. 1 *Eliz. c.* 12. By ſtat. 43 Geo. III. c. 69. all former duties on linen cloth, ſilks, cottons, and calicoes, are repealed; and in lieu thereof other duties are impoſed upon all goods which ſhall be printed, ſtained, painted, or dyed, in Great Britain, according to a ſchedule annexed to the act; and by 50 Geo. III. c. 26. certain export-duties are impoſed; the ſaid duties to be paid by the printer, ſtainer, painter, or dyer. By 49 Geo. III. c. 98. certain duties and cuſtoms are impoſed upon French linens, (or lawns.) By 43 Geo. III. c. 69. every calico printer, and every printer, painter, or ſtainer, of linens, cottons, or ſtuffs, ſhall pay annually for a licence 10l. The printing or ſtaining of calicoes muſt be for exportation; becauſe, by 7 Geo. I. c. 7. the uſe of printed, painted, ſtained, or dyed, calico, for wearing-apparel, is prohibited, on pain of 5l. to the informer, on conviction; and a perſon offering ſuch for ſale, unleſs for exportation, forfeits 20l. half to the informer, and half to the poor. This prohibition, however, does not extend to calicoes dyed wholly blue; and it ſhall be lawful to uſe ſtuff made of linen yarn and cotton wool manufactured and printed or painted in Great Britain, provided the warp thereof be wholly linen-yarn. 9 *Geo.* II. *c.* 4. By 14 Geo. III. c. 72. it is enacted that no greater duty ſhall be paid for ſtuffs made of raw cotton wool within this kingdom than 3½d. a yard; 43 *Geo.* III. *c.* 69. and that any perſon may uſe the ſame in apparel or otherwiſe; and every piece is to have three blue ſtripes in both ſelvedges, and to be ſtamped at each end with a ſtamp provided by the officers of exciſe; and, inſtead of the word *Calico*, uſed for foreign calicoes, each piece ſhall be marked with the words *Britiſh Manufactory*. Calicoes, &c. that ſhall not have three blue threads in the ſelvedge, ſhall be deemed foreign calicoes; and, on being printed or dyed, ſhall be marked at end with the words "Foreign Calicoes for Exportation;" and every dealer who ſhall have any ſuch goods in his cuſtody (except dyed throughout of one colour), or any ſtuffs made wholly of cotton wool wove in Great Britain, commonly called "Britiſh Manufactory," (muſlins, neckcloths, and fuſtians, excepted,) not having ſuch blue threads, ſhall forfeit 200l. and every ſuch piece found in his cuſtody. 25 *Geo.* III. *c.* 72. The owner or printer of any piece or remnant of coſſac or foreign muſlins and calicoes ſhall, before they be preſented to the officer, mark the ſame at both ends with a frame-mark, containing his name and place of abode, and alſo the name by which ſuch goods are commonly known (except ſuch as are dyed throughout of one colour), on pain of forfeiting 10l. for every piece or remnant. The owner or printer of any linens or ſtuffs made of cotton mixed, or wholly of cotton wool wove in Great Britain, called "Britiſh Manufactory or Muſlins," ſhall mark the ſame at both ends (fuſtians, velvets, velverets, dimities, and other figured ſtuffs, excepted) with a mark containing his name and place of abode, and the name and quality of ſuch goods, with the ready-money price thereof, before the ſame are preſented

to the officer in order to be printed or dyed; on pain of forfeiture and ſeizure, and 20l. and, if any ſuch piece be marked at a leſs price than the real value, the ſame may be ſeized and forfeited, and the owner ſhall forfeit 20l. If the frame-mark be defaced, the ſame ſhall be renewed on notice; but, if any perſon ſhall counterfeit or forge any frame-work, he ſhall forfeit 100l. and, if any perſon counterfeit the ſtamp, it is felony without benefit of clergy. 25 *Geo.* III. *c.* 72. 27 *Geo.* III. *c.* 31.

By the 4 Geo. III. c. 37. which eſtabliſhes the corporation of the Engliſh Linen Company for making cambrics and lawns, it is enacted, that the commiſſioners of exciſe, where there ſhall be a manufactory of cambrics or lawns, or of goods known under that denomination, ſhall appoint the ſuperviſor or other officer to ſeal the ſame, for which they ſhall have ſuch fee as the commiſſioners ſhall appoint; the manufacturer to give notice in writing to the officer, of the finiſhing of every piece, before it is taken out of the loom, who ſhall ſeal the ſame at both ends; on pain that ſuch manufacturer, taking the ſame out of the loom without having given ſuch notice, and having the ſame ſealed as aforeſaid, ſhall forfeit 5l. and every ſuch piece ſhall be forfeited, and may be ſeized by any officer of the cuſtoms or exciſe; and the officer, with convenient ſpeed after notice, ſhall mark and alſo number each piece; and make entry in writing, in books to be provided at the expenſe of the manufacturer, of the number ſet to each piece, the length thereof, and the number of threads in the warp, on pain of 10l. If the officer ſhall mark any not made in England, or after the ſame is taken out of the looms, he ſhall forfeit 50l. for each piece to him who ſhall ſue, and forfeit his office, and be incapacitated to hold any other office of truſt under the crown. If any perſon ſhall offer to the officer any bribe, he ſhall forfeit 50l. and if he ſhall, by bribery or otherwiſe, prevail upon the officer to commit ſuch offence, he ſhall forfeit 100l. and ſtand in the pillory two hours. And the officer ſhall yearly, in the month of June, tranſmit to the commiſſioners an account of all goods which he ſhall have ſtamped, and a copy of the entries made, on pain of diſmiſſion; and he, or his executors, ſhall deliver up the ſeals, on demand from the commiſſioners, on pain of 200l. Cambrics and lawns made in England, found unſtamped, ſhall be forfeited, and may be ſeized by any officer of the cuſtoms or exciſe, and after condemnation ſhall be ſold; and every perſon who ſhall ſell or expoſe to ſale, or have in his cuſtody for that purpoſe, any cambrics or lawns made in England unmarked, ſhall forfeit 200l. ſuch goods not to be ſold, or worn in this kingdom, but to be exported, and to be ſold only on condition of exportation. Nor ſhall they be delivered out of the warehouſe, until bond be given to the ſatisfaction of the collector, in double penalty of the goods, that the ſame ſhall be exported, and not re-landed. To counterfeit the ſeal appointed by this act, or import any foreign cambrics or lawns having ſuch counterfeit mark thereon, or expoſe the ſame to ſale, knowing the ſtamp thereon to be counterfeited, is felony without benefit of clergy. All goods condemned in purſuance of this act, and all pecuniary forfeitures (not otherwiſe directed), ſhall be ſued for and recovered in any of his majeſty's courts, in the name of the attorney-general, or of ſuch officer as aforeſaid; and applied, after deduction of charges, half to the king, and half to the officer ſeizing, informing, or ſuing, according to the directions of this act. The penalties may be ſued for, levied, and mitigated, as by the laws of exciſe, or in the courts at Weſtminſter; and employed half to the king, and half to him that ſhall diſcover, inform, or ſue. 10 *Anne*, *c.* 19. 24 *Geo.* II. *c.* 40. 25 *Geo.* III. *c.* 72. All utenſils and inſtruments for printing, painting, ſtaining, or dying, ſuch goods, in cuſtody of the ſaid perſon, or any other, ſhall be liable to all arrears of the duty, and to all penalties concerning the ſame, in like manner as if ſuch perſon was the lawful owner. 10 *Anne*, *c.* 19. 25 *Geo.* III. *c.* 72. 28 *Geo.* III. *c.* 37.

Stealing of linen, fuſtian, cotton goods, &c. from whitening-grounds or drying houſes, to the value of 10s. or knowingly buying or receiving ſuch ſtolen goods, was felony without benefit of clergy. 18 *Geo.* II. *c.* 27. This has been lately repealed; (ſee the article LARCENY, p. 242.) but breaking into houſes, ſhops, &c. and deſtroying any linen cloth, or implements uſed in the manufacturing of it, is ſtill a capital offence. 4 *Geo.* III. *c.* 37.

The proprietors of new patterns, in printed linens, &c. have the ſole right of printing them for two months. 27 *Geo.* III. *c.* 38. See LITERARY PROPERTY.

Glazing is a part of the general proceſs of finiſhing goods for the market; and is carried on by thoſe who are generally called cloth-lappers, or calender-men. The glazing is done by putting on the cloth a ſmall quantity of white wax, ſuch as uſed in the manufacture of wax candles, and the gloſs is afterwards effected by the friction of any ſmooth body on the ſurface of the cloth. By the ordinary proceſs the apparatus is very ſimple, conſiſting merely of a ſmooth table, a little inclined towards the operator, like a common writing-deſk, upon which the cloth to be glazed is ſpread ſmoothly, and drawn over, as occaſion requires, from one end of the piece to the other. Above this is a lever, ſuſpended from any convenient fixture to the roof, the lower end hanging in contact with the cloth; and, by moving this backward and forward, the neceſſary friction is produced. The end of the lever next to, and in contact with, the cloth, is faced with a ſmooth piece of flint or pebble, finely poliſhed, and of a cylindrical form, the under ſurface of which is in contact with the cloth. This lever being drawn backward and forward by the operator's hands, the whole cloth is poliſhed or glazed in ſucceſſion, the joint at the top of the lever being fitted into a horizontal ſlider, which allows the poliſher to be moved from one ſide of the cloth to the other. In this way of glazing, the whole is performed by the power of a man's arms and hands; but, from the poſition of his body being conſtantly inclined over the table, it is found to be a very laborious and fatiguing operation. The great number of people neceſſarily employed by this operation, and the difficulty of getting large quantities of goods rapidly glazed to anſwer the demands of hurried ſhipments for exportation, ſuggeſted lately the idea of a more ſpeedy and efficacious manner of performing the operation of glazing by an improvement and alteration in the conſtruction of the common five-bowl calender. This improvement was planned and executed at the extenſive works of the late Mr. John Miller of Glaſgow, who furniſhed the inventor with the means of carrying his plan into effect; and, upon a proof of its efficacy on trial, his majeſty's royal letters patent for its excluſive uſe to the inventor or his aſſignees within Scotland were obtained in the uſual form. Two or three machines were then conſtructed for his own works, to which, as far as we know, they are ſtill confined; and theſe machines have given the moſt univerſal ſatisfaction to all who have had their goods glazed by them, while at the ſame time an immenſe reduction of labour has been effected by their uſe.

The patent glazing-machine, like the common calender, conſiſts of five bowls, or cylinders, four of which are of caſt iron, ſmoothly turned, and finely poliſhed on the ſurface, and the large or intermediate cylinder is generally of paſteboard on an iron axis. In the common operation of ſmoothing by means of the calender, the velocity of the cylinders revolving upon their own axes is in the ratio of their reſpective diameters, ſo that an equal quantity of ſuperficies is conſtantly expoſed of each. In the glazing-calender, or machine, it is only neceſſary that the motions of one of the cylinders ſhould be ſo much accelerated as to produce the friction neceſſary to effect the glazing by rubbing againſt the other cylinders with which it is in contact, ſo as not to be liable to tear or otherwiſe injure the fabric. The ſimplicity of this machine, the regularity of the gloſs which it gives, and the immenſe ſaving of labour, are powerful recommendations in its favour. The great quantity alſo which may be effected by it in a very limited time, renders it peculiarly adapted to meet the occaſional

casional exigencies of the exporter; and the additional advantage of its facility of adaptation to the purposes of the common calender, when glazing is not required, adds to its value and utility. Upon pressing occasions, one of these engines, by being constantly employed night and day, will glaze from 600 to 800 pieces of cloth, of 28 yards each, weekly.

As to the dying of linens, see the article DYING, vol. vi. p. 161. The late Dr. Smellie has recommended the following method of marking linen, so as not to wash out: Take vermilion, as much as will lie on a half-crown piece, of the salt of steel a piece about the size of a small nutmeg; grind or levigate them well together with linseed oil; the composition may be diluted or thickened at pleasure.

Dr. Lewis mentions a manufacture established in London for embellishing linen with flowers and ornaments of gold-leaf. The linen, he says, looks whiter than most of the printed linens; the gold is extremely beautiful, and bears washing well. The doctor informs us, that he had seen a piece which he was credibly informed had been washed three or four times, with only the same precautions which are used for the finer printed linens; and on which the gold continued entire, and of great beauty. Concerning the process used in this manufacture, he gives us no particulars.

LIN'EN, *adj.* Made of linen.—A *linen* stock on one leg, and a kersey boot-hose on the other, gartered with a red-and-blue list. *Shakespeare.*—Resembling linen:

Death of thy soul! those *linen* cheeks of thine
Are counsellors to fear. What soldiers, whey-face?
Shakespeare.

LIN'EN-DRAPER, *s.* He who deals in linen.

LIN'EN-MAN, *s.* One that makes up linen:

I have in a table
With curious punctuality set down
To a hair's breadth, how low a new-stamp'd courtier
May vail to a country gentleman, and, by
Gradation, to his merchant, mercer, draper,
His *linen-man* and taylor. *Massinger's Emp. of the East.*

LIN'ENER, *s.* One that makes up linen into dress.—If she love good clothes or dressing, have your learned council about you every morning, your French taylor, barber, *linener*, &c. *B. Jonson's Epicæne.*

LI'NER, or LI'VER, a river in Cornwall, which runs into the Tamar opposite Tovey.

LIN'FIELD, a village in Sussex, eight miles south of East Grinstead; with three fairs; May 6, Whit-Tuesday, and October 28.

LIN'DFORD, a village in Norfolk, between Mundford and Buckenham-Parva, with a passage over the river Ickburgh. In 1720, two Roman urns were dug up here, as was another near it in 1735, with pieces of bones and ashes. The scite of its church, which has been long demolished, is enclosed, and planted with Scotch firs. This place is assessed to the land-tax at 189l. 16s. 8d.

LING, *s.* [*ling*, Islan.] Heath. See ERICA. vol. vi. p. 894. This sense is retained in the northern counties; yet Bacon seems to distinguish them.—Heath, and *ling*, and sedges. *Bacon's Natural History.*

By 4 and 5 Will. c. 23. no person shall, on any mountains, hills, heaths, moors, forests or chases, or other wastes, burn, between February 2 and June 24, any grig, ling, heath, furze, goss, or fern, on pain of being committed to the house of correction, for any time not exceeding one month, nor less than ten days, there to be whipped and kept to hard labour.

LING, *s.* [*linghe*, Dut.] A kind of sea-fish. See GADUS molva, vol. viii. p. 159, 60.—Our English bring from thence good store of fish, but especially our deepest and thickest *ling*, which are therefore called island *lings*. *Abbot.*

When harvest is ended, take shipping, or ride,
Ling, salt fish, and herring, for Lent to provide. *Tusser.*

LING. The termination notes commonly diminution; as, kit*ling*; and is derived from *klein*, German, *little*; sometimes a quality; as, first*ling*; in which sense Skinner deduces it from *langen*, old Teutonic, to belong.

LING, a city of China, of the second rank, in Chen-si, on the river Hoang: five hundred miles west-south-west of Pekin. Lat. 38. 10. N. lon. 105. 39. E.

LING-CHAN', a town of Corea: seventy-six miles east-north-east of Han-tcheou.

LING-CHAN', a town of China, of the third rank, in Quang-tong: forty-seven miles north of Lien-tcheou.

LING-CHE', a town of China, of the third rank, in Chan-si, near the river Fuen: twenty-five miles south of Fuen-tcheou.

LING-CHOU'I, a town of China, of the third rank, in Se-tchuen: fifteen miles south-east of Youang-gnan.

LING-CHOU'I, a town of China, of the third rank, in the island of Hai-nan: twenty-five miles south-west of Houan.

LING-NAN', a city of China, of the first rank, in Yun-nan: 1217 miles south-south-west of Pekin. Lat. 23. 38. N. lon. 102. 42. E.

LING-PON', a town of China, of the third rank, in Chan-si: seventeen miles west-north-west of Kiai.

LING-QUAN-Y', a town of China, in Chen-si: fifty miles south-west of Si-ngan.

LING-STA'I, a town of China, of the third rank, in Chen-si: thirty-seven miles north of Fong-tsiang.

LING-TA'O, a city of China, of the first rank, in Chen-si, on the Tie-tsan river, which falls into the Hoang-ho, or Yellow river. Great quantities of gold are found in the sand of the neighbouring rivers and brooks. The country is very mountainous, abounding with wild bulls, and a certain kind of animal resembling the tiger, whose skins are very valuable. The valleys are covered with corn, and those that are near the rivers with cattle. In short, the whole territory is very fruitful. It is 672 miles west-south-west of Pekin. Lat. 25. 22. N. lon. 106. 34. E.

LING-TCHE'OU, a town of Corea: twenty-eight miles south-south-west of Koang-tcheou.

LING-TCHI', a town of China, of the third rank, in Chan-tong, on the river Tchi: twelve miles north-north-west of Tcin-tcheou.

LING-TCHING', a town of China, of the third rank, in Pe-tche-li: twenty-two miles north of Chun-te.

LING-TCHU'EN, a town of China, of the third rank, in Quan-si, on the river Kouei: fifteen miles north-north-east of Kouei-ling.

LING-TCHU'EN, a town of China, of the third rank, in Chan-si: twenty-five miles south-south-east of Loungan.

LIN'GA, one of the smaller Shetland Islands, near the north coast of Mainland. Lat. 60. 44. N. lon. 1. 27. W.

LIN'GA, one of the small Shetland Islands, near the east coast of Mainland. Lat. 60. 34. N. lon. 1. 6. W.

LIN'GA, one of the small Shetland Islands, near the south-west coast of Unst. Lat. 61. 2. N. lon. 1. 12. W.

LIN'GA, one of the small Western Islands of Scotland, near the south coast of South Uist. Lat. 57. 3. N. lon. 7. 19. W.

LINGA SOU'ND, a bay on the west coast of the island of Stronsa. Lat. 59. N. lon. 0. 28. E.

LIN'GAM, *s.* in Hindoo mythology, is a symbol to which great veneration is paid, and much mysticism attached, by the extensive sect of Hindoos called Saivas, or the worshippers of Siva, the destructive, or rather regenerative, power of their triad. This type of Siva is represented of a conical form, and is seen in almost all parts of India, of various sizes, in stone, wood, clay, metals, &c. It may be supposed that Siva, being, among his other attributes, a personification of fire, as the most destructive of elements, was typified by a cone with its apex upwards, the form naturally assumed by flame; and that to this form enthusiasts have, in the wildness of their imagination,

gination, fancied alluſions, and directed analogies, that, in the progreſs of time, have more and more bewildered them; until at length ſuch an inextricable maſs of myſticiſm hath been accumulated referring to this ſymbol, as to wear an appearance almoſt of ridicule. The lingam being the ſymbol of Siva, his votaries are reminded of it, and of its archetype, by any thing conical or erect; a hill, a tree, any pyramidal object, a maſt or pole, &c. Lingams are ſeen of enormous ſize; in the cavern of Elephanta for inſtance, marking unequivocally that the ſymbol in queſtion is at any rate as ancient as that temple, as they are of the ſame rock as the temple itſelf. Of the public worſhip of the lingam we have already ſpoken under the article HINDOOSTAN, vol. x. p. 120. but they have lingams alſo of diminutive ſize for domeſtic adoration, or for perſonal uſe; ſome individuals always carrying one about with them; and in ſome Brahman families one is daily conſtructed in clay, placed, after due ſanctification by appropriate ceremonies and prayers, in the domeſtic ſhrine, or under a tree or ſhrub ſacred to Siva more eſpecially, and honoured by the adoration of the females of the houſhold. This ceremony is called *linga-puja*, i. e. the worſhip of the lingam, a beautiful plate of which, with a particular deſcription, is given in Moor's Hindu Pantheon, where "a pious female is repreſented propitiating Mahadeva (another name of Siva) in his generative character, indicated by the lingam inſerted in its appropriate receptacle, the argha, or yoni, myſterious types of nature, particularly diſcuſſed in future pages." See YONI.

LIN'GAN, a river of Ireland, which runs into the Suir two miles below Carrick-upon-Suir.

LIN'GAY, one of the ſmaller Weſtern Iſlands of Scotland, near the ſouth-weſt coaſt of Harris. Lat. 57. 40. N. lon. 7. W.

LINGAPOU'R, a town of Hindooſtan, in Dowlatabad: fifteen miles ſouth of Neermul.

LIN'GE, or LING'HE, a river of Holland, which runs into the Wahal at Gorcum.

LIN'GELBACH (John), a painter of merit, was born in 1625, at Frankfort on the Maine. He ſtudied his art firſt in Holland; and having, by a reſidence of two years in Paris, acquired a little money, he went to Rome for further improvement, and continued there till he was twenty-five years of age. In that city he exerciſed himſelf aſſiduouſly in drawing from nature all the objects that ſtruck him, ſuch as remains of antiquity, pieces of architecture, groups of characteriſtic figures at fairs, mountebanks' ſtages, and the like, which he expreſſed with wonderful taſte and facility. He returned to Amſterdam, where he became much admired as a painter of landſcapes, ſea-ports, naval engagements, and ſubjects of common life. He had a light and elegant touch, a fine tone of colouring, a thorough knowledge of aerial perſpective, great ſkill in deſigning and grouping, and much fertility of invention. No painter ſeems better to have ſucceeded in thoſe parts of the art at which he aimed; and his pieces abound in entertainment. He engraved a few landſcapes. He died in 1687, aged ſixty-two.

LIN'GEN, a county of Weſtphalia, bounded on the north by the biſhopric of Munſter, on the eaſt by the biſhopric of Oſnabruck, on the ſouth by the county of Tecklenburg, and on the weſt by Bentheim. It came, with Tecklenburg, into the poſſeſſion of the king of Pruſſia; and at the peace of Tilſit was ceded to Weſtphalia. The ſoil is not very fertile, but in ſeveral places are ſome mines of coal, and quarries of ſtone. It is divided into Upper and Lower; the principal town of the latter is Lingen, and Ibbenbuhren of the former.

LIN'GEN, a city of Weſtphalia, and capital of a county of the ſame name. It is ſituated not far from the Embs, and was formerly fortified, but at preſent is ſmall, and barely ſurrounded with a ditch. This town is the ſeat of the regency of the united counties of Lingen and Tecklenburg, and likewiſe of the deputations of the war and domain chamber of Minden In it is a Calviniſt, a Lutheran, and a Roman-catholic, church. The academical gymnaſium here, was founded in the year 1697, by William III. prince of Orange. About a quarter of a mile's diſtance from the town, to the north of it, is a paſſage over the Embs, which is called the Lingen ferry.

LIN'GEN, or LIN'EGEN, an iſland in the Eaſtern Indian Sea, near the ſouth coaſt of Malacca, about one hundred miles in circumference, and fifty from the north-eaſt coaſt of the iſland of Sumatra. Lat. 0. 10. S. lon. 104. 40. E.

LINGEN'DES (Claude de), a French Jeſuit, commended as one of the moſt admirable preachers of the ſeventeenth century, was born at Moulins, in the year 1591. He entered into the order at Lyons, in 1607; and, after completing his academical ſtudies, taught rhetoric and polite literature for ſome time in different ſeminaries. As, however, his genius particularly qualified him for the pulpit, he devoted himſelf to preaching, and for ſix-and-thirty years attracted crowded audiences by the excellence of his compoſitions and his elocution. He was exceeded by none, and ſcarcely equalled by any, of the pulpit orators of his day. And it is not a little remarkable, that his eloquent diſcourſes, in which argument and pathos are finely blended, were compoſed by him in Latin, but delivered in French. While he thus diſtinguiſhed himſelf as a preacher, he preſided eleven years over the college at Moulins; and afterwards filled the poſt of provincial of the order in France. Three times he went to Rome, either in the character of elector or provincial; and he died ſuperior of the Jeſuits' ſeminary at Paris, in 1660, at the age of ſixty-nine. He was the author of Latin ſermons, which were collected together, and publiſhed in the year after that of his death, under the title of *Concionum quadrageſimalium Argumenta*, 3 vols. 4to. and afterwards in 8vo. and of a volume printed ſeparately in 1663, entitled, *Conciones decem de ſanctiſſimo Sacramento*, 8vo. In 1666, two volumes of theſe ſermons, and afterwards a third, were tranſlated into French, and the verſion, before publication, was compared with the tranſcripts of different copyiſts, who had written down many of them at the time of their delivery. Theſe volumes, both in the original Latin, and in the French tranſlation, were received in a very favourable manner by the public. Lingendes was alſo the author of "Advice for the right Conduct of Life," written in Latin, and entitled, *Monita quædam ad Vitam bene Ordinandam*, which has been often printed in different places; and *Votivum Monumentum ab Urbe Molinenſi, Delphino oblatum*, 4to. 1639.

To LIN'GER, *v. n.* [from lenȝ, Sax. long.] To remain long in languor and pain:

Like wretches, that have *linger'd* long,
We'll ſnatch the ſtrongeſt cordial of our love. *Dryden.*

To heſitate; to be in ſuſpenſe:

Perhaps thou *ling'reſt*, in deep thoughts detain'd
Of th' enterpriſe ſo hazardous and high. *Milton.*

To remain long. *In an ill ſenſe:*

Your very fear of death ſhall make ye try
To catch the ſhade of immortality;
Wiſhing on earth to *linger*, and to ſave
Part of its prey from the devouring grave. *Prior.*

To remain long without any action or determination.—We have *lingered* about a match between Anne Page and my couſin Slender, and this day we ſhall have our anſwer. *Shakeſpeare.*—To wait long in expectation or uncertainty:

I muſt ſolicit his concerns as mine:
And, if my eyes have pow'r, he ſhould not ſue
In vain, nor *linger* with a long delay. *Dryden.*

To be long in producing effect.—She doth think, ſhe has ſtrange *ling'ring* poiſons. *Shakeſpeare.*

To LIN'GER, *v. a.* To protract; to draw out to length. *Out of uſe.*—I can get no remedy againſt this conſumption of the purſe. Borrowing only *lingers* and *lingers* it out;

but the diſeaſe is incurable. *Shakeſpeare.*—She *lingers* my deſires. *Shakeſpeare.*

Let your brief plagues be mercy,
And *linger* not our ſure deſtructions on. *Shakeſpeare.*

LIN'GERER, *ſ.* One who lingers.

LIN'GERING, *ſ.* The act of delaying; of waſting in a decline.

LIN'GERINGLY, *adv.* With delay; tediouſly.—Of poiſons, ſome kill more gently and *lingeringly*, others more violently and ſpeedily; yet both kill. *Hale.*

LIN'GET, *ſ.* [from *languet*; *lingot*, Fr.] A ſmall maſs of metal.—Other matter hath been uſed for money; as among the Lacedemonians, iron *lingets* quenched with vinegar, that they may ſerve to no other uſe. *Camden.*

LING'FIELD, a village in the Weald of Surry, on the ſouth ſide of Crowhurſt. Here is a good church, erected about the reign of Henry VI. A ſchool ſtands near it, with a dwelling for the maſter. Here are two inconſiderable fairs, on May 12 and June 29; the laſt for cows and heifers, but no fat cattle. In the common there is a fine ſpring paled in, of the ſame virtue with that at Tunbridge.

LING'HOLM, a ſmall iſland among the Orkneys, near the weſt coaſt of Stronſa. Lat. 50. 59. N. lon. 0. 27. E.

LINGICOT'TA, a town of Africa, in Kulla. Lat. 12. 30. N. lon. 9. 10. W.

LINGIE'RA, one of the names of Iſis.

LINGNIA'NY, a town of Lithuania: thirty-two miles eaſt of Wilkomierz.

LIN'GO, *ſ.* [Portugueſe.] Language; tongue; ſpeech. *A low cant word.*—I have thoughts to learn ſomewhat of your *lingo*, before I croſs the ſeas. *Congreve.*

LIN'GONES, now *Langres*, a people of Gallia Belgica, made tributary to Rome by Julius Cæſar. They paſſed into Italy, where they made ſome ſettlement near the Alps, at the head of the Adriatic.

LINGO'UM, *ſ.* in botany. See PTEROCARPUS.

LING'UA, *ſ.* [Latin.] A tongue; a language.

LIN'GUA, *ſ.* in botany. See RANUNCULUS and SERAPIAS.

LIN'GUA CERVI'NA. See ACROSTICHUM, ASPLENIUM, HEMIONITIS, POLYPODIUM, and PTERIS.

LIN'GUA GROS'SA, a town of Sicily, in the valley of Demona: nine miles weſt of Taormina.

LIN'GUA PASSERI'NA, *ſ.* in botany. See STELLERA.

LINGUA'CIOUS, *adj.* [*linguax*, Lat.] Full of tongue; loquacious; talkative.

LINGUA'CIOUSNESS, *ſ.* Loquacity; talkativeneſs. *Scott.*

LINGUA'CITY, *ſ.* Loquacity. *Scott.*

LINGUADEN'TAL, *adj.* [from the Lat. *lingua*, tongue, and *dens*, tooth.] Uttered by the joint action of the tongue and teeth.—The *linguadentals*, *f*, *v*, as alſo the *linguadentals*, *th*, *dh*, he will ſoon learn. *Holder's Elem. of Speech.*

LINGUAT'ULA, *ſ.* in helminthology, a genus of inteſtinal worms. Generic characters—Body depreſſed, oblong; mouth in front, ſurrounded with four paſſages.

Linguatula ſerrata, the only ſpecies known. It inhabits the lungs of the hare.

LINGUET'TA, a cape in the Adriatic, on the coaſt of Epire: twelve miles weſt of Valona.

LIN'GUIFORM, *adj.* Tongue-ſhaped. In botany, applied to a leaf linear and fleſhy, blunt at the end, convex underneath, and having uſually a cartilaginous border, as in Meſembryanthemum, Aloe, and Hæmanthus coccineus.

LIN'GUIST, *ſ.* [from *lingua*, Lat.] A man ſkilful in languages.—Though a *linguiſt* ſhould pride himſelf to have all the tongues that Babel cleft the world into, yet, if he had not ſtudied the ſolid things in them, as well as the words and lexicons, he were nothing ſo much to be eſteemed a learned man, as any yeoman or tradeſman competently wiſe in his mother-dialect only. *Milton.*

LINGUO'SE, *adj.* Full of tongue, talkative. *Bailey.*

LINGUOS'ITY, *ſ.* Loquacity, talkativeneſs. *Phillips.*

LINGUMPIL'LY, a town of Hindooſtan, in Myſore: thirty miles ſouth-weſt of Tademeri.

LING'WELL-YA'TE, a village in the weſt riding of Yorkſhire, between Wakefield Outwood and Thorp on the Hill; where, in 1697, were found certain moulds of clay, that were invented for counterfeiting the coins of ſome of the Roman emperors.

LING'WOOD, a village in Norfolk, weſt of Accle.

LING'WOOD-GRA'NGE, a village in Lincolnſhire, between Lincoln and Tatterſhall-Chace.

LING'WORT. See LING.

LINHA'RES, a town of Portugal, in the province of Tras os Montes: twelve miles weſt-north-weſt of Torre de Moncorvo, and nineteen ſouth of Mirandela.

LINHA'RES, a town of Portugal, in the province of Beira: five miles ſouth-weſt of Celorico.

LIN'HOPE-SPOUT, a cataract near Rodham, in Northumberland, which falls fifty-ſix feet perpendicular, and, paſſing over ſeveral pointed rocks, makes a fine white ſheet of foam.

LINIE'RES, a town of France, in the department of the Charente: fifteen miles ſouth-weſt of Angouleſme.

LINIG'EROUS, *adj.* [from the Lat. *linum*, flax, and *gero*, to carry.] Bearing flax, producing linen. *Scott.*

LIN'IMENT, *ſ.* [*linimentum*, Lat. from *linire*, to anoint gently.] In pharmacy, a form of external medicine, made of unctuous ſubſtances, uſed to rub on any diſtempered part. The liniment is of a mean conſiſtence between an oil and an unguent. The uſe of liniments is to ſoften aſperities of the ſkin, moiſten parts that need humectation, and reſolve the humours that afflict the patient and give him pain.

LI'NING, *ſ.* [See *To* LINE.] The inner covering of any thing; the inner double of a garment.—The fold in the griſtle of the noſe is covered with a *lining*, which differs from the facing of the tongue. *Grew's Coſmologia.*

The gown with ſtiff embroid'ry ſhining,
Looks charming with a ſlighter *lining*. *Prior.*

That which is within:

The *lining* of his coffer ſhall make coats
To deck our ſoldiers for theſe Iriſh wars. *Shakeſpeare.*

LINITAN', a ſmall iſland in the Eaſtern Indian Sea, five miles north from the iſland of Serangan, to which it belongs. Lat. 5. 36. S. lon. 125. 21. E.

LINK, *ſ.* [*gelencke*, Germ.] A ſingle ring of a chain.—The moral of that poetical fiction, that the uppermoſt *link* of all the ſeries of ſubordinate cauſes, is faſtened to Jupiter's chair, ſignifies an uſeful truth. *Hale.*

The Roman ſtate, whoſe courſe will yet go on
The way it takes, cracking ten thouſand curbs
Of more ſtrong *links* aſunder, than can ever
Appear in your impediment. *Shakeſpeare's Coriolanus.*

While ſhe does her upward flight ſuſtain,
Touching each *link* of the continued chain,
At length ſhe is oblig'd and forc'd to ſee
A firſt, a ſource, a life, a Deity. *Prior.*

Any thing doubled and cloſed together.—Make a *link* of horſe-hair very ſtrong, and faſten it to the end of a ſtick that ſprings. *Mortimer.*—A chain; any thing connecting:

Nor airleſs dungeon, nor ſtrong *links* of iron,
Can be retentive to the ſtrength of ſpirit. *Shakeſpeare.*

The *link* of nature draws me; fleſh of fleſh,
Bone of my bone, thou art. *Milton's Paradiſe loſt.*

Any ſingle part of a ſeries or chain of conſequences; a gradation in ratiocination; a propoſition joined to a foregoing and following propoſition.—The thread and train of conſequences in intellective ratiocination is often long, and chained together by divers *links*, which cannot be done in imaginative ratiocination, by ſome attributed to

brutes. *Judge Hale.*—A ſeries: This ſenſe is improper. Addiſon has uſed *link* for *chain.*—Though I have here only choſen this ſingle *link* of martyrs, I might find out others among thoſe names which are ſtill extant, that delivered down this account of our Saviour in a ſucceſſive tradition. *Addiſon on the Chriſtian Religion.*—[From λυχνος, Gr.] A torch made of pitch and flax.—Thou art an everlaſting bonfire light; thou haſt ſaved me a thouſand marks in *links* and torches, walking with thee in the night betwixt tavern and tavern. *Shakeſpeare's Henry* IV.

Round as a globe, and liquor'd every chink,
Goodly and great he ſails behind his *link.* *Dryden.*

Perhaps in the following paſſage it may mean lamp-black.—There was no *link* to colour Peter's hat. *Shakeſpeare.*

To LINK, *v. a.* To complicate; as, the links of a chain:

Deſcending tread us down,
Thus drooping; or with *linked* thunderbolts
Tranſfix us to the bottom of this gulph. *Milton.*

Notes, with many a winding bout
Of *linked* ſweetneſs long drawn out. *Milton.*

To unite; to conjoin in concord:

They are ſo *link'd* in friendſhip,
That young prince Edward marries Warwick's daughter.
Shakeſpeare.

To join; to connect:

So from the firſt eternal order ran,
And creature *link'd* to creature, man to man. *Pope.*

To join by confederacy or contract.—They make an offer of themſelves into the ſervice of that enemy, with whoſe ſervants they *link* themſelves in ſo near a bond. *Hooker.*

Be adviſed for the beſt,
Ere thou thy daughter *link* in holy band
Of wedlock, to that new unknowen gueſt. *Fairy Queen.*

To connect, as concomitant.—God has *linkt* our hopes and our duty together. *Decay of Piety.*

New hope to ſpring
Out of deſpair; joy, but with fear yet *link'd.* *Milton.*

To unite or concatenate in a regular ſeries of conſequences.—Theſe things are *linked,* and, as it were, chained one to another: we labour to eat, and we eat to live, and we live to do good; and the good which we do is as ſeed ſown, with reference unto a future harveſt. *Hooker.*—By which chain of ideas thus viſibly *linked* together in train, i. e. each intermediate idea agreeing on each ſide with thoſe two it is immediately placed between, the ideas of men and ſelf-determination appear to be connected. *Locke.*

Tell me, which part it does neceſſitate?
I'll chooſe the other; there I'll *link* th' effect;
A chain, which fools to catch themſelves project! *Dryden.*

LINK'-BOY, *ſ.* A boy that carries a torch to accommodate paſſengers with light.—What a ridiculous thing it was, that the continued ſhadow of the earth ſhould be broken by ſudden miraculous diſcluſions of light, to prevent the officiouſneſs of the *link-boy. Moore.*

In the black form of cinder-wench ſhe came.
O may no *link-boy* interrupt their love! *Gay's Trivia.*

LINK'-MAN, *ſ.* A man that plies with a link:

Though thou art tempted by the *link-man's* call,
Yet truſt him not along the lonely wall. *Gay.*

LINK NESS', a cape of Scotland, on the north-weſt coaſt of the iſland of Stronſa: one mile and a half ſouth-weſt of Huips Neſs. Lat. 59. 4. N. lon. 0. 26. E.

LINK'ENHAM, a village in Cornwall, ſouth-weſt of Launceſton.

LIN'KIA, *ſ.* in botany. See TREMELLA.

LINK'ING, *ſ.* The act of joining as with links.

LINKIO'PING, a town of Sweden, in Eaſt Gothland, ſituated on the river Stœng, near lake Roxen; the ſee of a biſhop. It contains three churches and a public ſeminary. It defended by a caſtle, built in the 15th century: ninety-ſix miles ſouth-weſt of Stockholm. Lat. 58. 26. N. lon. 15. 8. E.

LIN'LEY, a townſhip of the weſt riding of Yorkſhire, connected with Wakefield.

LIN'LEY (John), an eminent muſic-profeſſor and organiſt, long reſident at Bath, where he had ſerved an apprenticeſhip under Chilcot, the organiſt of that city. Having a large family of children, in whom he found the ſeeds of genius had been planted by nature, he pointed his ſtudies to ſinging, and became the beſt ſinging-maſter of his time, if we may judge by the ſpecimens of his ſucceſs in his own family. He was not only a maſterly player on the organ and harpſichord, but a good compoſer, as his elegies and ſeveral compoſitions for Drury-lane theatre evinced. The hiſtory of Mr. Lindley muſt include that of his children. His ſon Thomas, who was placed under Nardini at Florence, the celebrated diſciple of Tartini, was a fine performer on the violin, with a talent for compoſition, which, if he had lived to develope, would have given longevity to his fame. Being at Grimſthorpe, in Lincolnſhire, at the ſeat of the duke of Ancaſter, where he often amuſed himſelf in rowing, fiſhing, and ſailing, by ſome accident the boat was overſet, and this amiable and promiſing youth was drowned at an early age, to the great affliction of his family and friends, particularly his matchleſs ſiſter, Mrs. Sheridan, whom this calamity rendered miſerable for a long time; during which, her affection and grief were diſtilled in verſes of the moſt ſweet and affecting kind on the ſorrowful event. The beauty, talents, and mental endowments, of this *Sancta Cæcilia rediviva,* will be remembered to the laſt hour of all who heard, or even ſaw and converſed with, her. The tone of her voice and expreſſive manner of ſinging were as enchanting as her countenance and converſation. In her ſinging, with a mellifluous-toned voice, a perfect ſhake and intonation, ſhe was poſſeſſed of the double power of delighting an audience equally in pathetic ſtrains and ſongs of brilliant execution, which is allowed to very few ſingers. Mrs. Sheridan died at Briſtol in 1792. Mrs. Tickel, her ſiſter, was but little inferior to her in beauty and talents; and Mr. Linley's other daughters continued to excite the admiration of all who knew them, in a manner worthy of the family from which they ſprung. Mr. Linley, the father of this neſt of nightingales, from being aſſiſtant manager of Drury-lane theatre, lived to become joint patentee, and, for ſome time, ſole acting manager; in which capacity, he gave more ſatisfaction, and eſcaped cenſure, public and private, by his probity and ſteady conduct, more than is often allowed to the governor of ſuch a numerous and froward family. This worthy and ingenious man died in November 1795.

LIN'LITHGOW, a town of Scotland, a royal burgh, and capital of the county to which it gives name. It conſiſts principally of one ſtreet, three quarters of a mile in length, with ſeveral lanes; and a range of gardens to the north and ſouth. Oppoſite the town-houſe is a vacant ſpace, where a croſs formerly ſtood, and the principal well now is. The chief trade is making ſhoes. There are two tambour-factories, and near the town a houſe for printing calicoes. It is governed by a provoſt and bailies; and, united with Lanerk, Peebles, and Selkirk, ſends one member to parliament. There is a weekly market on Friday. It was formerly a place of conſiderable trade and opulence, but its greatneſs fell from the time of the union. King Edward I. built a caſtle here, on the ſide of a loch, in which he reſided one whole winter; but in 1307 it was taken and demoliſhed by Binny, a Scotchman. In the reign of Edward III. it came again into the hands of the Engliſh. At this place was born the beautiful and unfortunate queen Mary, in 1542. Her father James V. then dying at Falkland of a broken heart, for the miſcarriage at Solway-moſs, foretold the miſeries that hung over her and his country: "It came," ſaid he, "with a laſs, and will be loſt by one." The water of a

lake

LINNÆA.

Two-flowered Linnæa; from the Flora Danica.

London Published as the Act directs Aug.st 2nd 1813 by C. Jones.

J.Rose sc

lake near the town is remarkable for bleaching: twenty-four miles eaſt-north-eaſt of Glaſgow, and eighteen weſt of Edinburgh. Lat. 55. 59. N. lon. 3. 38. W.

LIN'LITHGOWSHIRE, or WEST LOTHIAN, a county of Scotland, bounded on the north by the Frith of Forth, on the eaſt and ſouth-eaſt by Edinburghſhire, on the ſouth-weſt by Lanerkſhire, and on the north-weſt by Stirlingſhire; about ſeventeen miles long, and eight in its mean breadth. In general it is pleaſant, abounding with corn and paſtures, and produces coals, lime-ſtone, iron, and ſalt, with plenty of fiſh from the rivers and frith. In this county Severus's wall began, which extended acroſs this part of Scotland. Its principal towns are Linlithgow, Bathgate, and Borrowſtonneſs, its principal ſeaport; and Queenſferry, the ancient common paſſage, at all times of tide, from Lothian to Fife. In 1811, the number of inhabitants was 19,451.

LINNÆ'A, *ſ.* [ſo named by Gronovius, in honour of the celebrated *Linnæus*.] In botany, a genus of the claſs didynamia, order angioſpermia, natural order of aggregatæ, (caprifoliæ, *Juſſ.*) The generic characters are —Calyx: perianthium double; perianthium of the fruit inferior, four-leaved: the two oppoſite leaflets very ſmall, acute; the remaining two elliptic, concave, upright, hiſpid, embracing the germ, converging, permanent. Perianthium of the flower ſuperior, one-leafed, five-parted, upright, narrow, ſharp, equal. Corolla: one-petalled, bell-ſhaped, half-five-cleft, obtuſe, ſubequal, twice as large as the calyx of the flower. Stamina: filaments four, awl-ſhaped, inſerted into the bottom of the corolla; of which two are very ſmall; the two neareſt longer, but ſhorter than the corolla; antheræ compreſſed, verſatile. Piſtillum: germ roundiſh, inferior; ſtyle filiform, ſtraight, length of the corolla, declinate; ſtigma globoſe. Pericarpium: berry juiceleſs, ovate, three-celled, covered by the hiſpid glutinous perianthium of the fruit, deciduous. Seeds: two, roundiſh.—*Eſſential Character.* Calyx double, of the fruit two-leaved, of the flower five-parted, ſuperior; corolla bell-ſhaped; berry dry, three-celled.

Linnæa borealis, or two-flowered linnæa, a ſingle ſpecies. Root perennial, fibrous. Stems filiform, from three to ſix feet long, looſe, creeping, round, perennial, ferruginous, with a few white hairs ſcattered over them. Leaves oppoſite, roundiſh-ovate, ſpreading, attenuated into the petioles, with two or three ſerratures on each ſide, having a few upright hairs on the upper ſurface, and only on the midrib in the lower. Branches ſimple, upright, with ſix or eight leaves on them. Perianthium of the fruit ovate, a little leſs than the germ, ciliate, the cilias pellucid, bent outwards; it has ſhort hairs ſcattered all over it, terminated by a yellow globular gland; germ ovate, with glandular hairs. Perianthium of the flower five-parted, upright, ciliate with pale hairs, and having glandular hairs ſcattered about it; the calycine ſegments lanceolate-awl-ſhaped; corolla turbinate, three times as long as the calyx, ſmooth and white on the outſide, having a few hairs ſcattered over it within, with blood-red veins within the cavity, which are yellow on the lower ſide: ſtigma hiſpid. The ſmell of the flowers approaches to that of Ulmaria, or meadow-ſweet; and is ſo ſtrong during the night as to diſcover this little plant at a conſiderable diſtance. In Sweden, where the plant is common, an infuſion of the leaves in milk is employed in the rheumatiſm. In Norway, they cure the itch with a decoction of it. And in Oſtro Bothnia they apply it in a cataplaſm or by fomentation to diſorders of the feet in ſheep.

Native of dry ſtony moſſy ancient fir-woods, in Sweden, Siberia, Ruſſia, Swiſſerland, Scotland, and North America; flowering in May and June. Linnæus deſcribes it in his Lapland Tour, as clothing maſſes of ſtones, being interwoven with ivy, in a picturеſque manner; and he ſeems to have choſen it himſelf to commemorate his own name, when he gathered it at Lykſele, May 29, 1732. Former botaniſts had called this elegant and ſingular little plant *Campanula ſerpyllifolia*; but Linnæus, proſecuting the ſtudy of vegetables on the only certain principles, the ſtructure of their parts of fructification, ſoon found this to conſtitute a new genus. He reſerved the idea in his own breaſt, till his diſcoveries and publications had entitled him to botanical commemoration, and his friend Gronovius, in due time, undertook to make this genus known to the world. It was publiſhed by Linnæus himſelf in the Genera Plantarum, in 1737, and the ſame year in the Flora Lapponica, with a plate, being moreover mentioned in the Critica Botanica, p. 80, as "an humble, deſpiſed, and neglected, Lapland plant, flowering at an early age," like the perſon whoſe name it bears. It was firſt diſcovered in Britain, June 2d, 1795, by the late profeſſor James Beattie of Aberdeen, in an old fir-wood at Mearns in that county. The plant having thus become intereſting to the lovers of ſcience, we have given a repreſentation of it on the annexed Plate.

LINNÆ'US (Charles), the moſt eminent naturaliſt of his age, and the founder of modern botany, was born in 1707 at Râſhult, in the province of Smaland, in Sweden, where his father reſided as aſſiſtant miniſter of the pariſh of Stenbrohult, to which the hamlet of Râſhult belongs, and became in proceſs of time its paſtor or rector; having married Chriſtina Broderſon, the daughter of his predeceſſor. The ſubject of our memoir was their firſt-born child. The family of Linnæus had been peaſants, but ſome of them, early in the 17th century, had followed literary purſuits. In the beginning of that century regular and hereditary ſurnames were firſt adopted in Sweden, on which occaſion literary men often choſe one of Latin or Greek derivation and ſtructure, retaining the termination proper to the learned languages. A remarkable linden-tree, Tilia europæa, growing near the place of their reſidence, is reported to have given origin to the names of Lindelius and Tiliander, in ſome branches of this family; but the above-mentioned Nicholas, when he went into orders, is ſaid to have firſt taken that of Linnæus, by which his ſon became ſo extenſively known. Of the taſte which laid the foundation of his happineſs as well as his celebrity, this worthy father was the primary cauſe. Reſiding in a delightful ſpot, on the banks of a fine lake, ſurrounded by hills and valleys, woods and cultivated ground, his garden and his fields yielded him both amuſement and profit; and his infant ſon imbibed, under his auſpices, that pure and ardent love of nature for its own ſake, with that habitual exerciſe of the mind in obſervation and activity, which ever after marked his character; and which were enhanced by a rectitude of principle, an elevation of devotional taſte, a warmth of feeling, and an amiableneſs of manners, rarely united in thoſe who ſo tranſcendently excel in any branch of philoſophy or ſcience, becauſe the cultivation of the heart does by no means ſo conſtantly as it ought keep pace with that of the underſtanding. The maternal uncle of Nicholas Linnæus, Sueno Tiliander, who had educated him with his own children, was alſo fond of plants and of gardening, ſo that theſe taſtes were in ſome meaſure hereditary. The young Charles, as he tells us himſelf, was no ſooner out of his cradle, than he almoſt lived in his father's garden. He was ſcarcely four years old when he heard his father deſcant, to a rural party, on the diſtinctions and qualities of ſome particular plants, culled from the flowery turf on which they were ſeated; and this firſt botanical lecture was ever after remembered as an epocha in his ſcientific life. He never ceaſed to enquire of his father concerning the names and properties of all the productions of the garden and the fields, that he could poſſibly procure; nor did the economy of inſects, even at this early period, eſcape his attention. His youthful inaptitude for retaining the names of natural objects ſometimes tired and diſpleaſed his inſtructor, whoſe wholeſome authority in time corrected this defect, and perhaps early prevented his falling into the error of thoſe deſultory ſpeculators of nature, who have agreed to deſpiſe that methodical and didactic preciſion of

of ideas, which, for want of early diſcipline, they could never attain. The memory of Linnæus, indeed, like his powers of perception, was naturally good, and his ſight was always remarkably acute. The vivacity and brilliant expreſſion of his eyes are ſaid to have laſted through life, and indeed are diſplayed in moſt of his portraits.

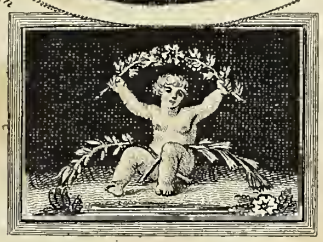
Theſe flowery ſtudies however were obliged to give way, in ſome meaſure, to leſs agreeable occupations; and unhappily the private tutor proved a man of leſs winning manners than the beloved parent. Thus at ſeven years of age grammar had but an unequal conteſt with botany in the mind of the young ſtudent. Nor was he much more fortunate when removed in 1717 to the grammar-ſchool of Wexio, the maſter of which, as his diſguſted pupil relates, "preferred ſtripes and puniſhments to admonitions and encouragements." Such a ſyſtem was near extinguiſhing all the talents it was intended to cultivate; and, when the youth was committed, two years afterwards, to the care of a more judicious and amiable private tutor than before, the horrors of the rod ſeem ſtill to have predominated over his taſte for learning. In 1722 he proved competent, nevertheleſs, to be admitted to a higher form in the ſchool, and his drier ſtudies were now allowed to be intermixed and ſweetened with the recreations of botany. In 1724, being ſeventeen years of age, he was removed to the ſuperior ſeminary, or Gymnaſium, and his deſtination was fixed for the church. But the original inclinations of his mind, and its early prejudices, here grew but the more apparent. He had no taſte for Greek or Hebrew, ethics, metaphyſics, or theology; but he devoted himſelf with ſucceſs to mathematics, natural philoſophy, and a ſcientific purſuit of his darling botany. His literary reputation made ſo little progreſs, that, when his father paid a viſit to Wexio, in 1726, his tutors, like the ſapient inſtructors of Newton at Cambridge, gave him up as a hopeleſs dunce. They adviſed that he ſhould be put apprentice to a ſhoe-maker, tailor, or ſome other handicraft trade, rather than be forced to purſue an object for which he was evidently unfit. Fortunately, the diſappointed parent met with a better counſellor in Dr. Rothmann, the lecturer on natural philoſophy, who encouraged him to hope much from the inclination of his ſon to natural knowledge and practical obſervation, and recommended that he ſhould be directed to the ſtudy of medicine. This good advice was ſupported with the gratuitous offer of taking the young man into his own houſe, for the year during which he was ſtill to remain at the Gymnaſium, which was gladly accepted. The worthy preceptor gave his pupil a private courſe of inſtruction in phyſiology on the Boerhaavian principles, and was rewarded by the ſucceſs of his endeavours. In 1727 Linnæus was matriculated at the univerſity of Lund, having, on the 19th of Auguſt, undergone with credit the examination of the dean, and even of the profeſſor of eloquence, Papke. He devoted himſelf to the ſtudy of medicine, lodging at the houſe of a phyſician, Dr. Stobæus, whoſe library and muſeum of natural hiſtory afforded the greateſt delight and aſſiſtance to his ardent mind, and the ſtudy of which often robbed him of ſeveral hours of his natural repoſe. In the ſame houſe was a German ſtudent named Koulas, eager like himſelf for inſtruction; and their friendſhip was mutually beneficial. Dr. Stobæus being infirm in health and ſpirits, Linnæus was allowed to relieve him occaſionally from the labours of his profeſſion; and ſoon became a great favourite. In the enſuing ſummer Linnæus paſſed the vacation under his paternal roof. Here he met with his former patron Rothmann, by whoſe advice he was induced to quit Lund for Upſal, as a ſuperior ſchool of medicine and botany. But the ſlender ſupport which his father could afford him, a capital of about 3l. ſterling, being totally inadequate, he was, in this new ſituation, reduced to the greateſt neceſſity. Private pupils were not to be procured by a poor unknown ſtudent. He was obliged to truſt to chance for a meal; and, when he relates that he had no way of mending his ſhoes but by folded paper, ſeems to have felt the want even of the cobler's education which had been recommended to him. He had offended his old friend Stobæus by quitting Lund; and, though he had brought with him a ſplendid Latin teſtimonial, from the rector of that univerſity, in which he was called *Politiſſimus ornatiſſimuſque dominus*, and was declared "to have conducted himſelf with no leſs diligence than correctneſs, ſo as to gain the affection of all who knew him," he ſeems to have obtained nothing more than a royal ſcholarſhip, which was conferred upon him on the 16th of December, 1728; but of the value of which we are not informed. It appears however by the above account to have been totally inſufficient for his maintenance. He nevertheleſs did not relax in his ſtudies; but attended the lectures of the younger Rudbeck, then profeſſor at Upſal, as well as the medical ones of profeſſor Roberg; and made critical manuſcript remarks upon all that he ſaw and heard.

In the autumn of 1729 his botanical taſte and application raiſed up for him a new and very eſtimable patron, in the learned Dr. Olaus Celſius, profeſſor of divinity, who met with him by chance in that academical garden, the fame of which he was deſtined hereafter to immortalize. This gentleman had then been intent, for above thirty years, upon the illuſtration of the plants mentioned in the Holy Scriptures, on which he publiſhed a very celebrated work in 1745, having travelled to the Eaſt on purpoſe to render it more perfect. He ſoon diſcovered the merit of Linnæus, took him under his protection, and allowed him the full uſe of his own rich library. The friendſhip of ſuch a man ſoon procured him further advantages. The ſon of profeſſor Rudbeck, and other young men, became his private pupils, by which his finances were improved. Nothing however ſeems to have been recollected with ſo much ſatisfaction to himſelf, in relating the events of this part of his life, as his intimate ſcientific friendſhip with Peter Artedius, who afterwards called himſelf Artedi, and became ſo famous in the knowledge of fiſhes and of umbelliferous plants. They paſſed ſome time together ſubſequently in Holland, when Linnæus witneſſed the melancholy fate of his friend, who was accidentally drowned at Amſterdam; of which he has prefixed ſo pathetic an account to the Ichthyologia of Artedi, publiſhed by his means. See ARTEDI, vol. ii. p. 221.

Linnæus, during his ſtudies under the roof of Celſius, met with a review of Vaillant's treatiſe on the Sexes of Plants, which firſt led him to conſider the importance, and great varieties of form, of the ſtamens and piſtils, and thence to form a new ſcheme of arrangement founded on thoſe eſſential organs. He drew up an eſſay on this principle, and ſhowed it to Celſius, who communicated it to Rudbeck; and the performance was honoured with the high approbation of both. This led the way to his being appointed to lecture in the botanic garden, as an aſſiſtant or deputy to the latter, whoſe advanced age rendered ſome relaxation neceſſary. The lectures of Linnæus began in the ſpring of 1730. He had previouſly ſolicited from the profeſſor the humble appointment of *gardener* to the univerſity, which was refuſed, only on the ground of his being fit for a better ſituation. Now, finding himſelf authorized to take the direction of the garden, he reformed and greatly enriched it. He was taken into the houſe of Rudbeck, as tutor to his younger children, and by this means had the uſe of a very fine collection of books and drawings. His mornings being devoted to the duties of his ſtation, his evenings were ſpent in preparing his botanical works.

Here it may not be improper to remark, that the doctrine that plants had diſtinct ſexes was by no means a new one; but it remained for Linnæus clearly to elucidate this obſcure and intricate ſubject, to demonſtrate its univerſality, and to make it ſubſervient to ſyſtem. Theophraſtus and Ariſtotle obſerve that plants are commonly divided into male and female, one of which is fertile, the other barren. "If the duſt of the branch of a male palm

Chapman sculp



LINNÆUS.

London Published as the Act directs Aug.t 1812 by Jones & Adlard.

be ſhaken over the female tree, (ſays Ariſtotle,) the fruit of the latter will ripen quickly." Dioſcorides names ſeveral plants male and female, but without a knowledge of their relative ſexes, for he calls that the male mercury which bears the ſeed, and that the female which is barren. Pliny obſerves that naturaliſts allow the diſtinction of ſex, not only in trees, but in herbs and all plants. Cæſalpinus reformed the errors of former writers, in ſuppoſing the barren plant to be the male, and that which bears the ſeed to he the female; but his notion goes no further than to thoſe where the organs are placed on ſeparate roots produced from the ſame ſeed. Zaluzianſki, a native of Poland, firſt diſcriminated the true ſexes of plants, and pointed out the eſſential difference between the male, the female, and the hermaphrodite. Dr. Grew, in 1682, ſuggeſted the idea that the antheræ were neceſſary to the impregnation of a plant, and plainly delivers it as his opinion, that theſe burſt open and ſhed the pollen or duſt contained in them, which falling on the ſeed-veſſel renders them prolific. Theſe principles were afterwards adopted by Ray, Camerarius who ſpeaks of the number of the ſtamina in flowers, Malphigi who examined the antheræ and pollen by the microſcope, Geoffroy, Juſſieu, Vaillant, Morland, and others.

A new object ſoon engaged the attention of our young naturaliſt. The converſations of Rudbeck, concerning the natural hiſtory of Lapland, and the curioſities he had ſeen there, excited an irreſiſtible deſire in Linnæus to viſit the ſame country. Accordingly, towards the end of the year 1731 he retired to his native place, and ſoon received, from the Academy of Sciences at Upſal, an appointment to travel through Lapland, under the royal authority, and at the expenſe of the academy. After a viſit to Lund in the ſpring of 1732, Linnæus ſet out from Upſal, May 12th, on his Lapland expedition. He travelled on horſeback, but ſlenderly provided with baggage; and, after viſiting the Lapland alps on foot, and deſcending to the coaſt of Norway, of which he has given a moſt picturesque and ſtriking deſcription, returned by Tornea, and the eaſt ſide of the Bothnian gulf, to Abo, and ſo to Upſal, which he reached on the 10th of October, having performed a journey of near four thouſand Engliſh miles; for which the academy allowed him his expenſes, amounting to ten pounds ſterling! The particulars of this intereſting expedition, which produced his *Flora Lapponica*, have lately been given to the public, in an Engliſh tranſlation of the original journey written on the ſpot, illuſtrated with wooden cuts from his own ſketches, making two octavo volumes. This document, a faithful tranſcript of his own mind, and written ſolely for his own uſe, gives a moſt amiable and reſpectable idea of the character and acquirements of this celebrated man, at this period of his life.

Having learned the art of aſſaying metals during ten days' reſidence at the mines of Biorknas, near Calix, in the courſe of his tour, he next year gave a private courſe of lectures on that ſubject, which had never been taught at Upſal before. The jealouſy of Dr. Roſen, however, purſued him; and this rival deſcended ſo low as to procure, partly by intreaties, partly by threats, the loan of his manuſcript lectures on botany, which Linnæus detected him in ſurreptitiouſly copying. Roſen had taken by the hand a young man named Wallerius, who afterwards became a diſtinguiſhed mineralogiſt, and for whom he now procured, in oppoſition to Linnæus, the new place of *adjunct*, or aſſiſtant, in the medical faculty at Lund. But the baſeſt action of Roſen, and which proved envy to be the ſole ſource of his conduct, was, that, having married the niece of the archbiſhop, he obtained, through his lordſhip's means, an order from the chancellor to prevent all private medical lectures in the univerſity. This, for which there could be no motives but conſcious inferiority and malice, deprived Linnæus of his only means of ſubſiſtence, and the ſtudents of any information which might endanger their reverence for his rival. He is ſaid to have been ſo exaſperated, as to have drawn his ſword upon Roſen, an affront with which the latter choſe to put up, as doubtleſs became the proſperous nephew of an archbiſhop; but Linnæus cannot be exculpated from having, for ſome time afterwards, indulged feelings of paſſionate reſentment, and even of meditated revenge. Theſe, however, his better principles and diſpoſitions, after a while, entirely ſubdued; and Roſen, towards the cloſe of his life, was glad of the medical aid of the man he had in vain endeavoured to cruſh.

Diſappointed in his views of medical advancement, Linnæus turned his thoughts more immediately to the ſubject of mineralogy. In the end of the year 1733, he had viſited ſome of the principal mines of Sweden, and had been introduced to baron Reuterholm, governor of the province of Dalarne, or Dalecarlia, reſident at Fahlun. This place Linnæus has perpetuated in the memory of botaniſts, by his *Lichen Fahlunenſis*, a production more reſembling ſome ramification of the neighbouring copper ores than any thing of vegetable origin. At the perſuaſion, as well as at the expenſe, of the governor, he travelled through the eaſtern part of Dalecarlia, accompanied by ſeven of his ableſt pupils; and the unpubliſhed journal of his tour exiſts in his library. At Fahlun he gave a courſe of lectures on the art of aſſaying, which was numerouſly attended; and here he firſt became acquainted with Browallius, then chaplain to the governor, afterwards biſhop of Abo. This judicious friend adviſed Linnæus to take his doctor's degree, in order to purſue the practice of phyſic, in which he had already at Fahlun met with much ſucceſs; and he further recommended him to aim at ſome advantageous matrimonial connection. Dr. John Moræus, a phyſician of the place, though at firſt not prepoſſeſſed in favour of our young adventurer, whoſe medical ſucceſs had encroached on his own, allowed him to pay his addreſſes to his eldeſt daughter; but their union was for the preſent deferred.

In purſuit of the plan pointed out by Browallius, Linnæus, having ſcraped together about 15l. ſterling, now entered on his travels, with a view of obtaining his degree at the cheapeſt univerſity he could find, and of ſeeing as much of the learned world as his chances and means might enable him to do. In the beginning of the year 1735 he ſet out, after viſiting his father, lately become a widower, in company with another medical ſtudent, named Sohlberg. At Hamburg his ſkill and honeſty unfortunately ſtood in his way. Spreckelſen, a ſecretary of the council and a conſiderable naturaliſt, had in his poſſeſſion a monſtrous production, which till that time had been conſidered the moſt valuable curioſity in Europe, and was received as a pledge for the loan of ten thouſand marks, a ſum equal to ſeven hundred and fifty pounds. It repreſented a hydra, or water-ſerpent, with ſeven heads; and had been figured as ſuch by Seba in his Theſaurus Naturalium. This celebrated monſter, upon an accurate examination, and by his acquaintance with the comparative ſtructure of the jaw-bones of animals, Linnæus found to be an impoſture; and proved that theſe ſeven heads were merely made up of the jaw-bones of weaſels artfully covered with the ſkins of ſerpents. A diſcovery ſo injurious to its poſſeſſor and the credit of the univerſity, raiſed a clamour againſt the young naturaliſt, the fury of which he thought it prudent to avoid, through the advice of his friend Dr. Jæniſch, by ſilently leaving the city.

Proſecuting the object of his journey, he reached the univerſity of Harderwyk at the end of May, and on the twenty-fourth of the following June was admitted doctor in medicine. His inaugural theſis was a diſſertation on the cauſes of intermittent fevers, which in 1735 was publiſhed in the Amænitates Academicæ. From Harderwyk he proceeded to Leyden, and formed an intimacy with Van Royen, Van Sweiten, Leiburkuhn, Lawſon, and Gronovius. Among the cauſes which contributed to enlarge the views and ripen the judgment of Linnæus, may be reckoned the facility with which he made himſelf known and regarded by the moſt learned men of his time. Wher-

ever he came, he found a friend; and that friend generally of the firſt reputation in the ſciences he ſtudied.

In this year he laid the foundation-ſtone of that ſplendid temple of nature, in which he afterwards ſaw the moſt enlightened men on the globe officiating as her prieſts, by publiſhing the firſt edition of his *Syſtema Naturæ*, conſiſting of eight large ſheets, in the form of tables; which edition is now a great bibliothecal curioſity. He alſo procured acceſs to the illuſtrious Boerhaave, who encouraged him to remain in Holland; but this advice could ſcarcely have been followed, had he not met with a patron in Burmann, of Amſterdam, who was then preparing his Theſaurus Zeylanicus, and who received Linnæus into his houſe as his gueſt for ſome months, during which period he printed his *Fundamenta Botanica*, a ſmall octavo of 36 pages, in the form of aphoriſms, which contains the very eſſence of botanical philoſophy, and has never been ſuperſeded nor refuted. The ſubſequent performances of the author himſelf, and of his followers, have been excellent, in proportion as they have kept to the maxims of this little book.

After Linnæus had been a few months under profeſſor Burmann's roof, he was introduced by Boerhaave to Mr. George Clifford, an opulent banker, whoſe garden at Hartecamp was one of the richeſt in the world, and who thought himſelf happy in the opportunity of procuring ſuch a man to ſtudy and ſuperintend his collection, as well as to make known to the world any novelties it might contain. Linnæus was therefore removed to Hartecamp, where, as he ſays, "he lived like a prince." With an ample library, as well as garden, at his command, in both which he had unlimited powers to ſupply any defects that he might diſcover, he had now the means of cultivating his beloved ſcience without reſtriction or impediment, and appears to have been truly ſenſible of the happineſs of his lot. In 1736, after having written his *Muſa Cliffortiana*, he was ſent by Mr. Clifford to England, and was introduced to the lovers and teachers of natural ſcience, at Oxford and London more eſpecially. He was ſtrongly recommended by Boerhaave, in a letter which ſtill exiſts, to ſir Hans Sloane; but this indefatigable collector neither underſtood nor cared for thoſe improvements in botanic ſcience which he might have learned from his viſitor. Linnæus found more intelligent and communicative friends in Dr. Shaw, the oriental traveller, profeſſor Martyn the elder, the well-known Philip Miller, and the celebrated Peter Collinſon. Theſe men of true ſcience admired his genius and valued his friendſhip; they promoted his wiſhes by every means in their power, enriching him with books; and ſupplying him plentifully with plants, both for his own herbarium, and the garden of his patron at Hartecamp. He was much ſtruck with what he ſaw of London; and has celebrated it in an expreſſion which has often been repeated, calling this famous city the *punctum ſaliens in vitello orbis*. Of his obſervations on the natural hiſtory of this country, nothing is preſerved but a tradition, that the golden bloom of the furze on the commons near London, eſpecially Putney-heath, delighted him ſo much, that he fell on his knees in a rapture at the ſight. He was always an admirer of this plant, and laboured in vain to preſerve it through a Swediſh winter in his greenhouſe; as we in England are obliged to ſhelter the Cape ſhrub in a ſtove, though it covers walls in the open air at Paris.

On his return to Holland, he continued the impreſſion of his *Genera Plantarum*, which appeared in 1737. In October 1736, he was made a member of the Imperial Academy Naturæ Curioſorum, by the title, according to the cuſtom of that body, of Dioſcorides ſecundus. He printed in 1737 the *Viridarium Cliffortianum*, an octavo catalogue of his friend's garden, diſpoſed according to his own ſexual ſyſtem; of which he publiſhed, later in the ſame year, at Leyden, an exemplification under the title of *Methodus Sexualis*, in which all the known genera of plants are ſo arranged by name only. This year alſo produced his magnificent *Hortus Cliffortianus*, in folio, in which all the plants of Mr. Clifford's collection, whether living or dried, are enumerated, with many deſcriptions and highly-intereſting remarks, an almoſt complete detail of ſynonyms, and ſome of the moſt exquiſite plates ever ſeen in any book. This ſplendid volume was not publiſhed, but only given away by Mr. Clifford. It was begun and completed in nine months. In the intervals of this labour, the *Critica Botanica*, an octavo volume, was written and printed. This is an entertaining commentary and illuſtration of part of the Fundamenta, from ſection 210 to 324, relating to nomenclature and ſpecific characters. It is a book not ſo much known as it deſerves, being very rare.

Theſe ſevere labours however proved too much for the health of Linnæus; and he conceived that the autumnal air of Holland, as is very probable, did not agree with him. Though he had every luxury and indulgence at his command, and was careſſed by his patron, and by all who came near him, with the moſt flattering attentions, he longed to return to his native country. Having left Mr. Clifford, he could not refuſe his aſſiſtance for a while to profeſſor Adrian Van Royen at Leyden, in the arrangement and deſcription of the garden there; and at this time he compoſed and printed the *Claſſes Plantarum*, which is a complete view of all the botanical ſyſtems ever known. Here alſo he publiſhed his friend Artedi's Ichthyologia. Linnæus remained at Leyden till the ſpring of 1738, when he had an intereſting interview with the great Boerhaave, then on his death-bed: "I have lived out my time," ſaid the venerable invalid; "I have done what I could; may God preſerve thee, from whom the world expects much more. Farewel!" Whether the climate of Holland co-operated with dejection of ſpirits in our young Swede, in conſequence of news he received reſpecting a rival in the affections of his miſtreſs, and in the eſteem of his intended father-in-law, or whether his literary labours were too unremitting, his departure was prevented by a very formidable intermittent fever. The ſkill of Van Swieten, and the renewed attentions of the amiable Clifford, who received him again under his roof with the moſt liberal and indulgent kindneſs, after ſome weeks reſtored him ſo far, that he was able, though ſtill weak, to ſet out on his journey. On reaching the more elevated country of Brabant, he felt in one day quite renovated, his whole frame being, as he expreſſes it, "freed from ſome great burden." He carried a very handſome introductory letter from Van Royen to Anthony de Juſſieu the phyſician, who made him acquainted with his brother, the famous Bernard de Juſſieu. He inſpected the botanic garden, the herbariums of Tournefort, Vaillant, the Juſſieus, &c. viſited the neighbourhood of Fontainebleau, which he has celebrated for its Orchideæ, formed an acquaintance with Reaumur and other diſtinguiſhed naturaliſts, and was admitted a correſponding member of the Academie des Sciences.

After leaving Paris, Linnæus took his paſſage at Rouen for Sweden, and landed at Helſingborg, from whence he proceeded to Fahlun, viſiting his father for a few days in his way. His reception from the lady of his choice was favourable: and they were formally betrothed to each other. Before they could marry, it was neceſſary that ſome proſpect of an advantageous eſtabliſhment ſhould be diſcovered. Stockholm was thought a promiſing theatre for a young man of talents in the medical profeſſion. In the mean time, the ſcientific merits of Linnæus were not overlooked, as he was unanimouſly choſen a member of the Upſal academy, the only one then in Sweden; and, after paſſing the winter of 1738 in the capital, he began to make his way in ſome departments of medical practice, ſo that by the following March he had conſiderable employment. A moſt flattering mark of public approbation was, ſoon after, conferred on Linnæus, without any ſolicitation. Count Teſſin, marſhal of the diet, which was then ſitting, gave him an annual penſion of 200 ducats from the board of mines, on condition of his giving

public

public lectures on botany and mineralogy at Stockholm. The ſame nobleman alſo obtained for him the appointment of phyſician to the navy, and received him into his houſe. His practice now increaſed greatly among the nobility; and he found himſelf in ſo proſperous a condition, that he would no longer delay his marriage, which took place at Fahlun, June 26, 1739. After a month he returned to Stockholm; and, by the intereſt of count Teſſin, laid the foundation of the Royal Academy of Sciences, of which he was, by lot, the firſt preſident; and, as that office was to be but of three months' duration, he reſigned it in September, and on that occaſion delivered an oration in Swediſh, on the wonderful economy of inſects, which was printed in the Tranſactions; and his example was followed by all the ſucceeding preſidents.

The death of Rudbeck, profeſſor of botany at Upſal, in 1740, opened to Linnæus a proſpect of that literary ſtation, which had always been the object of his wiſhes, in which he might devote himſelf entirely to the improvement of natural hiſtory, uninterrupted by the cares of medical practice. He had, however, a competitor, Roſen, his ancient rival and antagoniſt, whoſe ſuperior academical claims obtained the preference. But the reſignation of Roberg, the medical profeſſor, having made another vacancy, that chair was given to Linnæus, with the condition that he and Roſen ſhould divide the buſineſs of the two profeſſorſhips between them; and to the former were allotted the departments of the botanic garden, materia medica, ſemiology, diætetics, and natural hiſtory in general. Before his removal to Upſal, he was engaged by the ſtates of the kingdom to travel through the ſouthern provinces of Sweden, for the purpoſe of collecting ſuch information as might tend to the improvement of agriculture and manufactures. In this tour he was accompanied by ſix pupils, and he performed the taſk to the ſatisfaction of the ſtates; its reſult was printed. He entered upon his profeſſorſhip in the autumn of 1741; on which occaſion he pronounced a Latin oration "On the neceſſity of travelling in one's own country." His own paſt exertions in this reſpect rendered it a very entertaining and intereſting compoſition. In the ſame year he made the tour of the iſlands of Oeland and Gothland, by order of the ſtates; and in ſubſequent years he travelled on the ſame requiſition through Weſt Gothland and Scania. Excluſive of theſe excurſions, his abode was henceforth fixed at Upſal; and the remaining hiſtory of his life is only that of his literary and ſcientific labours, and of the honours and diſtinctions that were accumulated upon him.

One of his firſt cares was to improve and new-model the academical garden. He procured the erection of ſeveral new buildings, arranged the plants according to his own ſyſtem, and founded a muſeum of natural hiſtory in a part of the greenhouſe. In 1745 he publiſhed the firſt edition of his *Flora Suecica*, an admirable ſpecimen of a local catalogue, and the pattern of all thoſe which have ſince been made upon the Linnæan ſyſtem. In the next year appeared his *Fauna Suecica*, or catalogue of the animal kingdom in Sweden, arranged alſo according to his own method. In the numerous and difficult claſs of inſects, he adopted an entirely-new mode of arrangement, which has been followed by moſt later entomologiſts. His merits, indeed, with reſpect to this claſs of natural productions, ſtand next to thoſe with reſpect to the vegetable creation. The ſame accurate inſpection was requiſite in both; and, from the immenſe number of ſubjects in each, it was equally neceſſary in both to ſearch out for minute diverſities whereon to found an artificial claſſification.

The credit he was now acquiring in his own country appeared in his election to the poſt of ſecretary to the Academy of Sciences at Upſal; in a medal of him ſtruck at the expenſe of ſome noblemen, in 1746; in his nomination by the king to the rank and title of *archiater*, in 1747; and in his being the only Swede choſen into the new-modelled academy of Berlin. All theſe honours, however, though he was by no means indifferent to ſuch, appear to have given him leſs delight at this moment, than the acquiſition of the herbarium made by Hermannus in Ceylon, which an apothecary at Copenhagen unknowingly poſſeſſed. Being deſirous of becoming better acquainted with the nature of this collection, its owner was recommended to Linnæus, who ſoon diſcovered to whom it had originally belonged, and rejoiced at recovering a treaſure which had been ſuppoſed irrecoverably loſt. He laboured day and night, as he tells us, in examining the flowers; and hence originated his *Flora Zeylanica*, publiſhed at Stockholm in 1747. This herbarium, as well as that of Clifford, is now in the poſſeſſion of ſir Joſeph Banks.

The exertions, and domeſtic as well as foreign reputation, of Linnæus, had now rendered botany extremely popular in Sweden; and its intereſts were combined with thoſe of commerce in various diſtant expeditions and ſpeculations. Many of the principal merchants, as well as the nobility, had acquired a taſte for natural hiſtory, and were proud to further the views of their diſtinguiſhed profeſſor, who was now conſidered an honour to the nation; and he accordingly began to exert his influence in procuring the miſſion of his young diſciples to different parts of the globe, in order to make diſcoveries in natural hiſtory and economy; a circumſtance by which he is diſtinguiſhed above all other naturaliſts, and which has redounded equally to his own glory and to the public advantage. The travels of Kalm, of Oſbeck, of Haſſelquiſt, of Löfling, were the fruits of his zeal in this point. To Linnæus alſo may be aſcribed that curious and valuable collection of treatiſes which, under the name of *Amœnitates Academicæ*, began to be publiſhed in 1749, and were continued to ſeven volumes. They are academical theſes, held under Linnæus in his profeſſorial capacity, and may be regarded as containing his own doctrines and opinions on moſt of the points diſcuſſed.

In the year 1751, or thereabouts, the queen of Sweden, Louiſa Ulrica, ſiſter to the great Frederic of Pruſſia, having a taſte for natural hiſtory, which her royal conſort king Adolphus Frederic alſo patroniſed, ſhowed much favour to Linnæus. He was employed in arranging her collection of inſects and ſhells, in the country-palace of Drotningholm, or Ulrickſdahl; and was frequently honoured with the company and converſation of their majeſties, during his attendance there. The queen intereſted herſelf in the education of his ſon, and promiſed to ſend him to travel through Europe at her own expenſe. She alſo liſtened very graciouſly to any recommendation or petition of Linnæus, in the ſervice of ſcience; redeeming the papers and collection of Haſſelquiſt, and cauſing Kœhler to be ſent to the Cape of Good Hope; whoſe miſſion however was rendered abortive by the jealouſy of the Dutch, though he forwarded many curious inſects and plants to his maſter from Italy. Linnæus devoted ſome of his leiſure time in winter to the arrangement of his friend count Teſſin's collection of foſſils, at Stockholm; of which an account in Latin and Swediſh, making a ſmall folio, with plates, came out in 1753. The reſult of his labours at Drotningholm was not given to the public till many years after, in 1764, when his *Muſeum Reginæ* appeared in 8vo. being a ſort of Prodromus of an intended more ſplendid work, that was never executed. His moſt magnificent publication appeared in 1754, being a large folio, entitled *Muſeum Regis Adolphi Frederici*, comprehending deſcriptions of the rarer quadrupeds, birds, ſerpents, fiſhes, &c. of the king's muſeum, in Latin and Swediſh, with plates, and an excellent preface. This preface, one of the moſt entertaining and eloquent recommendations of the ſtudy of nature that ever came from the pen of an enthuſiaſtic naturaliſt, was tranſlated into Engliſh by Dr. Smith, and firſt printed in 1786; appearing again, in a volume of Tracts relating to Natural Hiſtory, in 1798. The queen of Sweden took ſo much pleaſure in the converſation of her diſtinguiſhed naturaliſt, that ſhe allowed him

him his habitual indulgence of ſmoking even in her apartments, that he might continue his labours with more eaſe and ſatisfaction to himſelf.

About this time, (1751,) he publiſhed his *Philoſophia Botanica*, a comment on, or amplification of, his own *Fundamenta*, and eſſential to the full comprehenſion of his ſyſtem. But the work of Linnæus, which Haller terms his *maximum opus et æternum*, appeared in 1753. It was the *Species Plantarum*, in 2 vols. 8vo. containing a deſcription of every known plant, arranged according to the ſexual ſyſtem. The deſcription, however, is independent of any ſyſtem, as being founded on the eſſential character of each ſpecies, with a further reference to the generic deſcription given in the *Genera Plantarum*. In this publication Linnæus firſt introduced his admirable invention of *ſpecific* or *trivial names*, epithets taken from the moſt prominent ſpecific mark of the ſubject, or from ſome other characteriſtic circumſtance. The ſpecific deſcriptions are given in the conciſe form of a definition, with a great variety of terms of his own invention, ſimple and compound, forming, as it were, a new botanical language. If in theſe terms he has not aimed at a claſſical purity, ſcarcely attainable in ſo modern a ſcience, he has in general formed them upon a correct analogy; and it cannot be denied that they are excellently adapted to their purpoſe.

In the mean time honours of the literary kind had been accumulating on him from foreign countries. Beſides ſeveral learned ſocieties of inferior rank, he was aggregated to the Imperial Academy, to the Royal Societies of Berlin and London, to the Academy of Peterſburgh, and finally was nominated one of the eight foreign members of the Academy of Sciences at Paris, being the firſt Swede who had obtained that diſtinction. The remote city of Upſal was viſited by many ſtrangers, attracted by his reputation, which extended throughout Europe; and the number of ſtudents in its univerſity was doubled. His correſpondence included almoſt all the eminent cultivators of natural hiſtory; and he was continually receiving tributes from all parts, of books, plants, and ſpecimens, which enabled him to complete his vaſt plan of carrying a new ſyſtematic arrangement through every department of nature. This he effected by the completion of his great work, SYSTEMA NATURÆ, which had grown in ſucceſſive editions, from a few tables, to two, and finally to three, volumes; and received his finiſhing hand in 1768. In this performance Linnæus is the methodiſer and nomenclator of all the known productions in the three kingdoms of nature. His claſſifications are all ſo far artificial, that he conſtitutes diviſions and ſubdiviſions from minute qualities in the ſubject, which ſerve very well as external marks, but frequently have little relation to its eſſential character, and therefore bring together things in their nature very diſſimilar. They are framed, however, with wonderful ingenuity; and have undoubtedly produced a more accurate identification in all the branches of natural hiſtory than before prevailed. This is the firſt ſtep to an exact hiſtory of every ſubject; and it is only ignorance which treats it with contempt as mere nomenclature. Although arrangement was the point which Linnæus peculiarly laboured, yet many of his ſmaller works prove his great attention to matters of uſe and curioſity; and no ſchool has contributed ſo much to a thorough acquaintance with the productions of nature as the Linnæan. Linnæus alſo carried his methodiſing plans into the ſcience of medicine, and publiſhed a claſſified *Materia Medica*, and a ſyſtem of noſology under the title of *Genera Morborum*. His idea of a ſyſtematic arrangement of diſeaſes by technical characters, was followed up and illuſtrated on a large ſcale, by his friend Sauvages of Montpellier; and the celebrated Dr. Cullen of Edinburgh juſtly attributed to the Swediſh philoſopher the foundation of his own performance in this line. Such ſchemes of arrangement indeed can be conſidered merely as helps to the memory, and in themſelves altogether artificial; and the abilities of Linnæus appear to the greateſt advantage in his claſſification of natural objects.

Theſe vaſt literary labours, combined with the practice of phyſic, were more than the bodily conſtitution of Linnæus could ſupport. He was attacked with the ſtone; and had alſo, from time to time, fits of gout. He conſidered the wood-ſtrawberry as a ſpecific for both diſorders; and they never greatly interfered with his comfort or his duties. On the 27th of April, 1753, he received, from the hand of his ſovereign, the order of the Polar Star, an honour which had never before been conferred for literary merit. A ſtill more remarkable, if not more grateful, compliment was paid him not long after by the king of Spain, who invited him to ſettle at Madrid, with the offer of nobility, the free exerciſe of his religion, and a ſplendid botanical appointment. This propoſal was conveyed to him in a handſome letter by the duke of Grimaldi, then prime miniſter; and was as handſomely declined by Linnæus, who declared, that, if he had any merits, they were due to his own country. This patriotic moderation received its juſt reward in November 1756, when he was raiſed to the rank of Swediſh nobility, and took the name of *Von Linné*. But his patent of nobility did not receive his majeſty's ſign manual till 1761, though it was antedated 1757. It was confirmed by the diet in 1762; and he then took a coat of arms expreſſive of the ſciences he cultivated. That auguſt body honoured him with a ſtill more ſolid reward, upwards of 520l. ſterling, for what ſeems to have been the leaſt valuable of his diſcoveries, the art of producing pearls in the river-muſcle. This was accompliſhed by wounding the ſhells in their natural ſituation, as appears by ſome ſpecimens illuſtrative of it in his muſeum; but the practice does not ſeem to have been proſecuted to any great extent.

In 1763 Linnæus was permitted to avail himſelf of the aſſiſtance of his ſon, then twenty-one years of age, in the labours of the botanical profeſſorſhip, and the young man was thus trained up for his future ſucceſſor. His eldeſt daughter was married to an officer in 1764. His worldly concerns appear to have been in a proſperous train, except that he ſuffered this year from a dangerous attack of pleuriſy; but it is pleaſing to read, in his private memorandums, the gratitude he expreſſes to his old rival Roſen, for his ſkill and attention during this illneſs, and the expreſſions of intimate regard by which they were now become attached to each other.

A moderate degree of opulence (conſiderable, indeed, relatively to the country in which he lived) attended the honour and reputation which Linnæus enjoyed. He was enabled to purchaſe an eſtate and villa at Hammarby near Upſal, which was his chief ſummer-reſidence during the laſt fifteen years of his life. Here he had a muſeum of natural hiſtory, on which he gave lectures; and here he occaſionally entertained his friends, but with that economy which had grown to be a habit with him, and which the poſſeſſion of wealth, as is frequently the caſe, rather ſtraitened than relaxed. His vigour and activity continued to an advanced period; though his memory, overburthened with ſuch an immenſe load of names, began to fail after his ſixtieth year. An attack of apoplexy, in May 1774, obliged him to relinquiſh the moſt laborious part of his profeſſorial duties, and to cloſe his literary toils. In 1776 a ſecond ſeizure rendered him paralytic on the right ſide, and reduced him to a deplorable ſtate of bodily and mental debility. An ulceration of the bladder was the concluding ſymptom, which carried him off on January 10th, 1778, in the ſeventy-firſt year of his age.

The death of Linnæus was regarded in Sweden as a national calamity. The whole univerſity went into mourning; his funeral was attended by all the profeſſors, doctors, and ſtudents, then at Upſal; and his pall was ſupported by eighteen doctors, who had formerly been his pupils. The Academy of Belles Lettres at Stockholm offered a gold medal for the beſt eulogium on him; and

another was offered, by the command of the king, for the beſt inſcription, either in Latin or Swediſh, to be engraved on his monument, erected at the entrance of the new botanical garden. The king, in his ſpeech to the ſtates, publicly lamented his death; and ordered a medal to be ſtruck to his memory. In 1787, when the foundation of the new building in the botanical garden was laid, among the Swediſh coins which were depoſited on the firſt ſtone, a medal was likewiſe placed in honour of Linnæus. And in 1798 a monument was erected to his memory in the cathedral of the city of Upſal. It conſiſts entirely of porphyry of Elfwedal. It is in the form of an altar, the ſteps of which are a brown ſtone of Oeland; and it ſupports a medallion, in which is a buſt of Linnæus. The inſcription is: *Carolo à Linné, Botanicorum principi, amici, et diſcipuli.* M.DCC.XCVIII. In other places likewiſe, where his merits were reverenced, honours in token of regard and affection for his memory were exhibited. Dr. Hope, the profeſſor of botany at Edinburgh, pronounced an oration in praiſe of Linnæus, at the opening of his lectures in 1778; and erected a monument to him in the botanic garden of that univerſity. Condorcet and Vicq d'Azyr read panegyrics in his praiſe at Paris; and the ſame was done by Beiris at Helmſtadt. The duke de Noailles cauſed a monument to be erected to his memory in his garden.

The iſſue of Linnæus were two ſons and four daughters: Charles, who ſucceeded his father; (ſee the next article:) John, who died in his infancy: Elizabeth-Chriſtiana, who married Bergencrantz, a captain of cavalry; ſhe has been ſome years dead, and left one daughter: Louiſa, and Sarah-Chriſtiana, both at preſent reſident with their mother at Hammarby: and Sophia, who is married to Duſe, procurator of the ſenate of the univerſity of Upſal.

As to the private and perſonal character of this great naturaliſt; he was in ſtature rather below the common ſize, but of a tolerably muſcular frame; in walking he ſtooped a little, which might be occaſioned by his habit of ſearching after and collecting plants; his head was very large, and prominent behind; his look was ardent, piercing, and apt to daunt the beholder; his ear not ſenſible to muſic; his temper quick, but eaſily appeaſed. In ſociety he was eaſy and pleaſant; in his domeſtic relations, kind and affectionate; in the ordinary commerce of life, upright and honourable. His views of nature impreſſed him with the moſt devout ſentiments towards its Author; and a glow of unaffected piety is continually breaking forth in his writings. Nature had, in an eminent manner, been liberal in the endowments of his mind. He ſeems to have been poſſeſſed of a lively imagination, corrected however by a ſtrong judgment, and guided by the laws of ſyſtem. Add to theſe, the moſt retentive memory, an unremitting induſtry, and the greateſt perſeverance in all his purſuits; as is evident from that continued vigour with which he proſecuted the deſign, that he appears to have formed ſo early in life, of totally reforming and fabricating anew the whole ſcience of natural hiſtory; and this fabric he raiſed, and gave to it a degree of perfection unknown before; and had moreover the uncommon felicity of living to ſee his own ſtructure riſe above all others, notwithſtanding every diſcouragement its author at firſt laboured under, and the oppoſition it afterwards met with. Neither has any writer more cautiouſly avoided that common error of building his own fame on the ruin of another man's. He every-where acknowledged the ſeveral merits of each author's ſyſtem; and no man appears to have been more ſenſible of the partial defects of his own. Thoſe anomalies, which had principally been the objects of criticiſm, he well knew every artificial arrangement muſt abound with; and, having laid it down as a firm maxim, that every ſyſtem muſt finally reſt on its intrinſic merit, he willingly commits his own to the judgment of poſterity. Perhaps there is no circumſtance of Linnæus's life which ſhows him in a more dignified light than his conduct towards his opponents. Diſavowing controverſy, and juſtly conſidering it as an unimportant and fruitleſs ſacrifice of time, he never replied to any, numerous as they were at one ſeaſon.

To all who ſee the aid this extraordinary man has brought to natural ſcience, his talents muſt appear in a very illuſtrious point of view; but more eſpecially to thoſe who, from ſimilarity of taſtes, are qualified to ſee more diſtinctly the vaſt extent of his original deſign, the greatneſs of his labour, and the elaborate execution he has given to the whole. He had a happy command of the Latin tongue, which is alone the language of ſcience; and no man ever applied it more ſucceſsfully to his purpoſes, or gave to deſcription ſuch copiouſneſs, united with that preciſion and conciſeneſs which ſo eminently characterize his writings.

The ardour of Linnæus's inclinations to the ſtudy of nature, from his earlieſt years, and that uncommon application which he beſtowed upon it, gave him a moſt comprehenſive view both of its pleaſures and uſefulneſs, at the ſame time that it opened to him a wide field hitherto but little cultivated, eſpecially in his own country. Hence he was early led to regret, that the ſtudy of natural hiſtory, as a public inſtitution, had not made its way into the univerſities; in many of which, logical diſputations and metaphyſical theories had too long prevailed, to the excluſion of more uſeful ſcience. Availing himſelf therefore of the advantages which he derived from a large ſhare of eloquence, and an animated ſtyle, he never failed to diſplay, in a lively and convincing manner, the relation this ſtudy hath to the public good; to incite the great to countenance and protect it; to encourage and allure youth into its purſuits, by opening its manifold ſources of pleaſure to their view, and ſhowing them how greatly this agreeable employment would add, in a variety of inſtances, both to their comfort and emolument. His extenſive view of natural hiſtory, as connected with almoſt all the arts of life, did not allow him to confine theſe motives and incitements to thoſe only who were deſigned for the practice of phyſic. He alſo laboured to inſpire the great and opulent with a taſte for this ſtudy; and wiſhed particularly that ſuch as were devoted to an eccleſiaſtical life ſhould ſhare a portion of natural ſcience; not only as a means of ſweetening their rural ſituation, confined, as many are, perpetually to a country reſidence, but as what would almoſt inevitably lead, in a variety of inſtances, to diſcoveries which only ſuch ſituations could give riſe to, and which the learned in great cities could have no opportunities to make. Not to add, that the mutual communication and enlargement of this kind of knowledge among people of equal rank in a country ſituation, muſt prove one of the ſtrongeſt bonds of union and friendſhip, and contribute, in a much higher degree than the uſual periſhing amuſements of the age, to the pleaſures and advantage of ſociety.

Linnæus lived to enjoy the fruit of his own labour in an uncommon degree. Natural hiſtory raiſed itſelf in Sweden, under his culture, to a ſtate of perfection unknown elſewhere; and was from thence diſſeminated through all Europe. His pupils diſperſed themſelves all over the globe; and, with their maſter's fame, extended both ſcience and their own. More than this, he lived to ſee the ſovereigns of Europe eſtabliſh ſeveral public inſtitutions in favour of this ſtudy; and even profeſſorſhips inſtituted in divers univerſities for the ſame purpoſe, which do honour to their founders and patrons, and which have excited a curioſity for the ſcience, and a ſenſe of its worth, that cannot fail to further its progreſs, and in time raiſe it to that rank which it is entitled to hold among the purſuits of mankind. His ſyſtem, now received in every country illuminated by the rays of ſcience, may be conſidered as the bible of nature, the great nomenclature of natural ſcience; where every genuine character is a family portraiture, and every ſpecific deſcription a miniature; and where, by a few ſimple appropriate terms,

the image of every diſtinct object on the globe we inhabit is reflected on the mind and the memory. To this ſyſtem may be juſtly applied the nervous obſervation of Dr. Johnſon, in his delineation of the character of Shakeſpeare: "The ſtream of time, which is continually waſhing away the diſſoluble fabrics of other ſyſtems, paſſes without injury by the adamant of Linnæus."

LINNÆ'US (Charles), ſon of the great Linnæus, was born January 20, 1741, at the houſe of his maternal grandfather at Fahlun. His father was anxiouſly deſirous of his excelling in natural hiſtory, more particularly botany; and, after endeavouring, from his moſt tender years, to make him fond of flowers, committed him, when about the age of nine or ten, to the more particular care of ſome of his own moſt favourite pupils. By them he was taught the names of the plants in the Upſal garden, and ſuch of the principles of natural ſcience as were ſuited to his period of life, as well as to converſe habitually in Latin. He proved a docile and ready ſcholar, and appears to have given ſatisfaction to his father, who procured for him, at the age of eighteen, the appointment of demonſtrator in the botanic garden, an office then firſt contrived on purpoſe for him. Having learned to draw from nature, he became an author at the age of twenty-one, publiſhing in 1762 his firſt *Decas Plantarum Rariorum Horti Upſalienſis*, the plates of which, in outline only, like thoſe of Plumier, were drawn by his own hand. Theſe are ſufficiently faithful and uſeful, if not ornamental. The deſcriptions are full and ſcientific. In 1763 another *Decas*, or collection of ten ſpecies, came out on the ſame plan. Whether the Upſal booksellers did not encourage him to proceed, or for what other reaſon we know not, he never printed any more numbers under this title. In 1767, however, he publiſhed at Leipſic ten more plates and deſcriptions, like the above, entitled *Plantarum Rariorum Horti Upſalienſis Faſciculus Primus*. To this he was perhaps inſtigated by his friend Schreber, who, the year before, had given to the world a ſimilar work, deſcribing ten rare oriental plants, drawn by himſelf. But neither of theſe publications was ever extended to a ſecond faſciculus. In 1763 he was nominated adjunct profeſſor of botany, with a promiſe, hitherto unexampled, that, after his father's death, he ſhould ſucceed to all his academical functions. In 1765 he took his degree of doctor of phyſic, and began to give lectures.

His progreſs would probably have been happy, if not brilliant, but domeſtic chagrin ſapped the foundation of all his felicity, and damped his ardour in every purſuit. This aroſe from the conduct of his unnatural mother, another example of that rare and deteſtable depravity exhibited by the mother of Savage the poet. Not content with diſhonouring her huſband's bed, and making his home as uncomfortable as ſhe could by the meaneſt parſimony and diſguſting petty tyranny, the wife of the great Linnæus conceived a hatred for her only ſon, which ſhe diſplayed by every affront and perſecution that her ſituation gave her the means of inflicting on his ſuſceptible and naturally-amiable mind. According to Fabricius, ſhe forced her huſband, who by ſuch a conceſſion ſurely partook largely of her guilt and meanneſs, to procure the nomination of his pupil Solander to be his future ſucceſſor, in preference to his own ſon; and it was a part of her plan that he ſhould marry her eldeſt daughter. Solander, however, diſdained both the uſurpation and the bait, refuſing to leave England; and the miſguided father recovered his ſenſes and authority, cauſing his ſon, as we have ſaid above, to receive this truly-honourable diſtinction. The mind and ſpirit of the young man nevertheleſs ſtill drooped; and, even when he had attained his thirtieth year, he would gladly have eſcaped from his miſeries and his hopes together. The authority of the king was obliged to be exerted, at his father's ſolicitation, to prevent his going into the army. This meaſure of the parent was happily followed up by kindneſs and encouragement in his botanical purſuits, to which treatment the ſon was ever ſenſible; and he revived from his deſpondency before his father's death, which happened when he was thirty-ſeven years of age.

Though obliged by his mother to purchaſe, at her own price, the library, manuſcripts, herbarium, &c. which he ought by every title to have inherited, he roſe above every impediment, and betook himſelf to the uſeful application of the means now in his hands, for his own reputation and advancement. His father had already prepared great part of a third botanical Appendix, or *Mantiſſa*; from the communications of Mutis, Kœnig, Sparmann, Forſter, Pallas, and others. To this the younger Linnæus added thoſe of Thunberg from the Cape, which his father, "with half-extinguiſhed eyes," as Condorcet beautifully relates, had juſt been able to glance over, but not to deſcribe. Hence originated the *Supplementum Plantarum*, printed at Brunſwick, under the care of Ehrhart, in 1781. The ingenious editor inſerted his own new characters of ſome genera of moſſes; which Hedwig has ſince confirmed, except that ſome of the names have been juſtly rejected. The plants of the Supplementum are admitted into the fourteenth edition of the Syſtema Vegetabilium by Murray, and figures of ſome of the moſt curious have been publiſhed by Dr. Smith, in his Plantarum Icones ex Herbario Linnæano. Three botanical diſſertations alſo appeared under the preſidency of the younger Linnæus, on Graſſes, on Lavandula, and the celebrated Methodus Muſcorum; which laſt was the work, and the inaugural theſis, of the preſent profeſſor Swartz of Stockholm. Theſe form a ſequel to the 186 ſimilar eſſays, which moſt of them compoſe the ſeven volumes of the Amœnitates Academicæ, the reſt being publiſhed by Schreber in three additional ones.

The ſubject of our memoir had always felt a ſtrong deſire to viſit the chief countries of learned and civilized Europe. For this purpoſe he was obliged to pawn his juvenile herbarium, made from the Upſal garden, to his friend Alſtroemer, for fifty or ſixty pounds. He arrived at London in May 1781, and was received with enthuſiaſm by the ſurviving friends and correſpondents of his father, being in a manner domeſticated under the roof of ſir Joſeph Banks, whoſe friendſhip, kindneſs, and liberality, could not be exceeded; neither could they have been by any one more gratefully received. Here the ardent Swediſh viſitor had every aſſiſtance for the preparation of ſeveral works on which he was intent, as a ſyſtem of the Mammalia, a botanical treatiſe on the lily and palm tribes, and new editions of ſeveral of his father's ſtandard books. None of theſe however have yet been printed. An attack of the jaundice rendered half his ſtay in England uncomfortable as well as uſeleſs to him. He proceeded to Paris in the latter end of Auguſt 1781, accompanied by the amiable and celebrated Brouſſonet, with whom he became acquainted in London. His reception in France was not leſs flattering than what he had experienced in England. He was enriched with duplicates of Commerſon's plants from the herbarium of the excellent Thouin, which amounted to about 1100 ſpecies, and had never been communicated to any other foreigner. In the following ſpring he viſited Holland, tracing with filial piety every veſtige of his father's ſteps at Hartecamp and elſewhere; and receiving, as he had done at Paris and London, ample contributions for his herbarium, library, and muſeum of ſhells and inſects. The next place in which he made any ſtay was Hamburgh, where ſeveral of his own friends were already ſettled; and from hence he returned by Copenhagen and Stockholm, viſiting his friend Fabricius at Kiel, and his patron baron Alſtroemer at Gottenburgh, and finally arriving at Upſal in February 1783. In his progreſs he had received ſeveral academical honours, as well as ample teſtimonies of ſcientific and perſonal reſpect, being a man of agreeable and unaſſuming manners, without vanity or oſtentation, though ſomewhat, perhaps not unduly, tenacious, that his own diſcoveries and performances ſhould not be confounded with any thing left be-

hind

hind by his father. But the career of this excellent man was cut ſhort by a bilious fever, which concluded with a ſtroke of apoplexy, November 1, 1783, in the forty-ſecond year of his age. His remains were interred with great ſolemnity on the 30th of the ſame month. His coffin was laid by the ſide of his father; and, as the male line of the family concluded in him, their coat of arms was broken over the grave. After this ceremony, the gardener of the univerſity ſtrewed flowers over the mingled aſhes of the father and the ſon. A funeral oration in Swediſh was pronounced by M. Von Schulzenheim, and was ſoon after publiſhed. This compoſition, partly tranſlated, and much enlarged, in the Engliſh edition, by Trapp, of Stoever's Life of Linnæus, has afforded much of the ſubſtance of this article.

The younger Linnæus is ſaid to have had naturally a ſtrong and vigorous frame of body, and to have inherited his father's keen and penetrating eyes, as well as his temper and active diſpoſition. He was greatly beloved by thoſe who knew him, and died generally reſpected and lamented. His muſeum and library reverted to his mother and ſiſters, as he had never been married; and the former inſtantly fixed her eyes on ſir Joſeph Banks, as the moſt likely perſon to purchaſe theſe relics at the high price, as ſhe thought it, of a thouſand guineas. On his refuſal, and by his kind recommendation and advice, they came into the hands of Dr. Smith. The ſale was precipitated before the return of the king of Sweden, then on his travels, leſt he ſhould oblige the heirs to diſpoſe of the whole at a cheaper rate to the Univerſity of Upſal. This would actually have been the caſe, as appears from the exertions made by his majeſty on his return, who ſent a courier to the Sound, and a veſſel by ſea, to intercept the ſhip that was bearing away the prize.

Dr. Smith, having gained poſſeſſion of this treaſure, was deſirous to communicate the benefit of it, as extenſively as poſſible, to the public. With this view, he in the year 1788 drew the plan of an inſtitution to be called the Linnæan Society, intended for the promotion of diſcoveries and improvements in natural hiſtory. Dr. Smith was moſt deſervedly choſen, and ſtill continues, preſident of the ſociety; and it obtained a royal charter in the year 1802, with a patent for armorial bearings. When it is recollected that the purchaſe we have mentioned comprehended the complete muſeum of Linnæus, including the library, herbarium, inſects, ſhells, and all other natural curioſities, with all the manuſcripts and whole correſpondence, of the illuſtrious Swede; the authority which ſuch an acquiſition gave to the labours of the infant ſociety, as well as to all botanical and zoological publications, the authors of which have ever been allowed freely to conſult it, will readily be perceived. Nothing perhaps could have more contributed to raiſe up, or to improve, a taſte for natural ſcience, in any country; and the eleven 4to volumes of Tranſactions, already publiſhed by the ſociety, prove that its members are not idle venerators of the name they bear.

Two other ſocieties have been inſtituted in honour of the great Linnæus. The Société Linnéenne was eſtabliſhed at Paris the year preceding that of London. An inſtitution for ſimilar purpoſes was formed at Leipſic, in the year 1790, under the care of profeſſor Ludwig.

LIN'NE, a town of France, in the department of the Roer: two miles ſouth of Ordingen, and thirty-two north-north-weſt of Cologne.

LIN'NET, *ſ.* [*linot*, Fr. *linaria*, Lat.] A ſmall ſinging-bird.—The ſwallows make uſe of celandine, the *linnet* of euphragia, for the repairing of their ſight. *Moore's Antidote.*—See Fringilla linota, vol. viii. p. 62.

LIN'NICH, a town of France, in the department of the Roer, on the Ruhr. In 1444, Arnold of Egmont was defeated near this town by Gerhard duke of Juliers and Berg. It is five miles north-north-weſt of Juliers. Lat. 50. 57. N. lon. 6. 13. E.

LINOCAR'PUM, *ſ.* in botany. See Linum.

LINOCIE'RA, *ſ.* [ſo named by Swartz from *Geofroy Linocier*, phyſician at Tournon in the Vivarais; author of l'Hiſtoire des Plantes des Indes; Par. 1584. He wrote alſo on beaſts, birds, fiſhes, and plants.] In botany, a genus of the claſs diandria, order monogynia. The generic characters are—Calyx: perianthium very ſmall, four-toothed, obtuſe, permanent. Corolla: petals four, equal, linear, channelled, upright, ſpreading at top, many times longer than the calyx. Stamina: filaments two; very ſhort, rather broad; antheræ linear, two-furrowed, length of the corolla, upright, each adhering ſlightly to the other ſide of the two petals. Piſtillium: germ ſuperior, ovate, four-cornered; ſtyle ſhort; ſtigma oblong, two-cleft. Pericarpium: berry ovate, ſharp-pointed, two-celled. Seeds: ſolitary, oblong.—*Eſſential Character.* Calyx four-toothed; corolla four-petalled; antheræ connecting two oppoſite petals at the baſe; berry two-celled.

Linociera liguſtrina is the only ſpecies deſcribed by Swartz. It is a native of dry open places in the Weſt Indies, eſpecially Jamaica and St. Domingo; flowering in June and July. It ſhould be obſerved, that the preſent genus was adopted by Schreber, from Swartz, who firſt called it *Thouinia*, in his Prodromus. The Thouinia now adopted into our ſyſtem is however a very different plant; and Dr. Smith ſuggeſts that Linociera may probably not be a diſtinct genus from Chionanthus, merely becauſe they differ in the number of cells of the fruit; the former having two cells, the latter only one. But in ſome genera of this natural order, the number of cells in the ripe fruit has been diſcovered conſtantly to be fewer than in the young germen. In Olea, in particular, this was found to be regularly the caſe by the late M. Brouſſonet, though we know not that it had been before ſuſpected.

LI'NON, or Lly'non, a river in Angleſey, which runs into the Allow before Llanvorog.

LINOPHYL'LUM, *ſ.* in botany. See Thesium.

LINO'SA, a ſmall iſland not far from the coaſt of Tunis, in the Mediterranean, near the iſland of Lampedoſa.

LINOS'ITY, *ſ.* [from *linum*, Lat. flax.] The ſtate of abounding with flax. *Scott.*

LINOSY'RIS, *ſ.* in botany. See Chrysocoma.

LINOZOS'TIS, *ſ.* A name given by the ancient Greek writers to two plants very different from one another: the one is the Chenopodium bonus henricus, or Engliſh mercury, a plant common in uncultivated places, and eaten by many boiled in manner of aſparagus; the other the Cuſcuta, or dodder, growing upon the plants of flax. Theophraſtus, Dioſcorides, and the ancient Greeks, uſe the word in the firſt ſenſe; and the modern Greeks in the latter.

LIN'QUES, a country of Celebes, lying between the two ſtates of Binano and Bankale, not far from the bay of Tourattea.

LIN'SCHOTTEN, a town of Holland: eight miles weſt of Utrecht.

LINS'DORF, a town of Bohemia, in the circle of Konigingratz: thirty-two miles eaſt-ſouth-eaſt of Geverſberg.

LIN'SE, a town of Pruſſia, in Oberland: fifteen miles ſouth-eaſt of Marienwerder.

LIN'SEED, *ſ.* The ſeed of flax. See Linum.—The joints may be cloſed with a cement of lime, *linſeed* oil, and cotton. *Mortimer's Huſbandry.*

LIN'SENBAHRT, or Lentil'ius (Roſinus), a phyſician, was born at Waldenburg, in the province of Hohenlohe, in February 1657. He commenced his ſtudies at Heidelberg at the age of fourteen, and thence removed to Jena in 1673; but his ſcanty means of ſubſiſtence compelled him the next year to engage as a teacher in the vicinity of Leipſic, where he continued till 1677. He then travelled, with a view to improve his ſituation, through ſeveral of the principal towns in the north of Germany, and ſettled at Mattau, in Courland, in the ſame capacity of teacher. To aid this feeble reſource, Linſenbahrt began

gan likewiſe to practiſe medicine, in which his ſucceſs was ſuch, that the marquis of Anſpach appointed him phyſician to the town of Creilſheim in Franconia; whither he repaired in 1680, after having been admitted a licentiate in medicine at Altdorf. He afterwards ſettled at Stutgard, and was patroniſed by the marquis of Dourlach; and, when that prince was driven by the war to take refuge at Baſle, he was nominated honorary phyſician to the duke of Wirtemberg, and became his firſt phyſician in 1711. He accompanied the ſon of this prince in his travels, during three years; and after his return, in 1716, remained in the tranquil exerciſe of his profeſſion until his death, in February 1733. Linſenbahrt was the firſt who recommended the uſe of arſenic internally for the cure of intermittent fevers, in which its efficacy has been eſtabliſhed by recent obſervers, and eſpecially by Dr. Fowler, of York. He was a decided enemy to bloodletting, which he ſtrenuouſly endeavoured to diſcard from the practice of medicine; and particularly condemned the cuſtom, then prevalent among the Germans, of letting blood at the equinoctial periods, againſt which he publiſhed a treatiſe in his mother-tongue, at Ulm, in 1692. He was likewiſe author of the following works: 1. Tabula Conſultatoria Medica, Ulm, 1696. 2. Miſcellanea Medico-Practica tripartita, 1694. 3. De Hydrophobiæ Cauſâ et Cura, Diſſertatio, ibid. 1707. 4. Eteodromus Medico-Practicus Anni 1709; Stutgard, 1711. 5. Jatromnemata Theoretico-Practica, 1712.

LINSEL'LES, a town of France, in the department of the North: five miles north of Liſle.

LIN'SEY-WOOL'SEY, *adj.* Made of linen and wool mixed. Vile; mean; of different and unſuitable parts:

A lawleſs *linſey-woolſie* brother,
Half of one order, half another. *Hudibras.*

Peel'd, patch'd and pybald, *linſey-woolſey* brothers,
Grave mummers! ſleeveleſs ſome, and ſhirtleſs others. *Pope.*

LINS'SE, a town of the Farther Pomerania; three miles ſouth-weſt of Belgard.

LIN'STEAD, a village in Kent, four miles from Feverſham.

LIN'STEAD, Great and Little, villages in Suffolk; weſt of Haleſworth.

LIN'STEIN, a town of Flanders; three miles ſouth of Hulſt.

LIN'STOCK, or LINT'STOCK, *ſ.* [*lunte*, or *lente*, Teutonic; *lint* and *ſtock*.] A ſtaff of wood with a match at the end of it, uſed by gunners in firing cannon. *Hanmer.*

The nimble gunner
With *linſtock* now the dev'liſh cannon touches,
And down goes all before him. *Shakeſpeare.*

The linſtock is commonly about three feet long, having at one end a piece of iron divided into two branches, each of which has a notch to hold a piece of match, and a ſcrew to faſten it there; the other end being alſo ſhod with iron, and pointed to ſtick into the ground, or in the deck when it is uſed at ſea. It is uſed by the gunners in firing cannon. It is frequently uſed in ſmall veſſels, in an engagement, where there is commonly one fixed between every two guns, by which the match is always kept dry and ready for firing.

LIN'STORP, a town of Sweden, in the province of Medelpadia: ſixteen miles north of Sundſwal.

LIN'STRE, a town of France, in the department of the Foreſts: eight miles north-north-eaſt of Luxemburg.

LINT, *ſ.* [*linteum*, Latin; *llin*, Welſh and Erſe.] The ſoft ſubſtance commonly called flax. Linen ſcraped into ſoft woolly ſubſtance to lay on ſores.—I dreſſed them up with unguentum baſilici cum vitello ovi, upon pledgits of *lint*. *Wiſeman's Surgery.*

Lint, made up in an oval or orbicular form, is called a *pledgit*; if in a cylindrical form, or in the ſhape of a date olive-ſtone, it is called a *doſſil*. Theſe different forms of lint are required for many purpoſes; as, 1. To ſtop blood in freſh wounds, by filling them up with dry lint before the application of a bandage; though, if ſcraped lint be not at hand, a piece of fine linen may be torn into ſmall rags, and applied in the ſame manner. In very large hemorrhages the lint, or rags, ſhould be firſt dipped in ſome ſtyptic liquor, alcohol, or oil of turpentine, or ſprinkled with a ſtyptic powder. 2. To agglutinate and heal wounds; to which end lint is very ſerviceable, if ſpread with ſome digeſtive ointment or balſam, or dipped in ſome vulnerary liquor. 3. In drying up wounds and ulcers, and forwarding the formation of a cicatrix. 4. In keeping the lips of wounds at a proper diſtance, that they may not haſtily unite, before the bottom is well digeſted and healed. 5. They are highly neceſſary to preſerve wounds from the injuries of the air. Small portions of lint tied round with thread are chiefly uſed in dreſſing wounds and ulcers of the deeper kind. They are always applied to the bottom of ſuch wounds, the remaining cavity being filled up with other portions of lint. By this means, the immediate removal of the dreſſings is not only provided for, but the poſſibility of leaving any part of them in the bottom of the wound is prevented. In very large wounds, and eſpecially in amputations of the limbs, which operations are frequently required in the army and navy at times when lint is very ſcarce, it will be very ſufficient to dreſs the bare bone and face of the wound with ſcraped lint, filling up the cavity with tow, and covering all with a large compreſs. Surgeons of former ages formed compreſſes of ſponge, feathers, wool, or cotton, linen being ſcarce; but lint is far preferable to all theſe, and is at preſent univerſally uſed.

Mr. Dumbell, in his extenſive linen-works at Liverpool, has brought to great perfection a new ſpecies of lint, which in quality, price, and novelty of invention, attracts at this moment the notice of the medical world. When we conſider that this uſeful article has lain dormant without improvement for many years, and that we are almoſt wholly indebted to foreign countries for the rags of which the lint hitherto uſed is made, we rejoice to find that this ſubject has engaged a proper attention in an eſtabliſhment where it promiſes to be carried on with ſpirit and ſcience; and the more ſo when we reflect that ſome of thoſe rags have been laſt tenanted by nothing ſhort of the dead bodies of the victims of ſome loathſome, epidemic, or peſtilential, diſeaſe, from the contagious influence of which a ſimple waſhing may not have cleanſed them, or from the continuance of which a new diſorder may be unknowingly inoculated, or raſhly implanted from this lurking-place, more deadly than the wound it is meant to cure. We underſtand that Mr. Dumbell's proceſs is (ſomething like hat-making) by felting, macerating, and bleaching, Engliſh-grown flax, with ſimple water; whereby not only every noxious ingredient is rejected, but that venomous mixture of cotton, with which almoſt all Engliſh rags abound, is avoided; by which cotton, wounds are retarded in their cure, feſtered, and made virulent. The proceſs is worked under the protection of letters patent; but the patentee's object, we are told from good authority, is to acquire profit by the very great extent of his ſales, and not by any unfair uſe of his monopoly; and we underſtand he is now bringing into the market, in very large quantities, the beſt lint at 4s. 6d. per pound, which is about one-half the price a very inferior article has hitherto been ſold at. It is got up in two different ſtates, thin and firm, for the ſpatula; and ſoft, ſpongy, and porous, for abſorbents, lotions, embrocations, cataplaſms, doſſils, pledgits, &c.

LIN'TEL, *ſ.* [*linteau*, Fr.] That part of the door-frame that lies acroſs the door-poſts over-head.—When you lay any timber or brick-work as *lintels* over windows, lay them in loam, which is a great preſerver of timber. *Moxon.*

Silver the *lintals* deep projecting o'er,
And gold the ringlets that command the door. *Pope.*

LIN'TELN, a town of Germany, in the county of Verden: four miles north-eaſt of Verden.

LINTER'NA PA'LUS, in ancient geography, a lake of Campania.

LINTER'NUM, a town of Campania where Scipio Africanus died and was buried.

LINTH, a river of Swiſſerland, which paſſes through the lake of Wallenſtadt, and runs into the lake of Zurich near Grynau.

LINT'HAL, a town of Swiſſerland, in the canton of Glaris: twelve miles ſouth-weſt of Glaris.

LIN'TON, a ſmall market-town in the county of Cambridge, ſituated ten miles from Cambridge, and forty-ſix from London. The town conſiſts of ſeveral irregular ſtreets, the chief of which is about half a mile in length. The houſes are principally low and covered with thatch; ſome however are of brick, and neatly built. The church is a ſpacious ſtructure, and built of flints, intermixed with ſtone and plaſter: it conſiſts of two aiſles, a nave, a chancel, and a large tower; and it contains ſeveral monuments and ſepulchral memorials. The market, principally for corn, is held on Thurſdays; it was originally on Tueſdays, and was granted in the year 1245, with an annual fair for three days. The fair has been diſcontinued, but two others have been eſtabliſhed, Whit-Monday and Auguſt 4.

In the reign of Edward III. there was an alien-priory at Linton, ſubordinate to the abbey of St. Jacutus de Inſula in Brittany; being ſeized for the king in the reign of Henry V. it was given by his ſucceſſor to the maſter and fellows of Pembroke-hall, Cambridge. At Barham alſo, in this pariſh, was a priory of Crutched Friars, ſo early as the year 1292; the ſcite was granted by Henry VIII. to Philip Pariſh, eſq. and afterwards to John Millecent, eſq. who was before poſſeſſed of the manor. In the Millecents the priory and manor continued till the year 1740, when John Millecent, eſq. the laſt of the family, died; his widow, afterwards married to the Rev. C. Lonſdale, left her eſtates to the maſter and fellows of Pembroke-hall. Barham-hall, Mrs. Lonſdale's ſeat, appears to have been formed out of the conventual buildings; the hall, chapel, and cloiſters, ſtill remain; it was appropriated by Mrs. Lonſdale's will, as a country-ſeat for the maſter of Pembroke-hall for the time being.

Bournbridge is near Linton. It is ſo called from the river Bourn, over which are two ſpacious bridges. Bournbridge is in the pariſh of Little Abington, and on the great road from Norwich to London. There are only two houſes here; the one formerly the White Hart, is now a private houſe; the other is the ſign of the King's Arms, where the coaches and waggons to and from London ſtop. It is diſtant from London forty-nine miles; Hockerill, nineteen; Newmarket, twelve; Royſton in Herts, thirteen; Backway, fourteen; Haverill, twelve; and Cambridge, eight. The commiſſioners of the land-tax, &c. hold their meetings at Bournbridge for the diviſions of Linton and Bottiſham; and the juſtices renew victuallers' licenſes for the diviſions of Linton and Trumpington.

Four miles from Bournbridge, to the left of the Cambridge road, is Gogmagog-houſe, the ſeat of Eliab Britton, eſq.—Triplow is ſouth-weſt of Linton, eight miles from Cambridge, and gave name to the hundred. *Britiſh Directory*, vol. v. Appendix.

LIN'TON, a village in the weſt riding of Yorkſhire, nine miles from Skipton; with a worſted-manufactory, and a bridge over the Wherfe.

LIN'TON, a town of Scotland, in the county of Peebles, at the conflux of the Lynne and the Tweed: twelve miles north-weſt of Peebles, and ſeventeen ſouth-ſouth-weſt of Edinburgh.

LIN'TREY, a town of France, in the department of the Meurte: four miles north-weſt of Blamont, and three eaſt of Luneville.

LINT'WAITE, a townſhip of Yorkſhire, in the neighbourhood of Wakefield; with 1381 inhabitants, including 752 employed in trade and manufactures.

LINTZ, a town and citadel of Germany, on the eaſt ſide of the Rhine. It is ſurrounded with an ancient wall; and the number of houſes is about 600: ten miles ſouth-ſouth-eaſt of Bonn, and twenty-three ſouth-ſouth-eaſt of Cologne. Lat. 50. 34. N. lon. 7. 14. E.

LINTZ, a town of Auſtria, ſituated on the Danube, well built, and populous, with ſome fine ſuburbs to it. The old town here conſiſts almoſt wholly of one ſingle ſtreet, and alſo compriſes in it the citadel, ſituated on an eminence, from whence is a fine open proſpect. In this citadel is held the ſovereign repreſentation and chamber; as alſo the government, in matters of juſtice relating to Upper Auſtria. The town carries on a pretty conſiderable trade; and has on Eaſter and St. Bartholomew's days ſome well-privileged and conſiderable fairs. Formerly it belonged to the county of Kyrnberg, together with which, about the year 1140, it was diſpoſed by the laſt count thereof to Leopold VI. duke of Auſtria. In the year 1289, and for four years after, ſome conſiderable aſſemblies of princes were held here. In a privilege of the year 1490, this place was, for the firſt time, named the head town of the principality above the Ens. In 1542, it was conſumed by fire; but rebuilt on a better plan. It is thirty miles ſouth-eaſt of Paſſau, and ſixty-two weſt of Vienna. Lat. 48. 18. N. lon. 14. 15. E.

LINT'ZENEGG, a town of Auſtria: ten miles ſouth of Zwetl.

LIN'UFAR, *ſ.* A name uſed by ſome of the writers of the middle ages to expreſs the water-lily. The Arabians gave this genus of plants the name of *nilufar*, and this word *linufar* is only formed of that, by tranſpoſing two of the letters.

LI'NUM, *ſ.* [the λινον of Dioſcorides, Theophraſtus, and other ancient Greek authors, appears to be derived from λινεω, Gr. to hold, the fibres of this plant being ſo remarkable for their tenacity, that its herbage has always been in the greateſt eſtimation for the manufacture of linen cloth, whilſt its ſeeds by preſſure afford a valuable oil.] FLAX; in botany, a genus of the claſs pentandria, order pentagynia, natural order of gruinales, (caryophylleæ, *Juſſ.* gerania, *Smith.*) The generic characters are—Calyx: perianthium, five-leaved, lanceolate, upright, ſmall, permanent. Corolla: funnel-form; petals five, oblong, gradually wider above, obtuſe, more ſpreading, large. Stamina: filaments five, awl-ſhaped, upright, length of the calyx; (alſo five rudiments, alternating;) antheræ ſimple, arrowed. Piſtillum: germ ovate; ſtyles five, filiform, upright, length of the ſtamens; ſtigmas ſimple, reflex. Pericarpium: capſule globoſe, rudely pentagonal, ten-valved, gaping at the tip; partitions membranaceous, very thin, connecting the valves. Seeds: ſolitary, ovate-flattiſh, acuminated, ſmooth.—*Eſſential Character.* Calyx five-leaved; petals five; capſule ten-valved, ten-celled; ſeeds ſolitary.

Species. I. With alternate leaves. 1. Linum uſitatiſſimum, or common flax: calyxes and capſules mucronate; petals crenate; leaves lanceolate; ſtem generally ſolitary. Root annual, ſimple, fibrous, pale brown. Stem upright, eighteen inches, two feet, or even more, in height, round, ſmooth, leafy, branched only at top. Leaves ſeſſile, growing cloſe together, almoſt upright, perfectly entire. Flowers large, growing in a panicle, on round ſmooth peduncles; calycine leaflets ovate, keeled, with a membranous edge, when magnified appearing to be fringed with hairs; petals wedge-ſhaped, deciduous, ſky-blue, ſtreaked with deeper-coloured lines; white at the claws, and ſomewhat gnawed at the tip; filaments dilated at the baſe, and ſlightly united there; antheræ at firſt oblong, but finally ſagittate, incumbent, blue. Germ ovate, ſhining. Styles ſomewhat club-ſhaped, or thicker towards the top; blue, ſlightly cohering at the baſe.

This valuable plant is ſuppoſed to have been derived originally from thoſe parts of Egypt which are expoſed to the inundations of the Nile. In the earlieſt record we have, Exodus ix. 31. flax is mentioned as a plant cultivated in that country; for which reaſon antiquaries have been ſurpriſed to find the veſtments of mummies made of cotton. It is highly probable, however, that mankind made thread of cotton before the uſe of flax was diſcovered; the former being produced in a ſtate ready for ſpinning, whereas the latter requires a long proceſs before it can be brought to that ſtate. It is difficult, or perhaps impoſſible, to determine when the culture of flax was firſt introduced into this country. In the ſimplicity of former times, when families provided within themſelves moſt of the neceſſaries and conveniencies of life, every garden ſupplied a proper quantity of hemp and flax. The macerating or ſteeping, neceſſary to ſeparate the fibres by rotting the reſt of the ſtalk, was found to render water ſo offenſive, that by the 33d of Henry VIII. it was enacted, that no perſon ſhould water any hemp or flax in any river or other ſtream, or in any common pond where beaſts are uſed to be watered, under the penalty of twenty ſhillings. The growth of hemp and flax has lately been encouraged by a premium, under an act of parliament. Flax is found wild in many parts of Europe, in corn-fields. In England it is doubtful perhaps whether it be aboriginal, though it is ſaid to be very common in the weſtern counties, not only in corn-fields, but in paſtures and on downs. It flowers in June and July.

The ſeeds of flax (lin-ſeed) yield, by expreſſion only, a large proportion of oil, which is an excellent pectoral, as is likewiſe the mucilaginous infuſion. They make an eaſy and uſeful poultice in caſes of external inflammation; and they are the food of ſeveral ſmall birds. After the oil is expreſſed, the remaining farinaceous part, called *oil-cake*, is given to oxen, who ſoon grow fat upon it. The oil itſelf differs in ſeveral reſpects from other expreſſed oils; it does not congeal in winter, nor does it form a ſolid ſoap with fixed alkaline ſalts; and it acts more powerfully as a menſtruum upon ſulphureous bodies. When heat is applied during the expreſſion, it gets a yellowiſh colour and a peculiar ſmell. In this ſtate it is uſed by painters and varniſhers. It is well known that the fibres of the ſtem are manufactured into linen; and that this linen, when worn to rags, is made into paper.

Mr. Miller remarks, that, although the plants of flax, when crowded together in cultivation, riſe only a foot and a half in height, with a ſlender unbranched ſtalk; yet, when they are allowed room, they will riſe more than two feet high, and put out two or three ſide-branches towards the top, eſpecially in a good ſoil.

He makes a diſtinct ſpecies of the dwarf-variety, becauſe it has ſtronger and ſhorter ſtalks branching out more, the leaves broader, the flowers larger with the petals indented at the extremity, the ſeed-veſſels much larger, and the peduncles longer.

Flax in German is *flacks*, or *lein*; in Dutch, *vlaſch*; in Daniſh, *hör*, or *härr*; in Norwegian, *lün*; in Swediſh, *lin*; in French, *lin*; in Italian and Spaniſh, *lino*; in Portugueſe, *linho*; in Ruſſian, Poliſh, and all the languages from the Sclavonian, *len* or *lan*. All the European languages, except the Daniſh, uſe *lin*, when they ſpeak of the ſeed.

2. Linum perenne, or perennial flax: calyxes and capſules blunt; leaves lanceolate, quite entire. Of this there are two varieties: *α*. L. decumbens, the Engliſh wild flax; with a proſtrate ſtem; and, *β*. L. erectum, the Siberian flax; with an upright ſtem.

α. Mr. Miller thus deſcribes the wild perennial flax. From its perennial root ariſe three or four inclining ſtalks, having ſhort narrow leaves towards their baſe, but ſcarcely any about the top. The flowers are produced at the ends of the ſtalks, ſitting very cloſe; they are blue, and about the ſize of the cultivated ſort, and are ſucceeded by pretty large round ſeed-veſſels, ending in acute points. The roots will continue four or five years. The flowers appear from June to Auguſt; they are of a delicate texture, and very elegant blue colour. Native of Cambridgeſhire, Norfolk, Suffolk, and Northamptonſhire, on calcareous paſtures.

β. Mr. Miller thus diſtinguiſhes the upright Siberian plant. The ſtems of this are ſtrong, in number according to the ſize of the root, in height from three to five feet according to the ſoil; they divide into ſeveral branches at top. Leaves narrow-lanceolate, not much more than an inch long, and an eighth of an inch broad, of a deep green, ending in acute points. The flowers form a kind of umbel at the ends of the branches; the ſtalks riſing nearly of the ſame height. The flowers are large, and of a fine blue; appear in June, and are ſucceeded by obtuſe ſeed-veſſels, ripening in September: thus deſcribed by the accurate Gærtner: capſule the ſize of a pea, ſpherical, ſtriated, pale ſtraw-colour, ten-celled, ten-valved; valves cruſtaceous, with a groove on the back, opening at top, and connected by means of the partitions; which are membranaceous, folded, or doubled, with their laminæ parted on the outſide, and ſo inſerted into the margins of the valves, that when theſe open the others unfold like the leather of a pair of bellows; receptacle none, but the ſeeds are fixed to the central margin of the partitions; ſeed ſolitary, ovate, mucronate at top, compreſſed, dark-coloured, ſhining, with a minute oblong navel below the tip. The ſtructure of the partition in the capſule of Linum is diſtinct from all others, as far as we know. Mr. Miller affirms that Siberian flax always has more branching ſtalks, longer and broader leaves, larger flowers, and much larger blunter ſeed-veſſels, than our Engliſh perennial flax. He alſo recommends the cultivating it for uſe; being perennial, earlier, more productive, and yielding a ſtronger, though not ſo fine a thread.

3. Linum monogynum, or one-ſtyled flax: calyxes acute; leaves linear-lanceolate, even; ſtem round, ſhrubby and branched at the baſe; flowers one-ſtyled. Native of New Zealand; in Queen Charlotte's Sound.

4. Linum viſcoſum, or clammy flax: leaves lanceolate, hairy, five-nerved. Root woody, perennial; leaves with hairs as long as the leaves themſelves, acuminate, five-nerved; corolla fleſh-coloured, with lines of a blood-red colour. Ray found it near Augſburg; it has alſo been ſeen near Ingolſtadt, in the mountains near Bologna, &c. The ſtalk is glutinous or clammy, whence its name. Allione aſſerts that it differs in nothing from the next ſpecies.

5. Linum hirſutum, or hairy flax: calyxes hirſute, acuminate, ſeſſile, alternate; branch-leaves oppoſite. Root woody, perennial; ſtems round, ſimple, hairy, from a foot to two feet in height, often ſmooth at bottom, leafy all over, upright, branching at top into flowering corymbs. Leaves acuminate, alternate, except a few at the ends of the branches, which are oppoſite, hairy, eſpecially at the edge and on the dorſal nerves; but ſometimes almoſt ſmooth. Flowers on very ſhort peduncles, not from the axils, but a little higher, and alſo from the diviſion of the branches; petals blue marked with lines, firmly embracing each other at the lower part, though not united at the baſe, repreſenting even after they are fallen a monopetalous funnel-form flower; antheræ pale. Linnæus obſerves, that this bears a great reſemblance to L. nodiflorum; but that the ſtem is round, the leaves ciliate or hirſute, and broader, the ſtem-leaves alternate, but the branch-leaves oppoſite, the flowers ſeſſile, alternate, the calyxes leafy and long, the branch or floral leaves and the calyxes ciliate with very ſhort glandular briſtles, eſpecially towards the top. Native of Auſtria and Hungary.

6. Linum Narbonnenſe, or Narbonne flax: calyxes acuminate; leaves lanceolate, ſtiff, rugged, acuminate; ſtem round, branched at the baſe; filaments connate. Stem from a foot to eighteen inches high, branching out almoſt to the bottom into many long ſlender branches. Flowers at the ends of the branches, in a ſort of umbel, ſmaller than thoſe of the firſt ſort, and of a pale blue colour. The ſeed-veſſels are much ſmaller, and not ſo round.

Native

Native of the South of France, Swifferland, Italy. It flowers from May to July. Cultivated by Mr. Miller in 1759.

7. Linum reflexum, or reflex-leaved flax: calyxes acuminate; leaves ovate-lanceolate, acuminate, reflex, even; filaments connate. Stem a foot high, round, woody, branched from the base. Leaves dark green, ending in a very sharp dagger-point. Flowers in a sort of umbel, large, blue. Native of the south of Europe; introduced in 1778 by Casimir Gomez Ortega, M. D. Flowers in July.

8. Linum tenuifolium, or fine-leaved flax: calyxes acuminate; leaves linear-setaceous, rugged backwards. Root perennial, woody, branching. Stems ascending at the base, and then erect, round, smooth, annual, from six inches to a foot in height, branched at top, and there less closely set with leaves. Flowers in a sort of panicle, peduncled; calyx ciliate at the edges; petals rose-coloured, purple, or white, nearly twice as long as the calyx. Native of the south of Europe.

9. Linum angustifolium, or narrow-leaved flax: calyx obsoletely three-nerved; leaflets and capsule acuminate; leaves linear-lanceolate, three-nerved; stems numerous, a little inclined. This is most nearly allied to L. usitatissimum in all its parts, except in having a woody perennial root producing many stems; it differs also at first sight in having smaller and paler flowers. The leaves have three, sometimes five, nerves; their edges entire and smooth. The preceding, with which Linnæus confounded this, has a very long-pointed calyx, with glandular serratures, and leaves which have rough edges and only a central nerve. L. perenne is sufficiently distinguishable by its more obtuse five-nerved calyx, and more capitate stigmas. Native of Cornwall and Devonshire, in dry sandy pastures, especially near the sea; Darsham in Suffolk; Minster in the Isle of Shepey, Beacon-hill and Deal, in Kent; by Pett, near Hastings.

10. Linum Gallicum, or annual yellow flax: calyxes awl-shaped, acute; leaves linear-lanceolate; peduncles of the panicle two-flowered; flowers subsessile. Root annual. Flowers yellow; commonly five, but sometimes only three, pistils. Native of the south of France; it flowers in July.

11. Linum maritimum, or sea-flax: calyxes ovate, acute, awnless; leaves lanceolate, the lower ones opposite. Root perennial; stems herbaceous, round, almost upright, glaucous, branched at top, a foot high or more. Leaves covering the whole stem and branches, oval-oblong, sharpish, glaucous, sessile, upright, quite entire, half an inch long. Linnæus observes, that it is allied to the preceding. Native of the south of Europe and the Levant; cultivated in 1596 by Gerarde; flowers in July and August.

12. Linum alpinum, or alpine flax: calyxes rounded, blunt; leaves linear, sharpish; stems declinate. Root perennial, branched. Stems herbaceous, simple, half a foot or more in length, round, very leafy, procumbent or ascending, many-flowered, and often divided. Flowers large; petals pale blue, three times as long as the calyx. Native of Austria, Piedmont, Dauphiné, and Silesia.

13. Linum Austriacum, or Austrian flax: calyxes rounded, blunt; leaves linear, sharp, straightish. Root perennial, woody. Stems herbaceous, annual, from six to eighteen inches long; round, simple or divided only into short branches at top, sometimes for the most part procumbent, sometimes more upright. The whole plant is smooth. The leaves vary in width. Native of Austria and the Palatinate; flowers in June and July.

14. Linum Virginianum, or Virginian flax: calyxes acute, alternate; capsules awnless; panicle filiform; leaves lanceolate, root-leaves ovate. Stem filiform, a foot high. Native of Virginia and Pennsylvania.

15. Linum flavum, or perennial yellow flax: calyxes subserrate-rugged, lanceolate, subsessile; panicle with dichotomous branches. Root perennial, woody. Stems herbaceous, upright, from six to eighteen inches high, smooth, rendered angular by membranes which seem to arise from the sides and middle of the leaves. Flowers elegant, upright, on short peduncles, at the end of the branches, and at the divisions of them; petals three times as long as the calyx, yellow, striate-veined, wide, and very blunt: filaments yellow, upright; five twice as long as the calyx with yellow anthers, and five others very short and barren, standing alternate with the fertile ones; styles yellow; capsule roundish, sharp, brownish. Native of Austria; introduced by Mr. Curtis about the year 1794, from seeds sent him by Monf. Daval, of Orbe in Swifferland. The flowers open most in a morning when the sun shines, and continue in succession during June, July, and part of August.

16. Linum strictum, or upright flax: calyxes awl-shaped; leaves lanceolate, stiff, mucronate, rugged at the edge. This is an annual plant, with an upright stalk near a foot and a half high. The seeds seldom ripen in England. Native of the south of France, Spain, and Sicily; cultivated by Mr. Miller in 1759.

17. Linum suffruticosum, or shrubby flax: leaves linear, acute, rugged; stems suffruticose. This has a shrubby stalk a foot high, sending out several branches. Native of Spain, about Aranjuez, but common in the kingdom of Valencia. Mr. Miller says he had the seeds of his L. fruticosum from Ortega at Madrid. It seems to be the same with the *suffruticosum* of Linnæus. According to the Kew Catalogue it was introduced in 1787, by Monf. Thouin; but, if Mr. Miller's plant be the same, he cultivated it in 1759.

18. Linum arboreum, or tree-flax: leaves wedge-shaped; stems arborescent. This beautiful species forms, if not a tree, as its name imports, a shrub of the height of several feet. It begins to flower in March, and continues flowering to the close of summer; but has not yet produced seeds in England. Native of the island of Candia; introduced in 1788, by John Sibthorp, M. D.

19. Linum campanulatum, or bell-flax: base of the leaves dotted-glandular on both sides. Stems simple, a finger's length, angular, commonly terminated by three large peduncled flowers. Native of the south of France and Russia.

II. With opposite leaves. 20. Linum Africanum, or African flax: leaves linear-lanceolate; flowers terminating, peduncled. Stem a foot high, round, with simple branches. Native of Africa; introduced in 1771 by Monf. Richard; flowers in June and July.

21. Linum nodiflorum, or knotted flax: floriferous leaves opposite, lanceolate; flowers alternate, sessile; calyxes the length of the leaves. Native of Italy; cultivated by Mr. Miller in 1759.

22. Linum catharticum, or purging flax: leaves ovate-lanceolate; stem dichotomous; corollas acute. Stems several, from three to nine inches high. Native of most parts of Europe. This small delicate species of flax, called also in some places mill-mountain, is very common throughout England in dry and hilly pastures, and flowers from the end of May to August. Gerarde celebrates this little plant as a purge. His receipt is a handful of the herb infused in a pint of warm white wine all night, and taken in the morning. Lewis prescribes an infusion in water or whey of a handful of the fresh leaves, or a dram in substance of them dried. Dr. Withering recommends an infusion of two drams or more of the dried herb, as an excellent purge in many obstinate rheumatisms; and adds, that it frequently acts as a diuretic.

23. Linum radiola, least flax, or all-seed. Stem dichotomous; flowers four-stamened, four-styled. Root annual; stem upright, an inch high or more, very much branched and dichotomous, round, filiform, smooth. Leaves sessile, ovate, acuminate, quite entire, bright green, smooth, a line and a half long and a line broad. Flowers upright, solitary, in little bundles at the ends of the branches, the lower ones on peduncles more than two lines in length; they are small, and white; calyx four-

leaved, the length of the corolla; petals four, upright, ſmall, roundiſh, blunt; ſtamens and ſtyles four. Hence ſome have ſeparated this ſpecies from the reſt, and have made it a ſeparate genus under its own name of Radiola. It is a native of many parts of Europe; with us on moiſt ſandy heaths, flowering in July and Auguſt. Its Engliſh names are *all-ſeed* and *leaſt rupture-wort*. It is ſhown on the annexed Plate, at fig. 1.

24. Linum quadrifolium, or four-leaved flax: leaves in fours. From a thick woody root this puts up ſeveral ſtems, ſix inches high or more, ſlender, upright, with leaves in fours at intervals, as in the ſtellate plants, dividing at top into branches, which ſupport large blue flowers. Native of the Cape of Good Hope.

25. Linum verticillatum, or whorl-leaved flax: leaves in whorls. This is an annual plant, and does not exceed a foot in height. Flowers violet or blue grey; ſeeds olive-coloured. Native of Italy; near Rome.

Propagation and Culture. Flax ſhould be cultivated upon a rich ſoil, that has not been ploughed for ſeveral years, upon which it always makes the beſt improvement; but, as it draws greatly from the ſoil, it ſhould not be ſown two years together upon the ſame ground, nor in leſs than after five or ſix years interval. The ground ſhould be as clean from weeds as poſſible; in order to have it ſo, it ſhould be fallowed two winters and one ſummer, obſerving to harrow the ground well between each ploughing, particularly in ſummer, to deſtroy the young weeds ſoon after they appear; this will alſo break the clods, and ſeparate the parts ſo, that they will fall to pieces on being ſtirred. If the land ſhould require dung, that ſhould not be laid on till the laſt ploughing, when it muſt be buried in the ground; but this dung ſhould be clear from ſeeds of weeds, which it may be by laying it in a heap and fermenting it well. Juſt before the ſeaſon for ſowing the ſeed, the land muſt be well ploughed, and laid flat and even. The ſeeds ſhould be ſown at the end of March or the beginning of April, when the weather is mild and warm. The common way is to ſow the ſeed broadcaſt, and to allow from two to three buſhels of ſeed to an acre; but from many repeated trials it has been found a much better method to ſow the ſeeds in drills, at about ten inches diſtance from each other, by which half the quantity of ſeed uſually ſown will produce a greater crop; and, when the flax is thus ſown, the ground may be eaſily hoed to deſtroy the weeds; if this operation be twice repeated in dry weather, it will keep the ground clean till the flax is ripe; this may be done at half the expenſe which hand-weeding will coſt, and will not tread down the plants nor harden the ground, which by the other method is always done; and it is abſolutely neceſſary to keep the flax clean from weeds, otherwiſe they will overbear and ſpoil the crop. Towards the end of Auguſt, or at the beginning of September, the flax will begin to ripen; and it muſt not ſtand to be over ripe; it muſt therefore be pulled up as ſoon as the heads begin to change brown and hang downwards, otherwiſe the ſeeds will ſoon ſcatter and be loſt; ſo that the pluckers muſt be nimble, in tying up the plants in handfuls, and ſetting them upright, till they are dry enough to be houſed. If the flax be pulled when it firſt begins to flower, the thread will be *whiter*, but then the ſeed will be loſt; the thread however will be *ſtronger* if the flax is left till the ſeed is ripe, provided it does not ſtand too long; but the colour of it will not be ſo good.

The Siberian perennial flax (N° 2, β.) has been tried, and anſwers very well for making common ſtrong linen; but the thread is not ſo fine or white as that which is produced from the common ſort; but, as the roots of this will continue many years, it will require little other culture but to keep it clean from weeds, which cannot well be done unleſs the ſeeds be ſown in drills, that the ground may be conſtantly kept hoed to deſtroy the weeds when young. This ſort muſt have the ſtalks cut off cloſe to the ground when ripe, and then managed in the ſame way as the common ſort; but it ſeldom produces more than three crops that will pay for ſtanding. Mr. Miller mentions another ſort with a biennial root, which he therefore names L. bienne. He received it from Iſtria, and ſays that it produced the fineſt thread of all the ſorts which he had tried. It grows taller than the common flax, and in gardens lives through the winter without receiving the leaſt injury from froſt. Mr. Miller gave a parcel of the ſtalks of this, with the Spaniſh and Siberian perennial ſorts, to a perſon well ſkilled in watering, breaking, and dreſſing, flax; who, having prepared them, aſſured him that the Iſtrian flax was by much the fineſt of the three, and was in goodneſs preferable to any he had ſeen.

The other ſorts are chiefly preſerved in botanic gardens. L. catharticum, or purging flax, is one of thoſe plants which refuſe culture; the ſeeds, whether ſown in ſpring or autumn, will ſeldom come up. Several of the ſpecies are handſome plants. The Siberian flax is now very commonly found among hardy perennials in the borders of large flower-gardens and plantations, and is eaſily increaſed either by ſeeds or parting the roots. L. flavum bears large yellow flowers, and is a hardy perennial. It appears to be eaſy of culture, and ſucceeds beſt in a ſoil moderately ſtiff and moiſt. The ſeeds vegetate freely; and it may be increaſed either by parting the roots in autumn, or by cuttings of the young ſhoots. Some of the ſorts (N° 6, 17, 18, 20.) require the protection of a greenhouſe. They may be increaſed by cuttings, but not without ſome difficulty. They ſeldom or ever ripen their ſeeds in this country.

Old paſtures, eſpecially on land formed from the ouze or ſediment of great rivers, are the beſt adapted to the growth of flax. In Reed-neſs, a tract of land in the county of York, on the ſouth ſide of the river Ouſe, near its junction with the Trent, they frequently plough their old paſtures, when the herbage begins to fail, and adopt the following courſe of crops, viz. 1. Flax; 2. Rape or Cole; 3. Flax: and, if the ground ſtill continue too rank for corn, they add, 4. Rape; 5. Flax; 6. Oats.

When they break up the paſture, they plough the ſward in December, about three inches deep; in this ſtate it receives the winter's froſt, and without any more preparation they ſow the ſeed (linſeed), two buſhels on an acre, the ſecond or third week in April, if the weather permit; or, if not, as ſoon after as poſſible; and with light ſhort-tined harrows, that will not drag the ſod, they harrow it pretty much to mould. They keep the crop as free as poſſible from weeds, for which purpoſe it is hand-weeded once or twice, in dry weather, before, and not after, the flax is four inches high; from that time it will out-grow and nearly ſmother every weed, and will be ready for pulling by hand, the ſecond, third, or fourth, week in July, according to the ſoil and ſeaſon; but, if it be intended for ſeed, it will require about a fortnight more. It is next tied into ſheaves of about three inches diameter, with bands made of part of the flax; and, whilſt the pulling and tying are going on, in dry weather, if poſſible, a team is employed in carrying it to the pits or ponds, which are previouſly well cleanſed; here it is laid cloſe, and trod, one layer of ſheaves upon another, until the man who treads it ſtands about mid-leg deep in water; the flax is then covered with ſods, earth, &c. ſufficient to keep it entirely under water; a briſk fermentation enſues, and the pit ſtinks abominably; in this ſtate it receives an additional treading, every night and morning, for about four days; when a ſheaf is taken out of the pit, untied, and ſpread on the ground to dry; when dry, it is tried by rubbing between the fingers, to ſee if the bun (hecks or ſpongy part of the ſtalk) be ſufficiently brittle to ſeparate readily from the flax, (or fibres;) if not, they try another ſheaf the day following, by which time it is uſually raited (retted or rotted) enough; though, if the growing ſeaſon has been more than uſually wet, the flax will be raited a day or two ſooner; if needful, they try it again on the ſixth and even the ſeventh day. As ſoon as it is diſcovered to be ſufficiently raited, it is all taken out of the pit, and every

LINUM AND LIQUIDAMBAR.

1. Least Flax or Mill Seed. 2. Maple-leaved Liquidambar or Sweet Gum.

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J. Pass sc.

every ſheaf, being untied, is ſpread on clean graſs-land. Here it lies to dry from five to ſeven days, unleſs a conſiderable ſhower fall ſooner; when it is to be turned, that both ſides may be bleached alike; and it is ſometimes turned a ſecond or third time. The bun is frequently tried, to ſee if it be brittle, and part readily from the flax. They are alſo particularly attentive to obtain their flax of a lead colour, which complexion they value even more than the rottenneſs of the bun. When bleached ſufficiently and perfectly dry, it is tied into ſheaves, five or ſix times as large as the former, and carted into ſheds or ricks; whence it is ſwingled and tied up for ſale by profeſſional labourers. The crop is from twenty-five to ſeventy ſtone on an acre.

The account of an acre may ſtand nearly thus:

Average crop 40 ſtone, at 9s. the medium price, and the bounty 4d. together	18	13	4
Current expenſes about 6l. add rent, taxes, aſſeſſments, and tithes, about 2l. 13s. 4d.	8	13	4
Profit	£10	0	0

This profit is very great; but what makes the crop of flax ſtill more valuable, is the additional employment it gives to the poor in weeding, pulling and tying, management of the pit, drying and ſwingling, to the amount of four or five pounds an acre; the article of ſwingling alone might go a great way towards giving employment to the poor in country pariſhes during the dead months of winter. After the crop is off, the ground is cleared of weeds and graſs, and as ſoon as convenient is ploughed an inch or two deeper; and rape-ſeed, from half a peck to a peck on the acre, according to the richneſs of the ſoil, is ſown, from a week before to a week after Michaelmas. The ſeed loſt in reaping and getting the rape produces a crop of green food for ſheep, which is fed off early enough to prepare the ground for a ſecond crop of flax. If a third crop be taken after oats, when that is off, a judicious mixture of graſs-ſeeds is ſown, and the ground returns to meadow and paſture again.

The following are the expenſes and profit of five acres of flax raiſed in Shropſhire:

	£.	s.	d.
Rent, including tithe	18	10	0
Seed	3	3	0
Weeding, drawing, and ſticking up	2	0	0
Binding and carriage	0	12	0
Threſhing and winnowing	2	2	0
Spreading, gathering, and carriage	1	14	3
Swingling, at 1s. per ſtone	14	1	4
	42	2	7
Produce. 281 ſtone 5lb. at 5s.	70	6	3
Seed, 49 buſhels	13	7	0
Bounty	4	13	9½
	88	7	0½
	42	2	7
Profit	£46	4	5½

There is no charge in the above account for ploughing and harrowing; it being uſual to give a large rent for old paſtures, by thoſe who make a buſineſs of raiſing flax, the perſon who lets the land engaging to plough and harrow it with his team. The above crop was conſidered as a large one; yet the profit is ſomewhat leſs than the preceding ſtatement, being 9l. 4s. 10½d. per acre.

The quantity of ſeed ſown on an acre in the Iſle of Ely is two buſhels, the coſt of which is a guinea or thereabouts; an experienced man is employed to ſow the ſeed, there being few who underſtand that buſineſs. No manure is wanting, where clean or ſward land is uſed, which is generally the caſe. The ground is ploughed but once, and harrowed fine. If rich, it will bring turnips, wheat, or clover, &c. after the flax is off. The coſt is about 3l. an acre. The produce from twenty to fifty ſtone, according to the land. When it is fit to pull, a man ſhould be employed who knows when to put it into the dike, and when to take it out, there being much difficulty in managing that point, without ſpoiling the flax. It is ſuppoſed not to impoveriſh the land, but to improve it.

In Dorſetſhire the beſt ſeed is annually imported from Riga, it being conſidered as very material to change the ſeed. It is generally ſown broad-caſt, about the middle of April, at the rate of two buſhels to an acre, upon any ſtubble, after only one ploughing, and clover-ſeed is often ſown with it. It is ripe about the end of July, or beginning of Auguſt, when it is drawn by hand, by women and children, and laid in ſwarths till it is dry, then bound up in ſmall bundles, and the ſeed is beaten out in the field where it grew, by a flail heavier than the common one, and the ſeed ſifted clean into a large ſheet; afterwards the ſtalk is laid on ſtubble or paſture ground, till it is completely dried; being often turned, and, if the weather be wet, ſet up in ſmall bundles. When it is ſufficiently dried, and fit to bark, which is called ſwingling, it goes to the flax-dreſſer, to be prepared for the manufacturer. It is always pulled up in a green ſtate; and is fit to draw, when the leaf on the ſtalk drops, and the milky juice is dried up. The ſtalk is never thrown into water, as is the common practice of Lincolnſhire and other places; but attains its proper ſtate more gradually, by what is called dew-ripening, or expoſing it to the air and dews for a long time together. From eight to twelve buſhels of ſeed on an acre is eſteemed a good crop; dry ſeaſons ſuit it beſt; and the farmers think, if it be not ſown more than once in ſix years, it does not exhauſt the land. This crop, beſides the ſeed, produces from fifty to ſixty dozen pounds weight on an acre of flax for ſpinning, worth from 4s. 6d. to 7s. the dozen. Its value is generally from eight to ten pounds an acre, including the ſeed; but it is a precarious crop, much dependant upon ſeaſons. The land is frequently let to a middle-man, called a *flax-jobber*, who pays the farmer four or five pounds an acre, manages the crop, finds ſeed and labour, and expects nothing from the farmer but ploughing, and the diſcharge of parochial taxes. The inferior ſeed, not good enough to be ſown, is valuable for the oil which it yields. Two gallons may be extracted from a buſhel of ſeed, which weighs about forty-eight pounds. The remaining hull or huſk produces the oil-cake, ſo much eſteemed for feeding cattle. Flax-ſeed is alſo uſed for the ſame purpoſe, by boiling or bruiſing, and then ſteeping it in hot-water. Where malt-grains can be had to mix with it, this food is of a very nouriſhing quality.

Flax in this country is by many degrees leſs vigorous and luxuriant than in Flanders, where the fine lace and cambrics are manufactured. They have a particular method of managing flax in that country, which in French is called *lin-ramé*. The land is ploughed and manured for it before winter; in the beginning of March, or ſooner, according to the ſeaſon, it is deeply ploughed again; ſome days before ſowing they ſpread upon the land ſome pigeon's dung, and they cover the ſeed with a harrowing and rolling. When the flax is four or five inches high, they weed it with the moſt ſcrupulous attention, and then build a kind of cover hanging over the little plants in the following manner. They ſtick on both ſides of the ground, bordering the ridge, ſome ſtrong wooden forks, about ſix inches high, upon which they put poles along the width of the ridge, in a direction parallel to the ground. Theſe poles are croſſed by ſmall ſticks, branches of trees, &c. ſo as to form a kind of grate full of holes, through which the plants of flax paſs, as they grow up; by this method their ſtems have a good defence againſt wind and rain, and their roots againſt either exceſſive humidity or heat; and thus their vegetation is very much benefited. The produce is very great; and, when it ſucceeds well, the crop exceeds in value the land where it grows. The culture, indeed, is very expenſive; for the requiſite wood

coſts about 16l. If, however, the crop on an acre be worth 50l. and upwards, when an acre cultivated in the common way is worth no more than from 10l. to 15l. the expenſe and trouble are well paid; and the wood, when the crop is gathered, is ſtill good for ſomething. This culture is probably adopted with a view of drawing up the flax tall and ſlender, for the purpoſe of having the fibres finer, for the delicate fabrics of that country.

It has been ſtrongly recommended, inſtead of ſteeping the flax in ponds or other cold-water, to ſeparate the *boon*, or pulp of the ſtalk, from the *harle*, or fibrous part, which conſtitutes the flax, by boiling it in water. If this proceſs ſhould be found to anſwer as well as the common one, much time and labour would be ſaved, and the air and waters would not be poiſoned as they now are where flax and hemp are ſteeped. The flax would alſo probably be of a finer colour; and the operation of bleaching would be ſafer, and leſs tedious. Whether the ſtrength of the thread would be improved or diminiſhed, muſt depend upon experience. We have one inſtance of its ſucceſsful application noticed in the Letters on Agriculture publiſhed by the Bath Society, vol. v. 1790. The mode, we believe, was firſt recommended in the Gentleman's Magazine for June 1787.

The culture of flax is very general in Perthſhire, but is not carried to a great extent in any one place. The foot of every brook in the Highlands, where the water runs ſlowly, and plenty of fine ſediment is depoſited, carries amazing crops of *lint*. On the banks of large rivers, where the land is flooded by back-water, the lint is generally a good crop; and lint is raiſed ſucceſsfully, the ſecond crop, after good clover-lay, which ſaves weeding; but this ought to be ſparingly practiſed, becauſe it is a bad rotation. If perſons were at pains to preſerve the ſeed, an immenſe ſum would be ſaved annually. For this purpoſe the ſhraves might be ſtacked till ſpring; and the ſeed might then be eaſily rubbed off by a roller, without injury to the rind; the ſheaves being laid head to head during the operation. The people have the whole ſummer before them to water and dreſs their lint. Or, if this proceſs be thought tedious, or they think that they lie too long out of their money, the lint may be rippled a few days after it is pulled; the capſules dried in the ſun, or on a kiln, and the lint watered immediately, and dreſſed. The ſeed ought to be changed annually from one ſoil to another. It muſt be acknowledged that this crop makes no return of manure, and impoveriſhes the ſoil to a great degree. But, when it is managed with judgment, it can purchaſe manure, and bring a conſiderable profit beſides; nor does it rob the ground more than wheat, provided the land be fallowed whenever the crop is taken off. Clover and other artificial graſſes grow, when ſown with flax, better than with any other crop.

In Ayrſhire, about ſeven pecks of flax-ſeed are uſually ſown upon a Scotch acre, and, when the land is well pulverized and duly weeded, produces at an average twenty ſtone of 24lb. Engliſh weight, worth about 12s. the ſtone, or 12l. per acre. Two-pence a pound is paid for ſcutching; 1d. for heckling or hatcheling; and, when the flax ſpins into forty-eight cuts per lb. it will coſt 16d. for ſpinning. One cut is equal to five ſcore threads, or turns of the reel; two cuts make one hear; twelve cuts one hank, haſp, or ſlip; four hanks, or forty-eight cuts, one ſpindle. Flax worth 1s. per lb. uſually ſpins from thirty-ſix to forty-eight cuts per pound. Tow, or hards, is ſold as low as 5d. Flax capable of ſpinning to ſeven ſpindles per lb. is worth 7s. Linen cloth for home-conſumption, worked in what is called a 1400 reed, coſts about 7d. a-yard for weaving, and is worth 2s. 4d. or half a crown the yard.

In Ireland, on mountain-lands they prefer American flax-ſeed; upon heavy or clay-lands they ſow Riga, Dutch, or Flanders, ſeed; the quantity they get is more and better in quality than from the American, and will laſt twenty years. For fine linens they never ſave ſeed, pulling it green; but for coarſe linens they ſave as much ſeed as they can. The produce of the flax depends on its oilineſs; and the goodneſs of the linen, on not being too much bleached. They plough their potatoe-land or harley-ſtubble, once at the end of March or April, and then ſow it. They weed the flax very carefully. They generally pull it at the end of July, or beginning of Auguſt, and immediately ripple it to get the ſeeds off; and then lay it into water from ſix or ſeven to twelve days, according to the ſoftneſs of the water, trying it before they take it out. They generally lay it in bogs or pools, but reckon the bogs beſt. When they take it out, they ſpread it on meadow-ground from ten to fifteen days, according to the weather; if that be bad, much of it is loſt. They dry it by laying it in heaps on a hurdle fixed upon poſts, and making a fire of turf under it. As faſt as it dries, they beat it on ſtones with a beetle; then they ſcutch it to ſeparate the heart, or the *ſhoves*, from the reſt. Mills are invented for this; and, if they uſe theſe, they pay 13d. a-ſtone for it. They next ſend it to the flax-heckler, who gives it a ſort of combing, and ſeparates it into two or three ſorts. In this ſtate it is ſaleable. The crop is from eighteen to forty-eight ſtone per acre of flax, rough after ſcutching; the medium thirty ſtone, and it ſells from 6s. 8d. to 9s. the ſtone. Much Dutch flax is imported; alſo from Riga, Konigſberg, and Peterſburg. The flax may be ſtacked like corn, and threſhed in the ſpring.

From the foregoing accounts, and the reſult of general experience concerning this crop, the following obſervations may be made. 1. That flax requires a rich dry ſoil, or fat ſandy loam, particularly that which is formed from the ſediment of great rivers; and that old graſs-land of this deſcription is its moſt proper matrix. It is, however, not unfrequently ſown on arable land; and, when the ſoil is in heart, dry, friable, and clean, with good ſucceſs. 2. Much depends on the ſtate of the ſoil at the time of ſowing. It ſhould be neither wet nor dry; and the ſurface ought to be made as fine as that of a garden-bed; for the crop ſhould all riſe together, and the ſurface ſhould be evenly ſeeded. If the plants come up at ſeveral times, or if by accident or miſmanagement they are thin upon the ground, the crop is irreparably injured. This will be the caſe in a ſeaſon of drought; or when ſpring-froſts are ſevere; or when the crop is attacked by a ſmall white ſlug; or when, the ground being full of clods, the ſeeds are not evenly diſperſed, but, not being able to pierce the clods, come up in circles round them, leaving vacancies in the centre favouring their early branching; than which nothing is more detrimental to the crop; the goodneſs of it depending much on its running up with a ſingle ſtalk; for, wherever it branches, the fibres terminate, and they are worked off in dreſſing. 3. If the crop be intended for thread of the firſt quality, the time of pulling is when the ſeeds are formed; but, if they be ſuffered to ripen, the advantage gained by the ſeed is balanced by the inferior quality of the flax; the filaments being harſh, and the cloth made from them not taking a good colour in whitening. It is alſo a great exhauſter of the ſoil, when it ſtands for the ſeed to ripen. 4. The flax-crop interferes with harveſt; and therefore ought to be confined to rich graſs-land diſtricts, where harveſt is a ſecondary object, and where exhauſtion may be rather favourable than hurtful to ſucceeding arable crops, by checking the too-great rankneſs of rich freſh-broken ground. See GYPSOPHILA, LYSIMACHIA, and POLYPREMUM.

LI'NUS. This name is common to different perſons whoſe hiſtory is confounded, and who are often taken one for the other.—One was ſon of Urania, and Amphimarus the ſon of Neptune.—Another was ſon of Apollo by Pſammathe daughter of Crotopus king of Argos. Martial mentions him in his 78th Ep. l. 9.—The third, the ſon of Iſmenius, and born at Thebes, in Bœotia; or the ſon of Mercury and Urania, according to Diogenes, who mentions ſome of his philoſophical compoſitions, in which he aſſerted that the world had been created in an inſtant.

This laſt perſonage and Orpheus ſeem to have been the moſt ancient poets and muſicians of Greece; but to determine whether Linus was the maſter of Orpheus, or Orpheus of Linus, would be as vain to attempt as difficult to accompliſh. All that can be done at this diſtance of time, is to compare the opinions of ancient writers upon the ſubject, and to incline to the moſt numerous and reſpectable evidence; and, in purſuing this method, it appears that the majority are in favour of the ſuperior antiquity of Linus. No teſtimony places him in a more remote period, or does more honour to his memory, than that of Herodotus; who tells us (Euterp.) "that, among other memorable cuſtoms, the Egyptians ſing the ſong of Linus, like that which is ſung by the Phœnicians, Cyprians, and other nations, who vary the name according to the different languages they ſpeak. But the perſon they honour in this ſong, is evidently the ſame that the Grecians celebrate; and, as I confeſs my ſurpriſe at many things I found among the Egyptians, ſo I more particularly wonder whence they had this knowledge of Linus, becauſe they ſeem to have celebrated him from time immemorial. The Egyptians call him by the name of *Maneros*, and ſay he was the only ſon of the firſt of their kings; but, dying an untimely death in the flower of his age, he is lamented by the Egyptians in this mourning ſong, which is the only compoſition of the kind uſed in Egypt."

According to archbiſhop Uſher, Linus flouriſhed about 1280 years before Chriſt; and he is mentioned by Euſebius (Præp. Evang.) among the poets who wrote before the time of Moſes. Diodorus Siculus, who is very diffuſe in his account of Linus, (lib. iii. cap. 85.) tells us, from Dionyſius of Mitylene the hiſtorian, who was contemporary with Cicero, that Linus was the firſt among the Greeks who invented verſe and muſic, as Cadmus firſt taught them the uſe of letters. The ſame writer likewiſe attributes to him an account of the exploits of the firſt Bacchus, and a treatiſe upon Greek mythology, written in Pelaſgian characters, which were alſo thoſe uſed by Orpheus, and by Pronapides, the preceptor of Homer. Diodorus ſays, likewiſe, that he added the ſtring *lichanos* to the Mercurian lyre; and gives to him the invention of rhythm and melody, which Suidas, who regards him as the moſt ancient of lyric poets, confirms. He is ſaid by many ancient writers to have had ſeveral diſciples of great renown, among whom were Hercules, Thamyris, and, according to ſome, Orpheus. Hercules, ſays Diodorus, in learning of Linus to play upon the lyre, being extremely dull and obſtinate, provoked his maſter to ſtrike him, which ſo enraged the young hero, that inſtantly ſeizing the lyre of the muſician, he beat out his brains with his own inſtrument; though others ſay he was killed by Apollo, for preſuming to rival him in muſic.

With reſpect to the dirges, which Plutarch, from Heraclides of Pontus, mentions as written by Linus, we find no account of them in any other ancient author. It appears, however, that his death has given birth to many ſongs of that kind, which have been compoſed in honour of his memory. A feſtival was likewiſe inſtituted by the name of *Linia*, for the celebration of his virtues; and ſo numerous were his inventions, and various the periods and places in which different authors fix them, that ſome have tried to reconcile theſe jarring accounts, by ſuppoſing that there were three ſeveral illuſtrious perſonages of that name; a ſuppoſition which we ſhall not pretend either to affirm or deny.

Homer (lib. xviii. ver. 569.) has paid a tribute to the memory of Linus, in his deſcription of the ſhield of Achilles:

To theſe a youth awakes the warbling ſtrings,
Whoſe tender lay the fate of Linus ſings;
In meaſur'd dance behind him move the train,
Tune ſoft the voice, and anſwer to the ſtrain.

Pope, in his note on this paſſage, ſays, from Pauſanias, that, "before the yearly ſacrifice to the muſes on Mount Helicon, the obſequies of Linus were performed, who had a ſtatue and altar erected to him in that place. Homer alludes to that cuſtom in this paſſage, and was doubtleſs fond of paying this reſpect to the old father of poetry."

LI'NUS, ſuppoſed to be the firſt biſhop of Rome, was born at Volterra, in Tuſcany. According to Irenæus, he received his biſhopric from the hands of the apoſtles Peter and Paul, which he is ſuppoſed to have retained twelve years. He is mentioned by St. Paul in the Second Epiſtle to Timothy; and is ſaid, by ſome writers, to have been the ſon of Claudia, who is mentioned at the ſame time. Nothing more is known of him which can be relied on, though it has been ſaid that he teſtified to the truth of his principles by ſuffering martyrdom; and two letters in the ſecond volume of the Biblioth. Patr. have been aſcribed to him: but there is no good authority for theſe facts.

LIN'ZA, *ſ.* in botany. See ULVA.

LI'O, a lake of Thibet, about thirty miles in circumference. Lat. 31. 22. N. lon. 86. 34. E.

LI'OI-KI'A-LANC-TSA', a town of Thibet: 100 miles ſouth-ſouth-eaſt of Laſſa. Lat. 28. 8. N. lon. 92. 44. E.

LI'OI-POU', a lake of Thibet, about thirty miles in circumference. Lat. 34. 27. N. lon. 90. 34. E.

LIO'MER, a town of France, in the department of the Somme: eighteen miles weſt of Amiens.

LI'ON, *ſ.* [*lion*, Fr. *leo*, Lat.] The fierceſt and moſt magnanimous of four-footed beaſts. See FELIS, vol. vii. —The ſphinx, a famous monſter in Egypt, had the face of a virgin, and the body of a *lion*. *Peacham on Drawing.*

Each with their kind, *lion* with lioneſs;
So fitly them in pairs thou haſt combin'd. *Milton.*

A ſign of the zodiac. See LEO:

The *lion* for the honours of his ſkin,
The ſqueezing crab, and ſtinging ſcorpion, ſhine
For aiding heav'n, when giants dar'd to brave
The threat'ned ſtars. *Creech's Manilius.*

The lion is the conſtant companion of Britannia, as a national ſymbol of ſtrength, courage, and generoſity. In ancient gems, in paintings, and ſtatuary, the lion's ſkin is the attribute of Hercules. In ſcriptural compoſitions, he is painted at the ſide of the evangeliſt St. Mark; and holds the fifth place among the ſigns of the zodiac, anſwering to the months of July and Auguſt.

LI'ON, a river of Scotland, in Perthſhire, on the northern extremity of Loch Tay, which runs into the Tay: the valley through which it paſſes is called *Glen Lion*.

LI'ON D'ANGE'RS, a town of France, in the department of the Mayne and Loire: ſix miles ſouth-eaſt of Segré, and ten north-north-weſt of Angers. Lat. 47. 37. N. lon. 0. 39. W.

LI'ON CO'VE, a ſmall bay in the Straits of Magellan, ſurrounded by rocks. The water is deep, but the ground is good. It is not a bad place for one ſhip, nor a good one for two. Here is a good watering up a ſmall creek, but no wood. There is good landing at the watering-place, but no where elſe; no refreſhments are found but a few muſcles, limpets, and rock-fiſh, with a little celery. Lat. 53. 26. S. lon. 74. 25. W.

LI'ON's FOOT, in botany. See CATANANCHE, vol. iii. p. 897.

LI'ON-HEARTED, *adj.* Bold as a lion:

See *lion-hearted* Richard,
Piouſly valiant, like a torrent ſwell'd
With wintry tempeſts, that diſdains all mounds,
Breaking away impetuous, and involves
Within its ſweep trees, houſes, men, he preſs'd,
Amidſt the thickeſt battle. *Philips.*

LI'ON's LEAF. See LEONTICE.

LI'ON-LIKE, *adj.* Valorous.—King Richard's ſirname was

was Cor-de-Lion, for his *lion-like* courage. *Camden's Remains.*

LI'ON MA'RIN, a bay on the ſouth coaſt of Kerguelen's Land, ſo called by Alouarn. Kerguelen called it *Baye de Gros Ventre.* Lat. 49. 32. S. lon. 68. 51. E.

LI'ON-METTLED, *adj.* Fierce as a lion:

Be *lion-mettled*, proud; and take no care,
Who chafes, who frets, or who conſpirers are. *Shakeſp.*

LI'ON MOU'NTAIN, a mountain of Africa, near the Cape of Good Hope, ſo called from its ſuppoſed reſemblance, which ſeamen obſerve, to that animal. It is diſtinguiſhed into what is called the Lion's Head and the Lion's Tail or Rump. The Lion's Head is a bare rock from the top to the bottom; the Tail is likewiſe rocky, but is covered with a ſlight ſtratum of earth, which produces an inferior kind of graſs; and every one is at liberty to let their cattle feed upon it. An enſign-ſtaff is erected upon both theſe ſummits, upon which ſignal-flags are hoiſted, as ſoon as any ſhips are perceived at ſea. Theſe ſignals are changed every month; advices whereof uſed to be ſent two years before-hand to Holland, and to the ſettlements in India; and ſealed letters, containing the detail of them, are given to the commanders of veſſels, who are to touch at the Cape, which are opened when they come in ſight of the mountains, in order to be ſure that the place is in the hands of their own countrymen, and, if the ſignals agree, that they may proceed with confidence to the anchorage in the bay. One or two men are conſtantly ſtationed on the Lion's Head; and, as ſoon as they perceive any ſhip at ſea, they hoiſt the flag, and fire one or more times, according to the number of veſſels that appear, a ſmall piece of cannon, which has been got up to this place with great difficulty, and the report of which is the more eaſily heard at Cape-town, from the reverberation which it makes againſt the ſteep ſides of the Table Mountain.

LI'ON's MOUTH, *ſ.* An herb. Taken for a ſpecies of ANTIRRHINUM:

Antirrhinum more modeſt takes the name
Of *lion's mouth.* *Tate's Cowley.*

LION's TAIL, in botany. See PHLOMIS LEONURUS.

LION's TOOTH, or DANDELION. See LEONTODON.

LIONCEL'. See HERALDRY, vol. ix. p. 422.

LI'ONEL, a man's name.

LI'ONESS, *ſ.* A ſhe-lion.—If we may believe Pliny, lions do, in a very ſevere manner, puniſh the adulteries of the *lioneſs. Ayliffe.*

Under which buſh's ſhade, a *lioneſs*
Lay couching head on ground, with catlike watch,
When that the ſleeping man ſhould ſtir. *Shakeſpeare.*

LI'ONS, a town of France, in the department of the Eure: nine miles north of Grand Andelys, and five eaſt of Rouen. Lat. 49. 24. N. lon. 1. 33. E.

LI'ONS (Gulf of), a bay of the Mediterranean, ſaid to be ſo named from the frequent tempeſts with which it is diſturbed; and not the Gulf of Lyons, from the city. It extends from Spain to Italy.

LIORAC', a town of France, in the department of the Dordogne: ſeven miles eaſt-north-eaſt of Bergerac.

LIOS'K, a town of Lithuania, in the palatinate of Troki: twenty miles weſt of Grodno.

LIOTA'RD (John-Francis), an eminent portrait-painter, was born at Geneva in 1703. He was deſigned for a mercantile life, but was permitted to follow the ſtrong inclination he diſplayed for the art of painting. By very diligent application he rendered himſelf a maſter in miniature, crayons, and enamel. Devoid of invention, his great excellence lay in making exact copies of the works of other painters, or in taking portraits with a fidelity that repreſented even the blemiſhes that nature preſented to his view: "He could not conceive (ſays Walpole) the abſence of any thing that appeared to him. Truth prevailed in all his works; grace in very few or none." He was, however, an excellent colouriſt, gave a remarkable roundneſs and relief to his figures, and thoroughly underſtood the principles of perſpective. Liotard ſtudied at Paris; and in 1738 accompanied the marquis de Puiſieux to Rome, where he became acquainted with two Engliſh noblemen, who took him with them to Conſtantinople. He remained there three years, and was employed to take portraits of ſome of the grand ſeignor's ladies. He aſſumed the Turkiſh habit and beard, which he retained at Paris on his return; and by that ſingularity attracted the public curioſity ſo as to make his fortune. He painted Louis XV. and the royal family, and Mad. Pompadour, who thought his pencil too faithful. Being invited to England, he appeared in the ſame coſtume; and was employed to paint the princeſs of Wales and her family, with other perſons of diſtinction. In his paſſage through Vienna he had taken the portraits of the emperor and empreſs; and at the Hague he took thoſe of the ſtadtholder and his ſiſter. Thus, partly from the influence of faſhion, and partly from real merit, he roſe to high profeſſional eminence. He married a young wife, and (ſays Walpole) "ſacrificed his beard to Hymen." His pictures bore a high price, eſpecially his enamels, which he executed in a larger ſize than ever before attempted. He made engravings of his Turkiſh and Greek portraits, his own portrait, and ſome other works. He lived to an advanced age. This Liotard is called *John-Stephen* by Mr. Walpole and in Pilkington's Dictionary; but *John-Francis* in the Dict. Nouv. Hiſt. and in Senebier's Hiſt. Liter. de Geneve, which latter work mentions *John-Stephen Liotard* as an engraver.

LIP, *ſ.* [lippe, Sax.] The outer part of the mouth; the muſcles that ſhoot beyond the teeth, which are of ſo much uſe in ſpeaking, that they are uſed for all the organs of ſpeech.—Her *lips* bluſh deeper ſweets. *Thomſon's Spring.*

Thoſe happieſt ſmiles
That play'd on her ripe *lip*, ſeem'd not to know
What gueſts were in her eyes. *Shakeſpeare.*

No falſehood ſhall defile my *lips* with lies,
Or with a vail of truth diſguiſe. *Sandys.*

The edge of any thing.—In many places is a ridge of mountains ſome diſtance from the ſea, and a plain from their roots to the ſhore; which plain was formerly covered by the ſea, which bounded againſt thoſe hills as its firſt ramparts, or as the ledges or *lips* of its veſſel. *Burnet.*

To make a LIP. To hang the lip in ſulleneſs and contempt.—A letter for me! It gives me an eſtate of ſeven years health; in which time I will *make a lip* at the phyſician. *Shakeſpeare.*

To LIP, *v. a.* To kiſs. *Obſolete:*

A hand, that kings
Have *lipt*, and trembled kiſſing. *Shakeſpeare.*

Oh! 'tis the fiend's arch-mock,
To *lip* a wanton, and ſuppoſe her chaſte. *Shakeſpeare.*

LIP'-LABOUR, *ſ.* Action of the lips without concurrence of the mind; words without ſentiments.—Faſting, when prayer is not directed to its own purpoſes, is but *lip-labour. Taylor's Rule of Living.*

LIP'-WISDOM, *ſ.* Wiſdom in talk without practice.—I find that all is but *lip-wiſdom* which wants experience. I now, woe is me, do try what love can do. *Sidney.*

LI'PA, a town of Lithuania, in the palatinate of Novogrodek: thirty-two miles weſt-north-weſt of Sluck.

LI'PA, a town of Croatia, on the river Dobra: ten miles ſouth-weſt of Carlſtadt.

LIPA'RI, a volcanic iſland, or rather a group of ſuch iſlands, in the Mediterranean, about twenty-four miles from the north coaſt of Sicily. They were formerly called ÆOLIAN ISLANDS; and now *Iſole di Lipari*, from the name of the chief of them. Theſe iſlands are commonly reckoned ten in number; though ſome by omitting, and

others

others by comprehending, ſome barren rocks, have diminiſhed or increaſed their number. The largeſt is Lipari, being 19½ Italian miles in circuit. Accordingly this iſland, from its extent, the number of its inhabitants, its agriculture and commerce, claims pre-eminence above all the others by which it is ſurrounded. Nor is it leſs important in the eſtimation of the naturaliſt from the quantity, variety, and unuſual beauty, of the volcanic products which it contains. Of the antiquity of the iſland, and of its exiſtence before the Trojan war, we are certain, ſince we learn from Homer, that, after the taking of Troy, Ulyſſes landed there, and was treated with the utmoſt urbanity by king Æolus, during the whole month of his continuance there; (Odyſſ. l. 10.) and, though we allow to the poet the uſual licenſe of poetry, it is ſtill moſt certain that he could not have named this iſland, and the city it contained, unleſs they exiſted at the time when he wrote his poem, above 3000 years ago. But, if we conſult other ancient and credible writers, we ſhall find that before Æolus, Liparus reigned in this iſland, and that from him it took its name, being before called Melogonis, or Meligunis. The antiquity of this iſland may alſo be inferred from the manner of its production by ſubterraneous eruptions, in which the decompoſition of volcanized matters is neceſſary, which requires a conſiderable interval of time. If, therefore, Lipari had inhabitants and cities, and was a cultivated country, before the deſtruction of Troy, it is evident that it muſt have exiſted many ages prior to that event. But, from the time when mention is made in hiſtory of this iſland to the preſent day, it is pretty certain that no true eruption or current of lava has taken place in it; for, if this had been the caſe, ſome memorial would have been preſerved of it, as well as of thoſe of Stromboli and Vulcano. See thoſe articles.

Spallanzani made a circuit of this iſland for the purpoſe of firſt examining its ſhores; and he then aſcended the mountains in its interior parts. In examining its ſhores, he began with the city of Lipari, which extends along the ſhores in the form of an amphitheatre; and in his reſearches in the harbour itſelf, under the caſtle of the city, he found that it is erected on an immenſe rock of lava, that riſes perpendicularly from the water, and is entirely deſtitute of all vegetation, except a few ſtalks of the Indian fig (Cactus opuntia, Linn.) which grew in its fiſſures. This lava is joined to large maſſes of glaſs, which form a whole with it, without any ſeparations or diviſions in the middle. The ancient exiſtence of fire in this place is evinced by another circumſtance, viz. that the vitreous ſubſtances already noticed are frequently accompanied by pumice, which is, in fact, only an imperfect glaſs. Upon attentively examining this mixture of lava, glaſs, and pumice, which forms the body of the rock, it appeared evident that there muſt have been ſeveral currents that had flowed down the ſides, and perhaps from the ſummit, of the contiguous mountain Della Guardia, into the ſea; ſince the direction of their deſcent is found on that ſide, and even the filaments of the pumices point towards that mountain.

The haven of Lipari forms a curve in the ſhore, which to the ſouth begins at the foot of the Monte Capiſullo, and ends to the north-eaſt at the bottom of the Monte della Roſa. After having examined that part of the ſhore which is contiguous to the harbour, lying under the caſtle, and on the right ſide of Monte Capiſullo, our author made the circuit of the remainder of that curve to the baſe of Monte della Roſa. In purſuing his tour, he found that Lipari, like the other Æolian Iſles, is at its baſe more or leſs corroded by the ſea, which is frequently in a ſtate of violent agitation; the lower excavations cauſe the parts above them to give way, and, in a ſeries of years, great maſſes fall into the ſea. To this the nature of the lava, which is full of cracks and fiſſures, conſiderably contributes; not to mention the influence of the humidity of the atmoſphere, and other deſtructive elements. Large heaps of theſe fragments accumulate on the ſhore, and make room for others, and thus a gradual diminution of the iſland takes place. Beyond the harbour and porphyritic rock, our author found the ſea forming a kind of bay within the land, round which a few cottages are built, affording ſhelter to a ſmall number of inhabitants, who ſubſiſt by the profits of a vineyard that ill repays their labour. The name of this place is *Canneto*; and above it is a current of lava, of an argillaceous baſe; ſimilar to that of the Arſio in Iſchia. At the diſtance of three miles from the haven of Lipari is *Campo Bianco*, the White Field, ſo called, becauſe it is a lofty and extenſive mountain, compoſed entirely of white pumices. The mountain, which is a prodigious maſs of pumice, riſes almoſt perpendicularly from the ſea, and, ſeen at a diſtance, appears to be about a quarter of a mile in height, and above half a mile in breadth. No plants grow upon it, except a few without fruits, like thoſe on the tops of the Alps. Its ſides are ſtreaked with numerous furrows, widening and deepening as they approach the bottom, and formed by the rains, which eaſily corrode and excavate a ſubſtance ſo ſoft and yielding as pumice. The ſea at the bottom has likewiſe occaſioned great devaſtations, by means of which is laid open to view a large vein of horizontal lava, on which the laſt wave dies away when the ſea becomes calm. The formation of this lava was, therefore, prior to the vaſt accumulation of pumices which reſt upon it. See the article LAVA, p. 280 of this volume.

Beyond Campo Bianco and its adjacent hills, riſes a mountain of another kind, called the Monte della Caſtagna, which, in the part of it deſcending to the ſea, is about one mile in extent, and above four miles in circumference. This mountain, according to Dolomieu and our author, is entirely compoſed of enamels and glaſſes. Campo Bianco and the Monte della Caſtagna, though apparently iſolated, are in reality a connected group, taken in its whole extent, having a circuit of eight miles; nor is the extent of its vitrifications leſs, if in theſe we include likewiſe the pumices, which are in fact only a leſs perfect glaſs. The ſterility of theſe mountains is a conſequence of their vitreous nature, which, in the courſe of ſo many ages, has not been decompoſed into a vegetable earth; if we except a few lichens attached to the fiſſures of the glaſſes, there is no veſtige of a ſingle living vegetable over the whole Monte della Caſtagna; and on Campo Bianco they are extremely rare. Beyond the pumices, the lavas again appear, beginning from the Punta del Segno Nero, and extending in a chain of ſeveral miles, which on the ſide of the ſea deſcends in precipices and craggy declivities; and, proceeding further, the ſea makes an incurvature, and forms a ſmall bay, called the Valle di Muria, on the ſides of which riſe high and ſteep rocks of lava half-demoliſhed, and among the lava enamels and pumices. In examining the interior of the iſland, Monte San Angelo, ſituated to the north of the city of Lipari, is the higheſt mountain, on the ſummit of which is a circular plain, ſurrounded by eminences ſhelving towards the inſide, which M. Dolomieu imagined to be the remains of an ancient crater, and which he ſuppoſes to have been the firſt that was formed in the iſland, about a mile above the ſea, through which the volcano burſt forth, and which ſerved as a baſe and ſupport for the other mountains that were thrown up afterwards. Soon afterwards roſe its companion, the Monte della Guardia, which looks towards the ſouth, and little inferior to the other in height. Theſe two mountains formed two iſlands in the ſea, which, enlarging each its reſpective baſe, united into one. To theſe two mountains ſubſequent eruptions made new additions, until at length the whole iſland of Lipari was produced.

Lipari, if we except ſome few flat places and practicable declivities, which the inhabitants have rendered cultivable by great labour, is a ruinous pile of horrid precipices, rugged cliffs, and enormous maſſes; and there is no ſummit, nor projecting part of a mountain, which does not exhibit manifeſt indications of its future fall and de-

ſtruction. The materials of which theſe ruins are formed are pumices, enamels, and glaſſes, ſimilar to thoſe already mentioned.

The celebrated *ſtoves* of Lipari have exerciſed the curioſity of travellers. Theſe lie four miles weſt of the city, and ſomewhat beyond the ſummit of a mountain, which, next to thoſe of San Angelo and Della Guardia, is one of the higheſt in the iſland. The road from the city to the ſtoves is formed by a deep excavation, chiefly the work of rain-waters, in an immenſe maſs of tufa. See TUFA. It begins at about 100 paces from the city, and continues, without interruption, to beyond the ſummit of the *Monte della Stufa*, or Mountain of the Stoves. The ſtoves, terminating a deſcent of about 200 feet in length, form a group of four or five caves, more like to the dens of bears than the habitations of men, and exhibiting much leſs art than the edifices formed by the beaver. Every cave has an opening at the bottom, through which the warm and humid vapours enter, and another in the top, through which they paſs out. On one of theſe ſtoves the thermometer ſtood at only 48⅔; but the vapour poſſeſſes ſomewhat of a ſuffocating nature. The ſtoves now retain little more than their name; and, whatever may have been their ſuppoſed virtue in the cure of diſorders, they are now nearly deſerted. Under the ſtoves, and the adjacent ground, there is reaſon to believe that ſome remains of ſulphureous conflagrations ſtill continue.

Lipari, we have already obſerved, is the largeſt, and it is alſo the moſt populous, of thoſe called the Æolian Iſles; the number of its inhabitants amounting to between nine and ten thouſand, moſt of whom reſide in the city of the ſame name. If the iſland be divided into four parts, about two and a half will be found to be cultivated, and the remainder overgrown with wood, and barren. Theſe barren tracts, however, are gradually converted into fruitful fields, by a kind of neceſſity ariſing from the continually-increaſing population of the iſland. Lipari produces cotton, pulſe, and olives, in ſmall quantities. The corn is ſcarcely ſufficient for the ſupply of the iſland. Oxen are employed in ploughing the ground. The ancient plough is ſtill in uſe here; and the mode of agriculture practiſed is very expeditious: one man traces a furrow, and another follows to ſow in it grain and pulſe: the ploughman, in cutting the next furrow, covers up that in which the ſeed has been ſown; and thus the field is both ploughed and ſown at once. But the moſt uſeful production of this iſland is grapes, of which there are ſeveral kinds. The firſt furniſhes the common wine that is drunk in the iſland, and of which they export annually two or three thouſand barrels. The paſſole and paſſolina, as they are called in the iſland, are two other kinds of grapes that are dried. The laſt is that ſort which is uſually called the Corinthian grape. Of this they commonly ſell 10,000 barrels annually; and of the other about 12,000. From a fourth kind of grape is made the famous Malmſey of Lipari; which is a wine of a clear amber colour, generous and ſweet. The grape producing this wine is ſcarce, and does not furniſh more than 2000 barrels annually, which are ſold for foreign markets, as well as the paſſole and paſſolina. The vintage is in the month of September, which is a ſeaſon of relaxation and feſtivity to the Liparese. Another plant of domeſtic uſe to the Liparese, if it does not form a branch of foreign commerce, is the Indian fig. Nothing can be more wretched than the fiſhery of Lipari. In June and July they fiſh for coral; but, owing to a want of ſkill, this fiſhery is very unproductive. At Lipari large and ſmall cattle are very ſcarce; and the few oxen and cows which are ſlaughtered there are brought from Sicily, and are very lean. Of wild quadrupeds, the country only produces rabbits, which make their burrows in the mountainous parts, where the volcanic matters, principally of the tufaceous kind, permit them to dig with their feet. The birds ſtationary here are but few, viz. the partridge, green-finch, ſparrow, gold-finch, horn-owl, and raven. Of migrating water-fowl, here are different kinds of ſea-gulls, and the cormorant. The birds of paſſage are the turtle-dove and the quail, which come for a few days in April and September. Several kinds of ſwallows are common.

Foreign commerce has begun to be introduced into the iſland by the mariners; they every year buy, at the fair of Sinigaglio, linen, muſlins, veils, and other commodities of that kind; and ſell them at Meſſina, Catania, Palermo, and other parts of Sicily. The trade is very advantageous to the country, and many have acquired conſiderable wealth; though it injures the fiſhery, and raiſes the price of fiſh. Strabo, Diodorus, and Dioſcorides, ſay, that the ſulphat of alumine (alum) was procured in great abundance at Lipari; but none of this ſalt is now extracted in the iſland.

The political adminiſtration of Lipari is compoſed of a criminal judge, a fiſcal, a governor, who has the chief authority both in military and civil affairs, and who is commonly an old invalid; and a civil judge. The biſhop, ſeventeen canons of the firſt order, and fourteen of the ſecond, and from 120 to 130 prieſts, form the eccleſiaſtical eſtabliſhment. The Liparese are, in general, of a prompt and lively wit, ready to learn, of acute penetration, and very deſirous of obtaining knowledge. A beggar is ſcarcely ever found in this iſland; for the pooreſt perſons have ſome ſmall piece of ground which they cultivate, and by the produce of which they live. The natives are rather of a large ſize, robuſt, and comely. The heat of the ſun, however, injures their complexions, producing tanned ſkins and ſwarthy countenances. The Liparese, in general, value themſelves upon being good mariners. *Spallanzani's Travels.*

LIPA'RI, an ancient and very ſtrong town, and capital of the above iſland of the ſame name in the Mediterranean, with a biſhop's ſee. It was ruined by Barbaroſſa in 1544, who carried away all the inhabitants into ſlavery, and demoliſhed the place; but it was rebuilt by Charles V. The caſtle ſtands upon a rock. The way to it from the city leads up a gentle declivity. This caſtle makes a part of the city; and on the ſummit of the rock is the citadel, in which the governor and the garriſon reſide. The cathedral ſtands in the ſame ſituation. Here the ancients, in conformity to their uſual practice, had built the temple of a tutelary god. This citadel commands the whole city; and it is acceſſible only at one place. Were an hoſtile force to make a deſcent on the iſland, the inhabitants might retreat hither, and be ſecure againſt all but the attacks of famine. The ancient inhabitants had alſo fortified this place. Conſiderable portions of the ancient walls are ſtill ſtanding in different places, particularly towards the ſouth: their ſtructure is Grecian; and the ſtones are exceedingly large, and very well cut. The layers are three feet high, which ſhows them to have been raiſed in ſome very remote period. Theſe remains are ſurrounded with modern buildings. The remains of walls, which are ſtill to be ſeen here, have belonged not only to temples, but to all the different ſorts of buildings which the ancients uſed to erect. The vaults, which are in a better ſtate of preſervation than any of the other parts of theſe monuments, are now converted to the purpoſes of a priſon.

In the city of Lipari there are convents of monks of two different orders; but there are no convents for women, that is to ſay, no cloiſters in which women are confined; thoſe, however, whoſe heads and hearts move them to embrace a ſtate of pious celibacy, are at liberty to engage in a monaſtic life, with the concurrence of their confeſſors. They put on the ſacred habit, and vow perpetual virginity, but continue to live with their father and mother, and mix in ſociety like other women. The vow and the habit even enlarge their liberty. This cuſtom will, no doubt, as M. Houel obſerves, appear very ſtrange; but this was the way in which the virgins of the primitive church lived: the idea of ſhutting them up together did not occur till the fifth century. The life of theſe

thefe religious ladies is lefs gloomy than that which thofe under the fame vows lead in other countries. They wear clothes of particular colours, according as they belong to this or that order. Their drefs gives them a right to frequent the churches at any hours; and the voice of cenfure, which takes particular pleafure in directing her attacks againft pious ladies, goes fo far as to affert, that fome young women aflume the habit with no other view but that they may enjoy greater freedom. The houfes in general are indifferent buildings; but three edifices are diftinguifhable from the reft; viz. the palace of the bifhop, the houfe of the governor, and the cathedral-church. In the former are a few capital paintings; and the latter contains very coftly facred utenfils, a great quantity of plate, and a number of filver images, among which is the ftatue of St. Bartholomew, their patron faint.

The roads which lead from the city to the interior are of a very fingular appearance. The whole ifland is nothing but an aflemblage of mountains, all of them conlifting of afhes or lava difcharged from the depths of the volcano by which it was at firft produced. The particles of thefe afhes are not very hard; the action of the rain-water has accordingly cut out trenches among the mountains; and thefe trenches, being perhaps lefs uneven than the reft of the furface, have of conlequence been ufed as roads by the inhabitants, and have been rendered much deeper by being worn for fo many ages by the feet of men and other animals. Thefe roads are more than five or fix fathoms deep, and not above feven or eight feet wide. They are very crooked, and have echoes in leveral places. You would think that you were walking through narrow ftreets without doors or windows. Their depth and windings fhelter the traveller from the fun while he is paffing through them; and he finds them deliciouly cool. The city of Lapari lies in lat. 38. 35. N. lon. 15. 12. W.

LIPA'RIA, *f.* [fo named by Linnæus, in allufion either to the fmooth or fleek habit of L. fphærica, from which his idea and character of the genus was taken, or to its rich and fplendid appearance; for the Greek word λιπαρος will juftify either explanation.] In botany, a genus of the clafs diadelphia, order decandria, natural order of papilionaceæ, or leguminofæ. The generic characters are—Calyx: perianthium one-leafed, very obtufe at the bafe, half-five-cleft, acute; the loweft divifion very long, elliptic, petal-like. Corolla: papilionaceous, without proceffes of the keel or wing; ftandard oblong, conduplicated, ftraight; the fides reflex; wings oblong, ftraight, narrower at the bafe, two-lobed at the lower margin. Keel lanceolate, fubafcending, two-parted at the bafe. Stamina: filaments diadelphous; fimple and nine-parted; filiform; three fhorter than the reft; antheræ ovate. Piftillum: germ feffile, very fhort; ftyle filiform, middling; ftigma fimple. Pericarpium: legume ovate. Seeds: few.—*Effential Character.* Calyx five-cleft, with the loweft fegment elongated; corolla, wings two-lobed below; ftamina, the larger with three fhorter teeth; legume ovate.

Linnæus feparates this genus from Borbonia, becaufe the tenth ftamen is not deficient in this, as it is in Borbonia. Lamarck unites them. The character of the genus is taken from the firft fpecies. It is compofed of fhrubs, that have the habit of Borbonia, fmooth or villofe. Leaves fimple, feffile, fmooth or villofe; ftipules fcarcely any; flowers axillary or terminating. They are natives of the Cape of Good Hope.

Species. 1. Liparia fphærica, or globe-flowered liparia: flowers in heads; leaves lanceolate, nerved, fmooth. This is a fhrub, with very handfome flowers. Stem four feet high, ftout, fmooth, and even. Leaves alternate, remote, broad-lanceolate, quite entire, acute, rigid, dagger-pointed, pungent. Head terminating, feffile, fmooth, the fize of an artichoke, furrounded by the leaves like a calyx, of the fame length with the corollets. The loweft fegment of the calyx the length of the whole corolla, and of the fame breadth alfo, coloured or petaloid, emarginate-trifid at the top. Corolla tawny. The manner in which the wings wrap round each other, before the flower opens, is very fingular.

2. Liparia graminifolia, or grafs-leaved liparia: flowers in heads; leaves linear, alternate, acute, feffile, calyxes villofe. Grows in a fandy foil at the Cape. The very narrow leaves, an inch or inch and a half long, and about a line wide, are peculiar, as well as the hairy heads of flowers, much fmaller than thofe of the foregoing.

3. Liparia umbellata, or umbelled liparia: flowers umbelled; leaves lanceolate, fmooth and even; corollas fmooth; calyxes and bractes hairy. The fame with Borbonia lævigata.

4. Liparia villofa, or woolly liparia: flowers in heads; leaves ovate, acute, villofe. This refembles Indigofera fericea. The flowers are in bundles; the corollas fmooth and even; the ftamens truly diadelphous. Introduced from the Cape in 1774, by Mr. Francis Maffon.

5. Liparia fericea, or filky liparia: flowers fubfpiked, axillary; leaves oblong-ovate, acute, villofe. This is allied to the preceding.

6. Liparia oppofita. See CROTALARIA.

Propagation and Culture. See BORBONIA, vol. iii. p. 211.

LIP'ARIS, a river of Cilicia, whofe waters were like oil.

LIPAROCE'LE, *f.* [from the Gr. λιπος, fat, and κηλη, a tumour.] In furgery, any kind of tumour compofed of fat.

LIPAVI'NA, a town of Croatia: twelve miles eaft-north-eaft of Creutz.

LIPCZA'NI, a town of Poland, in the palatinate of Braclaw: fixty miles weft-fouth-weft of Braclaw.

LIPCZA'NI, a town of Moravia, on the Pruth: twenty-four miles fouth-fouth-eaft of Choczim.

LIPE'NIUS (Martin), a German Lutheran divine, of whofe perfonal hiftory we have feen no other notice, than that he died in 1692, at the age of fixty-two. He was the author of a work On the Navigation of Solomon's Ships to Ophir, 4to. 1661; a curious treatife On Chriftmas Boxes, or New-year's Gifts, 4to. 1670; and he publifhed an immenfe compilation, entitled *Bibliothecæ Realis*, in 6 vols. folio, 1675–1685; confifting of a view, but very incorrect, of all the fubjects into which the different fciences are branched, with a catalogue of the names and works of the various authors who have treated concerning them. Two of thefe volumes are occupied by divines; two by philofophers; one by jurifts; and one by phyficians.

LI'PERSHAUSEN, a town of the duchy of Wurzburg: three miles north-eaft of Aub.

LI'PES, a town of Peru, and capital of a jurifdiction, under the viceroy of Buenos Ayres: 150 miles fouth-fouth-weft of Potofi. Lat. 21. 40. S. lon. 68. 16. W.

LI'PETZ, a town of Bohemia, in the circle of Konigingratz: nine miles fouth of Neu Biezow.

LIPET'SK, a town of Ruffia, in the government of Tambov, on the Voronez: forty miles weft-north-weft of Tambov. Lat. 53. N. lon. 40. 24. E.

LIP'HOOK, a village in Hampfhire, fix miles from Petersfield, on the London road. It has a good inn, which is the poft-office; and near it fome neat gentlemen's feats. Here are two fairs; the firft Wedneflday in March, and the 11th of June.

Near Liphook is Selborn, where a monaftery was founded in the reign of Henry III. and here are three charity-fchools, which were erected in the year 1705, for the poor children of this and three neighbouring parifhes. *Britifh Directory*, vol. v. App.

LIPIN'SKOI, a town of Ruffia, in the government of Novgorod: fixteen miles fouth-eaft of Novgorod.

LIP'MAN, a German rabbi in the fourteenth century, who publifhed a treatife in Hebrew againft the Chriftian religion, and the Sadducees, entitled *Nizachon*, or Victory, 1399; in which the author's efforts very feebly corresponded with his vaunting title. Theodore Hackfpan, profeffor of the oriental languages at Altdorf, publifhed

it at Nuremberg, in 1644, in 4to. accompanied with a treatiſe of his own, De Scriptorum Judaicorum in Theologia Uſu vario et multiplici. Lipman afterward abridged his piece, and printed it in rabbinical verſes. It was publiſhed at Altdorf, in 1681, by Chriſtopher Wagenſeil, with a long Confutation, in his collection, entitled Tela Ignea Satanæ.

LIPNIS'KI, a town of Lithuania, in the palatinate of Wilna: twenty miles eaſt-north-eaſt of Lida.

LIP'NITZ, a town of Bohemia, in the circle of Czaſlau: ſix miles weſt of Teutſch Brod.

LIP'NO, a town of the duchy of Warſaw: twelve miles north of Dobrzyn.

LI'PO, a town of China, of the third rank, in Quang-ſi: thirty-ſeven miles north of Nan-tan.

LIPODER'MOS, *ſ.* [from the Gr. λειπω, to leave, and δερμος, ſkin.] A diſeaſe of the ſkin. A circumciſed perſon; one whoſe prepuce is wanting.

LIPOPSYCH'IA, *ſ.* [from the Gr. λειπω, to leave, and ψυχη, the ſoul.] A ſhort fainting-fit; a ſwoon.

LIPORA'NO, a town of Naples, in the province of Otranto: three miles ſouth of Tarento.

LIPOTHYM'IC, *adj.* Affected with a lipothymy.

LIPOTH'YMOUS, *adj.* Swooning; fainting.—If the patient be ſurpriſed with a *lipothymous* languor, and great oppreſſion about the ſtomach and hypochonders, expect no relief from cordials. *Harvey on the Plague.*

LIPOTH'YMY, *ſ.* [from the Gr. λειπω, to leave, and θυμος, the mind.] Swoon; fainting-fit.—The ſenators, falling into a *lipothymy*, or deep ſwooning, made up this pageantry of death with a repreſenting of it unto life. *Taylor.*—In *lipothymys* or ſwoonings, he uſed the frication of this finger with ſaffron and gold. *Brown.*

LIPOW'E, a town of Lithuania: twenty-five miles north-north-eaſt of Braclaw.

LIPOWIEC', a town of Auſtrian Poland, on the Viſtula, with a caſtle on a rock, uſed as a priſon for eccleſiaſtical offenders: twenty miles weſt of Cracow.

LIP'PA, a town of Hungary, on the Maros. In the year 1594, this town was beſieged by the Turks; but, the ſuburbs of Temeſwar having been ſet on fire by a party of Hungarians from Lugos, the flame ſeen in the camp before Lippa ſo terrified the Turks, that they immediately raiſed the ſiege, and left all their baggage behind them. It was afterwards ſeveral times taken and re-taken in the wars between the Turks and Imperialiſts. It is twenty-two miles north of Temeſwar.

LIP'PE, a county of Germany, ſituated to the weſt of the biſhopric of Paderborn, divided into ſeveral branches, taking their names from the different towns and parts of the principality belonging to each. The country is mountainous, but contains ſome good arable land. The principal rivers are the Emmer and the Werra. The chief towns are Detmold and Lemgow. To the taxes of the empire the monthly aſſeſſment was 120 florins, and each chamber-term 57 rix-dollars 56½ kruitzers. It is now a part of the kingdom of Weſtphalia.

LIP'PE, a river of Germany, which riſes in the neighbourhood of Lippſpring, and runs into the Rhine near Weſel.

LIP'PE, or LIP'STADT, a town of Weſtphalia, on the Lippe. It was founded in the year 1150, by Bernhard count of Lippe, and was once Hanſeatic. In the year 1376, it was mortgaged to the county of Mark: it afterwards belonged in common to the count of Lippe and king of Pruſſia, as count of Mark. In 1632, a bloody battle was fought here between the Swedes and Imperialiſts, in which Guſtavus Adolphus king of Sweden and the imperial general Pappenheim were both killed. It is fourteen miles weſt of Paderborn. Lat. 51. 39. N. lon. 8. 24. E.

LIP'PE SCHAU'MBERG (William, Count), a very ſingular character, was the ſon of Albert Wolfgang count Lippe and Schaumberg, by a daughter of count Oynhauſen. He was born in 1724 at London, where his parents then reſided in conſequence of a miſunderſtanding which prevailed between his father and grandfather. In 1735 he was ſent to Geneva to complete his education. In 1740 he returned along with his brother; and, in the following year, they were both ſent to the univerſity of Leyden, from which they were removed, ſome time after, to Montpellier in France. At about the age of eighteen he conceived a ſtrong deſire to ſee England; he accordingly repaired thither, and obtained an enſign's commiſſion in the firſt regiment of guards. On the death of his elder brother George, in 1742, he returned to Buckebourg, the family-reſidence in Germany; and next year accompanied his father, a lieutenant-general in the Dutch ſervice, during the campaign in the Netherlands, and was preſent as a volunteer at the battle of Dettingen, where he diſtinguiſhed himſelf by his bravery and good conduct. In the year 1745 he joined the Auſtrian army in Italy, in which he ſerved as a volunteer under field-marſhal Lobkowitz and count Schulenburg; and, on his return to Buckebourg at the end of the campaign, he was promoted, in conſequence of his ſervices, to be a colonel in the Auſtrian army; but this commiſſion he declined. In 1746 he travelled through many of the German provinces; proceeded thence to Italy and Swiſſerland, and afterwards to England, for which he always retained a ſtrong predilection. Having ſucceeded to his paternal dominions in 1748, he repaired to Berlin to return to his Pruſſian majeſty the order of the Black Eagle, which had been conferred on his father. Here he formed an acquaintance with ſome of the moſt diſtinguiſhed literary men of that city, and was elected a member of the Academy of Sciences, an honour which was conferred on him in 1764 by the Royal Society of Gottingen. Soon after, he undertook a new tour to Italy through Hungary, where he enlarged his knowledge of antiquities and improved his taſte in the fine arts. He returned to Buckebourg in 1751, and next year raiſed from among his own ſubjects a regiment of grenadiers, and a corps of artillery, to which he added in 1753 another of carbineers, whoſe dreſs was very ſingular, being black turned up with red. The coats of the officers were alſo black trimmed with ſilver, and their veſts and breeches yellow ſatin, which formed a curious contraſt with the red lining of the coat. In 1753 he was honoured by the king of Pruſſia with the order of the Black Eagle. In 1754 he eſtabliſhed at Buckebourg a foundery, where he cauſed to be caſt all thoſe cannon which he afterwards employed in the ſeven-years' war againſt the French. In the year 1756 he entered into a ſubſidiary treaty with Great Britain, by which he engaged to aſſiſt his Britannic majeſty in the defence of his German ſtates againſt the French; and to furniſh for that purpoſe a regiment of infantry of a thouſand men, a corps of three hundred artillery, and another of carbineers and chaſſeurs. Next year the Schaumberg troops joined the Hanoverians at Bielfeld; and the count, as an ally of his Britannic majeſty, was appointed adjutant-general of the allied army, a ſituation in which he ſerved with great reputation till the end of the war. When the army opened the campaign in the ſpring of the year 1758, under the command of prince Ferdinand, he again repaired to his poſt; and was preſent at the battle of Minden, and alſo at that fought on the 10th of October the ſame year by lieutenant-general Oberg at Lutterberg, where the French troops made every exertion to get poſſeſſion of the count's perſon. After his troops had remained with the allied army a conſiderable time, he was ordered by an imperial mandate of the 28th of Auguſt 1758 to withdraw them, and to join the Auſtrian forces againſt the king of Pruſſia; but, notwithſtanding the threat held out of being placed under the ban of the empire, he abſolutely refuſed to comply with this requiſition; and, though his territories were invaded by the French troops, and treated as a conquered country, he continued faithful to the ſolemn engagements which he had entered into with England. In the year 1759 the count obtained the command of the whole artil-

lery

lery of the allied army, and on this occaſion renewed the before-mentioned treaty with his Britannic majeſty, engaging to furniſh a greater number of troops. He had a conſiderable ſhare in the battle fought on the 1ſt of Auguſt that year, in the neighbourhood of Todenhauſen; and the ſucceſs of the day was in a great meaſure owing to the excellent diſpoſition which he made of the batteries, and the manner in which the artillery was ſerved under his inſpection. The ſame year the ſiege of Marpurg was ſucceſsfully undertaken under the count's direction: he next accompanied the troops deſtined for the ſiege of Munſter, which were much weaker than the garriſon of the town; yet this attempt was crowned with ſuch complete ſucceſs under the command of the count, that the town capitulated on the 20th of September. On his return home in 1760, he formed an artificial iſland in the Steinheeder lake, which is a mile long and half a mile broad, and, being ſurrounded by moraſſes, is without the reach of cannon. Here he afterwards conſtructed a fortreſs, an expenſive work, on which he was employed five years, and which was conſidered by the ableſt engineers as impregnable; each baſtion is connected with another by means of heavy iron chains to prevent the acceſs of boats; and it contains, beſides the uſual apartments, a chapel and a library furniſhed with the beſt books on engineering, a collection of models, another of natural curioſities, and lodgings for the officers, with a ſchool for engineers, and an obſervatory. To this fortreſs the count gave the name of Wilhelmſtein, and hither he often retired to inſpect the education of the cadets, and to ſleep in an apartment directly over the powder-magazine. In the year 1761, when war broke out between Spain and Portugal, count Lippe was appointed by his Britannic majeſty commander-in-chief of the Britiſh troops ſent to the aſſiſtance of the latter. He was afterwards entruſted with the command of both armies; and, in the ſpring of 1762, proceeded by the way of England to Portugal. Soon after his arrival, the king ordered the ſum of forty thouſand cruſadoes to be paid to him for his eſtabliſhment; but the count, with his uſual magnanimity, diſtributed one half of the money among the ſoldiers, by which means he gained the eſteem of the whole army, and ſent back the other half to the king, after deducting as much as was ſufficient to pay for his uniform of field-marſhal. The king even offered him a penſion of 3000l. ſterling, but this likewiſe the count declined; and, though his majeſty repeated this offer after the count's return to Germany, and had actually depoſited a part of the ſum in the hands of a Dutch banker, he adhered to his firſt reſolution. By his exertions principally, Portugal was protected from the danger threatened to it by her powerful and ambitious neighbour. The king of Portugal, Joſeph I. who knew how to appreciate count Lippe's talents, employed him in a civil as well as military capacity; and, in conſequence of his advice, introduced many improvements into the political adminiſtration of the kingdom, and particularly into the financial department. But his principal object was to eſtabliſh the army on a reſpectable footing, and to inſpire the ſoldiery with a more delicate ſenſe of honour. The war which he carried on with Spain was merely a defenſive one; but he effected more by it than he could by one of a contrary deſcription, as he was enabled to throw ſo many obſtacles in the way of the enemy, that their plans were rendered entirely fruitleſs. In 1763, before he left Portugal, he eſtabliſhed a ſchool of artillery; and conſtructed on the Spaniſh frontier a very ſtrong fortreſs, which, in commemoration of his name, was called Fort Lippe. At the general peace the count returned to Germany, carrying with him abundance of preſents from the kings of Portugal and England, in teſtimony of their eſteem and approbation. He now employed much of his time in the ſtudy of the military art, and in bringing his theories to the teſt of practice. As the reſult of his experience and obſervations, he wrote a treatiſe on the art of defenſive war, in ſix ſmall volumes, which is ſaid to poſſeſs much merit, but of which he had only ten copies printed. In 1767 he reviſited Portugal by the king's invitation, and completed the reform which he had begun in the Portugueſe army. In the following ſpring he returned to Germany, and ſoon after was honoured with a viſit from Frederic II. of Pruſſia. The remainder of his life he employed in promoting the proſperity of his ſtates, and the happineſs of his ſubjects. He died in 1777, in the fifty-fourth year of his age. Sublime thoughts and heroic ſentiments had been as familiar and natural to his mind as they were to the nobleſt characters of Greece and Rome. The animation of his features announced the elevation, ſagacity, penetration, kindneſs, virtue, and ſerenity, of his ſoul. In his retirement he amuſed himſelf with the arts and ſciences; but his favourite ſtudies were philoſophy and ancient hiſtory. He poſſeſſed an extenſive knowledge in every department of literature; and by his travels in foreign countries he had become familiarly acquainted with the French, Engliſh, Italian, and Portugueſe, languages; he was an excellent draftſman, a great connoiſſeur in paintings; and excelled ſo much in muſic, that he was able to direct the concerts which were given in the evening at his reſidence.

LIP'PED, *adj.* Having lips.

LIPPE'HNE, a town of the New Mark of Brandenburg: four miles north-north-eaſt of Soldin, and twenty-ſix north of Cuſtrin. Lat. 53. 4. N. lon. 15. 3. E.

LIP'PERODE, a town of Weſtphalia, in the county of Lippe, on the Lippe: two miles eaſt-north-eaſt of Lipſtadt.

LIP'PEY. See Leypa, p. 566.

LIP'PI (Fra. Filippo), an excellent hiſtorical painter, born about the beginning of the fifteenth century. At the age of ſixteen, being entered a noviciate in the convent of Carmelites at Florence, where he was born, he had there an opportunity of ſeeing that extraordinary artiſt Maſſaccio at work upon the aſtoniſhing freſcoes with which he adorned the chapel of Brancacci, in the church there; and became eager to embrace the art he ſaw capable of ſo much effect in affording gratification, inſtruction, and intereſt to the mind. Such was his ſucceſs, and ſo did he enter into the principles and manner of his great maſter, that, after the death of the latter, it was ſaid, by common conſent, that the ſoul of Maſſaccio ſtill abode with Fra. Filippo. He forſook the habit of his convent, and devoted himſelf entirely to painting; but his ſtudies were for a time diſturbed by his being unfortunately taken, while out on a party of pleaſure, by ſome Moors, and carried priſoner to Barbary; where he remained in ſlavery eighteen months. He obtained his liberty by his talents. He drew the portrait of his maſter upon a wall with ſo much ſpirit and accuracy in reſemblance, that he, being ſtruck with the ingenuity of his ſlave, and generouſly feeling compunction in confining a man of ſuch uſeful talents, gave him his freedom as a reward. On his return home, he painted ſome works for Alphonſo king of Calabria. He employed himſelf alſo in Padua; but it was in his native city of Florence, that his principal works were performed. He was employed by Coſmo di Medici; who preſented his pictures to his friends, and one to pope Eugenius IV. He was alſo employed to adorn the palaces of the republic, the churches, and many of the houſes of the principal citizens; among whom his talents were held in high eſtimation. The holy mode of life into which he was conducted in early years, and the fine endowments of mind which he enjoyed by nature, did not teach him the folly of vice; and he met in this world with a ſevere puniſhment, juſtly due to a guilty amour he indulged in at Spoleto; where he was employed at the cathedral to paint the chapel of the Bleſſed Virgin. There, in his ſixty-ſeventh year, he was poiſoned by the relations of the lady whoſe favours he was ſuppoſed to enjoy. Lorenzo di Medici erected a marble tomb in the cathedral to his memory, which Angelo Politiano adorned with a Latin epitaph.

LIP'PI (Filippo), ſon of the former, was renowned for

excellent imitations of architectural ornaments. He died in 1505, at the age of 45.

LIP'PI (Lorenzo), alſo a Florentine painter, born in 1606. He was likewiſe a great muſician and a poet. In the latter character he publiſhed *Il Malmantile racquiſtato.* He died in 1664.

LIP'PIA, *ſ.* [ſo named by Houſtoun, from *Auguſtine Lippi*, who travelled into Egypt, and died in Abyſſinia.] In botany, a genus of the claſs didynamia, order gymnoſpermia, natural order ſtellatæ, (vitices, *Juſſ.*) The generic characters are—Calyx: perianth one-leafed, compreſſed, four-toothed, bivalved, when mature; valves membranaceous, acuminate, keeled, upright, permanent. Corolla: one-petalled, unequal; border four-cleft; diviſions rounded, the inferior and ſuperior one larger; the ſuperior erect. Stamina: filaments four, ſhorter than the corolla; two of them longer than the others; anthers ſimple. Piſtillum: germ ovate, compreſſed-flat: ſtyle filiform, of the ſituation and length of the ſtamen; ſtigmas oblique. Pericarpium: none; valves of the calyx cover the ſeeds. Seeds: ſolitary, oblong. Several fructifications are collected into a little head.—*Eſſential Character.* Calyx four-toothed, roundiſh, upright, compreſſed-membranaceous; capſule one-celled, two-valved, two-ſeeded, ſtraight; ſeed one, two-celled. Gærtner is for expunging this genus, and uniting it with Blairia. He remarks that the calyx is certainly not ſuperior.

Species. 1. Lippia Americana, or American lippia: heads pyramidal. Height ſixteen or eighteen feet, with a rough bark; branches and leaves in pairs. Leaves oblong, pointed, a little ſerrate. Peduncles axillary, ſuſtaining many pyramidal ſcaly heads, about the ſize of a large gray pea, in which are many ſmall yellow flowers between the ſcales; corolla funnel-form. Fruits on long peduncles. Seeds two, coadunate, ovate, ſomewhat bony, convex and ſmoothiſh on one ſide, flat or ſlightly concave on the other, whitiſh. Found at Vera Cruz by Dr. Houſtoun; and cultivated by Mr. Miller before 1733.

2. Lippia hemiſphærica, or hemiſpherical lippia: heads hemiſpherical. This is a ſhrub ten feet in height, the whole odoriferous and aromatic; dividing into woody, round, weak, branches, that bend down unleſs they are ſupported; the younger ones are quadrangular and flower-bearing. Flowers ſmall, each on a very ſhort peduncle; corolla white. This plant connects the ſtellate with the verticillate plants, and yet is of neither order. Native of Carthagena in New Spain.

3. Lippia ovata, or ovate lippia: heads ovate, leaves linear, quite entire. Gærtner ſeparates this from Lippia, on account of the inverted ſituation of the embryo, and names it Dalea Lippiaſtrum. L'Heritier has placed it among the Selagos. See SELAGO ovata.

4. Lippia hirſuta, or hirſute lippia: hirſute, leaves oblong, wrinkled, ſerrate, tomentoſe underneath; panicles axillary, heads ovate. Stem four-cornered, hoary with ſhagginеſs. Flowers minute, white. Found in America by Mutis.

5. Lippia cymoſa, or cymous lippia: flowers cymed, leaves ovate, almoſt entire. This ſhrub has often ſeveral ſtems from the ſame root, each no bigger than a gooſequill; round, woody, browniſh black, from three to ſix feet in height, ſlender, and requiring ſupport; twigs many, oppoſite, having ſharp prickles one third of an inch long; and oppoſite leaves, half an inch in diameter, a little pointed at the ends, almoſt round, yellowiſh-green, ſmooth, ſomething like thoſe of Nummularia, and very ſtrong ſcented like Pulegium. Petioles the eighth of an inch in length. The flowers come out at the top, are ſmall, many together, of the colour, and ſomewhat reſembling, thoſe of Spiræa Theophraſti, though not ſo cloſe ſet, nor ſo handſome. Seeds ſmall, oblong, channelled, brown. Native of Jamaica.

Propagation and Culture. Theſe ſhrubs, being natives of the continent of America and the iſlands of the Weſt Indies, muſt be preſerved in a bark-ſtove. The ſeeds ſhould be ſown on a hot-bed, and the plants treated as other ſhrubby plants from the ſame country; by keeping them always in the ſtove, plunged in the bark-bed, obſerving to give them a large ſhare of air in warm weather, and to refreſh them frequently with water. In winter they muſt be watered more ſparingly, and be kept in a moderate degree of warmth, otherwiſe they will not live through the winter, eſpecially when young; but, when they have acquired ſtrength, they may be preſerved with a leſs ſhare of warmth. As the plants advance in growth, ſhift them into larger pots; but this ſhould not be too often repeated: once every ſpring will be ſufficient; for theſe and many other exotic plants do not thrive ſo well when frequently removed as when they are permitted to fill the pots with their roots. Shift them in April, at which time the tan of the hot-bed ſhould be ſtirred, and freſh tan mixed with it, to increaſe the heat. The earth in which theſe plants are placed, ſhould be freſh and light, but not too rich.

LIP'PIE, *ſ.* A corn-meaſure in Scotland; four lippies being equal to one peck.

LIP'PITUDE, *ſ.* [*lippus*, Lat. blear-eyed.] Blearedneſs of eyes.—Diſeaſes that are infectious are, ſuch as are in the ſpirits and not ſo much in the humours, and therefore paſs eaſily from body to body; ſuch are peſtilences and *lippitudes. Bacon.*

LIPP'LEPOUT, *ſ.* in botany. See CASSINE, vol. iii. p. 874.

LIP'POMAN (Louis), a learned Italian prelate in the ſixteenth century, deſcended from a noble Venetian family, and born in the capital, but in what year is not known. Being deſtined to the church, he purſued his ſtudies with ſuch diligence and ſucceſs, that he was conſidered to be one of the ableſt divines of his time. He was alſo diſtinguiſhed by his capacity for buſineſs; and was employed in ſeveral embaſſies of importance, to Portugal and other countries. He was one of the divines who attended the council of Trent, where he acquired conſiderable reputation by the figure which he made in the diſcuſſions of that aſſembly. Upon the interruption of the council, he was ſent papal nuncio into Germany in 1548; and two years afterwards was recalled by pope Julius III. who fixed upon him for one of the three preſidents of the council of Trent. In 1556, pope Paul IV. ſent him nuncio into Poland, and made him his ſecretary. M. de Thou beſtows a high encomium upon him, by obſerving, that he was equally illuſtrious for the purity of his principles and the innocence of his life. By zealous catholics he might be thought entitled to ſuch a commendation; but his claim to it would have been oppoſed by the Jews, and the proteſtants of Poland, whom he perſecuted with inhuman and unrelenting ſeverity, during his miſſion in that country. At different periods, the dates of which we have not met with, he was ſucceſſively promoted to the biſhoprics of Modon, Verona, and Bergamo. The various employments in which he was engaged, however, did not prevent him from proſecuting his literary ſtudies, and publiſhing various learned and laborious treatiſes. He died in 1559, with the reputation of being well ſkilled in the learned languages, eccleſiaſtical hiſtory, divinity, and particularly in an acquaintance with the ſcriptures, and the fathers. He publiſhed, Catenas of the Greek and Latin Fathers, upon Geneſis, Exodus, and the ten firſt Pſalms, which appeared in 3 vols. folio, in 1546, 1550, and 1584. He alſo made himſelf famous by a new collection of the Lives of the Saints, in 8 vols. folio, which are laborious and minute, rather than critical and judicious; ſeven volumes of which were publiſhed by himſelf, from 1551 to 1558, and the eighth after his death in 1560, by his nephew, Jerome Lippoman.

LIPP'SPRING, a town of Weſtphalia, in the biſhopric of Paderborn, at the ſource of the Lippe. This town is famous for being the place where Charlemagne obliged the Saxons to embrace Chriſtianity, and where he held three councils: ſixteen miles ſouth of Detmold, and four north of Paderborn.

LIP'PUS (Aurelius), whoſe family-name was *Brandokni*,

tini, an eminent Italian poet, divine, and polite writer, was born of a noble family at Florence in the 15th century, and ſurnamed *Lippus*, on account of a defluxion from his eyes, which, at an early age, had nearly deprived him of his ſight. Notwithſtanding this misfortune, he acquired great eminence in various kinds of literature. Among other excellencies for which he was diſtinguiſhed, he was ſingularly ready in his poetic compoſitions; and this talent he poſſeſſed in ſo eminent a degree, that he is ſaid to have put into very elegant verſe, without premeditation, all the topics of Pliny's thirty-ſeven books of Natural Hiſtory. Corvinus king of Hungary, hearing of his fame, invited him to his court; and employed him, for ſeveral years, in teaching rhetoric at Buda and Gran. After the death of that king, in 1490, he returned to Florence, and aſſumed the habit of the friars of St. Auguſtin. In this new profeſſion, he applied aſſiduouſly to the exerciſe of his miniſtry, and preached, with great applauſe, to crowded auditories in ſeveral parts of Italy. After reſiding for ſome time at Naples, where he had for his ſcholar Giammaria del Monte, afterwards pope Julius III. he ſettled at Rome, and died there of the plague in 1498. The moſt valuable of his numerous works were his 3 books *De Ratione Scribendi*, containing the precepts of good writing, and written with ſingular learning and elegance; and two books, entitled *Chriſtiana Paradoxa*; and *De Humanæ Vitæ Conditione, et tollenda Corporum Ægritudine*. Theſe, with ſome others, were printed at Baſil in 1498. He alſo publiſhed, in heroic verſe, the hiſtories of the O. and N. T. a commentary on St. Paul's Epiſtles, a treatiſe *De Lege*, ſome orations, and ſome Latin and Italian poems; and left ſeveral treatiſes in manuſcript, on political and hiſtorical ſubjects. *Tiraboſchi.*

LIPRAZ'ZO, a town of Naples, in Capitanata: ſeventeen miles weſt-ſouth-weſt of Manfredonia.

LIPRE'YS, a river of North America, in the ſtate of Georgia, which runs into the Tombigh in lat. 32. 50. N. lon. 87. 51. W.

LIPS, a town and caſtle of Hungary: ſix miles north of Neuſol.

LIP'SIUS (Juſtus), a very eminent philologiſt and critic, was born in 1547 at Iſch, a village near Bruſſels, where his father, one of the principal inhabitants of that city, had a country-houſe. He gave very early diſplays of his diſpoſition for literature, which was cultivated to advantage at the Jeſuits' ſchool in Cologne, whither he was ſent at the age of twelve. Well furniſhed with claſſical learning, he went to the univerſity of Louvain, where he engaged in the ſtudy of the civil law, ſtill however retaining a predilection for the belles lettres. He publiſhed the firſt fruits of his ſtudies in this laſt department under the title of *Variarum Lectionum Libri Tres*, dedicated to cardinal Granvelle, who patronized him, and received him into his houſe at Rome, in 1567, in quality of Latin ſecretary. Lipſius employed the opportunity this ſituation afforded him in collating manuſcripts in the Vatican and other libraries, inſpecting the antiquities of Rome, and cultivating an acquaintance with the eminent ſcholars then reſiding in that metropolis. Wiſhing to return to his native country, he proceeded through Germany with that intention. The Low Countries, however, were now the ſeat of war; and he learned that his own patrimony was laid waſte by the troops. He therefore, in 1572, accepted the profeſſorſhip of hiſtory at Jena, though a Lutheran univerſity; nor does he ſeem to have ſcrupled, during the greateſt part of his life, complying with the eſtabliſhed religion of the country in which he reſided. Quitting Jena in 1574, he went to Cologne, where he married a widow, by whom he never had any children. At that city he wrote his *Antiquæ Lectiones*, conſiſting chiefly of emendations of Plautus; and began his notes upon Tacitus. After reſiding for a time at his native ſeat of Iſch, he was driven thence by the civil wars, and took ſhelter at Louvain, where, in 1576, he was created a doctor of laws, and gave public lectures on the laws of the decemvirs. The diſturbances of the time induced him to make a further retreat, and he accepted the chair of hiſtory at Leyden, and thus again changed his external religion from Roman-catholic to Calviniſt. The thirteen years which he ſpent at this univerſity were the prime of his life, and were diſtinguiſhed by the publication of thoſe works by which he acquired moſt reputation. Theſe were upon various topics, critical, hiſtorical, and philoſophical, written with much vigour of ſtyle and depth of erudition. His commentaries upon Tacitus were particularly applauded by the learned. Two works which he wrote, however, brought a ſerious imputation upon his principles, and have left an indelible ſtain on his memory. Theſe were, his *Politicorum Libri vi.* and his treatiſe *De una Religione*. In them he maintains openly the maxim that no ſtate ought to permit a plurality of religions, but ought to exerciſe the utmoſt ſeverity againſt all who ſeparate from the eſtabliſhed church. This doctrine could not but appear highly offenſive in a country which had lately undergone the greateſt calamities in throwing off the yoke of a perſecuting church, and had adopted tolerant principles. He was warmly attacked in controverſy; and, although the univerſity, proud of poſſeſſing ſo eminent a ſcholar, gave him more countenance than might have been expected, yet he thought he ſaw a ſtorm ariſing, and privately withdrew to Flanders. There he made an abjuration of the proteſtant religion, and returned to the church in which he had been originally educated, and to which he affirmed he had always ſecretly adhered. He ſettled again at Louvain, where he taught the belles lettres with undiminiſhed reputation. His intolerant maxims were not likely to injure him in the opinion of papiſts; and he received liberal propoſals from various ſovereigns and other perſons of diſtinction to reſide under their protection. He, however, choſe to continue at Louvain, where he wrote many other works of different degrees of merit. It is admitted that in his later writings his ſtyle is much deteriorated by the habit or affectation of a ſententious brevity, which he contracted from the imitation of Tacitus, and particularly of Seneca, who was his favourite philoſopher. Though he did not live to an advanced age, he gave marks of an enfeebled judgment; and eſpecially afforded his enemies a triumph, by the weak ſuperſtition he diſplayed in his two pieces entitled, *Diva Virgo Hallenſis*, and *Diva Sichemienſis, ſive Aſpricollis*. Theſe were relations of the wonders and miracles performed at the ſhrines of two images of the Virgin Mary, in which the learned devotee adopted every puerile and abſurd tale that he found current among the vulgar. If, as is ſuppoſed, the Jeſuits put him upon writing theſe legends in order to give proof of the ſincerity of his religious profeſſion, they conſulted very ill the reputation both of Lipſius and his religion. That he had really become a weak bigot, appeared further from his dedicating a ſilver pen to the Virgin of Hall in a copy of verſes filled with his own praiſes, and in his bequeſt to her of his furred gown. Lipſius died at Louvain in 1606, in his fifty-ninth year. His works have been collected in ſix volumes folio.

LIPSK, a town of Lithuania, in the palatinate of Novogrodek: twenty-eight miles weſt-ſouth-weſt of Sluck.

LIPSK, a town of Poland, in the palatinate of Sandomirz: thirty miles north of Sandomirz.

LIP'SO, an iſland in the Grecian Archipelago, about eight miles in circumference: ſix miles ſouth-ſouth-eaſt of Patmos. Lat. 37. 24. N. lon. 26. 23. E.

LIP'STADT. See LIPPE.

LIPTO'TES, *ſ.* in rhetoric, a figure, wherein, by denying the contrary of what we intend, more is ſignified than we would ſeem to expreſs; as in the following verſe of Virgil: "Quid prodeſt, quod me ipſe animo non ſpernis, Amynta."

LIPU'DA, a river of Naples, which runs into the ſea five miles ſouth of Cape Alice.

LIPYR'IA, *ſ.* [Greek.] A kind of continual fever.

LIQ'UABLE, *adj.* [from *liquo*, Lat.] Such as may be melted.

LIQUA'MEN,

LIQUA'MEN, *ſ.* [Latin.] The ſubſtance produced by liquation.

To LI'QUATE, *v. n.* To melt; to liquefy.—If the ſalts be not drawn forth before the clay is baked, they are apt to *liquate*. *Woodward on Foſſils.*

LIQUA'TION, *ſ.* [Latin.] The act of melting.—Capacity to be melted.—The common opinion hath been, that chryſtal is nothing but ice and ſnow concreted, and, by duration of time, congealed beyond *liquation*. *Brown's Vulgar Errors.*

LIQUEFAC'TION, *ſ.* The act of melting; the ſtate of being melted.—Heat diſſolveth and melteth bodies that keep in their ſpirits, as in divers *liquefactions*; and ſo doth time in honey, which by age waxeth more liquid. *Bacon's Natural Hiſtory.*—The burning of the earth will be a true *liquefaction* or diſſolution of it, as to the exterior region. *Burnet.*

LIQ'UEFIABLE, *adj.* Such as may be melted.—There are three cauſes of fixation, the even ſpreading of the ſpirits and tangible parts, the cloſeneſs of the tangible parts, and the jejuneneſs or extreme comminution of ſpirits; the two firſt may be joined with a nature *liquefiable*, the laſt not. *Bacon's Natural Hiſtory.*

To LIQ'UEFY, *v. a.* To melt; to diſſolve.—That degree of heat which is in lime and aſhes, being a ſmothering heat, is the moſt proper, for it doth neither *liquefy* nor rarefy; and that is true maturation. *Bacon's Nat. Hiſt.*

To LIQ'UEFY, *v. n.* To grow liquid.—The blood of St. Januarius *liquefied* at the approach of the ſaint's head. *Addiſon on Italy.*

LIQ'UEFYING, *ſ.* The acting of melting down; the act of diſſolving.

LIQUEN'TIA, now LIVENZA, a river of Ciſalpine Gaul, falling into the Adriatic Sea.

LIQUEOI'S. See LIEOU-KIEOU, p. 629.

LIQUES'CENCY, *ſ.* Aptneſs to melt.

LIQUES'CENT, *adj.* Melting.

LIQUEU'R, *ſ.* [French.] A flavoured dram:

Know what conſerves they chooſe to eat,
And what *liqueurs* to tipple. *Shenſtone.*

LIQ'UID, *adj.* [*liquide*, Fr. *liquidus*, Lat.] Not ſolid; not forming one continuous ſubſtance; fluid.—Gently rolls the *liquid* glaſs. *Dr. Daniel.*—Soft; clear:

Her breaſt, the ſug'red neſt
Of her delicious ſoul, that there does lie,
Bathing in ſtreams of *liquid* melody. *Craſhaw.*

Pronounced without any jar or harſhneſs.—The many *liquid* conſonants give a pleaſing ſound to the words, though they are all of one ſyllable. *Dryden's Æneid.*

Let Carolina ſmooth the tuneful lay,
Lull with Amelia's *liquid* name the nine,
And ſweetly flow through all the royal line. *Pope's Horace.*

Diſſolved, ſo as not to be obtainable by law.—If a creditor ſhould appeal to hinder the burial of his debtor's corpſe, his appeal ought not to be received, ſince the buſineſs of burial requires a quick diſpatch, though the debt be entirely *liquid*. *Ayliffe's Parergon.*

LIQ'UID, *ſ.* Liquid ſubſtance; liquor:

Be it thy choice, when ſummer heats annoy,
To ſit beneath her leafy canopy,
Quaffing rich *liquids*. *Philips.*

In the ſecond volume of Count Rumford's Eſſays, he has detailed ſome very curious experiments on the conducting power of liquids with regard to heat. Our limits will not allow us to make long extracts from the intereſting experiments of this ingenious philoſopher, who has done more in what regards the ſcience of heat than all who have ever written upon it beſides. We only hope to be able to convey ſome intelligible ideas on the ſubject to ſuch of our readers as have not ſeen the count's Eſſays, or who, from their numerous avocations, cannot ſpare time to read a more voluminous account.

In the courſe of a ſet of experiments, in which the count had occaſion to uſe thermometers of an uncommon ſize, (their bulbs being above four inches in diameter,) having expoſed one, filled with ſpirit of wine, in a window, to cool after being heated, he obſerved the whole maſs of liquid in a moſt rapid motion, running ſwiftly in two oppoſite directions *up* and *down* at the ſame time. This motion was rendered viſible by ſome particles of duſt which had got by accident among the ſpirit of wine, the ſun happening to ſhine upon the window, as duſt in the air of a darkened room is viſible by the ſun-beams coming through a hole in the window-ſhutter. The aſcending current occupied the *axis* of the tube, the deſcending *the ſides*. On inclining the tube a little, the former moved out of the axis and occupied that ſide which was uppermoſt, the latter the whole of the lower ſide. Quick cooling, by applying ice-cold water to the tube, increaſed the velocities of the currents, which, however, ceaſed entirely when the thermometer had acquired the temperature of the room. Being perſuaded that this motion in fluids (for the ſame experiment was tried with the ſame reſult with a ſimilar thermometer filled with linſeed-oil) was occaſioned by their particles *going individually* and *in ſucceſſion* to give off their heat to the cold ſides of the tube, the count was led to conclude, that liquids are in fact *non-conductors of heat*; and that, if heat be propagated in them *only* in conſequence of the internal motion of the particles, whatever could obſtruct thoſe motions would retard that effect. To determine this point, a certain quantity of heat was made to paſs through a given quantity of pure water; and, noting the time employed, the experiment was repeated with water mixed with ſome fine ſubſtance, as eider-down, which, without altering its chemical properties, or impairing its fluidity, could only ſerve to obſtruct and embarraſs the motions of the particles of the water in tranſporting the heat, ſhould heat be *tranſported* and *carried* in this manner, and not paſs freely through it. The body which received the heat, and which ſerved at the ſame time to meaſure the quantity of it communicated, was a very large thermometer, with a cylindrical bulb made of thin copper, ſpherical at the ends, 1·84 inches in diameter, 4·99 long, of 13·2099 cubic inches capacity, and meaſuring externally 28·834 ſquare inches; it weighed 1846 gr. and could contain 3344 gr. of water at the temperature of 55°. To this bulb was affixed a glaſs tube 24 inches long and $\frac{4}{10}$ of an inch in diameter, by means of a cork fitted into a neck of copper 1 inch long, belonging to the bulb. This thermometer, filled with linſeed-oil and graduated, was fixed in the axis of a hollow cylinder, made of thin ſheet-copper, $11\frac{1}{2}$ inches long, and 2·3435 inches diameter within, with a ſpherical bottom, weighing 2261 gr. The bulb of the thermometer was made to occupy the lower part of this cylinder by means of 4 pins of wood $\frac{1}{10}$ of an inch in diameter and $\frac{1}{4}$ of an inch long, one of them faſtened to the bottom, the other three round the inſide of the cylinder at equal diſtances, in very ſmall ſockets made to receive them. The diſtance between the external ſurface of the bulb of the thermometer and the internal of the containing cylinder was 0·25175 of an inch, and could contain, at the height of $\frac{1}{4}$ of an inch above the bulb, 2468 grains of water. The bulb of the thermometer being ſurrounded by water, or by any other liquid, or mixture, the conducting power of which was to be aſcertained, a cylinder of cork ſomething leſs in diameter than the braſs cylinder, about half an inch long, having a hole in its centre in which the tube of the thermometer paſſed freely, was thruſt down into the braſs cylinder nearly to the ſurface of the ſubſtance it contained, and made to reſt on three projecting braſs points fixed to the neck of the copper bulb. The upper part of the tube was then filled with eider-down, and cloſed with a cork ſtopper, the tube of the thermometer, which paſſes through a fit hole in the middle of this ſtopper, projecting upwards. The ſcale from the point of freezing to that of boiling water was

OR

on that part of the tube which rises above the stopper, and was divided according to that of Fahrenheit. The thermometer being fixed in the tube as above described, surrounded by the substance the conducting power of which was to be ascertained, the instrument was placed in thawing ice, and kept there till the thermometer fell to 32°. It was then taken out and instantly plunged into boiling water, and the conducting power of the substance under experiment was estimated by the time required to make the heat pass through it into the thermometer; the time being carefully noted when the liquid in the thermometer arrived at 40°, and also when it came to every 20th degree above it. A number of experiments were made with this instrument, all of which tended to prove that the passage of heat through water is much impeded by mixing other substances with it, whether they be such (eider-down for instance) as merely *embarrass* the water in its motions, or those (mucilages, &c.) which lessen its fluidity.

The time required to heat the instrument from 32° to 200, when the bulb of the thermometer was surrounded with

1. 2276 gr. of water and 192 gr. of starch, was	1109″
2. 2276 gr. of water and 192 gr. of eider-down,	949
3. With water and 48 gr. or $\frac{1}{40}$th of its bulk of eider-down	763
4. With stewed apples	1096½
5. With pure water	597

The starch was boiled with the water with which it was mixed, as was also the eider-down; the latter to free it from air, which adheres to it with great obstinacy.

As count Rumford supposed, and justly, that there was a possibility of error when the results were determined by the extreme points *freezing* and *boiling*, owing to the slowness of the process when the instrument approaches the medium of the temperature in which it is placed, he thought they might be got more accurately by taking the times occupied in heating from 80° to 160. They were as follows:

With the 1st	341″
With the 2d	269
With the 3d	215
With the 4th	335
With pure water	172

The time the heat took to pass out of the thermometer through the same substances:

	from 200° to 40°	from 160° to 80°.
through the 1st	1548″	468″
the 2d	1541	460
the 3d	1395	373
the 4th	1749½	520
Water	1032	277

As the results of these experiments prove that the propagation of heat in water is retarded, not only by those things which diminish its fluidity, but also by those which, by mechanical means, and without forming any combination with it whatever, merely obstruct its internal motions, it appears to the ingenious author, and we believe it will not be denied, that this proves, that heat is propagated in water *in consequence* of its internal motions; or, that it is transported or *carried* by the particles of that liquid, and that it does not spread and expand in it, as in metals and other conductors of heat, as has generally been imagined.

The success of these experiments encouraged the author to plan and execute others still more decisive and extremely interesting. It has been generally believed that water cannot be heated in contact with ice; reflecting on the subject, he perceived that either this must be a mistake, or his ideas respecting the manner in which heat is propagated in that fluid erroneous. On the supposition that water is not a conductor of heat, according to the common acceptation of that term, or that heat cannot pass in that fluid, except when *carried* by its particles, (which, being put in motion by the change it occasions in their specific gravity, transports it from place to place,) it did not appear how ice, if, instead of being permitted to swim on water, it were confined at the bottom of it, or any where below the surface, could affect the temperature of the superincumbent water, or prevent its receiving heat from other bodies; but, on the other hand, the ice-cold water which results from the melting of ice when on the surface of that fluid, cannot but descend by its gravity to the bottom of the containing vessel in an uninterrupted stream; so that, as long as this operation is going on, the mass of water cannot be much heated.

A cylindrical glass jar 4·7 inches diameter and 14 inches high was nearly filled with boiling-hot water. A circular cake of ice of nearly the same diameter, 3½ inches thick, and weighing 10½oz. was then gently put on the surface of the water. In 2′ 58″ it was entirely melted. A cake of ice of the same form and dimensions with the above was afterwards fastened down on the bottom of the same jar, by means of two slender laths, a trifle longer than the diameter of the jar, forced down into it, and laid across each other over the ice. Cold water to cover the ice to the height of ¼ of an inch was then poured into the jar to prevent its breaking by the sudden application of boiling water with which it was next filled. To protect the ice while the hot water was pouring in, a circular piece of paper was previously laid on its surface, which was afterwards gently removed by means of a string fastened to one side of it. The result of the experiment proved, that the count was not mistaken in his ideas. When 20′ had elapsed, the heat in the water at different depths was found to be—immediately above the surface of the ice, 40°; at ¼ inch above it, 46°; at 1 inch, 130°; at 3 inches, 159°; at 7 inches, 160°. At the end of 35′, it was, at the surface of the ice, 40°; at ¼ inch, 76°; at 1 inch, 110°; at 2 inches, 144°; at 3, 148°; at 5, 148½°; at 7, 149°. After 1 hour and 15′, it was, at the ice, 40°; 1 inch above it, 82°; 2 inches, 106°; 3, 123°. These were taken near the side of the jar; the following at the axis: At the end of 1 h. 30 m. at the surface of the ice, 40°; at 1 inch above it, 84°; at 2 inches, 115°; at 3, 116°; at 7, 117°. At the end of 2 hours, still 40° at the surface of the ice; 76° at 1 inch above it; 94° at 2 inches; 106° at 3; 108° at 4; 108¼° at 6; 108½° at 7 inches. An end was now put to the experiment; the water was poured off; and, the remaining ice being weighed, it was found that 5 oz. 6 gr. troy had been melted. Taking the mean temperatnre of the water at the end of the experiment at 106°, it appeared that 73¼ oz. of hot water employed was cooled 78°. As 1 oz. of ice absorbs just as much heat in being melted as 1 oz. of water loses in being cooled 140°, *each* of these 73¼ oz. would give off as much heat as would melt $\frac{78}{140}$ths of 1 oz. of ice; that is, all of them together as much as would melt 40$\frac{3}{10}$ ounces of ice; but the quantity melted was only about 5 oz. and hence it appears, that *less than* $\frac{1}{8}$*th part of the heat lost by the water was communicated to the air*; or, *ice melts eighty times slower at the bottom of a mass of boiling-hot water than when swimming on its surface.*

But the ice was melted, though slowly, at the bottom of the hot water, which the author accounts for in a satisfactory manner without needing to abandon his hypothesis. Fresh water presents an exception to the general law of condensation by cold; it condenses in cooling till it comes to 40°, but on cooling it lower *it expands*, and continues to expand till it freezes and after it has become ice. (Salt water on the contrary continues to be condensed the more, the more it is cooled.) Water in contact with melting ice is always at the temperature of 32°, and therefore specifically lighter than that which is 8 degrees warmer, or at 40°; the latter will therefore *descend*, being heavier, and by its greater heat melt a portion of the ice, be cooled, and then give place to the descending currents of warmer water which succeed it. It appears

too from the experiments which followed, that a conſiderable portion of the ice that was melted, was melted in conſequence of the motions into which the water was thrown on being poured into the jar.

The experiments on which the author builds his reſults were conducted in the following manner: 43·87 cubic inches, or 1 lb. 11½ oz. troy, of water, was put into the jar, which was placed in an earthen bowl and ſurrounded with a freezing mixture compoſed of ice and common ſea-ſalt, by which means the water in the jar was frozen into one compact maſs adhering to its bottom and ſides. The jar was then removed from the freezing mixture, and placed in a mixture of pounded ice and water for 4 h. that the cake of ice might be brought to the temperature of 32°, when the ſurface of the ice was covered to the height of 0·478 of an inch with ice-cold water before pouring in the boiling water. Inſtead of a piece of paper as before, a wooden diſh perforated with many hundreds of holes was put on the ſurface of the ice to defend it while the hot water was pouring in, which was done through a long wooden tube, ſtopped with a cork at the lower end, but perforated with a number of ſmall holes in the ſides, immediately above the cork, to make the water iſſue horizontally, and not impinge with force againſt the bottom of the wooden diſh, which of courſe floated as the water roſe; which tended to leſſen the motions in the liquid. The diſh was then carefully removed from the ſurface of the water. The experiments were varied by ſometimes leaving the upper part of the jar ſurrounded by the atmoſphere, at other times by covering the part occupied by the hot water with cotton, and, at others, by keeping the jar plunged to its brim in melting ice and water. The mean quantity of ice melted by hot water in 30′, when the jar was kept plunged to its brim in melting ice and water, was 399⅖ grains; when ſurrounded by air at the temperature of 41°, 456 gr. when ſurrounded by air at the temperature of 61°, 558½ gr. when covered up by a thick and warm covering of cotton, 690½ gr. When the experiments were ſimilar, the mean reſults of thoſe which were made with water at different temperatures were as follows. In the experiments in which the part of the jar occupied by the water was expoſed uncovered to the air at the temperature of 61°, with boiling water the quantity of ice melted in 30 minutes was 558½ gr. with water at the temperature of 61°, 646 gr. with water at the temperature of 41°, 574 gr. In the experiments in which the jar was wholly ſurrounded by pounded ice and water, and conſequently was at 32°, the quantity melted in 30′ with boiling-hot water was 399⅖ gr. with water at the temperature of 611, 66½ gr. with water at the temperature of 41°, 541 gr.

From theſe reſults the ingenious author concludes, (and certainly his experiments juſtify the concluſion,) that boiling-hot water is not capable of melting more ice, *when ſtanding on its ſurface*, than an equal quantity of water at the temperature of 41°, or when only 9 degrees above freezing—a fact which proves that water is a perfect non-conductor of heat, and that heat is propagated in it *only* in conſequence of the motions which the heat occaſions in the inſulated and ſolitary particles of that fluid, by altering their ſpecific gravities. He here obſerves, in a note, that the inſight which this diſcovery gives us in regard to the nature of the mechanical proceſs which takes place in chemical ſolutions, is too evident to require illuſtration.

LIQUIDAM'BAR, *ſ.* [a name given by the Spaniards in America to this tree, from the liquid gum which it diſtils.] In botany, a genus of the claſs monoecia, order polyandria, natural order of coniferæ, (amentaceæ, *Juſſ.*) The generic characters are—I. Male flowers numerous, on a long, conical, looſe, ament. Calyx: involucre, common four-leaved; leaflets ovate, concave, caducous; the alternate ones ſhorter. Corolla: none. Stamina: filaments numerous, very ſhort, on a body convex on one ſide, flat on the other; antheræ upright, twin, four-furrowed, two-celled. II. Female flowers at the baſe of the male ſpike, heaped into a globe. Calyx: involucre as in the male, but double. Perianthium: proper bell-ſhaped, cornered, ſeveral, connate, warty. Corolla: none. Piſtillum: germs two, conjoined between each other, and with the perianthium; ſtyle to each long, awl-ſhaped; ſtigma recurved. Pericarpium: capſules twin, leathery, beaked, one-celled, gaping inwards. Seeds: ſeveral, oblong, gloſſy, compreſſed, ending in a little membrane above.—*Eſſential Character.* Male calyx common, four-leaved; corolla none; filaments numerous. Female calyx in a globe, four-leaved; corolla none; ſtyles two; capſules many in a globe, two-valved, many-ſeeded.

Species. 1. Liquidambar ſtyraciflua, maple-leaved liquidambar, or ſweet-gum: leaves palmate-lobed; with the ſinuſes of the baſe of the veins villoſe. The trunk of the ſweet-gum tree is commonly two feet in diameter, ſtraight, and free from branches to the height of about fifteen feet; from which the branches ſpread and riſe in a conic form to the height of forty feet and upwards from the ground. Leaves five-pointed, divided into ſo many deep ſections, (or ſometimes ſeven,) and ſet on long ſlender petioles: they are of a dark-green colour, with their upper ſurfaces ſhining. A ſweet glutinous ſubſtance exſudes through their pores in warm weather, which renders them clammy to the touch. In February, before the leaves are formed, the bloſſoms begin to break forth from the tops of the branches into ſpikes of yelloviſh-red pappoſe globular flowers, which ſwell gradually, retaining their round form, to the full maturity of their ſeed-veſſels, which are thick ſet with pointed hollow protuberances, and ſplitting open diſcharge their ſeeds. Each cell contains a ſeed, winged at one end, with many ſmall grains diſtinct from the ſeed. Theſe, which Linnæus calls *chaffy corpuſcles*, according to Gærtner are immature germs. There are two capſules in each cell of the ament; they are grooved, ſhining, and of a bay-ferruginous colour. Seeds as many as ſixteen in a capſule, oblong, elliptic, compreſſed like a lens. This is repreſented on the Plate at fig. 2.

The wood of this tree is good timber, and is uſed in wainſcotting, &c. The grain is fine, and ſome of it beautifully variegated; but when wrought too green is apt to ſhrink, to prevent which no leſs than eight or ten years is ſufficient to ſeaſon the planks. From between the wood and the bark iſſues a fragrant gum, which trickles from the wounded trees, and by the heat of the ſun congeals into tranſparent drops, which the Indians chew, as a preſervative to their teeth. It ſmells ſo like balſam of Tolu, that it is not eaſy to diſtinguiſh them. The bark is alſo of ſingular uſe to the Indians for covering their huts. Native of North America, in low clayey ground. Cultivated in the garden of Compton biſhop of London in 1688; it was ſent over from Virginia by Baniſter.

2. Liquidambar imberbe, or oriental liquidambar: leaves palmate-lobed; with the ſinuſes of the baſe of the veins ſmooth. The leaves of this have their lobes ſhorter, and much more ſinuated on their borders; they end in blunt points, and are not ſerrated; neither have they thoſe tufts of hair which are found on the leaves of the firſt ſort. Its native country is unknown. According to Mr. Miller, the ſeeds were ſent to Mr. Peyſſonel from the Levant, to the king of France's garden at Marli; Monſ. Richard, the king's gardener, ſent ſome of them to Mr. Miller, who cultivated this tree in 1759.

3. Liquidambar peregrinum. See COMPTONIA aſplenifolia.

Propagation and Culture. The ſweet-gum tree is hardy enough to endure the ſevereſt cold of this country in the open air. It is commonly propagated by layers; but, when raiſed from ſeeds, it grows to be a much fairer tree. The ſeeds of this tree, if ſown in the ſpring, commonly remain in the ground a whole year before the plants come up; ſo that the ſureſt way to raiſe them is, to ſow the ſeeds in boxes or pots of light earth; which may be placed in a ſhady ſituation during the firſt ſummer, and in autumn they may be removed where they may have more

ſun;

ſun; but, if the winter ſhould prove ſevere, it will be proper to cover them with peaſe-haulm, or other light covering, which ſhould be taken off conſtantly in mild weather. In the following ſpring, if theſe boxes or pots are placed upon a moderate hot-bed, it will cauſe the ſeeds to come up early, ſo that the plants will have time to get ſtrength before the winter; but during the firſt and ſecond winters, it will be proper to ſcreen the plants from ſevere froſt, but afterwards they will bear the cold very well.

To LIQ'UIDATE, *v. a.* [from *liquid.*] To clear away; to leſſen debts.—If our epiſtolary accounts were fairly *liquidated*, I believe you would be brought in conſiderably debtor. *Cheſterfield.*

LIQ'UIDATING, *ſ.* The act of leſſening; of diſcharging debts; of melting away.

LIQUIDA'TION, *ſ.* The act of liquidating; the ſtate of being liquidated.

LIQUID'ITY, *ſ.* Subtilty; thinneſs.—The ſpirits, for their *liquidity*, are more incapable than the fluid medium, which is the conveyer of ſounds, to perſevere in the continued repetition of vocal airs. *Glanville.*

LIQ'UIDNESS, *ſ.* Quality of being liquid; fluency.—Oil of anniſeeds, in a cool place, thickened into the conſiſtence of white butter, which with the leaſt heat reſumed its former *liquidneſs. Boyle.*

To LIQ'UIFY, &c. See LIQUEFY, &c.

LIQ'UOR, *ſ.* [*liquor*, Lat. *liqueur*, Fr.] Any thing liquid: it is commonly uſed of fluids inebriating, or impregnated with ſomething, or made by decoction.—Sin taken into the ſoul, is like a *liquor* poured into a veſſel; ſo much of it as it fills, it alſo ſeaſons. *South's Sermons.*

Nor envy'd them the grape
Whoſe heads that turbulent *liquor* fills with fumes. *Milton.*

Strong drink: in familiar language.

To LIQ'UOR, *v. a.* To drench or moiſten.—Cart-wheels ſqueak not when they are *liquored. Bacon.*

LIQ'UORICE. See GLYCYRRHIZA, vol. viii. p. 632.—*Liquorice*-root is long and ſlender, externally of a duſky reddiſh-brown, but within of a fine yellow, full of juice, and of a taſte ſweeter than ſugar; it grows wild in many parts of France, Italy, Spain, and Germany. The inſpiſſated juice of this root is brought to us from Spain and Holland; from the firſt of which places it obtained the name of Spaniſh juice. *Hill's Materia Medica.*

LIQ'UORICE (Jamaica). See ABRUS, vol. i. p. 30.

LIQ'UORICE (Wild). See ABRUS, vol. i. p. 30. and ASTRAGALUS, vol. ii. p. 305.

LIQ'UORICE-VETCH. See ASTRAGALUS glyciphyllus, vol. ii. p. 305.

LIQ'UORICE-VETCH (Wild). See GLYCINE, vol. viii. p. 630.

LIQ'UORISH. See LICKERISH, p. 622.

LI'RA, a river of Italy, which runs into the Mera at Chiavenna.

LI'RA, or LI'RE, *ſ.* A money of account in Italy; and alſo a ſilver coin, particularly at Milan and Venice. The lira is of different kinds and values in different parts of Italy, from 4¼d. to 18½d.

LIR'IA. See LLIRIA.

LIRICON'FANCY, *ſ.* Lily of the valley. See CONVALLARIA.

LIRIODEN'DRON, *ſ.* [δενδρον λειριον, Gr. lily-tree; a tree bearing liliaceous flowers.] The TULIP-TREE; in botany, a genus of the claſs polyandria, order polygynia, natural order of coadunatæ, (magnoliæ, *Juſſ.*) The generic characters are—Calyx: involucre proper two-leaved; leaflets triangular, flat, deciduous. Perianthium three-leaved; leaflets oblong, concave, ſpreading, petal-form, deciduous. Corolla: ſix-petalled, bell-ſhaped; petals ſpatulate, obtuſe, channelled at the baſe; the three exterior deciduous. Stamina: filaments numerous, ſhorter than the corolla, linear, inſerted into the receptacle of the fructification. Antheræ linear, growing longitudinally to the ſides of the filament. Piſtillum: germs numerous, diſpoſed into a cone; ſtyle none. Stigma: to each globoſe. Pericarpium: none; ſeeds imbricated into a body reſembling a ſtrobile. Seeds: numerous, ending in a lanceolate ſcale, emitting an acute angle towards the baſe of the ſcale from the inner ſide, compreſſed at the baſe, acute.—*Eſſential Character.* Calyx three-leaved; petals ſix; ſeeds imbricated into a ſtrobile.

Species. 1. Liriodendron tulipifera, or common tulip-tree: leaves lobed. This is a native of North America, where it grows ſo large as to be a tree of the firſt magnitude, and is generally known through all the Engliſh ſettlements by the title of *poplar.* Of late years there have been great numbers of theſe trees raiſed from ſeeds in the Engliſh gardens, ſo that now they are become common in the nurſeries about London; and there are many of the trees in ſeveral parts of England which do annually produce flowers. The firſt tree of this kind which flowered here, was in the gardens of the late earl of Peterborough, at Parſons Green near Fulham, which was planted in a wilderneſs among other trees; before this was planted in the open air, the few plants which were then in the Engliſh gardens were planted in pots, and houſed in winter, ſuppoſing they were too tender to live in the open air; but this tree, ſoon after it was placed in the full ground, convinced the gardeners of their miſtake, by the great progreſs it made, while thoſe which were kept in pots and tubs increaſed ſlowly in their growth; ſo that afterward there were many others planted in the full ground, which are now arrived to a large ſize, eſpecially thoſe which were planted in a moiſt ſoil. One of the handſomeſt trees of this kind near London, is in the garden of Mr. Jones at Waltham Abbey; and at Wilton, the ſeat of the earl of Pembroke, there are ſome trees of great bulk; but the old tree at Parſons Green is quite deſtroyed, by the other trees which were ſuffered to over-hang it, and rob it of its nouriſhment, from a fear of taking down the neighbouring trees, leſt, by admitting the cold air to the tulip-tree, it would injure it. Mr. Darby at Hoxton, and Mr. Fairchild, ſeem to have been the firſt who raiſed this tree in any quantity from ſeeds, and from them the gardens abroad were chiefly ſupplied. Biſhop Compton, however, cultivated it at Fulham in 1688. There is a fine tree in Mr. Ord's garden at Walham Green, every year covered with bloſſoms.

The young ſhoots of this tree are covered with a ſmooth purpliſh bark; they are garniſhed with large leaves, whoſe footſtalks are four inches long; they are ranged alternately. The leaves are of a ſingular form, being divided into three lobes; the middle lobe is blunt, and hollowed at the point, appearing as if it had been cut with ſciſſars; the two ſide lobes are rounded, and end in blunt points: the leaves are from four to five inches broad near their baſe, and about four inches long from the footſtalk to the point, having a ſtrong midrib, which is formed by the prolongation of the footſtalk: from the midrib run many tranſverſe veins to the borders, which ramify into ſeveral ſmaller: the upper ſurface of the leaves is ſmooth, and of a lucid green; the under is of a pale green. See BOTANY Plate V. fig. 100. The flowers are produced at the end of the branches: they are compoſed of ſix petals, three without, and three within, which form a ſort of bell-ſhaped flower, whence the inhabitants of North America gave it the title of *tulip.* Theſe petals are marked with green, yellow, and red, ſpots, making a fine appearance when the trees are well charged with flowers. The time of this tree's flowering is in July; and, when the flowers drop, the germ ſwells, and forms a kind of cone; but theſe do not ripen in England. Gærtner ſays that he has diſſected more than five hundred ſcales, or *ſamaræ* as he calls them, without finding a ſingle fertile ſeed. The upper ſcales have only one ſeed in them, but the lower ones have conſtantly two.

Cateſby, in his Natural Hiſtory of Carolina, &c. ſays, there are ſome of theſe trees in America, which are thirty feet in circumference; that the boughs are unequal and

irregular, making ſeveral bends or elbows, which render the trees diſtinguiſhable at a great diſtance, even when they have no leaves upon them. They are found in moſt parts of the northern continent of America, from the Cape of Florida to New England, where the timber is of great uſe, particularly for making of periaugues, the trunks of theſe being large enough to be hollowed into the ſhape of thoſe boats, ſo they are of one piece. Mr. Marſhall deſcribes the tulip-tree as ſeventy or eighty feet in height. He mentions two varieties, one with yellow and the other with white wood; the firſt ſoft and brittle, much uſed for boards and heels of ſhoes, alſo turned into bowls, trenchers, &c. the white, heavy, tough and hard, ſawed into joiſts, boards, &c. for building. He remarks that the flower has ſometimes ſeven petals or more. Kalm obſerves, that it is very agreeable at the end of May to ſee one of theſe large trees, with its ſingular leaves, and covered for a fortnight together with flowers, which have the ſhape, ſize, and partly the colour, of tulips. The wood is uſed for canoes, whence the Swedes in North America call it *canoe-tree*; for boards, bowls, diſhes, ſpoons, and all ſorts of joiners' work. Kalm ſpeaks of having ſeen a barn of conſiderable ſize, the ſides and roof of which were made of a ſingle tulip-tree ſplit into boards. But there is one inconvenience attending it; for there is no wood that contracts and expands itſelf ſo much as this. The bark is diviſible into very thin laminæ, which are tough like baſt. It is pounded, and given to horſes who have the bots. The roots are ſuppoſed to be as efficacious in agues as Jeſuit's bark.

2. Liriodendron liliifera, or lily-tree: leaves lanceolate. This is a middle-ſized tree, with ſpreading branches. Leaves ovate, acuminate, quite entire, ſmooth, alternate. Flowers pale, large, without ſcent, heaped at the ends of the branches, one on a peduncle. Native of China, near Canton, and of Amboyna.

Loureiro has two other ſpecies which he names *L. figo*, and *L. coco*; but, not knowing whether they belong to this genus or to that of Magnolia, we have not ventured to inſert them.

Propagation and Culture. This tree is propagated by ſeeds, which are now annually imported in great plenty from America. Theſe may be either ſown in pots or tubs filled with light earth from the kitchen-garden, or in a bed in the full ground. Thoſe which are ſown in the firſt way, may be placed on a gentle hot-bed, which will forward their growth, ſo that the plants will acquire more ſtrength before winter. If they are thus treated, the glaſſes of the hot-bed ſhould be ſhaded from the ſun every day, and the earth in the pots ſhould be frequently refreſhed with water; for, unleſs it is kept moiſt, the ſeeds will not grow; but this muſt be done with care, ſo as not to make it too wet, which will rot the ſeeds. When the plants appear, they muſt be ſtill ſhaded in the heat of the day from the ſun, but freſh air muſt be admitted daily to prevent their drawing up weak; and, as the ſeaſon advances, they muſt be gradually hardened to bear the open air. While the plants are young, they do not require much ſun, ſo they ſhould be either ſhaded or placed where the morning ſun only ſhines upon them; they muſt alſo be conſtantly ſupplied with water, but not have it in too great plenty. As the young plants commonly continue growing late in the ſummer, ſo, when there happen early froſts in autumn, it often kills their tender tops, which occaſions their dying down a conſiderable length in winter; therefore, they ſhould be carefully guarded againſt theſe firſt froſts, which are always more hurtful to them than harder froſts afterward, when their ſhoots are better hardened; however, the firſt winter after the plants come up, it will be the better way to ſhelter them in a common hot-bed frame, or to arch them over with hoops, and cover them with mats, expoſing them always to the open air in mild weather. The following ſpring, juſt before the plants begin to ſhoot, they ſhould be tranſplanted into nurſery-beds, in a ſheltered ſituation, where they are not too much expoſed to the ſun. The ſoil of theſe beds ſhould be a ſoft gentle loam, not too ſtiff, nor over light; this ſhould be well wrought, and the clods well broken, and made fine. There muſt be great care taken not to break the roots of the plants in taking them up, for they are very tender; they ſhould be planted again as ſoon as poſſible; for, if their roots are long out of the ground, they will be much injured thereby. Theſe may be planted in rows at about a foot diſtance, and at ſix inches diſtance in the rows; for, as they ſhould not remain long in theſe nurſery-beds, ſo this will be room enough for them to grow; and, by having them ſo cloſe, they may be ſhaded in the ſummer, or ſheltered in the winter, with more eaſe than when they are farther apart. If the plants make great progreſs the firſt ſummer, they may be tranſplanted again the following ſpring; part of them may be planted in the places where they are to remain, and the other ſhould be planted in a nurſery where they may grow two or three years to acquire ſtrength before they are planted out for good; though the younger they are planted in the places where they are to ſtand, the larger they will grow, for the roots run out into length, and when they are cut it greatly retards their growth; ſo that theſe trees ſhould never be removed large, for they rarely ſucceed when they are grown to a large ſize before they are tranſplanted.

There are ſome people who propagate this tree by layers; but the layers are commonly two or three years before they take root, and the plants ſo raiſed ſeldom make ſuch ſtraight trees as thoſe raiſed from ſeeds; though indeed they will produce flowers ſooner, as is always the caſe with ſtinted plants.

This tree ſhould be planted on a light loamy ſoil, not too dry, on which it will thrive much better than upon a ſtrong clay, or a dry gravelly ground; for in America they are chiefly found upon a moiſt light ſoil, where they grow to a prodigious ſize; though it will not be proper to plant theſe trees in a ſoil which is too moiſt in England, becauſe it might endanger the rotting of the fibres of the roots, by the moiſture continuing too long about them, eſpecially if the bottom be clay, or a ſtrong loam, which will detain the wet. To raiſe them in the open ground the beginning of March, prepare a bed of good mellow rich earth well mixed with old rotten cow-dung, expoſed to the ſun, and ſheltered from cold winds: place an old frame over the bed; and, having ſown the ſeeds, ſift over them, half an inch thick, a ſoil compoſed ſome months before of one load of old paſture-earth, one of well-rotted cow-dung, and half a load of ſea or fine pit ſand. Some of theſe ſeeds will probably make their appearance in nine or ten weeks, but much the greater part will lie in the ground till next ſpring. Water the beds therefore no more than barely ſufficient to cheriſh the plants that have appeared; for four or five weeks ſcreen them from the ſun during the heat of the day, but afterwards let them receive its full influence. In bad weather, during winter, throw double mats over the frames. In March the ſucceeding year, pick off all moſſy hard-cruſted earth from the bed, ſmooth it, and ſift on ſome fine rich mould. At the end of April, or beginning of May, plants will appear in abundance, when they muſt be frequently but gently watered. Till the beginning of Auguſt they muſt be ſcreened from the mid-day ſun, by part of an old reed-fence, or by nailing ſome thin boards together high enough to ſhade the bed. After this, no farther care is neceſſary, but frequent moderate waterings, and to throw a mat over the frame during any ſevere winter-ſtorm. At the beginning of April, next ſeaſon, take up the plants carefully with a trowel, without bruiſing the roots; and, if they cannot be planted immediately, mix a pail-full of ſifted mould and water, to the conſiſtence of pap; draw the plants through it, till as much adhere as covers their roots and fibres; in this condition they may be kept ſeveral days out of the ground. Cut only a little of the tap-root ſmoothly off, but let all the fibres remain; and then

plant

plant them in drills cut out with the ſpade, at a foot diſtance row from row, and ſix inches in the row. Plant five of theſe lines, and then leave an alley three feet wide. Water them frequently and plentifully during the ſummer-months; throw mats over them, in caſe of very ſevere froſt, the firſt winter, and let them remain two years. Then remove them to another nurſery, in rows three feet and a half diſtant, and eighteen inches in the row; and let them continue three years. Being now ſix or ſeven feet high, they will be of a good ſize for planting where they are to remain. No tree bears pruning its roots or branches worſe than this.

It is a tree of extraordinary beauty and ſtatelineſs, and highly deſerves a place in all noble and elegant plantations.

LIRI'UM, *ſ.* in botany. See LILIUM.

LI'RON, a river of France, which runs into the Orb at Beziers.

LIRI'OPE, one of the Oceanides, mother of Narciſſus by the Cephiſus.—A fountain of Bœotia on the borders of Theſpis, where Narciſſus was drowned according to ſome accounts.

LIRI'OPE, *ſ.* [dedicated by Loureiro to the mother of Narciſſus; a plant of the ſame natural family having been deſtined to commemorate her ſon. The blue colour of the preſent flower is thought alſo, by this author, to accord with the epithet *Cærula Liriope*; Ovid's Met. iii. 342.] In botany, a genus of the claſs hexandria, order monogynia, natural order ſpathaceæ. The generic characters are—Calyx: ſheath ovate, incurved, ſingle-flowered, ſmall, permanent, of one leaf. Corolla: inferior, bell-ſhaped, ſpreading, divided into ſix deep, oblong, reflexed, fleſhy, equal ſegments. Stamina: filaments ſix, awl-ſhaped, erect, equal, ſhorter than the corolla, inſerted into the receptacle; antheræ oblong, erect. Piſtillum: germen ſuperior, roundiſh; ſtyle thick, furrowed, reflexed, as long as the ſtamens; ſtigma ſimple. Pericarpium: berry ovate, ſmooth, fleſhy, ſingle-ſeeded. Seed: ovate.—*Eſſential Character.* Corolla in ſix deep ſegments, inferior; ſheath ovate; berry ſingle-ſeeded.

Liriope ſpicata, the taŏc-tien of the Cochin-chineſe, and mac-lân of the Chineſe. Found commonly both in rude and cultivated ground of thoſe countries. Roots perennial, oblong, ſolid, brown bulbs, connected by creeping radicles. Stem none. Leaves numerous, crowded together, ſword-ſhaped, ſtiff, ſmooth, nearly erect, a foot long. Flower-ſtalk naked, round, ſlender, ſtraight, about as long as the leaves. Flowers ſpiked, rather ſmall, of a pale blue colour, without ſmell. The herb is ſaid to have a cooling quality, and a decoction of its leaves is thought to ſtrengthen the hair. *Loureiro's Cochin-china*, vol. i. p. 200.

LI'RIS, now *Garigliano*, a river of Campania, which it ſeparates from Latium. It falls into the Mediterranean ſea.

LI'RY, a town of France, in the department of the Ardennes: ſix miles ſouth of Vouziers.

LIS, or LI, *ſ.* An itinerary meaſure of China, equal to 1897½ Engliſh feet; ſo that 192½ lis meaſure a mean degree of the meridian nearly; but European miſſionaries in China have divided the degree into 200 lis, each li making 1826 Engliſh feet.

LIS, a lake of Ruſſia, in the government of Tobolſk, ſurrounded by an extenſive moraſs. Lat. 63. 5. N. lon. 99. 14. E.

LIS, a river of Ruſſia, which riſes from a lake of the ſame name, and runs into the Eniſei in lat. 62. 20. N. lon. 90. 14. E.

Fleur de LIS, or *Flower de Luce.* See the article HERALDRY, vol. ix. p. 412. This flower was not only borne in the ancient arms of France, but adopted by our kings till the late union with Ireland. The electoral cap, as emblematic of Hanover, and the ſhamrock for Ireland, have been ſubſtituted for it.

LIS, or LYS (John Vander), a painter of hiſtory, landſcapes, and converſations, was born at Oldenburgh in 1570, but went to Haerlem to place himſelf as a diſciple under Henry Goltzius; and, being endowed with great natural talents, he ſoon diſtinguiſhed himſelf in that ſchool, and imitated the manner of his maſter with great ſucceſs. He adhered to the ſame ſtyle till he went to Italy; where, having viſited Venice and Rome, he ſtudied the works of Titian, Tintoretto, Paolo Veroneſe, and Domenico Fetti, ſo effectually, that he improved his taſte and judgment, and altered his manner entirely. He ſoon received marks of public approbation; and his compoſitions became univerſally admired for their good expreſſion, for their lively and natural colouring, and the ſweetneſs and delicacy of his pencil; although it muſt be acknowledged, that he could never totally diveſt himſelf of the ideas and taſte peculiar to the Flemings. His ſubjects uſually were hiſtories taken from the ſacred writings, or the repreſentations of rural ſports, marriages, balls, and villagers dancing, dreſſed in Venetian habits; all which ſubjects he painted in a ſmall as well as a large ſize, with a number of figures, well deſigned, and touched with a great deal of delicacy. A capital picture of this maſter is, Adam and Eve lamenting the death of Abel; which is extremely admired, not only for the expreſſion, but alſo for the beauty of the landſcape; and in the church of St. Nicholas at Venice is another of his paintings, repreſenting St. Jerome in the deſert, with a pen in his hand, and his head turned to look at an angel, who is ſuppoſed to be ſounding the laſt trumpet. The paintings of this maſter are very rarely to be purchaſed. He died in 1629.

LIS (John Vander), of Breda, an hiſtorical painter, was born at Breda about the year 1601, and became a diſciple of Cornelius Polemburg, whoſe manner he imitated with extraordinary exactneſs; ſo that there are ſome paintings of this maſter's hand, which, though they appear to have ſomewhat leſs freedom and lightneſs of touch, are nearly equal to thoſe of Polemburg, and are frequently taken to be his. At Rotterdam, in the poſſeſſion of Mr. Biſſchop, there is a delicate painting repreſenting Diana in the bath, attended by her nymphs; and the portrait of Vander Lis, painted by himſelf, was in the poſſeſſion of Horace Walpole, and is deſcribed by that ingenious gentleman as being worked up equal to the ſmoothneſs of enamel.

LISABA'TA. See LISSABATTA.

LI'SAN HOTUN, a town of the kingdom of Corea: 440 miles eaſt-north-eaſt of Pekin.

LISA'RA, a town of European Turkey, in the province of Albania: fifty-two miles ſouth-ſouth-eaſt of Albaſano.

LIS'BERG, a town of Upper Heſſe: three miles ſouth of Nidda, and one north-eaſt of Ortenberg.

LIS'BERG, a town of Bavaria, in the biſhopric of Bamberg: three miles north-weſt of Burg Eberach.

LIS'BON, the metropolis of Portugal, ſituated in the province of Eſtramadura, and forming a kind of creſcent or amphitheatre, on the right bank of the Tajo, or Tagus, on ſeveral hills. It is a very ancient city; and on account of its harbour, which is ſpacious and deep, the Phœnicians, who firſt traded hither, called it *Oliſippo*, i. e. the Agreeable Bay, whence, as ſome have ſaid, was formed the appellation of Liſbon. Others have fabulouſly aſcribed the foundation of this city to Ulyſſes, and hence derived its ancient name *Ulyſſippo*. The entrance of the port is difficult and dangerous, and requires the aſſiſtance of a pilot.

This city has been often conquered and reconquered by different people. In the year 1147, it was taken from the Moors by Don Alphonſo, aſſiſted by a fleet of French, Engliſh, and Germans, who were ſailing to the Holy Land on a cruſade. In the year 1373, Henry king of Caſtile attacked Liſbon by ſea and land; and, as the inhabitants were without ammunition to defend it, he ſucceeded. The day after the battle of Alcantara, in which the Portugueſe were defeated by the duke of Alva, the conqueror entered Liſbon, and ſeverely puniſhed the friends of the duke of Braganza; but, on the 1ſt of December, 1640, the Portugueſe proclaimed the duke of Braganza, in this town, king of Portugal; and he took the name of John IV. Liſbon

was erected into a biſhopric in the fifth century; and, when it was retaken from the Moors by Don Alphonſo, the biſhopric was re-eſtabliſhed by pope Eugenius III. and, in the year 1390, it was erected into an archbiſhopric. In the year 1706, pope Clement XI. conſecrated a chapel in the king's palace, as a patriarchal church, and granted it a chapter. The patriarch is generally a cardinal, and exerciſes his epiſcopal functions in this chapel. Liſbon is a place of great trade, and many foreign merchants, both catholic and proteſtant, reſide here, Engliſh, French, Dutch, &c. being the grand magazine of all goods brought from Braſil and other colonies belonging to the Portugueſe.

The Portugueſe compute the length of the city at two leagues; and the diſtance from Belem to the eaſtern extremity is ſtated by Link to be a full German mile, or about four Engliſh miles and a half. The breadth of the town is very various, often but ſmall, and ſometimes quite inconſiderable, not exceeding one ſtreet, but never much more than half a league. It formerly contained ſeveral magnificent churches, fifty colleges and convents, two elegant palaces, a caſtle commanding the town, and ſeveral handſome ſquares. It was ſurrounded by a ſingle wall, on which were ſeventy-ſeven antique towers of no great ſtrength. On the river ſide it had twenty-ſix gates, and on the land ſide ſeventeen. The ſtreets were narrow and dirty, and ſome of them very ſteep. The houſes of the citizens were generally very mean; but thoſe of the nobility and gentry were built with ſtone, and exhibited an elegant appearance.

Such was the ſtate of this city, previous to the fatal 1ſt of November, 1755, when, about ten o'clock in the morning, the air remarkably ſerene, without the leaſt warning except a rumbling noiſe which immediately preceded it, a dreadful earthquake ſhook, by ſhort but quick vibrations, the foundations of the whole place, looſening the ſtones from their cement; and then, with ſcarcely a perceptible pauſe, the motion changed, and every building was toſſed like a waggon driven violently over rough ſtones; which laid in ruins almoſt every houſe, church, and public building, with incredible ſlaughter of people. It continued about ſix minutes, during which time the grinding of the walls, the fall of churches, the lamentable cries of the inhabitants, joined to a perfect darkneſs occaſioned by duſt, made one of the dreadfulleſt ſcenes of nature; the river, which forms a great bay oppoſite the town, was equally diſturbed; its bed in many places was raiſed to its ſurface; ſhips were driven from their anchors, and joſtled together with great violence; nor did the maſters know if they were afloat or on ground; at the ſame time a large key adjoining to the cuſtom-houſe, called the Cays Depreda, was ſwallowed up with about 150 people; beneath the bar was ſeen dry from ſhore to ſhore; then ſuddenly the ſea like a mountain came rolling in, and about Belem the water roſe fifty feet in an inſtant; and, had it not been for the great bay to receive and ſpread the great flux, the low part of the city muſt have been under water; as it was, it came up to the houſes, and drove the inhabitants to the hills. To finiſh the calamity, fires ſucceeded the ſame hour in many places at once, before the people could recover themſelves; the principal part of the city, the cuſtom-houſe, the palace, India-houſe, opera-houſe, the great houſe of the Braganzas, where the crown-jewels were lodged, and the caſtle, were conſumed, beſides churches, and other public buildings, as Corpus Santi, the Carmelites, the patriarchal church, Miſericordia hoſpitals, palace and priſons of the inquiſition, the church of St. Domingo and library, all the colleges of the Jeſuits, regular canons of St. Fara, the old cathedral priſons of Limairia, and courts of juſtice, St. Francis de Deſeada, the nunnery of Santa Clara, and the convent of Calvaris, with a multitude of others of inferior note. There ſucceeded two great ſhocks, one in about ten minutes, the other about two hours after, which though ſhort threw down many of the ſhattered buildings.

"The terror of the people was beyond deſcription; nobody wept, it was beyond tears; they ran hither and thither, delirious with horror and aſtoniſhment, beating their faces and breaſts; crying, *Miſericordia*, the world is at an end. Mothers forgot their children, and ran about loaded with crucifixed images. Unfortunately many ran to the churches for protection; but in vain was the hoſt expoſed, in vain did the poor creatures embrace the altars; images, prieſts, and people, were buried in one common ruin; it happened likewiſe to be the great feſtival of All Saints, ſo that the churches were crowded, and the multitude of candles burning on that occaſion ſet them on fire immediately, which communicating to the houſes, great numbers, ſtill living under the ruins, were burnt to death. After the firſt ſhock, many prieſts of the few ſtanding churches took the pictures of their ſaints, and went among the ruined ſtreets, attended by ſome of their congregations in proceſſion; the effect of which was, many periſhed that might have eſcaped. Some, willing to do a meritorious act on this occaſion, laid hold of a young Engliſh gentleman, who could not ſpeak a word of the language, and chriſtened him by force; it was happy their folly went no further, which ſome gentlemen had reaſon to fear; for the people were told it was a judgment for ſuffering heretics among them.

"The proſpect of the city was deplorable. As you paſſed along the ſtreets you ſaw ſhops of goods with the ſhopkeepers buried with them, ſome alive crying out from under the ruins, others half buried, others with broken limbs, in vain begging for help; they were paſſed by crowds without the leaſt notice or ſenſe of humanity. The people lay in the field that night, which equalled if poſſible the horrors of the day. The city all in flames; and, if you happened to forget yourſelf with ſleep, you were awakened by the tremblings of the earth and the howlings of the people. Yet the moon ſhone, and the ſtars, with unuſual brightneſs. Long-wiſhed-for day at laſt appeared, and the ſun roſe with great ſplendour on the deſolated city in the morning. Some of the boldeſt, whoſe houſes were not burnt, ventured home for clothes, the want of which they had ſeverely felt in the night, and a blanket was now become of more value than a ſuit of ſilk; but many were deterred from attemping this by their prieſts, who taught them, that, as it was a judgment from God, it was a ſin to endeavour avoiding its conſequence. After the fire, the proſpect of the city was ſtill more miſerable; bodies half-burnt, horſes, mules, and aſſes, half-burnt, and ſtill living. A banditti began plundering from the firſt, and extended the fires, ſo that the city burnt for ſix days. By degrees huts and tents were erected, in which the naked inhabitants made the beſt ſhift they could. The killed according to the Jeſuits' accounts amounted to 90,000; others reduced it to 50,000, and ſome to 30,000. Some incloſed in the ruins of the firſt ſhock were ſet at liberty by the ſucceeding ones; and many were taken out of the ruins ſeveral days after." *Gent. Mag.* for Feb. 1756.

When this calamity was known in England, money was voted for the ſurviving ſufferers by parliament, and private ſubſcriptions were entered into. Proviſions and clothing were ſent over, and even workmen to aſſiſt in rebuilding the city. The conſequence has been, that the new ſtreets, erected in the place of the old, are capacious, regular, and well paved, with convenient path-ways for foot-paſſengers, as in the ſtreets of London. The houſes are lofty, uniform, and ſtrong, The manner of building them is rather ſingular: the carpenter is the firſt employed; when he has raiſed the ſkeleton of frame-work, the maſon is then employed to fill up the interſtices with rubble-ſtone and brick. The reaſon they aſſign for building in this manner is, that the concatenation of the walls with the wood-work contributes to reſiſt the ſlight concuſſions of earthquakes with which this city is ſo often viſited. The firſt ſtory of each dwelling-houſe, when not converted into a ſhop, is a magazine for merchandiſe of one kind

or other. The merchants uſually keep their coaches in the halls; and ſometimes they anſwer for both coach-houſe and ſtable. Notwithſtanding the excellent building-materials with which the diſtrict abounds, the rearing of a houſe here coſts more than one of the ſame dimenſions in London. This, in a great meaſure, is owing to the want of proper machines for tranſporting the materials, and of convenient tools to facilitate the work; and yet it is extraordinary with what dexterity the people ſupply the want of theſe apparatus. Of a houſe four ſtories high the attic is the pleaſanteſt floor; it is often furniſhed with a balcony, elegantly ornamented with rails of iron gilt, and furniſhed with an awning of ſilk or linen, under which the ladies ſit on cuſhions during the hot weather, employing their time in reading, ſowing, or caſting love-ſignals in the ſilent language of the fingers; a method of conveying their ideas, which they have reduced to an alphabetic ſyſtem. The principal apartments of many of the nobility and merchants are furniſhed in a magnificent manner. The manufactures of India and of China are more common in their houſes than thoſe of Europe. In the diſtribution of the apartments, coolneſs and ventilation are conſulted, in preference to warmth. Here grates and chimney-pieces are almoſt unknown; in winter, a warm cloak is the common ſubſtitute for a fire. The hall-doors are generally left open, and bells ſupply the place of knockers. In point of cleanlineſs, Liſbon is become leſs a ſubject of animadverſion for ſtrangers; but all is not yet done; it ſtill wants common ſewers, pipe-water, and water-cloſets. There is no court end of the town here, nor a houſe that will let to advantage merely on account of its ſituation. One of the principal modern ſtreets is chiefly inhabited by copper-ſmiths and tin-men.

It is very difficult to aſcertain the number of inhabitants in Liſbon. The different foreign factories are not numbered with the natives. The Engliſh factory alone is computed at ſix hundred ſouls: the Dutch and German factories conſiſt alſo of a great number of perſons. In the year 1716, pope Clement XI. declared in a conſiſtory, that the atteſtations ſent to him from Liſbon aſſerted, that the weſtern part only of that city contained near 300,000 inhabitants. In the year 1730, Antonio de Oliveira Freire, in his chorographical deſcription of Portugal, attributes no leſs than 800,000 inhabitants to Liſbon. In the year 1754, the atteſtations ſent to Rome, in order to procure bulls, aſſigned 600,000 inhabitants to the metropolis. The Gentleman's Magazine, from which we have copied, as above, an account of the earthquake, ſtates the population, previous to that event, at 500,000. To come nearer to our own time; according to the decennial cenſus in the year 1790, the forty pariſhes of Liſbon contained 38,102 fire-places, or hearths; theſe include the ſuburbs of Junqueira and Alcantara, but not the villages of Belem and Campo-Grande, though theſe, particularly the firſt, are connected with the town, being within the boundary of Liſbon. Including Belem, a market-town which completely joins Junqueira, the population may be eſtimated, according to Link, at above 300,000, excluſive of the military. Mr. Murphy, who about the ſame time reſided ten months at Liſbon, ſets down the population in preciſe numbers, 228,612; but to theſe are to be added the religious of both ſexes, with their attendants, who dwell in convents and monaſteries, the ſoldiery, the profeſſors and ſtudents in ſeminaries of education, and ſuch of the Gallician labourers as have no fixed dwelling; their aggregate amount is not very ſhort of twelve thouſand. According to this ſtatement, the population exceeds 240,000.

Liſbon is quite open on all ſides, having neither walls nor gates, nor even any fortifications, except a ſmall caſtle in the middle of the town, and a number of batteries or ſmall forts on the river. The ground on which the city ſtands is very hilly, and, according to the Portugueſe writers, is ſituated, like ancient Rome, on ſeven hills; but it may be more properly regarded as ſtanding on three hills. The firſt begins at the bridge of Alcantara, forming the proper weſtern limit of the town, and extending to St. Benedict's ſtreet. This hill is the higheſt, and much celebrated for the ſalubrity of its air. At the weſtern extremity it is but little cultivated, but farther to the eaſtward up to its ſummit, forming in that direction a plain, on which ſtands the new monaſtery. In many parts it is ſo ſteep, that it is laborious to walk along the ſtreets; and even the lower ſtreet, which runs along the river, has conſiderable declivities, and is much incommoded by torrents occaſioned by heavy falls of rain. In this part many handſome houſes are erected, intermixed with thoſe of a meaner ſort, in ſtreets that are irregular, ill paved, and often narrow. Among theſe ſcattered houſes are gardens, and even corn-fields. On this hill the late queen built a church and convent, to which ſhe was much attached. The church is handſome, but conſtructed in a bad taſte, and overloaded with ornaments. Not far from this church is the proteſtant burial-ground, which is planted with cypreſſes and Judas-trees, Cercis ſiliquaſtrum. Beyond the houſes is a pleaſant plain, called Campo de Ourique, ſeparated from the neighbouring hills by deep valleys, and uſed as a promenade by the lower and middling claſſes. The ſecond hill is a continuation of the firſt, from which it is ſeparated by a valley of no great depth; it extends from Benedict-ſtreet to the valley, in which are three ſtreets built by the late marquis de Pombal. At the foot of the eaſtern ſide of this hill the earthquake did great damage, of which traces remain, and thus made way for the erection of ſeveral handſome houſes. On this eaſtern declivity is the opera-houſe. Above the public promenade this hill riſes to a conſiderable height, and is very ſteep towards the next valley. This eminence affords a very fine view; in the valley beneath appears the beſt part of the town; to the left are olive-gardens interſperſed with many houſes, monaſteries, and churches; oppoſite is the high ſteep hill on which the caſtle ſtands; to the left the Tagus covered with ſhips. This hill is ſucceeded by an even valley of conſiderable length and breadth, which forms the broadeſt part of the town, which was entirely rebuilt after the earthquake of 1755. On the bank of the river is a handſome ſquare, formerly the terrace or parade of the royal palace, 610 feet by 550. The quay, and the groups of people where the ſhips and boats are landing and taking in their cargoes, excite attention. The eaſt ſide is formed by a large building with an arcade, terminating in a pavilion, which is uſed as an exchange. Oppoſite to it is a ſimilar building without a pavilion. In the centre of this ſquare, the avenues of which are unfiniſhed, is an equeſtrian ſtatue of Don Joſeph in bronze, on a pedeſtal of ſtone adorned with various ſymbols. The three principal ſtreets rebuilt ſince the earthquake, are formed by large buildings of conſiderable elevation and good appearance. The line that divides Eaſt and Weſt Liſbon, which is an eccleſiaſtical diſtinction, (the former belonging to the biſhop of Liſbon and the latter to the patriarchate,) paſſes through this part of the town. Near this ſpot is the great palace of the Inquiſition. Another ſmall ſquare not far diſtant is uſed as a promenade, and forms a garden, with ſeveral avenues of various kinds of trees and hedges. Behind this garden are the play-houſe and the ſquare uſed for bull-fights; and at a ſmall diſtance are market-places. The third hill begins with an eminence, on which is the caſtle of Liſbon, from which it continues, with ſome interruption of plains, to the eaſtern extremity of the town. The caſtle is a ſmall fort. This part of the town conſiſts of narrow, irregular, ill-paved, ſtreets, in which occur a few neat houſes. The buildings are conſtructed on bad models; and even among the churches there is not one particularly diſtinguiſhed, and a conſtant noiſe of little bells and bad chimes renders them ſtill more unpleaſant.

The Tagus waſhes the foundations of the houſes throughout Liſbon; being towards the eaſtern part about two or three leagues broad; to the weſt it becomes narrower, and as far as its mouth it is only about a league

broad. The river is often covered with ſhips, and large men of war may lie oppoſite to the town. The ſcene is intereſting; and the market-town called Almada, with its church on the ſummit of the hill, and the Engliſh hoſpital at the foot of it, enlivens the picture. The ſide of Liſbon towards the country conſiſts entirely of hills, from which are ſeen only the higheſt edifices of the town; and the traveller arrives ſuddenly in the city before he is aware of it. The adjacent country, particularly on the north and eaſt ſides, to a conſiderable diſtance, is covered with large gardens ſurrounded with high walls. Theſe gardens are called in Portugueſe *quintas*; and they generally contain plantations of orange and olive trees, and ſometimes corn-fields, and even vineyards. Beyond the weſtern part of Liſbon the country preſents naked and rocky hills; but ſome of theſe are luxuriantly fertile. The hills, indeed, form the meadows of Liſbon. The ſoil round the city conſiſts of lime-ſtone and baſalt. Cloſe to the north ſide of the town is the famous aqueduct, conſtructed of a kind of white marble, and completed in 1738. It ſerves to convey water from ſeveral ſprings ſituated at a diſtance of three leagues, near the village of Bellas, being in ſome parts conducted under-ground. Near the town it paſſes over a deep valley, and reſts on ſeveral bold arches, the largeſt of which is 250 feet high, and 116 broad. Its pointed arches ſeem changed, when viewed from beneath it, into majeſtic vaults that re-echo every ſound. The whole length of the aqueduct is 2600 feet. In the middle is a covered arch-way of ſeven or eight feet, where the water flows on each ſide through a tunnel of ſtone. Without this arched way and on each ſide is a path, where two perſons can walk abreaſt, with a parapet. The water enters the town at a place called *da Amoreira*, when it divides into ſeveral other aqueducts, and ſupplies the fountains, which, though formed in a bad taſte, are ornamental. Here the gallegos draw water in ſmall barrels, and cry it about the ſtreets. The water is very good, containing a portion of oxygenated calcareous earth; its ſources being in lime-ſtone hills. The trees that grow on the north ſide of Liſbon are chiefly olive and orange-trees. The latter are propagated by ſeed, and afterwards grafted. In December and January the oranges begin to turn red, and at the end of January and in February, before they are ripe and ſweet, they are gathered for exportation. Towards the end of March and in April they are very good, but delicate perſons will not eat them till the beginning of May; at which time they begin to be perfectly ſweet and well-flavoured. One tree frequently bears 1500 oranges, and ſometimes 2000, but rarely 2500. In the vicinity of Liſbon the harveſt is in May, and the corn is thraſhed as it is with us; but in ſome parts it is trodden out by horſes or oxen, for which purpoſe a floor is made in the fields. The Portugueſe live chiefly on meat and fiſh; but are not fond of vegetables. The bread is generally bad. Potatoes are not cultivated, but imported from England and Ireland. The fruits moſt common are oranges and grapes. In the vicinity of Liſbon is a ſmall vineyard, that of Carcavella, or Carcavelos, yielding a peculiar grape, which gives name to the Liſbon wine called Carcavella; a wine that is ſaid to be generally fabricated in London.

The badneſs of the police ſtrikes every foreigner on entering Liſbon. The filth is ſuffered to lie in heaps in the ſtreets, unleſs it ſhould be waſhed away by the rains. The ſtreets are rendered ſtill more inconvenient by want of light: a hoſt of dogs, without maſters, and preying on the public, wander about like hungry wolves; and, ſtill worſe than theſe, an army of banditti. The high walls of the quintas in the town, with the vacant and deſerted grounds, invite to robbery and murder, which are ſtill farther favoured by the badneſs of the police. Theſe crimes are always perpetrated with knives, though all pointed knives are prohibited. Murders generally ariſe from revenge or jealouſy; robbers are moſtly contented with threats. The ſpring is the moſt dangerous time; and the boldneſs of the aſſaſſins is aſtoniſhing. On a faſt-day, in a proceſſion in honour of St. Rochus, (ſays Mr. Link,) a man was murdered in open day in the throng, at five o'clock in the afternoon. In the ſummer of the ſame year a man was robbed at noon, between the walls near the prince of Waldeck's, who was witneſs to the tranſaction. The robbers were even ſo bold as to attack coaches. But the criminal almoſt always eſcaped, the compaſſion of the Portugueſe being ſuch, that every one aſſiſts him in his flight. They exclaim *Coutadinho!* or "Alas! poor man!" and every thing is done to aſſiſt him. The puniſhment of death is entirely done away, and the culprit is ſent to the Indies or Angola; a puniſhment which by no means gives the impreſſion of death, though the climates of both are ſo unwholeſome that deſtruction is certain.

The ſociety of Liſbon is dull and melancholy, eſpecially when compared with that of large Spaniſh cities. The inhabitants neither walk nor ride for mere amuſement; there is little luxury, nor are there any fine equipages. Many ſervants are kept by the higher families; but they are poorly clad, and ill fed. One of the principal amuſements of the rich is the Italian opera, which is ſupported by private individuals. The play-houſe is little viſited by perſons of condition; here no women perform; and the players are frequently artiſans. The Circus for the bull-fights is but a ſhort diſtance from the theatres. This amuſement is declining very faſt; and, after all, perhaps the manner of tearing the bulls with maſtiffs, as in England and other parts of Europe, is not leſs barbarous than the manner of tormenting them in Spain and Portugal; but we are apt to ſee defects in our neighbours, whilſt we are blind to our own; like the Lamian witches, who, according to the facetious Rabelais, in foreign places had the penetration of a lynx, but at home they took out their eyes, and laid them by.

As we have already given an ample account of the bull-fights in Spain, (vol. iii. p. 501.) it is unneceſſary to add thoſe of Liſbon, which are almoſt ſimilar. A ſcene of a more novel nature invites our attention; that is, the manner of catching black cattle in Braſil; thus deſcribed by Mr. Murphy: "I was preſent at the Circus when this curious ſpectacle was exhibited, the firſt of the kind, as I was told, ever repreſented in Liſbon. It conveyed a good idea of the manner in which the inhabitants of that fertile region catch their cattle. They kill the animals for the ſake of the hides, which are brought to Portugal to be manufactured. Of the fleſh I underſtand the Braſilians make but little account; they barely take as much as is ſufficient for preſent exigence, and leave the reſt a prey to the birds and beaſts of the foreſts. The Circus was very crowded on this occaſion. About five in the afternoon a native of Pernambuca entered the arena mounted upon a ſpirited horſe of the Arabian breed. The rider was of a copper colour, of a ſtrong and active figure, his hair black, and his head uncovered. He wore a looſe mantle, ſomewhat like the paludamentum of the ancient Romans. The ſkin of a wild beaſt was thrown looſely over the horſe inſtead of a ſaddle; from which were ſuſpended two cords for ſtirrups. The whole appeared quite in character. As ſoon as the cavalier had paid his obeiſance to the audience, a bull, whoſe natural ferocity was heightened in the ſtall, ruſhed in, and had nearly overturned him in the firſt onſet; the fleetneſs of his horſe, and the dexterity with which he managed the reins, only could have ſaved his life. The furious animal purſued him ſeveral times round the arena till he became tired, after which he ſtood panting in the middle of the ring. The horſeman ſtill continued his circular courſe at an eaſy pace, holding a long cord in his hand, with a ſlip-knot at the end of it; having watched a proper opportunity, he caſt it over the horns of the bull, and rode twice round him; then, ordering the gate to be thrown open, he made off at full ſpeed till he came to the full length of the cord; upon which he received a check that drew him on his back, and made the horſe

horſe caper on his hind feet; nevertheleſs he clung to him by his knees, and in this reclined poſture, held the cord in both hands and the bridle in his mouth. The bull at this time was entangled by the rope, with his head drawn in between his fore-feet, and incapable of motion. The Braſilian diſmounted, approached, and drew from beneath his mantle a ſhort hunting-ſpear, which, with an apparently-ſlight force, he darted into the head of the animal, in conſequence of which he inſtantly fell down and expired."

The literary inſtitutions of Portugal are—The Royal Academy of Portugueſe Hiſtory, for which ſee the article ACADEMY, vol. i. p. 46. The Royal Academy of Sciences, founded in the year 1779, by the duke de Lafoens, uncle to the queen. The ſovereign is the immediate patron, and the founder is preſident. Twenty-four effective members, divided into three claſſes, viz. natural ſciences, mathematics, and national literature, form the main body of the ſociety; and the reſidue is compoſed of thirty-ſix free members; a ſmall number of literary foreigners, and a larger one of great perſonages of the nation, as honorary members; ſome veteran members, and a conſiderable proportion of extra correſpondents. Government allows them a revenue, by means of which they have eſtabliſhed an obſervatory, a muſeum, a library, and a printing-office. The academy has hitherto directed its attention to the encouragement of many objects, which do not, in other countries, require the care of an academy of ſciences. The 1ſt volume of its memoirs was publiſhed at Liſbon in 1797: the memoirs commence at 1780. The Geographical Academy, principally pertaining to the geography of Portugal, was inſtituted in January 1799. Liſbon has alſo public libraries; and ſome muſeums, and public hoſpitals.

The climate of Liſbon is reckoned very ſalubrious. A heat equal to 96° Fahr. is not uncommon in Portugal. The medial heat is generally about 60°. From Midſummer-day to the middle of September rain is very uncommon; in November and December heavy rains with frequent ſtorms occur. Days of perpetual ſilent rain are very rare; for in general it comes down in torrents. In January cold clear weather often prevails, but becomes milder in February, which is generally a very pleaſant month. The days of fair weather amount to 200 in the year, and thoſe of ſettled rain ſeldom exceed 80. Yet, as the place, notwithſtanding great improvements ſince the earthquake, is ſtill very filthy, it ſeems to be a queſtion whence (and whether) Liſbon is ſo healthy as has been repreſented. In a correſpondence between Dr. Mitchill of New York, and Hippolyto Da Coſta, a Braſilian, the ſalubrity of the city is aſcribed, above all things, to the calcareous matter it contains in the buildings, pavements, &c. Mr. Da Coſta writes to Dr. Mitchill as follows: "Your theory, in regard to the action of alkalis and calcareous earth upon *ſepton*, or the principle of corruption, is ſo well proved in the ſeveral papers you have publiſhed, that it is needleſs to adduce further proofs to perſons of knowledge; but, as additional facts may be uſeful to perſuade people of leſs information or more prejudices, I believe I agree with your wiſhes in preſenting to you an account of the influence of calcareous earth upon the putrid effluvia in the city of Liſbon, which is, I think, a proof of the moſt intereſting nature. The old city, or the part which did not ſuffer ſo much in the earthquake, and preſerves its ancient buildings, is in the Gothic taſte, with narrow and crooked ſtreets, in the moſt of which there are no pavements for foot-paſſengers; the houſes are ſo high, that, in ſome of the narroweſt ſtreets, the ſun cannot be ſeen but two or three hours every day, viz. from eleven before noon to one after noon. In the new city there are gutters or ſewers below the earth to conduct the water and impurities from the houſes and ſtreets to the river; but in the old city there are none of theſe. As the houſes are, in general, five or more ſtories high, and the ſtreets narrow, it is eaſy to conceive the thickneſs of population, and, of courſe, the vaſt quantity of impurity that comes into the ſtreets every day, which, with the water, and other liquids poured in likewiſe, keep always there a vaſt quantity of dirt. A great ſum of money is appropriated, I know, and ſome pains taken, to preſerve the cleanlineſs of the city; but, without entering into the diſcuſſion how this money is employed or diſpoſed of, which is but very little intereſting to our preſent enquiry, it is very certain that I have often been obliged to make a great turn to go a ſhort diſtance, becauſe it was impoſſible to croſs the ſtreet through the dirt; and very often I have ſeen dogs, cats, and other dead animals, lie in the ſtreets. There is in every houſe (chiefly in the new city) a privy, with a pipe which goes up to the higheſt ſtory; becauſe, as the ſeveral ſtories are inhabited by different families, they want ſuch a convenience in every one; but this canal emits always a very bad ſmell, by the accumulation of impurities within its walls, which, from the form of its conſtruction, cannot be waſhed but with water let in by a ſmall orifice or hole. There is alſo, in many houſes, a place in the inſide of the ſtreet-door for making water, which contributes its portion of bad ſmell; and the houſes are in general not very clean. Beſides all theſe ſources of putrid exhalations, there are a great many wharfs, and much naked ſhore, which, being uncovered by the ebb-tide, preſent to the ſun a ſurface covered with dirt and ſea-weeds undergoing putrid fermentation. The mouths of the ſewers I have mentioned above go to the wharfs, and are likewiſe bare at low water. The fluid which comes from theſe ſewers contains ſo many infecting matters, that its ſtrong putrid ſmell can ſcarcely be endured.

"After this ſhort deſcription of the police of Liſbon, in regard to its cleanlineſs, every body would draw the inference that endemical diſeaſes muſt reign, not only in the ſummer, but in the winter-time, ſeeing that the accumulation of the dirt in the ſtreets is incomparably greater in the winter than in ſummer. The connection there is between malignant diſtempers and dirtineſs is very well known. Happily, however, the contrary is the fact: Liſbon is one of the moſt healthy ſituations I know, and its inhabitants do not ſuffer but the common diſeaſes to which the human body is ſubjected. Many people go from England and other countries to Liſbon, in certain diſeaſes, to enjoy the benefit of a ſalubrious place, and very often to ſpend the ſummer agreeably in a good and wholeſome climate.

"What then can be the cauſe of this apparently-phyſical contradiction between the impurity and corruption in the ſtreets, and the ſalubrity of the air? I confeſs, ſir, I cannot find any explanation of this phenomenon if I reject the theory of *the influence of calcareous earth upon ſeptic fluids*; and I can well comprehend the reaſon if I admit it. The buildings in Liſbon are all of ſtone, and, in general, of marble of ſeveral qualities, and chiefly the Marmor raſilis of Linnæus; and this ſtone is procured in the neighbourhood of the city. All the houſes are white-waſhed inſide and outſide; and the handſomeſt new-faſhioned houſes are plaſtered with a plaſter they call *eſcariola*, a compound of gypſum and other matters, and painted over that compoſition in water-colours. As a number of new buildings are continually erecting, there are, in all the ſtreets, a great many ſtone-cutters hewing the ſtones, and their fragments are ſcattered through the ſtreets. In the time of the earthquakes, as the houſes fall down, the attrition of the ſtones one againſt the other breaks them in pieces, reducing many to a powder. The pavements for the foot-paſſengers are of large marbles; and, in many parts, the ſoil is calcareous too; in other parts, as the ſtreets are paved with ſmall round ſtones or pebbles, the accumulation of the calcareous powder makes a ſtratum above the ſurface of the ſtreets and public places. When the wind blows hard, there is ſo great a quantity of calcareous powder flying about, that it is incommodious to the eyes; and ſometimes is ſo fine, that it comes into the houſes even when the windows are ſhut. Now, to what can I impute the healthineſs of that city but the quality

of its calcareous earth? which neutralizes the putrid exhalations, or ſeptic acid, that impregnates the atmoſphere; and thus prevents its bad and fatal effects, preſerving that city, which otherwiſe would be the fountain of peſtilence, and the anti-chamber of death.

"If no other cauſe can be diſcovered for the healthineſs of Liſbon amongſt its continual putrid infection, recourſe may be had to the climate, and to the temperature of the atmoſphere; but I believe it can be ſufficiently proved, that the cauſe is the influence of the calcareous earth, and not of the climate; becauſe, if this ſalubrity were owing to the climate, all the neighbourhood of Liſbon, which enjoys the ſame climate, would enjoy the ſame healthineſs; but this is not the caſe. On the oppoſite bank of the Tagus, over againſt Liſbon, there are three or four villages, called Almada, Caparica, and Caſtilhas, ſituated on ſmall hills, and ſurrounded by beautiful farms: the buildings there are in general of good *ſiliceous ſtones*; the ſoil is *ſandy*, and in ſome parts *clayey*; and the ſtreets in theſe villages infinitely cleaner than in Liſbon; but intermittent and remittent fevers prevail in theſe villages and their neighbourhoods almoſt every ſummer, while in the mean time Liſbon is perfectly free. Near the other part of the river, in the neighbourhood of Liſbon, on the ſhore of the ocean, there are other ſmall villages, as Cintra and Collares, from whoſe neighbourhoods the ſtone of the Liſbon buildings comes; and the ſoil is in a great part *calcareous*. Theſe places are pointed out as the ſeat of health, and, indeed, are the moſt beautiful and pleaſant ſummer-retreats you can imagine.

"After this ſtatement, can any body attribute the ſalubrity of Liſbon to its climate merely? Certainly not: becauſe I obſerve, that where there is calcareous earth there is no infection, notwithſtanding the continual exiſtence of putrid exhalations; and, where there is not calcareous earth, and the ſoil is ſandy, gravelly, and clayey, there are fevers, although the climate is the ſame; the diſtance of theſe places being only the breadth of the river, about three miles. To theſe unanſwerable facts I muſt add, that I have obſerved, two or three times, in Liſbon, dead animals upon the ruins of houſes, and of courſe ſurrounded with calcareous earth, in a ſtate of deſiccation; and, at the ſame time, two or three fathoms diſtant, another animal dead too, and lying upon another kind of ſoil, in a ſtate of complete putrefaction. The reaſon of their preſervation is obvious; the ſeptic acid was abſorbed by the calcareous earth as ſoon as it was formed by the union of ſepton with oxygen; likewiſe, the oil formed by the union of their hydrogen with carbon has been imbibed, the water formed by the junction with oxygen evaporated, and the remaining parts of the animal were left in a dry ſtate. The effects of calcareous earth and alkalis ſeem to be very well underſtood by the people of Portugal; they put chalk and plaſter with the bodies they bury in the churches; and they waſh with plaſter the rooms where there have been any ſick or contagious diſorders. This precaution they never omit."

Liſbon, all Portugal, and great part of Spain, are now under the protection of the Britiſh arms, and of the Britiſh hero, field-marſhal marquis Wellington. It is well-known, that the prince-regent of Portugal has transferred his ſeat of government, for the preſent, to South America; but it is a curious fact, not ſo generally known, that the project of removing the ſeat of the Portugueſe government to the Braſils, which has ſo recently been put in execution, was ſeriouſly in contemplation, with the marquis of Pombal, as long ago as the year 1761, when that country was invaded by the Spaniards. Calculations were made at that time, and precautions taken, as to the number of veſſels neceſſary to tranſport acroſs the Atlantic the whole of the royal family, with the principal officers of the court, and their ſeveral attendants. The project was laid aſide when the danger ceaſed; and the Braſils continued to be conſidered as a colony deſtined excluſively to enrich the parent ſtate, till the year 1807. On the 29th of November in that year, the queen, the prince-regent, and all the court, attended by the whole Portugueſe fleet, ſailed from the Tagus, leaving their European dominions in the care of a regency, or rather, as we have ſaid, under the protection of the Engliſh; and arrived ſafe at Rio de Janeiro on the 8th of January, 1808; which place has ever ſince been the ſeat of government for the kingdom of Portugal and its dependencies. Lat. 38. 43. N. lon. 9. 3. W. *Gibſon's Geography*, vol. iii. *Gent. Mag.* vol. xxvi. *Phil. Mag.* vol. iv. *Link's Travels in Portugal. Murphy's Travels in Portugal.*

LIS'BON, a town of America, in New-London county, Connecticut, lately a part of Norwich; containing two pariſh-churches, and 1168 inhabitants.

LIS'BON, *ſ.* [from the city.] A kind of white wine. A kind of ſoft ſugar.

LIS'BURG. See LYSBURG.

LIS'BURN, a town of Ireland, in the county of Antrim, on the borders of the county of Down, which ſends one member to the imperial parliament: ſeven miles ſouth-ſouth-weſt of Belfaſt, and ſixteen north-north-weſt of Downpatrick.

LIS'BURN (Cape). See CAPE LISBURN, vol. iii. p. 754.

LIS'CA BIAN'CA, one of the ſmalleſt of the Lipari Iſlands, anciently called *Euonymus*: thirty-three miles weſt of Cape Vaticano, and ten north-eaſt of Lipari.

LIS'CHAN, a town of Bohemia, in the circle of Rakonitz: three miles north of Rakonitz.

LIS'CHAU, a town of Bohemia, in the circle of Bechin: ſix miles north-eaſt of Budweiſs.

LIS'CHITZ, a town of Bohemia, in the circle of Czaſlau: eight miles north of Czaſlau.

LISCIA'NO, a town of Naples, in the province of Otranto: eight miles ſouth-eaſt of Tarento.

LI'SER, LIE'SER, or LY'ZER, a river of Carinthia, which riſes in a lake about four miles north of Gmund, and runs into the Drave one mile from Spital.

LI'SERHOFEN, a town of the duchy of Carinthia: five miles weſt of Millſtatt.

LISIAN'THUS, *ſ.* [from the Gr. λισσος, ſmooth, and ανθος, a flower.] In botany, a genus of the claſs pentandria, order monogynia, natural order of rotaceæ, (gentianæ, *Juſſ.*) The generic characters are—Calyx: perianth five-parted; leaflets lanceolate, keeled, membranaceous on the margin, very ſhort, permanent. Corolla: one-petalled, funnel-form; tube long, ſomewhat ventricoſe, ſtraightened at the baſe within the calyx; border five-parted; diviſions lanceolate, ſhorter than the tube, recurved. Stamina: filaments five, filiform, longer than the tube; anthers ovate, incumbent. Piſtillum: germ oblong, ſharp-pointed; ſtyle filiform, length of the ſtamens, permanent; ſtigma headed, two-plated. Pericarpium: capſule oblong, acuminate, two-celled; the margins of the valves intorted. Seeds numerous.—*Eſſential Character.* Calyx keeled; corolla with a ventricoſe tube and recurved diviſions; ſtigma two-plated; capſule two-celled, two-valved; the margins of the valves intorted.

Species. 1. Liſianthus longifolius, or long-leaved liſianthus: leaves lanceolate, ſegments of the corolla lanceolate, acute. This elegant little plant riſes generally to the height of fourteen or ſixteen inches or more; it is not much divided, but all the branches ſhoot commonly to the ſame height, and are furniſhed with oblong pointed leaves, placed oppoſite. The flowers are large in proportion to the plant; are generally longer than the leaves, and ſtand at the extremities of the branches. According to Sloane, it riſes to about four or five feet high, being branched on every ſide. The pairs of leaves an inch diſtance from each other, and an inch and a half long, and half as much broad in the middle, ſmooth, dark green, on petioles an eighth part of an inch in length. Flowers yellow, ſuperior. Capſule pyramidal, oblong, covered with a few ſmall leaves, three-celled, with great plenty of ſmall brown ſeed in each cell. Native of Jamaica, in a dry, ſandy, but cool, ſoil.

2. Liſianthus

2. Liſianthus cordifolius, or cordate-leaved liſianthus: leaves cordate, ſegments of the corolla lanceolate, acute. Browne remarks, that this plant may be deemed a variety of the foregoing; or that they are at leaſt ſo very like in the general make and habit, that the form of the leaves is almoſt the only difference. Swartz, however, obſerves, that the leaves are always heart-ſhaped, the upper ones only being ovate and ſeſſile; the corollas are alſo rather larger. Native of Jamaica.

3. Liſianthus exſertus, or lengthened liſianthus: leaves ovate-lanceolate, peduncles trichotomous, genitals very long. 4. Liſianthus latifolius, or broad-leaved liſianthus: leaves lanceolate-elliptic, acuminate, peduncles trichotomous, ſegments of the corolla erect, genitals included. 5. Liſianthus umbellatus, or umbelled liſianthus: leaves elongated, obovate, flowers terminating, peduncled, umbelled, ſegments of the corolla very ſhort, blunt, upright. Natives of Jamaica.

6. Liſianthus frigidus, or dull liſianthus: leaves ovate, acuminate, coriaceous, panicle terminating, trichotomous, corollas ventricoſe, with roundiſh ſegments. Native of the mountains of Guadaloupe.

7. Liſianthus ſempervirens, or evergreen liſianthus: leaves lanceolate-elliptic, ſegments of the corolla ovate, blunt. See the deſcription under BIGNONIA ſempervirens. Linnæus obſerves, that the ſeed-veſſels are cordate ſimple ſiliques.

8. Liſianthus glaber, or ſmooth liſianthus: ſmooth; leaves ovate, petioled; corymbs terminating. Found in South America by Mutis.

9. Liſianthus chelonoides, or Surinam liſianthus: ſmooth; leaves oppoſite, ſubconnate, oblong; panicle terminating, dichotomous, racemoſe. Stem herbaceous, ſimple, round, ſmooth, from two to three feet in height. Flowers alternate, remote, directed one way, pendulous, yellow. This herb is very bitter, and ſtrongly purgative. Native of Surinam.

Aublet's plant, which is cited as ſynonymous in Linnæus's Supplement, is diſtinct from this, and a new ſpecies.

Propagation and Culture. For the 7th ſpecies, ſee Bignonia ſempervirens. The reſt, being natives of South America and the Weſt Indies, are much more tender, and muſt be nurſed in the bark-ſtove.

LISICZ'NICK, a town of Poland, in Podolia: twenty-eight miles weſt of Kaminiec.

LISIEU'X, a town of France, and principal place of a diſtrict, in the department of the Calvados. Before the revolution, the ſee of a biſhop: 5½ poſts eaſt of Caen, twenty-one weſt of Paris. Lat. 49. 9. N. lon. 0. 19. E.

LISIGNA'NO, a town of Iſtria: fourteen miles eaſt-ſouth-eaſt of Pola.

LISIN'IAS, in ancient geography, a town of Theſſaly. *Pliny.*

LIS'KEARD, a market and borough town in Cornwall. Mr. Worden, who ſurveyed and deſcribed this county in the reign of James I. calls it *Liſkerde*; and ſays, "it is a poor town, whoſe ruins however argue its priſtine glory to be great; and that it is privileged for the coinage of tin, and has a pretty market." Since his time it is improved to be one of the largeſt and beſt-built towns in Cornwall, with the greateſt market, which is kept on Saturdays; and fairs the Monday fortnight before Chriſtmas-day, Shrove-Monday, Monday week before Eaſter, Holy-Thurſday, Auguſt 15, and October 2. Here is a handſome town-hall built on ſtone pillars, with a turret on it, and a clock with four dials that coſt near two hundred pounds. Here is a large church and meeting-houſe, an eminent free-ſchool, and a curious conduit; and on the adjacent commons, which feed multitudes of ſheep, there have been frequent horſe-races. Here is a very great trade in all manufactures of leather; and ſome ſpinning is ſet up here lately, encouraged by the clothiers of Devonſhire. On the hills of North Liſkeard, and in the way from hence to Launceſton, are many mines of tin, which is caſt at the blowing-houſes into blocks, that are ſent hither to be coined. Liſkeard is calculated to contain three thouſand inhabitants. The elective influence is in the hands of lord Eliot. It ſent to parliament 23 Edward I. and was incorporated July 6, 1580, 29 Eliz. and the government conſiſts of a mayor, recorder, eight capital burgeſſes, and fifteen aſſiſtants. The members of parliament are choſen by the corporation and ſeven freemen. Number of voters fifty; returning officer, the mayor. Preſent members; Hon. Wm. Eliot, brother to lord Eliot, and the Rt. Hon. C. P. Yorke, a teller of the exchequer.

The following curious election-anecdote is from a work we have often quoted, the Hiſtory of the Boroughs of Great Britain.—May 10, 1701. The houſe, being acquainted that no return had been made into the office of the clerk of the crown, of a burgeſs to ſerve in this preſent parliament, for the borough of Liſkeard, in the county of Cornwall, in the room of George Dennis, eſq. deceaſed, ordered, "That the deputy clerk of the crown do attend this houſe to-morrow morning, with the returns from the county of Cornwall for this preſent parliament; and likewiſe with his docket-book of writs and returns for the election of members to ſerve in parliament." The houſe, being informed that the under-ſheriff of the county of Cornwall was in town, ordered, "That the ſaid under-ſheriff do attend this houſe to-morrow morning." The reſt of the proceedings concerning this return, which are too long for our plan, are to be found at length in the printed votes of the next day. The caſe briefly was:—A writ had been duly iſſued, and a precept had been made thereon and duly executed, returned to the under-ſheriff, the indenture by him compared with a counterpart, which he executed for the ſheriff; the writ and return were, at the under-ſheriff's requeſt, ſent by the town-clerk, by poſt, to the under-ſheriff's agent in London, to be conveyed to the clerk of the crown; but were taken by robbers, and by them deſtroyed. It appeared by the information of a member and another perſon, who were preſent, that Charles Trelawny, eſq. was duly elected and returned; the counterpart of the indenture was produced and read, and ſtat. 7 Hen. IV. and part of 23 Hen. VI. were read; and thereupon it was ordered, *nem. con.* "That the deputy-clerk of the crown do file, among the returns of members to ſerve in this preſent parliament for the county of Cornwall, the counterpart of the indenture executed by the ſheriff of Cornwall, of the return of Charles Trelawny, eſq. to ſerve in this preſent parliament as a burgeſs for the borough of Liſkeard, in the ſaid county, in the room of George Dennis, eſq. deceaſed, as the return of the ſaid Charles Trelawny to parliament; it appearing to this houſe that the writ, and the principal part of the aforeſaid indenture, were taken away in coming up to the clerk of the crown by highwaymen, who deſtroyed the ſame by burning them." And he filed the ſame accordingly. Liſkeard is thirty-one miles eaſt of Truro, and 221 weſt-ſouth-weſt of London. Lat. 50. 27. N. lon. 4. 27. W.

St. Cleer is a village to the north of Liſkeard; in which pariſh are various druidical and other antiquities; particularly the Hurlers, which conſiſted, when perfect, of three contiguous circles of upright ſtones from three to five feet in height; the Cheeſe-wring, a natural pile of rude rocks, riſing to the height of thirty-two feet; the Other Half-ſtone, which appears to have been the ſhaft of a croſs that originally ſtood upright. To theſe may be added, a cromlech of great magnitude, called Trevethey-ſtone. St. Cleer's well, of which ſome remains are ſtill extant, was in the times of ignorance and ſuperſtition eſteemed a bath of ſovereign virtue. South of Liſkeard is St. Keyne's well, which is claſſed by Carew among the natural wonders of Cornwall. Of this ſaint, and of the well, many poetical and legendary tales are extant. The ſpring is arched over, and on the mould which covers this arch five large trees are growing. *Britiſh Directory*, vol. iii. *Beauties of England and Wales*, vol. ii.

LIS'LAU, a town of Bohemia, in the circle of Boleſlaw: ſix miles ſouth of Benatek.

LI'SLE, or LIL'LE, properly L'ISLE, or the Iſland, a city

city of France, and principal place of a diſtrict in the department of the North. Before the revolution it was the capital of French Flanders; and ſome have not heſitated to call it the ſecond town in the French dominions. It was built by Baldwin earl of Flanders, or rather improved and erected into a city by him, becauſe he was born in its neighbourhood, and from thence called *Baldwin de Liſle*. It was walled in 1046, and met with ſo many favours from the ſovereigns of Flanders, that by degrees it became one of the fineſt towns in all that rich province. Louis XIV. reduced it in perſon in the year 1667. In the year 1668, it was yielded to him by the peace of Aix-la-Chapelle; and from that time the king of France ſpared neither pains nor coſt in fortifying and adorning it. The famous Vauban erected a citadel the moſt regular, and at the ſame time one of the ſtrongeſt, that had ever been ſeen, of which he remained governor to his death. The town itſelf was alſo fortified in ſuch a manner, that it was held impregnable. It is ſeated on the river Deule, in the midſt of rivulets, pools, and marſhes, whence its name *L'Iſle*, or the Iſland; though it is called by the Flemings *Ryſſel*, and from its beauty and riches *le petit Paris*. In the year 1708 it was beſieged by the duke of Marlborough and prince Eugene. As ſoon as this ſiege was apprehended, the marſhal de Boufflers, governor of Flanders, demanded leave to ſhow his zeal for the king's ſervice, by defending it in perſon, which was granted. He had under him the marquis de Sourville, M. de la Lande, and many other officers of note; and a very ſtrong garriſon. On the whole, the French were ſo ſanguine, that they fancied the place out of danger; and the duke de Vendome is reported to have ſaid, "he did not think ſo wiſe a commander as prince Eugene would venture on ſo raſh an undertaking." The ſiege was however proceeded in, and with very good ſucceſs. During the courſe of it, the duke of Burgundy being very uneaſy for want of intelligence from Liſle, an officer in his army, one captain Duboys, boldly determined to attempt getting into the city, notwithſtanding the ſtrict guards kept by the beſiegers; and he was ſo lucky as to ſucceed. He undreſſed himſelf, and, having hid his clothes, ſwam over ſeven canals and ditches, and ſo got into the town. Marſhal Boufflers, having provided him clothes, ſhowed him the condition all things were in; and, having written a letter to the duke, he rolled it up in wax, which the captain put in his mouth; then he reſigned the ſuit the marſhal had given him, ſwam over the ſame ditches, dreſſed himſelf on the other ſide in the clothes he left behind him, and returned ſafe to the duke of Burgundy with the intelligence he wanted. The French ſay, that marſhal Boufflers acquainted the duke of Burgundy by this gentleman, that if the allies could be but diſappointed of one convoy, the ſiege muſt be raiſed. Nothing, however, could avert the fate of Liſle. It was reduced after about three months ſiege, and the loſs of eighteen or twenty thouſand men; but was reſtored by the treaty of Utrecht, on condition that the fortifications of Dunkirk ſhould be demoliſhed.

Liſle underwent another memorable ſiege in the year 1792, when the Auſtrians inveſted it, and on the 29th of September began a heavy cannonading againſt it, which continued inceſſantly till the 6th of October, when they were obliged to raiſe the ſiege, after having thrown into the city about 30,000 red-hot balls, beſides 6000 bombs. At preſent it is ſaid to contain 170 ſtreets, 30 ſquares, 8000 houſes, and, by the moſt recent ſtatement, 54,756 inhabitants. Before the revolution it had ſeveral religious houſes. It was divided into ſeven pariſhes, and had ſeven gates, ſome of which were admired for the ſtyle of their architecture. Its manufactures are thoſe of cloth, camlets, nankeens, ſtuffs of ſilk and woollen, cotton, linen of all qualities and deſigns, lace, ribbons, carpets, hats, ſtockings, paper, ſoap, &c. Liſle is fourteen miles weſt of Tournay, thirty-two ſouth-weſt of Ghent, thirty-ſeven north-weſt of Mons, and one hundred and thirty north of Paris. Lat. 50. 83. N. lon. 3. 9. E.

LI'SLE, a town of France, in the department of the Dordogne: nine miles eaſt-north-eaſt of Riberac, and nine north-weſt of Perigueux.

LI'SLE, a town of France, in the department of the Yonne: twenty-four miles ſouth-eaſt of Auxerre, and ſeven north-north-eaſt of Avallon.

LI'SLE, a poſt-town of North America, in Tioga county, New York; through which paſſes a branch of the Chenengo.

LI'SLE (De), the name of ſeveral very eminent French aſtronomers and geographers.

LI'SLE (Claude de), was born at Vaucouliers, in the dioceſe of Toul, in Lorraine, in the year 1644. He was educated by the Jeſuits at Pont-à-Mouſſon; and at the age of ſeventeen took his degrees in law, and was admitted an advocate; but, ſoon conceiving a diſlike to that profeſſion, he renounced the ſtudy of juriſprudence, and devoted himſelf entirely to that of hiſtory and geography. For the ſake of enjoying the beſt advantages for improvement in theſe branches of learning, he removed to Paris, where at length he commenced private lecturer on hiſtory and geography; and acquired ſuch high reputation in this profeſſion, that he could boaſt of having been maſter to the principal nobility at the French court. Among others, the duke of Orleans, afterwards regent, was ſeveral years under his inſtruction, and always entertained a high regard for him, of which he gave him repeated proofs. De Liſle died at Paris, in 1720, in the ſeventy-ſixth year of his age. He was the author of, 1. An hiſtorical Account of the Kingdom of Siam, 1684, 12mo. 2. A genealogical and hiſtorical Atlas, on engraved Plates; chiefly the labour of the two laſt years of his life, of which a part was publiſhed in 1718. 3. Letters on geographical ſubjects, printed in the Journal des Savans, particularly for the year 1700. 4. An Abridgment of Univerſal Hiſtory, from the Creation of the World to 1714, 7 vols. compiled from the author's hiſtorical lectures, but not publiſhed till after his death, in 1731. 5. An Introduction to Geography, publiſhed in 1746, in two vols. 12mo. in the name of his eldeſt ſon, the ſubject of the next article.

LI'SLE (William de), a very learned French geographer, was the ſon of the preceding, and born at Paris in the year 1675. He diſcovered his genius for geographical ſtudies when he was only nine years of age, at which early period he began to deſign maps, and ſoon made a rapid progreſs in that art. By his ſtudious enquiries, and ſcientific ſkill, he brought it to a degree of perfection which eclipſed the glory of his moſt famous predeceſſors, and will hand down his name to poſterity with diſtinguiſhed honour. With laudable pride he would often acknowledge, that, if he poſſeſſed any merit, he was indebted for it to the inſtructions and advice of his father, who took upon himſelf the direction of his firſt ſtudies. Towards the cloſe of the year 1669, he firſt offered himſelf a candidate for public favour, by publiſhing a map of the world, maps of Europe, Aſia, Africa, and America, a map of Italy, one of ancient Africa immediately after the deſtruction of Carthage, and two globes, one celeſtial, the other terreſtrial. Theſe performances were received with univerſal applauſe, and, by their vaſt improvements on the labours of preceding geographers, eſtabliſhed his claim to unrivalled excellence. They were ſucceeded by various other productions in the ſame department of ſcience, which have contributed, equally with the former, to perpetuate the author's fame. In the year 1702, a proper tribute of reſpect was paid to his merit, by giving him a place in the Academy of Sciences. In 1718, he was appointed firſt geographer to the king, and cenſor royal, with a penſion: he had alſo the honour of being appointed geographical tutor to the young king Louis XV. for whoſe uſe he drew up ſeveral works; and in particular, a general map of the world, and another of the famous retreat of the ten thouſand. He alſo drew up A Treatiſe on the Courſe of all known Rivers; valuable for reſearch, and for correctneſs. So high was the reputation which De Liſle

had now acquired, that ſcarcely any book of hiſtory or travels was publiſhed, which the authors were not deſirous of embelliſhing with his maps. And this reputation was not confined to France, but extended throughout Europe. Hence many ſovereign princes endeavoured to tempt him to enter into their ſervice; but without ſucceſs. Peter the Great, when he was at Paris on his travels, took an opportunity of viſiting him in a familiar manner, to communicate to him ſome remarks upon Muſcovy; "but more eſpecially," ſays Fontenelle, "to learn from him, better than he could any where elſe, the extent and ſituation of his own dominions." De Liſle died by a ſtroke of apoplexy in 1726, when he was only in the fifty-firſt year of his age. There are ſeveral papers by him in the Memoirs of the Academy of Sciences; and a liſt of his productions may be ſeen in Freret's Eulogium on him in the Mercure for the month of March 1726.

LI'SLE (Louis de), ſurnamed *de la Croyere*, the third ſon of Claude, was diſtinguiſhed by his proficiency in aſtronomical ſtudies, which recommended him to a ſeat in the Academy of Sciences. Though he left no works behind him, excepting what he may have contributed to the Memoirs of the Paris and Peterſburg academies, he deſerves to be noticed among thoſe who have rendered ſervice to the intereſts of ſcience, on account of the hazardous journeys and voyages which he undertook to promote them. In the year 1726, he went to Ruſſia with his brother Joſeph-Nicholas, the ſubject of the next article, who was appointed aſtronomer to the Academy of Sciences at Peterſburg. From that capital Louis de Liſle made ſcientific excurſions, beyond the utmoſt boundaries of the immenſe Ruſſian empire. He took ſeveral journeys to the coaſts of the Icy Sea, to Lapland, and the government of Archangel, to determine the ſituation of the principal places by aſtronomical obſervations. For the ſame purpoſe, by order of the court of Ruſſia, he afterwards traverſed a great part of Siberia, in company with Muller and Gmelin, profeſſors of the Peterſburg academy. Having quitted his companions in that country, he proceeded alone to Kamtſchatka, where, in 1741, he embarked on-board the veſſel commanded by the Ruſſian captain Alexis Tchirikow, who proceeded with captain Beering, to examine the unknown northern coaſts of America, and the ſeas between them and the Aſiatic continent. But he ſurvived this voyage a very ſhort time, dying in the ſame year, after his return to the port of Avatſkha, where he commenced the voyage.

LI'SLE (Joſeph-Nicholas de), a very able aſtronomer and geographer, was brother of the preceding, and born at Paris in the year 1688. After having been inſtructed in grammar-learning by his father, he attended lectures in the Mazarin-college, where he went through his rhetorical exerciſes in 1706. The total eclipſe of the ſun, which took place on the twelfth of March in that year, having occaſioned the diſcovery of his genius for mathematical purſuits, he was placed under a proper tutor, with whom he ſtudied the elements of geometry, fortification, and mechanics. But, while purſuing theſe ſubjects of ſtudy and curioſity, he felt an irreſiſtible inclination for the ſcience of aſtronomy. Even before he had ſeen any aſtronomical treatiſe, he had committed to paper his reflections on the apparent diameters of the ſun, the length of which he perceived to vary; on the eccentricity of its orbit, which he thought to be the cauſe of that variation; on the method of meaſuring eclipſes; and on the interſections of horary circles which conſtitute a dial. This genius for invention, combination, and calculation, inſpired our young mathematician with a taſte for reſearch, which enabled him to advance rapidly in his acquaintance with aſtronomical ſcience, and eaſily to become maſter of the gnomonics of M. de la Hire, which moſt beginners find ſo difficult.

In the year 1707, M. de Liſle was offered the place of an engineer at Martinico. This offer proved the occaſion of his learning the art of drawing, the knowledge of which afterwards proved highly uſeful in his geographical labours, by enabling him to deſign maps with as much neatneſs as correctneſs. Of this art likewiſe he knew how to avail himſelf in his aſtronomical ſtudies, ſo as to draw figures with the utmoſt preciſion, better adapted to abridge calculations and to ſimplify the working of problems, than any which had before appeared. In the year 1708, he had already begun to engage in aſtronomical calculations with M. Lientaud, and to frequent the obſervatory of Caſſini the younger, who was then employed on his tables of the ſun and moon. In 1709, he obtained leave to occupy the cupola of the Luxemburg palace facing the ſtreet de Tournon; and, ſince he was now in poſſeſſion of an obſervatory, he flattered himſelf with the hope that he ſhould be able to conſtruct the neceſſary inſtruments by his own ingenuity. He ſucceeded ſo far as to make a wooden quadrant, which he divided with great care, and found to anſwer his purpoſe in his early obſervations. At the ſame time he calculated, for M. Caſſini, a table of the right aſcenſions and declinations in degrees, minutes, and ſeconds, adapted to all the degrees of longitude and latitude of the planets, and the obliquity of the ecliptic; which M. Caſſini made uſe of in predicting the occultations of the ſtars by the moon, in the Connoiſſance des Temps.

In the year 1710, Caſſini having communicated to our young aſtronomer his method of repreſenting an eclipſe of the ſun, by the projection of a terreſtrial parallel on a plane; de Liſle immediately conceived an idea of rendering it applicable to every part of the earth, by means of a globe, mounted and prepared for that purpoſe. The aſtronomers, to whom he gave ſome intimation of his project, conſidered it to be impracticable; but, when his machine was completed, they beſtowed high applauſe on his invention; and Caſſini, who was then blind, by examining it with his hands, fully comprehended its utility. The model, in relief, was depoſited in the royal obſervatory. The firſt remarkable obſervation of M. de Liſle was that of the moon on the 23d of January, 1712; after which his labours were for ſome time interrupted by ill-health. The circumſtances of his father's numerous family made it now neceſſary that he ſhould endeavour to procure for himſelf the means of ſupport; and, in doing ſo, he found himſelf obliged to render his aſtronomical ſkill ſubſervient to the reveries of judicial aſtrology. At that time the count de Boulainvilliers was famous at court for his horoſcopes and aſtrological predictions; and he engaged young de Liſle to employ himſelf on calculations relative to theſe predictions. For theſe ſervices our aſtronomer was remunerated by pecuniary preſents from the regent, the marſhal de Noailles, and other courtiers; and he had alſo the grant of a penſion of ſix hundred livres in the year 1715. It was on this occaſion that he calculated tables of the moon according to the theory of Newton, before Halley had communicated to him thoſe which he printed in 1719, or Flamſteed had given the tables which M. Lemonnier printed in 1746. In the year 1714, M. de Liſle had the honour of being elected to a ſeat in the Academy of Sciences, which gave new energy to his exertions; and the Memoirs of this body were in a ſhort time enriched with his valuable reflections and diſſertations.

Being deprived of his obſervatory at the Luxemburg during the following year, he continued his obſervations at the hotel de Taranne, and afterwards at the royal obſervatory during the abſence of the aſtronomers, who were engaged in prolonging the meridian of Paris towards the north. The neceſſity that he was under of frequently changing his obſervatory and his inſtruments, was no little obſtacle to the progreſs of a young obſerver; and it was not before the year 1721 that he was able to procure a quadrant of forty-three inches radius, with which he afterwards made a great number of obſervations. Among the Memoirs of the Academy of Sciences for the year 1715, may be found his obſervations on the atmoſphere of the moon, and on the luminous rings viſible during eclipſes. In the year 1713, he had obſerved the ſpots in

the ſun with great care, and was led to form the idea of a theory to determine their motions, and by that means to calculate the ſun's rotation on his axis. In the year 1720, he delivered in a propoſal to the academy for aſcertaining in France the figure of the earth; and ſome years afterwards his deſigns relative to that object were carried into execution. In 1723, he gave in a curious memoir on the tranſits of Mercury, in which he propoſed a new method for calculating them, obſerving them, and drawing concluſions from them. He was the firſt who obſerved that, in order to calculate the tranſits of Mercury and Venus over the Sun, it is not neceſſary to have their geocentric longitudes, that is, their longitudes as ſeen from the Earth, but that it is ſufficient to calculate their longitudes as ſeen from the Sun. He alſo propoſed the uſe of the quadrant in obſerving theſe tranſits, which is in various reſpects better adapted to the purpoſe than any other inſtrument; and in this he has been followed by the moſt able aſtronomers.

In the year 1724, M. de Liſle paid a viſit to England, where he was honoured with the acquaintance and eſteem of Newton and Halley. The firſt made him a preſent of his portrait; and the ſecond gave him a copy of his aſtronomical tables, which he had printed in the year 1719, but which were not publiſhed before the year 1749. In this country, he was admitted a fellow of the Royal Society; and before his death he held a ſimilar connexion with all the great ſcientific academies in Europe.

The year 1726 preſents us with one of the moſt remarkable events in M. de Liſle's life, his tranſplantation from his native country into Ruſſia. So long ago as the year 1721, he had received a letter from M. Blumentroſt containing an invitation from Peter the Great, to go to Peterſburg, and fill the poſt of aſtronomer in the Imperial Academy of Sciences. Four years he deliberated on this offer, when the death of that monarch ſeemed to terminate all negociation for his removal to the north. But the empreſs Catharine, who ſucceeded to the throne after the death of Peter, and was determined to carry on his plans for the civilization of his barbarous countrymen, did not forget that on his dying bed he ſtrongly adviſed her to invite learned foreigners into the country, and to protect them. Accordingly, ſhe renewed the invitation of that monarch to M. de Liſle, with the promiſe of a conſiderable penſion. At length he determined to accept of the invitation; and, having received the king's licence for himſelf, his brother Louis, and M. Vignon, who were to aſſiſt him in his labours, he ſet out with his companions for Peterſburg in the year 1726. During the progreſs of his journey, his zeal for the improvement of ſcience induced him to make a ſhort ſtay at Rodeſtein in Thuringia, at Berlin, and at Dorpt in Livonia; at each of which places he made the obſervations neceſſary for determining their longitudes and latitudes. On his arrival at Peterſburg in the month of October, he was eſtabliſhed in the houſe of the obſervatory built by Peter the Great, which he occupied nearly twenty-one years, ſpent in inceſſant labours for the improvement of aſtronomy and geography. This obſervatory was ſpacious and commodious; but it was deficient in many neceſſary inſtruments for ſuch an inſtitution, which he endeavoured, without ſucceſs, to obtain. He was obliged, therefore, to enter on his labours under great diſadvantages, owing to the imperfection of his apparatus, which he endeavoured to remedy as much as poſſible by the inſtruments which he brought from France, and ſuch others as by degrees he was permitted to conſtruct. M. de Liſle's firſt ſeries of obſervations were employed in aſcertaining the longitude and latitude of Peterſburg, and the refractions in that northern region. Afterwards he devoted ſeveral years to an aſſiduous obſervation of the meridional height of all the planets, and of the fixed ſtars of the three firſt magnitudes; calculated to determine the poſitions of all theſe ſtars, with their annual variations, and to eſtabliſh a variety of points neceſſary to illuſtrate the theory of the planets, and particularly that of the moon. To theſe were added, an immenſe number of obſervations out of the meridian; eclipſes of the ſun and moon; occultations of the planets and of the fixed ſtars by the moon; and their approximations and conjunctions, which he noticed with the utmoſt poſſible exactneſs. He, likewiſe, from the aſtronomical and phyſical obſervations made by his brother in his expedition to Siberia, calculated the longitudes of a vaſt variety of places, which he compared with thoſe of the Jeſuits in China, whom he engaged to make obſervations correſpondent to thoſe of his brother. But theſe obſervations, ſo uſeful to the geography of that part of Aſia, remain yet in manuſcript, excepting a few, publiſhed in the firſt volume of the Memoirs of M. de Liſle, and in the Memoirs of the Academy of Peterſburg.

As in the year 1740 a tranſit of Mercury over the Sun was expected which would not be viſible in Europe, the zeal of M. de Liſle in the cauſe of ſcience determined him to encounter the hardſhips and dangers attending a viſit to diſtant Aſiatic regions, that he might have an opportunity of obſerving it. With this deſign he quitted Peterſburg in the month of February, and, after undergoing immenſe fatigue, penetrated over the ſnow and ice into the deſerts of Siberia. His firſt obſervations in this terrible climate were on the intenſeneſs of the cold, which was greater than had ever been pointed out by a thermometer, or than it was conceived poſſible for human nature to ſuſtain. A memoir of M. de Liſle on this ſubject is inſerted in the volume of the French Academy for 1749. But, when the time for obſerving the tranſit arrived, after all his fatigues and ſufferings, his philoſophy was put to the ſevereſt trial by the cloudineſs of the day, which totally fruſtrated the deſign of his journey. To indemnify himſelf as far as was poſſible for this grievous mortification, he employed his time in making geographical and phyſical obſervations, and in drawing up a deſcription of the country, which is inſerted in the eighteenth volume of Querlon's Hiſtory of Travels, &c. Geography was indeed one of the grand objects of his labours, and was particularly recommended to him by M. de Maurepas, when he conſented to his departure from France. Accordingly, during the firſt months of his ſettlement at Peterſburg, he formed a plan for making a general map of Ruſſia, and procured the eſtabliſhment of a board of geography. He then obtained particular maps of the provinces of this vaſt empire, with the names and accompanying obſervations tranſlated into French; and, as he became ſoon diſſatisfied with the ſlowneſs of the interpreters aſſigned him, he learned to read them in the Ruſſian language, and to tranſlate them himſelf. He particularly required that aſtronomical obſervations ſhould be made in the moſt diſtant parts of the empire. For this purpoſe his brother Louis was commiſſioned, in 1737, to commence ſuch obſervations in the government of Archangel, and to proceed as far as Kola; on which expedition he ſpent nearly three years. But in his geographical as well as aſtronomical department, M. de Liſle met with numerous obſtacles and diſcouragements which greatly impeded his progreſs; and he was reduced to no ſmall difficulties, by the delays of the payments of the academy, and the arrears of his penſion. Beſides the labours of his brother, M. de Liſle was furniſhed with the communications of thirty young Ruſſians, who were particularly inſtructed by two able Engliſh profeſſors in the art of ſurveying and drawing maps, and ſent to the different provinces of the empire for that purpoſe. Theſe maps were delivered to M. de Liſle, who perſonally examined theſe young *geodeſiſts*, as Lalande calls them, on their return to Peterſburg, aſking from them particulars of the countries which they had reſpectively ſurveyed, to the minuteſt detail, without omitting the ſmalleſt village or the ſmalleſt ſtream; that he might thus ſupply as far as poſſible what their want of ſcience and proper inſtruments prevented them from performing, and unite their ſcattered members in one regular whole. He alſo obtained an order from the cabinet of the empreſs

Catharine to M. de Kyrilow, firſt ſecretary of the ſenate, to furniſh him with all the maps and memoirs which were ſent to that body; and he received geographical communications from M. Latiſchow, the ſucceſſor of M. Kyrilow, and from ſeveral perſons connected with the admiralty, the college of war, and the department of engineers. At length, he was able to announce to the academy that he had completed his plan for a Ruſſian atlas, and propoſed to publiſh it; but that undertaking was procraſtinated till after his return to France, when the work made its appearance in twenty-one maps, at firſt in the Ruſſian language, and afterwards in Latin. On a ſubſequent compariſon of theſe maps with the ſketches which he had himſelf made at Peterſburg, M. de Liſle found them to differ ſo materially from his collections, that he formed a deſign of engraving them anew at Paris, more correctly, in a better taſte, and on a larger ſcale, accompanied with exact deſcriptions of the countries, and an account of the authorities on which they were founded. His labours for this purpoſe form a part of the manuſcripts which he left behind him, and which were depoſited in the king's library.

Intimately connected with aſtronomy are meteorological obſervations; and theſe M. de Liſle regularly made during forty years, with incredible exactneſs. The thermometers which he uſed for this purpoſe, till the year 1731, were thoſe of Reaumur, which are the moſt perfect of the ſpirit kind, though not without their inconveniences. Thoſe he at that time corrected, in a conſiderable degree, by making them of mercury, on the ſame principle. In his thermometer, the point at which the graduation commences is that to which the mercury is raiſed by the heat of boiling water; and, contrary to the common order, the ſeveral degrees are marked from this point downwards, the numbers increaſing as the heat decreaſes, and the freezing point being at 150.

We have already obſerved, that while M. de Liſle was diſcharging the duties of his appointment with the greateſt zeal and diligence, he met with many obſtacles and diſcouragements, which, after he had been ſeven years in Ruſſia, increaſed rather than diminiſhed. The neceſſary aſſiſtants in making his obſervations were gradually withdrawn; the inſtruments which had been promiſed were not procured: the ſums requiſite for defraying the expenſes of the obſervatory were withheld; and the arrears of his penſion were ſuffered to accumulate. Theſe circumſtances made him diſguſted with his ſituation; and, in the year 1734, he wrote to M. Blumentroſt, and to M. de Keyſerling, preſident of the academy, for permiſſion to return to France, and the payment of his arrears; but he could not obtain either the one or the other. At length, after almoſt annually requeſting his diſmiſſion for thirteen years, M. de Liſle obtained it in 1747; and, taking his leave of Peterſburg in the month of May, he arrived at Paris in September of the ſame year. Soon after, he was appointed profeſſor of mathematics at the college-royal; in which ſituation he lived to render the greateſt ſervice to the intereſt of ſcience, by training up pupils worthy of ſuch a maſter, and formed to proceed with ardour and indefatigable perſeverance in the ſame glorious career. In this number were the celebrated Lalande, and M. Meſſier. But this employment did not prevent M. de Liſle from reſuming with new vigour his aſtronomical labours. At firſt he made ſome obſervations at the royal obſervatory; but ſoon removed to the Hotel de Clugny. His profeſſorſhip brought him in no more than nine hundred livres a-year; but with this income, and the produce of the arrears of his penſion which were paid him before his departure from Peterſburg, he was content. Indeed, he expended no ſmall part of the latter, in building and furniſhing with proper inſtruments an obſervatory on the flat top of the Hotel de Clugny. Here he recommenced his obſervations, and continued them without interruption during twenty years, both night and day, in winter as well as ſummer, very commonly attended by his illuſtrious pupil Lalande. In the year 1748, his pupil M. Monnier took a voyage to Scotland, to obſerve one of the moſt intereſting eclipſes of the ſun which had appeared for a long time, it being annular, and furniſhing an opportunity for meaſuring the diameter of the moon, at the time when it ſhould be entirely viſible on the ſun's diſk. On this ſubject M. de Liſle publiſhed a large advertiſement, which was a complete treatiſe on annular eclipſes. The obſervations, which he afterwards received from his correſpondents, induced him to enter more fully on the conſideration of the theory of eclipſes, and he communicated a part of his reſearches on this ſubject to the academy in 1749. One of the moſt intereſting performances which M. de Liſle publiſhed relative to geography, was his "New Charts of the Diſcoveries of Admiral de Fonte, or Fuente, made in 1640, and thoſe of other Navigators, Spaniſh, Portugueſe, Engliſh, Dutch, French, and Ruſſians, in the Northern Seas, with Explications, &c." 1750 and 1753, 4to. This work, and Louis de Liſle's voyage with captains Tchirikow and Beering on the weſtern coaſts of America, ſerved mutually to illuſtrate and confirm each other, and gave to the charts of M. de Liſle all the authority poſſible; and they furniſhed M. Buache, firſt geographer to the king, with the materials for his Geographical and Phyſical Conſiderations, which he publiſhed in 1752, and following years. At the time when aſtronomers were impatiently waiting for the tranſit of Mercury over the Sun in 1753, M. de Liſle ſignaliſed his zeal for the ſervice of aſtonomy by publiſhing a very curious map of the world, in which he repreſented the effect of the parallaxes of Mercury in different countries, in order to point out the proper places for making ſuch obſervations on the tranſit as ſhould, from the difference of their reſults, furniſh a method of determining the diſtance of the Sun, in a manner ſimilar to that applied by Halley to the tranſit of Venus. The tranſit of Mercury over the Sun in 1756, likewiſe, fully employed M. de Liſle for a long time. This was the twelfth tranſit of that planet noticed by aſtronomers; and was attended with this particular advantage, that the apparent orbit traverſed nearly the centre of the ſun. This circumſtance was made uſe of by M. de Liſle, in determining the diameter of the ſun.

The laſt work of M. de Liſle, inſerted in the volumes of the French academy, is a memoir on the comet of 1758, which had been diſcovered by a peaſant in the neighbourhood of Dreſden on the 25th of July, and which Meſſier found on the 15th of Auguſt, with the inſtruments, and by following the method propoſed by M. de Liſle in the preceding year, for obſerving the celebrated comet of Halley. The map of theſe obſervations was preſented by M. de Liſle and M. Meſſier to the king; and the former, who was received in the moſt gracious manner, had the honour of giving a particular explanation of it to his majeſty.

The comet of 1759, which had been predicted by Mr. Halley forty years before, afforded M. de Liſle abundant ſcope for the exerciſe of his ſcientific ſkill. In the month of November, 1757, he began to publiſh, in the Memoirs de Trevoux, a table of all the places in the heavens which were to be examined for this comet, on the ſuppoſition of its being diſcernible, either thirty-five or twenty-five days before its perihelion, which he marked on a celeſtial planiſphere; and he conſtructed an inſtrument, with the neceſſary diviſions and conveniencies for eaſily finding it, and marking its poſition as ſoon as it ſhould be diſcovered. Theſe preparations he confided to M. Meſſier, an able obſerver, who was choſen by M. de Liſle, with the conſent of the miniſter, to aſſiſt him in his labours. M. Meſſier ſearched for the comet during a year and a half, and in that time obſerved for ſeveral months the comet of 1758. At length, on the 21ſt of January, 1759, he diſcovered the long-ſought-for comet of Halley, and aſcertained its place. M. de Liſle gave an account to the public of theſe firſt obſervations on that comet, in the firſt volume of the Mercure for July 1759; but he reſerved the

the detail of its positions for a treatise which he intended to publish on this comet, after he had himself made all the observations possible, and collected those of others, during the time of its appearance. He also entertained the hope of being able to suggest new considerations on the theory of comets in general, supplementary to what he had delivered in 1745 to the Academy of Petersburg; but these have not been published.

One of the greatest services which M. de Lisle rendered to astronomers, was his correction of the double error of Halley relating to the transit of Venus, expected in 1761; by which means he prevented several men of science from undertaking long voyages for the sake of observing it, whose labours would have proved useless with respect to the principal object in view.

It was now high time that the long, laborious, and very useful, labours of M. de Lisle should meet with some recompense from the state. There had been for a long time established at Paris a general depot for the marines, in which were collected memoirs relating to the colonies, the reports of intendants, the ordinances of the king, and the orders of his ministers respecting the marine, both in the civil and military departments. In this depot were numerous designs, plans, and manuscript charts, both of the coasts of France, and of the colonies and establishments in different parts of the world, with memoirs relating to them. The number of these memoirs, plans, and charts, increasing every day, it was judged necessary, in order that they might be consulted with the greater facility, to create for them a particular department, in which they should be separated from the other papers of the marine, which we have mentioned above. It was under the regency of the duke of Orleans in 1721, that this department was first established, and a naval captain placed at the head of it. In the year 1754, M. Rouillé, minister of the marine, well knowing how valuable the precious collections and the labours of M. de Lisle would prove to that institution, suggested to the king the benefit which the service would receive from giving him an appointment in it. Accordingly, his majesty constituted him, by brevet, *astronomical geographer to the marine*, attaching to his office the collection of plans and journals of naval captains, to arrange them in regular order, and to extract from them whatever might be found beneficial to his service in this department. As soon as M. de Lisle had entered on his new post, he received directions to draw up memoirs for the minister on the subjects of his appointment; which he prepared with equal celerity, knowledge, and judgment. As the king had now engaged him in his service, his majesty purchased, with a pension for life, his rich astronomical and geographical collections, which were added to the manuscripts in the depot. These were all arranged in regular order by M. de Lisle, who drew up a detailed and circumstantial inventory of them, making every person connected with his office acquainted with them, and showing the uses to which they might be applied for the benefit of the service and the advancement of science.

M. de Lisle's eye-sight was always excellent, and, like Newton, he was able to read without spectacles, at night as well as in the day-time, when he was eighty years of age. He was more than seventy years old before his strength began sensibly to be impaired, in 1758; from which time he devolved the care of his observations wholly on M. Messier, and obtained from the minister the appointment of M. de Lalande for his coadjutor at the college-royal. He now withdrew into quiet retreat at the abbey of St. Genevieve, where he spent much of his time in devotional exercises, and appropriated the greatest part of his income to acts of benevolence and charity. But in his retirement he was not the gloomy religionist, who considered himself dead to the world, and uninterested in its concerns; for he still cherished his old taste for astronomy and geography, corresponded with men of science, read the new works, and partook in the care with which M. Messier continued his observations, collections, and manuscripts. He even published several memoirs, and maps of Georgia, Palestine, and Pekin; he communicated his papers on Siberia to M. Querlon, who continued the History of Travels, and other manuscripts to M. Pingré, M. de Lalande, and other persons to whom they were necessary; and he delivered several memoirs to M. de Lalande, to be revised by him, that they might be published in the volumes of the academy. That body, as an extraordinary mark of their respect for his distinguished merits, conferred on him the title of *veteran pensionary*, which the king confirmed. In the month of July, 1768, M. de Lisle was afflicted with a scorbutic complaint, which his medical friends succeeded in curing; but in the September following he was attacked by a kind of apoplexy, and afterwards by the palsy, to which he fell a sacrifice on the 11th day of that month, in the eighty-first year of his age. Of his extraordinary merits as a man of science, the preceding narrative will enable the reader to form a sufficient judgment. In private life he was distinguished by unaffected piety, pure morals, undeviating integrity, a generous disinterested spirit, and most amiable manners. The only publication of M. de Lisle, not already specified, consisted of Memoirs illustrative of the History of Astronomy, 1738, in 2 vols. 4to. *Eloge de M. de Lisle, par M. de Lalande.*

LI'SLE DE LA DREVETIE'RE (Louis-Francis de), a French dramatic writer, was descended from a noble family of Perigord, and born at Suze-la-Rousse in Dauphiné. He was sent to Paris to finish his education, and studied the law with the intention of being called to the bar; but a dissipated turn prevented him from effecting his purpose. His father not being able to maintain him at Paris, he was reduced to live by his talents, and began to write for the Italian theatre. In 1721 his comedy of Arlequin Sauvage was brought on the stage; it was successful, and is still seen with pleasure. His Timon le Misanthrope had still greater success. His Arlequin au Banquet des Sept Sages was somewhat too philosophical for the taste of the times. It was followed by the Banquet Ridicule; by Le Faucon, ou les Oies de Boccace; and by a variety of other pieces. He also composed Danaus, a tragedy; a poem entitled Essai sur l'Amour Propre; and several pieces of verse, collected in a single volume. He died in 1756.

LISLE'NA, a town of Sweden, in the province of Upland: sixteen miles south-south-west of Upsal.

LIS'MORE, an island of the Hebrides, in the county of Argyle, Scotland. It is situated at the mouth of the great arm of the sea called Loch Linnhe, and extends about ten miles in length and two in breadth. The whole of this island lies on a stratum of excellent lime-stone, unfortunately rendered of little value to the inhabitants by the deficiency of fuel to burn it. Mr. Pennant says the derivation of its name is from *Lios'mor*, or "the great garden." According to tradition, however, it was not a garden, but a deer-forest; and, as a proof of this, multitudes of stags' horns of uncommon size are frequently dug up in the mossy parts of it. At present there is very little wood; but, the soil being fertile, vegetables shoot up with uncommon vigour. The chief productions of the ground are beans and oats: the former are mostly applied to the purposes of distillation; and the latter go to the discharge of rents, so that the inhabitants are obliged to import large quantities of meal for their subsistence. There are a considerable number of cattle reared in this island, but they are generally of very small stature: the author already mentioned thinks they must have greatly degenerated from their original growth, for he informs us that he saw the skull of an ox dug up here, which was of much larger dimensions than any now living in Great Britain. About a hundred head of the largest are exported annually. The horses bred here are extremely short-lived: they are harnessed when only two or three years old, which practice will no doubt assist in shortening the period of their existence. Neither foxes, hares, nor rats, can be found

found in the iſland; otters and mice, however, are abundant. It contains three ſmall lakes, two of which are famed for excellent trout, and the third for eels.

Liſmore was formerly the ſeat of the biſhop of Argyle, who was thence ſtyled *Epiſcopus Liſmorenſis*. Mr. Pennant ſays there are no remains either of the cathedral or the biſhop's palace: in the Beauties of Scotland, however, it is aſſerted, that veſtiges of both are ſtill to be ſeen. The chancel of the former is there ſtated to be uſed as the pariſh-church, and the walls of the latter are ſaid to be pretty entire, and diſtant about four miles from the cathedral. Several fortified camps can yet be diſcovered in different parts of the iſland. A Daniſh fort, ſurrounded by a deep foſſe, is likewiſe in tolerable condition: the walls are now ſeventeen feet high, having a gallery within; and round the area a ſtone ſeat, which Mr. Pennant ſuppoſes might have been intended as a general reſting-place for the chieftains and their ſoldiers. The church, ſays the ſame author, in conformity with his aſſertion that there are no remains of the cathedral, "is a mean modern building." In the church-yard ſeveral old monuments are ſtill ſtanding, one of which is very remarkable, as conſiſting of nothing more than a thick log of wood: its antiquity muſt be very great, as there is no word in the Erſe language to denote this kind of monument. On a rock are cut the radii of a dial, but the index is deſtroyed. A ſmall baſin is excavated in another rock, which was probably uſed by the Druids in ſome part of their religious ceremonies.

At the ſouth end of the iſland of Liſmore lies a ſmall rocky iſle, over which the ſea rolls at high tides; at other times it raiſes its rough head ſomewhat above the ſurface of the water. It is called the Lady's Rock, from the following traditionary ſtory. In former times one of the M'Leans of Duart, whoſe caſtle (now in ruins) ſtands on a promontory in Mull, in nearly an oppoſite direction to the Lady's Rock, married a ſiſter of Argyle. The lady was handſome and amiable, but unhappily ſhe was barren. In thoſe days it was a high crime in the eye of a huſband, when his wife bore him no children. Duart hated his hapleſs lady for that cauſe, and determined on her deſtruction. To accompliſh it with eaſe, and, as he imagined, ſafe from detection, he ordered ruffians to convey her ſecretly to the bare rock near Liſmore, and there leave her to periſh at high tide. The deed was executed to Duart's wiſh; and the lady was left on the rock, watching the rolling tide riſing to overwhelm her. When ſhe had given herſelf up for loſt, and expected in a very ſhort time to be waſhed from the rock by the waves, ſhe fortunately perceived a veſſel ſailing down the Sound of Mull, in the direction of the rock on which ſhe was ſitting. Every effort in her power was exerted, and every ſignal in her poſſeſſion was diſplayed to attract the notice of the people in the veſſel. At length they perceived her, and drew near the rock. She made herſelf known; and related, that it was by the order of her barbarous huſband ſhe was left on the rock, and thus reduced to the wretched ſtate in which they found her. The mariners, ever a generous race, took compaſſion on her, received her on-board their veſſel, and conveyed her ſafely to her brother at Inverary. M'Lean Duart made a grand mock funeral for his much-loved, much-lamented, lady, who he announced to have died ſuddenly. He wrote diſconſolate letters to her relations, particularly to Argyle; and after a decent time went to Inverary in deep mourning, where, with the greateſt ſhow of grief, he lamented to his brother-in-law the irreparable loſs he had ſuſtained. Argyle ſaid little; but ſent for his ſiſter, whoſe unexpected appearance in life and health proved an electric ſhock to her huſband. Argyle was a mild and amiable man, and took no other revenge of M'Lean but commanding him to depart inſtantly, at the ſame time adviſing him to be cautious not to meet his brother Donald, who would certainly take away his life for having intended to deſtroy that of his ſiſter. Sir Donald Campbell did meet him many years afterwards in a ſtreet at Edinburgh, and there ſtabbed him for his crime towards his ſiſter, when M'Lean was eighty years of age. *Mrs. Murray's Companion to the Hebrides.*

LIS'MORE, a poſt-town of Ireland, in the county of Waterford, and province of Munſter, 100 miles from Dublin. It was anciently called *Leſſmore*, or *Lios-more*, i. e. "The Great Encloſure, or Habitation;" it is now a biſhopric, and formerly had an univerſity. St. Carthagh, or Mochuda, in the beginning of the ſeventh century, founded an abbey and ſchool in this place, which in a ſhort time was much reſorted to, not only by the natives, but alſo by the Britons and Saxons, during the middle ages. According to an ancient writer of the life of St. Carthagh, Liſmore was in general inhabited by monks, half of it being an aſylum into which no woman dared enter; conſiſting entirely of cells and monaſteries, the ruins of which, with ſeven (out of twenty) churches, are yet viſible. The ſite of Liſmore was in early ages denominated *Magh Skia*, or the Choſen Shield, being the ſituation of a *dun*, or fort, of the ancient chieftains of the Decies, one of whom granted it to St. Carthagh on his expulſion from the abbey of Ratheny in Weſtmeath. On becoming an univerſity, Magh Skia obtained the name of *Dunſginne*, or the Fort of the Saxons, from the number of Saxons who reſorted thereto; but, ſoon after, it was called *Lios-more* or *Leſs-more*, and now *Liſmore*; the biſhopric of which was united to that of Waterford in 1363, being ſeven hundred and thirty years after its foundation. The public road to Cork was formerly through this place, and at that time it had a better face of buſineſs. St. Carthagh, who retired to this place with ſome of his religious in 636, to avoid the fury of the then Iriſh monarch, tied his diſciples to a moſt ſtrict rule of life; they never were allowed the uſe of fleſh, fiſh, or fowl; only the vegetables that the ground produced at the expenſe of their own labour. Father Daniel, in his Hiſtoire Monaſtique, mentions one on the ſame foundation in France. The caſtle here, which was built by king John, was erected in 1195 on the ruins of the abbey of St. Carthagh. In 1189 it was demoliſhed by the Iriſh, who took it by ſurpriſe. Being afterwards re-edified, it was for many years an epiſcopal reſidence, till Myler Magrath, archbiſhop of Caſhel, and biſhop of this ſee, granted the manor of Liſmore to that noted ſcholar and ſoldier ſir Walter Raleigh, in the reign of queen Elizabeth, at the yearly rent of 13l. 6s. 8d. but that eſtate was lopped off with his head in the reign of king James I. After this it fell into the hands of ſir Richard Boyle, afterwards the firſt earl of Cork; and his youngeſt ſon, the celebrated and deſervedly-eſteemed philoſopher Robert Boyle, was born in it. It has ſince become the property of the duke of Devonſhire, who is deſcended by the female line from the eldeſt branch of the Boyle family. On entering Liſmore, the traveller is ſtruck with the ſight of this venerable caſtle, lifting its high and embattled towers in a kind of melancholy grandeur, bordering on ſadneſs; the ancient avenue, whoſe tall dark trees ſhed a gloom over the outer gate-houſe, gives its neglected front a deeper and more ſolemn ſhade. On the angles are ruined towers of prodigious ſtrength, in the ſame roofleſs ſtate that the wars of 1641 left them. Within the great gate-houſe there is a ſpacious court; on each ſide are the ranges of offices belonging to the caſtle, which faces the entrance, and forms a parallelogram. Over the gate-houſe are the arms of the firſt earl of Cork, who beautified and enlarged it. Deſcending on the eaſtern ſide to the bridge, you are charmed with its grand elevation; the north front riſing from a perpendicular range of wooded rock, overhanging the Blackwater. Imagination cannot paint a more romantic ſcene. The broad and placid river, from which, on the left, ariſe lofty and richly-covered rocks, to a fearful height, crowned with nodding groves, in ſome parts ranging down from the ſteep ſummit, caſt their green branches in the ſtream; while, in others, they are ſeparated by the jutting heads of moſs-clad rocks, whoſe variegated ſides of grey and ſpangled brown contraſt in a lively manner with

the varied foliage. Over all, the ivied windows and pointed turrets lifting themſelves high above the trees, which half diſcloſe their antique caſements, finiſh the picture to the left. On the right the ſhores are diverſified by wood and lawn, and behind opens a deep and thickly-wooded glen, through which a ſmall river, called Oon-a-ſhad, winds into the Blackwater; to the weſt, the ſalmon-weirs traverſe the river for a conſiderable way, and form ſeveral agreeable falls, the ſoft lulling ſound of which greatly heightens the beauty of the whole. In October 1785, the late duke of Rutland, then lord lieutenant of Ireland, whilſt on a tour in Munſter, held a council in, and iſſued proclamations from, this caſtle. Here is a fine bridge over the river Blackwater, erected at a very great expenſe by the duke of Devonſhire; this bridge is remarkable for the extent of the principal arch, the ſpan of it being 190 feet. Below the town is a rich fiſhery for ſalmon, which is the greateſt branch of trade here. Though this place is at preſent much reduced, yet Cambrenſis informs us, that, not many years after the conqueſt, this was a very rich city, and held out ſome time againſt the Engliſh, who took it at laſt by ſtorm, and gained rich plunder here, enough to load ſixteen ſail of ſhips. Liſmore is twenty-ſix miles north-eaſt of Cork, and thirty-one weſt-ſouth-weſt of Waterford. Lat. 52. 8. N. lon. 7. 57. W.

LISNAKE'A, a poſt-town of Ireland, in the county of Fermanagh: ſeventy miles north-eaſt from Dublin.

LISNE, *ſ.* A cavity; a hollow.—In the *liſne* of a rock at Kingſcote in Glouceſterſhire, I found a buſhel of petrified cockles, each near as big as my firſt. *Hale.*

LISON'ZO, a river which riſes in Carniola, about a mile eaſt from Weiſſenfels, paſſes by Goritz, Luciniſſa, and Gradiſca, and runs into the gulf of Trieſte.

To LISP, *v. a.* [ðliꝑp, Sax.] To ſpeak with too frequent appulſes of the tongue to the teeth, or palate, like children.—Appulſe partial, giving ſome paſſage to breath, is made to the upper teeth, and cauſes a *liſping* ſound, the breath being ſtrained through the teeth. *Holder's Elements of Speech.*—Come, I cannot cog, and ſay thou art this and that, like a many of theſe *liſping* hawthorn-buds, that come like women in men's apparel, and ſmell like Bucklerſbury in ſimpling-time. *Shakeſpeare.*

As yet a child, nor yet a fool to fame;
I *liſp'd* in numbers, for the numbers came. *Pope.*

LISP, *ſ.* The act of liſping.—I overheard her anſwer with a very pretty *liſp*, O Strephon, you are a dangerous creature. *Tatler.*

LIS'PER, *ſ.* One who liſps.

LIS'PING, *ſ.* The act of pronouncing with a liſp; a broken pronunciation.

LISS, a town of Holland: eight miles north of Leyden.

LIS'SA, a fourth fury, ſometimes mentioned by the poets.

LISS'A, a town of Sileſia, in the principality of Breſlaw, on the Weiſtritz. In the year 1757, a battle was fought near this town between the Pruſſians under the command of the king, and the Auſtrians under count Daun, in which the latter were defeated; 6000 Auſtrians were killed, 15,000 made priſoners, and an immenſe artillery taken; ſeven miles weſt-north-weſt of Breſlaw, and twenty-ſeven eaſt of Lignitz. Lat. 51. 7. N. lon. 16. 50. E.

LISS'A, an iſland in the Adriatic, about twenty-four miles in circumference, near the coaſt of Dalmatia, anciently called *Iſſa*, and celebrated for its commerce and its marine. It was in alliance with Rome, and warred with the kings of Illyrium; at the decline of the Roman empire, this iſland ſunk too, and became ſucceſſively dependant on Narenta, Leſina, and Venice. It abounds in mountains, which contain marble, interſected by fertile valleys; vines, olives, mulberries, almonds, and figs, flouriſh; and the mountains are richly furniſhed with odoriferous plants, from which the bees collect an exquiſite kind of honey; but the principal riches of the iſland ariſe from its fiſhery, eſpecially of ſardines; it contains two towns, and ſeveral villages. Lat. 43. 25. N. lon. 16. 18. E.

LIS'SA, or LECHNO, a town of the duchy of Warſaw. Liſſa was formerly only a village; but, when great numbers of proteſtants from Sileſia, Bohemia, Moravia, and Auſtria, removed to this place, and obtained the free exerciſe of their religion, it conſiderably increaſed, and was raiſed to a town. The inhabitants carry on a good trade. Here is a Lutheran church, a ſeminary, and a Calviniſt church. In the year 1656, the inhabitants quitted the town for fear of the Poliſh troops, who plundered it and laid it in aſhes. In 1707, it was alſo laid waſte by the Ruſſians; but afterwards it was rebuilt with great improvement: forty-four miles ſouth-ſouth-weſt of Poſen, and fifty-five weſt of Kaliſch. Lat. 51. 55. N. lon. 16. 35. E.

LISSABAT'TA, a town on the north-coaſt of the iſland of Ceram, inhabited by a mixture of different people, ſufficiently troubleſome to the Dutch. Lat. 2. 55. S. lon. 128. 44. E.

LIS'SAN GHA'IB, [Arab. the language of myſtery.] An epithet given by many Mahometans to the works of the poet Shemſeddin, commonly known by the name of Hafez.

LISSAN'THE, *ſ.* [ſo named by Mr. R. Brown, from λισσος, ſmooth, and ανθη, a flower; becauſe of the naked and beardleſs limb of the corolla.] In botany, a genus of the claſs pentandria, order monogynia, natural order epacrideæ, *Brown.* The generic characters are—Calyx: perianth inferior, of five equal, concave, permanent leaves, ſometimes accompanied by two rather ſmaller ones at the baſe. Corolla of one petal, funnel-ſhaped; tube nearly cylindrical, generally hairy within; limb in five lanceolate, equal, ſpreading, beardleſs ſegments. Nectary a five-lobed gland, at the baſe of the germen. Stamina: filaments five, ſhort, within the tube; anthers roundiſh, of two cells, burſting lengthwiſe. Piſtillum: germen ſuperior, globular, with five ſlight angles; ſtyle pentagonal, rigid, ſhorter than the tube; ſtigma obtuſe. Pericarpium: drupe ſucculent; nut hard, of five cells.—*Eſſential Character.* Calyx of five or ſeven leaves; corolla funnel-ſhaped; limb beardleſs; ſtamens inſerted into the tube, very ſhort; drupe ſucculent; nut hard, of five cells. Mr. Brown defines ſix ſpecies of this genus, ſeparated by him from the Styphelia of preceding botaniſts. See his Prodr. N. Holl. i. 540.

I. Calyx of only five leaves; cluſters axillary, of few flowers, their partial ſtalks furniſhed with a pair of bracteas at the baſe; tube of the corolla hairy within. 1. Liſſanthe ſapida: cluſters of two or three flowers, recurved; leaves oblong-linear, ſharp-pointed, revolute; white and ſtriated beneath. Gathered by Mr. Brown near Port Jackſon, New South Wales. By the name, we preſume the fruit is eatable.

2. Liſſanthe ſubulata: cluſters of four or five flowers, erect; leaves half an inch long, linear-awl-ſhaped; branches ſmooth; fruit with ten furrows. Gathered by Mr. Brown in the ſame country.

3. Liſſanthe ſtrigoſa: cluſters collected towards the ends of the branches, erect, of few flowers; leaves linear-awl-ſhaped; branches downy; drupe with five ſlight angles. Sent from Port Jackſon by Dr. White in 1793. Found there alſo, as well as in Van Diemen's Land, by Mr. Brown.

II. Calyx of ſeven leaves; corolla ſhort, its tube and mouth without hairs; ſpikes axillary, of few flowers. 4. Liſſanthe montana: leaves oblong-linear, obtuſe, pointleſs; glaucous beneath. Gathered by Mr. Brown at Van Diemen's Land.

III. Calyx of ſeven leaves; corolla elongated, its mouth beſet with deflexed hairs within the tube; flowers axillary, ſolitary. 5. Liſſanthe daphnoides: leaves elliptic-lanceolate, ſlightly concave, with a blunt callous point; their edges naked, roughiſh. Sent from Port Jackſon by Dr. White, in 1792. Mr. Brown found it both in the tropical part of New Holland, and in Van Diemen's Land. The ſtem is much branched, leafy, and finely downy.

Flowers numerous, axillary, ſolitary, on ſhort hairy ſtalks. Corolla much like that of L. ſtrigoſa, but with rather longer and narrower ſegments, whoſe upper ſide appears, from the dried plant, to be finely downy from their baſe to the middle. Mr. Brown however, who ſaw it alive, deſcribes this part as entirely ſmooth. The aſpect of this pretty ſpecies is much like that of ſome of the ſmaller kinds of Daphne.

6. Liſſanthe ciliata: leaves elliptic-lanceolate, flat, with a pellucid point; their edges finely ſerrated and fringed. Limb of the corolla roughiſh. Gathered by Mr. Brown in Van Diemen's Land.

LIS'SAR, a town of Perſia, in the province of Ghilan: ſixty miles north-weſt of Reſhd.

LIS'SER, a river of Germany, which runs into the Bigge.

LIS'SER, a river of France. See LESER, p. 528.

LISS'ERSTORFF, a town of Auſtria: three miles north of Stokerau.

LIS'SON, in ancient geography, a river of Sicily.

LISSOU'EN, a town of Pruſſia, in Natangen: fifteen miles ſouth of Marggrabowa.

LIS'SUS, in ancient geography, the laſt town of Illyricum, towards Macedonia, ſituated on the Drilo. It had a capacious port, the work of Dionyſius the Tyrant, who led the colony thither, enlarged and walled it round. *Diodorus Siculus.* Now called ALESSIO, which ſee, vol. i.

LIS'SUS, a river of Thrace, falling into the Ægean ſea between Thaſos and Samothracia. It was dried up by the army of Xerxes, when he invaded Greece. *Strabo.*

LIST, *ſ.* [*liſte*, Fr.] A roll; a catalogue.—Some ſay the loadſtone is poiſon, and therefore in the *liſts* of poiſons we find it in many authors. *Brown.*

Bring next the royal *liſt* of Stuarts forth,
Undaunted minds, that rul'd the rugged north. *Prior.*

Civil LIST. The money allotted for the ſupport of the king's houſehold, and for defraying certain neceſſary charges of the government. See the article ENGLAND, vol. vi. p. 805.

LIST, *ſ.* [*lice*, Fr.] Incloſed ground in which tilts are run, and combats fought:

Paris thy ſon, and Sparta's king, advance,
In meaſur'd *liſts* to toſs the weighty lance;
And who his rival ſhall in arms ſubdue,
His be the dame, and his the treaſure too. *Pope.*

Bound; limit:

The ocean, overpeering of his *liſt*,
Eats not the flats with more impetuous haſte,
Than young Laertes in a riotous head
O'er-bears your officers. *Shakeſpeare's Hamlet.*

She within *liſts* my ranging mind hath brought,
That now beyond myſelf I will not go. *Davies.*

A ſtrip of cloth.—A linen ſtock on one leg; and a kerſey boot-hoſe on the other, gartered with a red and blue *liſt*. *Shakeſpeare.*

A *liſt* the cobler's temples ties,
To keep the hair out of his eyes. *Swift.*

A border.—They thought it better to let them ſtand as a *liſt*, or marginal border, unto the Old Teſtament. *Hooker.* [From lyſtan, Sax.] Deſire; willingneſs; choice.—Nothing of paſſion or peeviſhneſs, or *liſt* to contradict, ſhall have any bias on my judgment. *King Charles.*

Alas, ſhe has no ſpeech!
—Too much;
I find it ſtill when I have *liſt* to ſleep. *Shakeſpeare.*

He ſaw falſe Reynard where he lay full low;
I need not ſwear he had no *liſt* to crow. *Dryden.*

To LIST, *v. n.* [lyſtan, Sax.] To chooſe; to deſire; to be diſpoſed; to incline.—They imagine, that laws which permit them not to do as they would will endure them to ſpeak as they *liſt*. *Hooker.*

Kings, lords of times and of occaſions, may
Take their advantage when and how they *liſt*. *Daniel.*

LIST, *pret. perſonal* [from the *v. n.*] Pleaſed.—*Her liſt* in ſtryfull termes with him to balke. *Spenſer.*

And when *him liſt* the raſkall routes appall,
Men into ſtones therewith he could tranſmew,
And ſtones to duſt, and duſt to nought at all;
And when *him liſt* the prouder lookes ſubdew,
He would them gazing blind, or turne to other hew. *Sp.*

To LIST, *v. a.* [from *liſt*, a roll.] To enliſt; to enrol or regiſter.—For a man to give his name to Chriſtianity in thoſe days, was to *liſt* himſelf a martyr, and to bid farewel not only to the pleaſures, but alſo to the hopes, of this life. *South.*

They *liſt* with women each degen'rate name
Who dares not hazard life for future fame. *Dryden.*

To retain and enrol ſoldiers; to enliſt.—The king who raiſed this wall appointed a million of ſoldiers, who were *liſted* and paid for the defence of it againſt the Tartars. *Temple.*

Two hundred horſe he ſhall command;
Though few, a warlike and well-choſen band;
Theſe in my name are *liſted*. *Dryden.*

[From *liſt* incloſed ground.] To incloſe for combats:

How dares your pride preſume againſt my aws,
As in a *liſted* field to fight your cauſe?
Unaſk'd the royal grant. *Dryden's Knight's Tale.*

[From *liſt*, a ſhred or border.] To ſew together, in ſuch ſort as to make a particoloured ſhow.—Some may wonder at ſuch an accumulation of benefits, like a kind of embroidering or *liſting* of one favour upon another. *Wotton's Life of Bucking.*—[Contracted from *liſten.*] To hearken to; to liſten; to attend:

Then weigh, what loſs your honour may ſuſtain,
If with too credent ear you *liſt* his ſongs;
Or loſe your heart, or your chaſte treaſure open
To his unmaſter'd importunity. *Shakeſp. Hamlet.*

LIS'TED, *adj.* Striped; particoloured in long ſtreaks:

A dewy cloud, and in the cloud a bow
Conſpicuous, with three *liſted* colours gay,
Betok'ning peace from God, and cov'nant new. *Milton.*

LIS'TEL, *ſ.* [from *liſt.*] In architecture, a liſt, a fillet, a narrow flat moulding.

To LIS'TEN, *v. n.* To hearken; to give attention.—When we have occaſion to *liſten*, and give a more particular attention to ſome ſound, the tympanum is drawn to a more than ordinary tenſion. *Holder.*

On the green bank I ſat, and *liſten'd* long;
Nor till her lay was ended could I move,
But wiſh'd to dwell for ever in the grove. *Dryden.*

To LIS'TEN, *v. a.* To hear; to attend. *Obſolete.*—Lady, vouchſafe to *liſten* what I ſay. *Shakeſpeare.*

The wonted roar was up amidſt the woods,
And fill'd the air with barbarous diſſonance;
At which I ceas'd, and *liſten'd* them awhile. *Milton.*

LIS'TENING, *adj.* in the manage, ſteady in motion, attending to the ſpur. *Scott.*

LIS'TENING, *ſ.* The act of hearkening; of attending.

LIS'TENER, or LIST'NER, *ſ.* One that hearkens; a hearkener.—The huſh-word, when ſpoke by any brother in a lodge, was a warning to the reſt to have a care of *liſteners*. *Swift.*—*Liſtners* never hear well of themſelves. *L'Eſtrange.*

LIS'TER (Martin), a phyſician and naturaliſt, was born about 1638, of a Yorkſhire family ſettled in the county of Buckingham. He was educated at St. John's college

college in Cambridge, of which he was made fellow by royal mandate in 1660. Having made choice of the medical profeſſion, he travelled to the continent for improvement, and in 1670 ſettled in York as a practitioner. To his profeſſional employment he added the diligent purſuit of enquiries in natural hiſtory and antiquities, and communicated many papers to the Royal Society, of which body he was elected a fellow. By his various productions, he became well known to the learned in the kingdom; and upon the ſolicitation of his friends, he removed to the metropolis about the year 1683. He was created M. D. by diploma at Oxford in that year, and was elected a fellow of the College of Phyſicians. In 1698 he attended the earl of Portland in his embaſſy to the court of France, on which occaſion he obtained introductions to the moſt eminent men of ſcience at Paris, and viewed all the curioſities of that capital. On his return he publiſhed an account of this journey, among the particulars of which were ſome things of a trifling nature, that gave occaſion to Dr. William King's burleſque imitation of it, entitled, A Journey to London. It was not, indeed, difficult at that time to throw ridicule on a man who had written on ſnails and ſpiders, and beſtowed his attention on the minuteſt parts of natural knowledge. Dr. Liſter was appointed, in 1709, ſecond phyſician in ordinary to queen Anne, which poſt he occupied only a ſhort time. He died in February 1711–12.

The properly-medical writings of this phyſician, are marked with a propenſity to hypotheſis, and an attachment to the ancients, but are not void of valuable obſervations from his own experience. In this claſs may be enumerated his two works on Engliſh medicinal waters, entitled, 1. De Fontibus Medicatis Angliæ, Exercit. nova et prior, 1682; altera, 1684. 2. Exercitationes ſex Medicinales, 1694; republiſhed with additions under the title of Octo Exercitationes Medicinales, 1697; the diſeaſes here treated of are dropſy, diabetes, hydrophobia, lues venerea, ſcurvy, gout, calculus, and ſmall-pox. 3. Diſſertatio de Humoribus, 1709, the work of his old age, full of hypotheſes and refutations of other theoriſts. In general, Liſter is a keen controverſialiſt, and indulges in ſevere remarks on ſome of his contemporaries, eſpecially Sydenham. But his reputation is principally founded on his labours in natural hiſtory and comparative anatomy. Beſides his papers in the Philoſophical Tranſactions, of which near forty appear in the numbers from 25 to 585 incluſive, he publiſhed the following works: 4. Hiſtoriæ Animalium Tres Tractatus; 1678, 4to. 5. Exercitatio Anatomica de Cochleis maxime terreſtribus et Limacibus, 1694, 8vo. 6. Exercitatio Anatomica altera, de Buccinis Fluviatilibus et Marinis, 1695, 8vo. 7. Exercitatio Anatomica tertia Conchyliorum Bivalvium, 1696, 4to. In all theſe works Dr. Liſter has diſplayed great accuracy of obſervation, and indefatigable induſtry in detecting the moſt minute and curious particulars of the animal economy. He alſo publiſhed a corrected and newly-methodiſed edition of Goedart on Inſects, 1685, 8vo. His Journey to Paris, 1698, contains a variety of entertaining matter, and was well received, notwithſtanding the efforts of ridicule. *Biog. Britan.*

LIST'FUL, *adj.* [from *liſt*, *v.* in its ſenſe of *liſten.*] Attentive:

Thereto they both did franckly condiſcend
And to his doome with *liſtfull* cares did both attend. *Sp.*

LIS'TERLAND, a cape on the ſouth coaſt of Norway, twenty miles north-weſt of Lindeſneſs.

LIS'TING, *ſ.* The act of putting on liſt; of enrolling ſoldiers. A kind of border.

LIST'LESS, *adj.* [from *liſt.*] Without inclination; without any determination to one thing more than another.—Intemperance and ſenſuality clog men's ſpirits, make them groſs, *liſtleſs*, and unactive. *Tillotſon.*

A lazy lolling ſort
Of ever-*liſtleſs* loit'rers, that attend
No cauſe, no truſt. *Pope.*

Careleſs; heedleſs: with *of:*

The ſick for air before the portal gaſp,
Or idle in their empty hives remain,
Benumb'd with cold, and *liſtleſs of* their gain. *Dryden.*

LIST'LESSLY, *adv.* Without thought; without attention.—To know this perfectly, watch him at play, and ſee whether he be ſtirring and active, or whether he lazily and *liſtleſly* dreams away his time. *Locke.*

LIST'LESSNESS, *ſ.* Inattention; want of deſire.—It may be the palate of the ſoul is indiſpoſed by *liſtleſneſs* or ſorrow. *Taylor.*

LISTOW'EL, a poſt-town of Ireland, in the county of Kerry and province of Munſter, 131 miles from Dublin, anciently called *Lis-Tuathal*, the Fort of Tuathal, who was exiled in the firſt century, but returned; and his life forms a brilliant era in Iriſh hiſtory. Near this are the ruins of a caſtle, pleaſantly ſituated on the river Feale; it was taken in November 1600, by ſir Charles Wilmot, being then held out for lord Kerry againſt queen Elizabeth. There are three annual fairs.—Five miles beyond Liſtowel are the ruins of a church.

LISTVENNISCH'NA, a town of Ruſſia, in the government of Irkutſk, on the Argun, on the confines of China: 176 miles eaſt-north-eaſt of Nertchinſk. Lat. 51. 44. N. lon. 121. 20. E.

LI'SY SUR OU'RCQ, a town of France, in the department of the Seine and Marne, on the Marne: ſeven miles north-eaſt of Meaux.

LIT, the preterite of *light*; whether to light ſignifies to happen, or to ſet on fire, or to guide with light.—I *lit* my pipe with the paper. *Addiſon's Spectator.*

Believe thyſelf, thy eyes,
That firſt inflam'd, and *lit* me to thy love,
Thoſe ſtars, that ſtill muſt guide me to my joy. *Southerne.*

LIT, a town of Sweden, in Jamtland: ten miles north of Olterſund.

LIT-CHI', *ſ.* in botany. See SAPINDUS edulis.

LI'TA, *ſ.* [ſo named by Schreber, from λιτος, Gr. ſimple, naked, or deſtitute, becauſe the plant conſiſts chiefly of flowers, with a very triſling ſtem, and no leaves, but a few ſmall ſcales.] In botany, a genus of the claſs pentandria, order monogynia, natural order of rotaceæ, (gentianæ, *Juſſ.*) The generic characters are—Calyx: perianthium one-leafed, tubular, erect, coloured, five-cleft, ſharp, permanent. Corolla: one-petalled, ſalver-ſhaped; tube cylindric, very long, enlarged at the baſe and tip; border five-cleft; diviſions ovate, ſpreading. Stamina: filaments none; antheræ five, twin, in the throat of the corolla. Piſtillum: germ oblong; ſtyle filiform, length of the tube; ſtigma headed, truncated. Pericarpium: capſule oblong, one-celled, two-valved. Seeds: numerous, ſaw-duſt-like, affixed to the margins of the valves. This genus is allied to Gentiana, but differs in the corolla, piſtil, and fruit.—*Eſſential Character.* Calyx five-cleft, with two or three ſcales at the baſe; corolla ſalver-ſhaped, with a very long tube, dilated at the baſe and throat, border five-cleft; antheræ twin, inſerted in the throat; capſule one-celled, two-valved; ſeeds numerous.

Species. 1. Lita roſea, or roſe-lita: flowers in pairs; ſegments of the corolla acute. Root tuberous, fibrous, about a foot deep in the ground. Stem knobbed, quadrangular, with two little connate ſcales at each joint, pointed, fleſhy and brittle; as ſoon as it comes out of the ground, it divides into three, four, or five, branches, ſcarcely an inch long, knobbed, ſcaly, two-flowered, ſeldom one-flowered. Corolla roſe-coloured. Theſe flowers are almoſt next the ground, moſt of the ſtem being concealed. The root, which is irregular, and as big as the

the fiſt of a man, white within, and covered with a ruſſet ſkin, is eaten in Guiana, where it grows wild, and differs not greatly from potatoes. It flowers in May.

2. Lita cærulea, or blue lita: flowers in pairs; ſegments of the corolla rounded. The branches of this are more numerous, the calyx is larger, with longer narrower ſegments; the corolla is blue, with a larger aperture to the tube, and the ſegments of the border larger, wider, and rounded. Sometimes theſe are ſix in number, and then the flowers have ſix ſtamens. Native of Guiana; flowering in May.

3. Lita lutea, or yellow lita. See GENTIANA aphylla, vol. viii. p. 332.

LITA'BRUM, in ancient geography, a town of Spain, in Tarraconenſis. Now *Buitraga*, in New Caſtile.

LITA'DA, a town of the iſland of Negropont, in the Grecian Archipelago: forty-eight miles north-weſt of Negropont.

LITA'NA SILVA, in ancient geography, a wood of the Boii, in Gallia Togata, or Ciſpadana, where the Romans, under L Poſthumius Albinus (whoſe head the Boii cut off, and carried in triumph into their moſt ſacred temple), had a great defeat; of twenty-five thouſand ſcarcely ten eſcaping. *Livy.* Holſtenius conjectures, that this happened above the ſprings of the Scultenna, in a part of the Appennine between Cerſinianum and Mutina. Now *Selva di Lugo.*

LIT'ANY, *ſ.* [λιτανεια, Gr. ſupplication.] A form of ſupplicatory prayer.—Supplications, with ſolemnity for the appeaſing of God's wrath, were of the Greek church termed *litanies*, and *rogations* of the Latin. *Hooker.*—Recollect your ſins that you have done that week, and all your lifetime; and recite humbly and devoutly ſome penitential *litanies*. *Taylor.*

Among the early Chriſtians the uſe of litanies was not fixed to any ſtated time, but were only employed as exigencies required. They were obſerved, in imitation of the Ninevites, with ardent ſupplications and faſtings, to avert the threatening judgments of fire, earthquakes, inundations, or hoſtile invaſions. About the year 400, litanies began to be uſed in proceſſions, the people walking barefoot, and repeating them with great devotion; and it is pretended, that by this means ſeveral countries were delivered from great calamities. The days on which theſe were uſed were called *rogation-days*: theſe were appointed by the canons of different councils, till it was decreed by the council of Toledo, that they ſhould be uſed every month throughout the year; and thus by degrees they came to be uſed weekly on Wedneſdays and Fridays, the ancient ſtationary days for faſting. To theſe days the rubric of our church has added Sundays, as being the greateſt days for aſſembling at divine ſervice. Before the laſt review of the Common Prayer, the Litany was a diſtinct ſervice by itſelf, and uſed ſome time after the Morning Prayer was over; at preſent it is made one office with the morning ſervice, being ordered to be read after the Third Collect for Grace, inſtead of the interceſſional prayers in the daily ſervice.

The Litany now uſed in our church is of equal antiquity with the Collects; and the author of both is St. Gregory; the Collects being taken from his Sacramentary, and this Litany formed chiefly out of his, which was itſelf compiled out of ancient Liturgies. *Litany* ſignifies a prayer of the moſt earneſt intreaty, and pathetic ſupplication, that Chriſtians can offer up to Almighty God. In the firſt part of it the miniſter repreſents to our conſideration thoſe evils, whether of ſin or ſuffering, from which we pray to be delivered; during which the people ought to be devoutly attentive to every particular he mentions, and at the end of every ſentence reply, *Good Lord, deliver us*; that is, from thoſe evils expreſſed in the laſt-repeated exhortation, to which that reply is made. In the latter part, the miniſter points out thoſe particular mercies and bleſſings, which we humbly entreated God to pour down upon ourſelves and others; and at every period we are humbly and devoutly to pray, *We beſeech thee to hear us, good Lord.* And, although we are to remain ſilent while the miniſter is reading his part, we muſt ſeriouſly accompany him, in heart and mind, through the whole. The reſponſes, which we repeat at the end of every ſentence, ſerve to renew and engage our attention, and keep up our earneſt importunity with God, to grant us what the miniſter in the preceding words recommends as the more immediate object of our prayers. Thus every ſeparate ſentence becomes a diſtinct prayer, and makes up the moſt admirable and pathetic part of our church-ſervice, comprehending a general ſupplication for deliverance from all thoſe evils, both ſpiritual and temporal, which we are too apt to fall into; and to theſe we add our interceſſions with God for bleſſings on the king, the royal family, and all that have authority, whether in church or ſtate, in this our native country;—for all Chriſtians, for all that are grieved or oppreſſed, *afflicted or diſtreſſed, in mind, body, or eſtate*, whether they be known or unknown to us, and whether they be our friends or our enemies. *Cookſon's Common Prayer*, p. 39. note *u*.

LITA'O, a town on the north-weſt coaſt of the iſland of Timor. Lat. 9. 2. S. lon. 124. 42. E.

LITA'TION, *ſ.* [from *lito*, Lat. to ſacrifice.] The act of ſacrificing. *Not uſed. Bailey.*

LIT'CHFIELD, a populous and hilly county of North America, in the ſtate of Connecticut, bounded north by Maſſachuſetts, ſouth by Newhaven and Fairfield counties, eaſt by Hartford, and weſt by New York. It is divided into twenty townſhips, containing 41,214 inhabitants. Although the face of the country is generally mountainous, the ſoil is fertile, yielding large crops of wheat and Indian corn, and affording fine paſture. The inhabitants are almoſt univerſally farmers, and wholly detached from maritime commerce.

LIT'CHFIELD, the chief and poſt-town of the above county, ſeated on an elevated plain, expoſed to the cold winds of winter, but enjoying a large portion of the refreſhing breezes of ſummer. Its ſituation is handſome; and it contains a court-houſe, a meeting-houſe, and 4285 inhabitants: thirty-two miles weſt of Hartford. Lat. 41. 46. N. lon. 73. 37. W. On ſeveral ſmall ſtreams, ſome of which fall into Great Pond, a beautiful ſheet of water, are three iron-works, an oil-mill, and a number of ſaw and griſt mills.

LIT'CHFIELD, a townſhip in Herkemer county, New York, taken from German Flats, incorporated in 1796, and containing 1976 inhabitants.—A townſhip in Lincoln county, Maine, forty-five miles from Hallowell; containing 1044 inhabitants.—Alſo, a townſhip in Hillſborough county, New Hampſhire, ſituated on the eaſt ſide of Merrimack river, about fifty-four miles weſt of Portſmouth; ſettled in 1749, and containing 372 inhabitants.

LIT'CHFIELD, in England. See LICHFIELD, p. 617.

LITE, *adj.* [the old word for] Little.—From this exploit he ſpar'd not great nor *lite*. *Fairfax.*

LI'TERAL, *adj.* [from *litera*, Latin.] According to the primitive meaning; not figurative.—Through all the writings of the ancient fathers, we ſee that the words which were, do continue; the only difference is, that, whereas before they had a *literal*, they now have a metaphorical uſe, and are as ſo many notes of remembrance unto us, that what they did ſignify in the letter is accompliſhed in the truth. *Hooker.*—A foundation, being primarily of uſe in architecture, hath no other *literal* notation but what belongs to it in relation to an houſe, or other building; nor figurative, but what is founded in that, and deduced from thence. *Hammond.*—Following the letter, or exact words.—The fitteſt for public audience are ſuch as, following a middle courſe between the rigour of *literal* tranſlations and the liberty of paraphraſts, do with greater ſhortneſs and plainneſs deliver the meaning. *Hooker.*—Conſiſting of letters: as, The *literal* notation of numbers was known to Europeans before the ciphers.

LIT'ERAL, *ſ.* Primitive or literal meaning.—How dangerous it is in ſenſible things to uſe metaphorical expreſſions unto the people, and what abſurd conceits they will ſwallow in their *literals*, an example we have in our profeſſion. *Brown.*

LITERAL'ITY, *ſ.* Original meaning.—Not attaining the true deuteroſcopy and ſecond intention of the words, they are fain to omit their ſuperconſequences, coherences, figures, or tropologies, and are not ſometimes perſuaded beyond their *literalities*. *Brown's Vulgar Errors.*

LIT'ERALLY, *adv.* According to the primitive import of words; not figuratively.—That a man and his wife are one fleſh, I can comprehend; yet, *literally* taken, it is a thing impoſſible. *Swift.*—With cloſe adherence to words; word by word.—So wild and ungovernable a poet cannot be tranſlated *literally*; his genius is too ſtrong to bear a chain. *Dryden.*

LIT'ERARY, *adj.* Of letters.—The former of theſe appears with too much diſtinction in the *literary* as well as faſhionable world, to make it neceſſary I ſhould enlarge upon his ſubject. *Maſon's Life of Gray.*

LIT'ERARY PROP'ERTY. See the article LITERATURE.

LIT'ERATE, *adj.* [from *litera*, Lat. a letter.] Learned, ſkilled in letters.

LITERA'TI, *ſ.* [Italian.] The learned.—I ſhall conſult ſome *literati* on the project ſent me for the diſcovery of the longitude. *Spectator.*—Among the Chineſe, ſuch as are able to read and write their own language; for it does not appear that they ſtudy any other; nor indeed can it be expected, when the extreme difficulty of acquiring a competent knowledge of that one language is conſidered. See the article LANGUAGE, p. 173.

The literati form the moſt diſtinguiſhed part of the Chineſe nation. For more than 2000 years, they have conſtantly held the chief rank in the empire; and it is always from among them that maſters are choſen for the education of youth; miniſters, for the adminiſtration of public affairs; and magiſtrates, for judging the people; in a word, the literati are, in ſome meaſure, the ſoul of the Chineſe nation, ſince it is from them that it receives its moral exiſtence, and its civil and political being. The literati muſt therefore be very numerous in a ſtate, where they enjoy every diſtinction attached to pre-eminence, and where every thing favours their increaſe. Since learning is the only means that conducts to civil honours, it is neceſſary that thoſe who aſpire to them ſhould cultivate letters; and they muſt make it appear, that they have cultivated them with ſucceſs, before they can obtain any civil employment. To guard againſt impoſition, government has fixed for every city of the firſt, ſecond, and third, claſs, the number of literati who can be legally promoted every year to the firſt degree of literature, which is that of *ſieou-tſai*, and which anſwers to bachelor of arts in our univerſities. Every ſieou-tſai is accounted noble, and is never enrolled among the taxables. Of theſe there are reckoned to be in China 24,701 individuals, who are annually introduced to the firſt degree of literati; and the number of thoſe admitted before may be ſuppoſed to be at leaſt twenty times as great. According to this eſtimate there are always in China 494,020 literati, who have taken degrees, and who are, conſequently, not included among the taxables. From among the literati are choſen all the mandarins except the mandarins of arms: theſe laſt are indeed very numerous; but then it is to be obſerved, that they have no ſhare in the government, which in every department is entirely confided to the literati, or mandarins of letters. See the article CHINA, vol. iv. p. 446, 7.

LIT'ERATURE, *ſ.* [*literatura*, Lat.] Learning; ſkill in letters.—This kingdom hath been famous for good *literature*; and, if preferment attend deſervers, there will not want ſupplies. *Bacon.*

To trace the gradations of excellence, to behold one period adding its own diſcoveries to the experience of another, and to obſerve the progreſs of each ſucceſſive age in wiſdom and ſcience, is a diſquiſition in the higheſt degree uſeful and entertaining to a liberal mind. Even a partial inveſtigation into the progreſs of improvement, is, to a man of buſineſs, an agreeable relaxation; to him who is not confined for ſubſiſtence to any particular profeſſion, it is a pleaſant, if not a neceſſary, ſource of employment; to the philoſopher it affords matter of wonder and admiration, and lays a foundation for the moſt intereſting diſcoveries.

An enquiry into the riſe and progreſs of literature, with which the arts and ſciences are intimately connected, is perhaps the moſt intereſting that can be offered to our notice. We can contemplate man at firſt rude and unreſtrained; afterwards obliged by neceſſity to ſubmit to laws, and cultivate the arts of ſocial life, while his advancement in ſcience and the liberal arts kept pace with his proficiency in virtue and cultivation. This, we know, has ever been the caſe in the original formation of ſtates and empires. It is alſo gratifying to obſerve, from what ſmall beginnings, and by what ſlow gradations, the moſt poliſhed nations have ariſen from the greateſt depths of ignorance and barbarity, to the utmoſt heights of learning and politeneſs. There are revolutions in the literary as well as in the political world, an enquiry into which would afford equal pleaſure to the curious or inquiſitive obſerver. The decay of learning and knowledge is generally rapid in proportion to its advancement: hence nations ſucceed each other in literary eminence, as well as in political ſuperiority.

However neceſſary, uſeful, and entertaining, the diſquiſition may be, it has been very little touched upon, for a very obvious reaſon. The nature of the undertaking appears to preſent innumerable obſtacles to its ſucceſs. The difficulty of obtaining materials for a work of this kind, and of arranging them when obtained, deters the more wealthy writers; while poor ones have the additional diſadvantages to combat—of want of time, and want of money. "It is a painful conſideration," ſays ſir William Jones, "that the profeſſion of literature, by far the moſt laborious of any, leads to no real benefit or true glory whatſoever. Poetry, ſcience, letters, when they are not made the ſole buſineſs of life, may become its ornaments in proſperity; and its moſt pleaſing conſolation in a change of fortune; but if a man addicts himſelf entirely to learning, and hopes by that either to raiſe a family, or to acquire what ſo many wiſh for and ſo few ever obtain—an honourable retirement in his declining age, he will find, when it is too late, that he has miſtaken his path; that other labours, other ſtudies, are neceſſary; and that, unleſs he can aſſert his own independence in active life, it will avail him little to be favoured by the learned, eſteemed by the eminent, or recommended even by kings." A diſquiſition of this kind reſembles an extenſive territory, in which are ſcattered in profuſion all the beauties of nature, whoſe extent deters the dull and indolent from entering it; while the pleaſant objects which it preſents to view, fully repay the active and perſevering for their labour.

The delights and advantages reſulting from literary acquiſitions are univerſally acknowledged. There are few ſo ignorant as to be unable to extol them, and few ſo uncultivated as not to wiſh for their enjoyment. They are the general topics of diſcourſe, the general ſubjects of declamation. This general confeſſion of the utility of literature, renders education more general; education promotes the diffuſion of knowledge and learning; which contributes to general happineſs, by affording a ſource of uſeful occupation and rational entertainment. It is delightful to obſerve, in the ocean of time, ſome few who have been able to elevate themſelves above the undiſtinguiſhed maſs with which it is covered, without poſſeſſing any previous advantages ſuperior to thoſe of their fellow-combatants; and, when they ſank, have left a mark which not even ſucceeding ſtorms could eradicate. Thoſe were the men who have ſoared above the common race of mortals, and to whoſe elevation we look up with awe and admiration.

But,

But, unleſs we have an acquaintance with the hiſtorical events of the age in which any great writer flouriſhed, and a knowledge of what peculiar advantages he enjoyed, or of what peculiar diſadvantages he laboured under, we are deſtitute of a great additional ſource of pleaſure. For inſtance, there are few ſo totally devoid of taſte, as to be unable to reliſh the great and natural beauties of Homer, although they be ignorant of his life, and of the circumſtances of the times in which he lived. But how greatly muſt their ſurpriſe, pleaſure, and admiration, increaſe, when they are informed that the author of poems, which evince a moſt luxuriant imagination combined with the greateſt knowledge of nature, and moſt extenſive acquaintance with the manners of mankind, lived at a barbarous period, when his native country, Greece, was torn by internal commotions; and that he was a wanderer, and blind during a great part of his life.

The literature of the greateſt importance is that of the Greeks and Romans, ſince to them alone we are indebted for our knowledge, however little, concerning the preceding ages; with the exception of the Jewiſh writers, who have related no more concerning the hiſtory of other countries than was abſolutely neceſſary from its connection with that of their own. The Grecian age commenced about the time of the Peloponneſian war, (a period no leſs celebrated for its warriors than for its writers and artiſts,) and terminated in the time of Alexander the Great. The Roman age includes the reigns of Julius and Auguſtus Cæſars; and, like the former age, was diſtinguiſhed alſo by its generals and conquerors. In each of theſe periods, the poet and hiſtorian concurred in rendering immortal the victorious general, or the object of popular approbation. The hiſtorian exerted all his faculties, and employed all the arts of eloquence and high-colouring, in order to magnify the proweſs, or exaggerate the achievements, of him whoſe actions he admired, or whoſe favour he wiſhed to conciliate; while the poet, actuated by the ſame motives, rendered harmony of numbers and poetical licenſe ſubſervient to the ſame deſign. The greatneſs of their ſubjects, their deſire of ſuperiority over each other, and perhaps the peculiar advantages of the periods at which they flouriſhed, were moſt probably the chief cauſe of the animation which thoſe writers in general poſſeſſed who flouriſhed together at the above-mentioned ages; and which renders their peruſal ſuch an infinite ſource of pleaſure to every one who poſſeſſes a refined taſte and cultivated imagination. On this account, all who have any pretenſions to the characters of lovers of literature, are ſuppoſed to have at leaſt a competent knowledge of the productions of the beſt orators, poets, hiſtorians, philoſophers, &c. It is neceſſary, for inſtance, not to be totally ignorant of the works, beauties, or at leaſt ſubjects, of Herodotus, Thucydides, and Xenophon, among the hiſtorians; Socrates, Plato, and Ariſtotle, among the philoſophers; Demoſthenes, Æſchines, and Iſocrates, among the orators; Pindar, Æſchylus, Euripides, Sophocles, Ariſtophanes, Menander, Anacreon, and Theocritus, among the poets; all of whom lived during the Grecian age. We have here omitted many others, of whom we ought to know ſomething, ſuch as Homer and Heſiod, becauſe they did not flouriſh at the ſame period with thoſe whoſe names we have mentioned. A knowledge, however little, of the following writers, who flouriſhed in the Roman Auguſtan age, is alſo neceſſary to thoſe who would be eſteemed men of learning: viz. Catullus, Lucretius, Terence, Virgil, Horace, Tibullus, Propertius, Ovid, Phædrus, Cæſar, Cicero, Livy, Salluſt, Varro, and Vitruvius.

This is not the place to give a critical analyſis of the excellencies and defects of authors, ſince that is already done, as far as the alphabet has extended, under each name reſpectively; nor has the ſtate of literature in various nations been neglected in the geographical articles, as CHINA, ENGLAND, FRANCE, &c. &c. beſides the great maſs of information contained in our article LANGUAGE, in the preſent volume. Our remarks, therefore, in this place will be of a different caſt, as relating merely to arrangement; for the ſources of knowledge are become ſo copious, and learning has aſſumed ſuch a variety of ſhapes, that it requires a great portion of our time to *learn* even what it is that *may be learned*, and whence we are to obtain the details of each particular branch of univerſal ſcience. This circumſtance has produced a new ſpecies of hiſtorical writing, called *bibliography*; and the works on that ſubject only would fill a conſiderable library. Moſt of them, however, gave rather the hiſtory of the learned than the hiſtory of learning. In ſome of them, indeed, the authors were arranged in a chronological order; but ſtill it was the hiſtory of men of letters rather than that of literature; and the gradual progreſs of learning was ſeldom traced. Some few exceptions are to be found, with reſpect to particular nations; of which the Letteratura Italiana of Tiraboſchi is an admirable inſtance; and J. G. Meuſel's Leitfaden zur Geſchichte der Gelehrſamkeit, &c. is another. The plan of this latter excellent work (which we are ſurpriſed has not been tranſlated) we ſhall follow in our preſent enquiry. He divides the hiſtory of literature into ſix ſections, or periods.

I. *From Moſes to Alexander the Great; a period of* 1198 *years.*

Before this period, all learning was oral, tranſmitted from father to ſon in tales and ſongs; and ſyſtematical knowledge had yet no exiſtence. Chaldæa, Egypt, and Paleſtine, were the firſt ſeats of learning, which was chiefly in the hands of the prieſts. In the courſe of this period, however, the ſciences made a conſiderable progreſs, not only in Aſia, but in Africa and Europe. Among the promoters of learning, M. Meuſel places Samuel, David, and Solomon, in Judæa; Piſiſtratus and Pericles, at Athens; Crœſus, king of Lydia; and the Roman king, Numa Pompilius. The perſons whoſe example and writings had the greateſt influence on the ſtate of letters, were, Moſes, Thoth, Zoroaſter, Thales, and Pythagoras. The ſeats of learning were in Egypt, at Memphis, Heliopolis, and Thebes. At Babylon, an aſtronomical ſchool, and a literary ſociety, were formed by Belus. Samuel ſeems to have had a ſchool of poets and muſicians in Paleſtine; and, from that age, various academies were founded in the Jewiſh nation. The Greeks had ſchools at Athens, Smyrna, Phocæa, and Chios. Pythagoras founded ſchools in Italy. The moſt ancient library, which hiſtory mentions, is that of Oſymanduas, at Memphis. Piſiſtratus was the firſt who formed a public library at Athens; but the moſt renowned was that of Polycrates, in the iſle of Samos.

With reſpect to philological learning; the Hebrew language, firſt cultivated by Moſes and brought to its golden age under David and Solomon, gave place after the Babyloniſh captivity to the Chaldee; which, as well as the Aramæan or Syriac, is only a different dialect. To the ſame general claſs belong the Phœnician, the Arabic, and the Ethiopic. The language of Egypt was twofold; that of Upper Egypt, or the Sahidic, and that of Lower Egypt, or the Coptic. The Greek, which probably ſprang from the Phœnician, was ſo enriched and refined by Orpheus, Homer, and other writers, as to become the firſt of tongues, and the foundation of the Latin and moſt other European languages. The learned throughout this period all wrote in their mother-tongue, according to the beſt ſpeakers. Grammar and criticiſm were yet unknown. See the article LANGUAGE.

The firſt hiſtories were poetical tales, often blended with fable, and clothed in allegory. Moſes is reckoned the moſt ancient writer whoſe works are now extant. He had a ſucceſſion of Hebrew writers down to the captivity. The Egyptian hiſtory was compoſed in hieroglyphics, only known to the prieſts. The Phœnicians had early hiſtorians, as appears from Herodotus; but only the name of Sanchoniathon is known to us. The Greek hiſtorians, during this period, were the moſt notable; Herodotus, Thucydides, Xenophon, and Cteſias. The Olympic games ſerved to fix their chronology. The Periplus

of

of Hanno belongs alſo to this period. It was written in Punic, but was tranſlated into Greek, in the author's life-time. The firſt mathematical knowledge was limited to aſtronomy, geometry, and arithmetic. Aſtronomy was firſt cultivated by the Chaldæans. Egypt was the birth-place of geometry. Naval architecture, if not invented, was improved, by the Phœnicians. From Egypt and Chaldæa, the Greeks borrowed the firſt principles of thoſe ſciences which were cultivated by Thales, Pythagoras, Anaximander, Anaxagoras, Euphorbus, Plato, and his ſcholars. What we now call philoſophy was, in early times, among all nations, an abſurd mixture of a few juſt obſervations with numerous errors, groundleſs ſuppoſitions, and falſe concluſions. To call the wiſdom of the Hebrews *philoſophy* is an abuſe of words; and that of the Chaldees, Perſians, and other eaſtern nations, was no more deſerving of the name. Of the philoſophy of the Indian Gymnoſophiſts and Brachmans, we know too little to form a competent idea of it. The boaſted high philoſophy of the Chineſe has of late been reaſonably doubted. It is therefore among the Greeks that we are to look for philoſophical knowlege, in this period. The firſt philoſophy in Greece was a wild mythology, ſometimes religious, ſometimes moral, and ſometimes political. Such it is to be found in the Orphics, and in Homer and Heſiod. The Gnomiſts followed; commonly called the Seven Wiſe Men of Greece. Thales, the founder of the Ionic philoſophy, was born 600 years before Chriſt. His ſcholars and ſucceſſors were Anaximander, Anaximenes, Pherecides, Hermotimus, Diogenes of Apollonia, and Archelaus of Athens. The founder of the Italic ſchool was Pythagoras: and his moſt renowned followers were Empedocles, Alcmaon, Timæus, Ocellus Lucanus, Epicharmus, Theages, Archytas, Philolaus, and Eudoxus. The Eleatic ſchool, ſo called from Elea in Magna Græcia, was founded by Xenophanes; contemporary with Pythagoras. His principal followers were Parmenides, Meliſſus, and Zeno. Heraclitus, although a diſciple of the ſame ſchool, was in ſome degree the founder of a new ſect; and his contemporary Leucippus was the father of the atomic philoſophy, improved by Democritus. His moſt celebrated ſcholars were Protagoras of Abdera, Diagoras of Melos, and Anaxarchus.

The Greek philoſophy was now about to undergo a great revolution. *De cælo deſcendit γνωθι σεαυτον*; and Socrates was the mortal commiſſioned to make it known on earth. It is true that he himſelf wrote nothing; but his diſciples were careful to collect all his ſayings, and to tranſmit them to poſterity in the moſt enchanting dreſs. Theſe were Xenophon and Plato. Æſchines, Cebes, and Crito, were alſo Socratiſts. After the death of Socrates, his followers were divided into five different ſchools. 1. The Cyrenaic, founded by Ariſtippus. 2. The Eretrian, by Phædo. 3. The Megaric, by Euclid. 4. The Cynic, by Antiſthenes. 5. The Platonic, by Plato; called after his death the Academic School.

Moſes is the oldeſt poet, as well as the moſt ancient hiſtorian. Beſides ſome hiſtorical fragments which he quotes, we have three odes or ſongs of his own compoſition. The reigns of David and Solomon were the poetic age of the Jews. They had, however, neither drama nor epopœa, unleſs the book of Job may come under the latter denomination.

The poetry of Greece is ſo old, that it is loſt in remote antiquity. Orpheus, Muſæus, and Linus, were antecedent to Homer; but *he* is the true father of genuine poetry and taſte, the poet of all ages and nations. The works of Homer were to the Greeks a book of elements, which was put into the hands of youth, and whence they drew knowledge of every kind. Not only poſterior bards learned their art from this great maſter, but proſe-writers, the hiſtorian, the philoſopher, and the orator, had him continually in view. The ſtatuary and the painter took their ſubjects from him; kings and generals made him their conſtant companion; and Homer was the darling of the world.

Contemporary with, or perhaps a little before Homer, was Heſiod; and after Homer and Heſiod we meet with the names of ſeveral lyric poets, as Archilochus, Alcman, Arion, Terpander, Alcæus, Sappho, Erinna, Steſichorus, Ibycus, Anacreon, Corinna, Laſus, Pindar, and Bacchylides; of all whom, except Anacreon and Pindar, we have only fragments. The principal elegiac Greek poets, during this period, were Mimnermus of Colophon, Theognis of Megara, and Simonides. The dramatiſts were Theſpis, Suſarion, Æſchylus, Sophocles, Euripides, in tragedy; and in comedy, Cratinus, Crates, Eupolis, and Ariſtophanes.

The orators of Greece, during this period, were Solon, Piſiſtratus, Themiſtocles, Alcibiades, Aſpaſia, and Pericles. The oratorical art was greatly improved by Iſocrates, Andocides, Lyſias, Iſæus, Æſchines, Hyperides, Donarchus, and above all by Demoſthenes. The rhetors, Empedocles, Corax, and Tiſias. The ſophiſts, Protagoras, Gorgias, Hippias, Prodicus, Callias, Polus, and Thraſymachus.

From obvious cauſes, prieſts were generally the firſt phyſicians. The Egyptians are ſuppoſed to have been ſkilled in anatomy. They certainly knew the art of embalming to great perfection. Solomon was acquainted with the virtues of every herb that grows. Iſaiah alſo ſeems to have had ſome experience in the healing art. In Greece, the ſcience was early cultivated, and greatly eſteemed. Its father was ſaid to be Eſculapius; whoſe principal followers were Chiron, Alcmaon of Crotona, Empedocles, Iccus of Tarentum, Prodicus, and the divine Hippocrates, whoſe ſons Theſſalus and Draco ſucceeded to his medical knowledge. Beſides theſe, we find the names of Philiſtion, Callimachus, Petronius, Eudoxus, Chryſippus, and Praxagoras.

No written laws exiſted prior to thoſe of Moſes. Other legiſlators, ſince him, were Dejoces of Media, Minos of Crete, Phoronæus the Argolian, Pittacus of Leſbia, Cecrops, Draco, and Solon, of Athens, Lycurgus of Sparta; among the Perſians, Zoroaſter; among the Locrians, Zaleucus; and among the Romans, Numa.

Except the Hebrews, who had a particular religion and divinity under a ſingular national God, the reſt of the world was plunged in polytheiſm blended with obſcenity and ſuperſtition.

II. *From Alexander the Great to the Death of Auguſtus*; 305 *years.*

Learning, during this period, made great progreſs under the Macedonian king Alexander, and under his ſucceſſors; particularly the Ptolemies of Egypt. From Greece, learning was brought to Rome, where the ſciences and fine arts were cultivated with ardour and ſucceſs; until exceſſive luxury, and degrading ſervility, began to deteriorate the public taſte; and at length, after the death of Auguſtus, entirely vitiated it. The principal promoters of learning, during this period, were, Alexander, the three Ptolemies, Eumenes II. king of Pergamus, Julius Cæſar, Mæcenas, and Auguſtus. The individuals whoſe example had the greateſt influence on literature, were, Ariſtotle, Eratoſthenes, Varro, Cicero, and Julius Cæſar.

The Jews had ſchools and ſynagogues at Jeruſalem, Alexandria, Babylon, and other places. The Chaldæans had ſchools at Babylon and Barſippe; the Perſians at Balch and Suſa; the Phœnicians at Tyre and Sidon, and perhaps at Carthage. In Egypt, the Muſæum of Ptolemy Philadelphus was the moſt renowned. In Greece, the Lycæum and the Stoa. At Rome, the more ancient grammar-ſchools were thoſe of Spurius Carvilius and Crates Mallotes; the former contemporary with the firſt, the latter with the ſecond, Punic war. The firſt ſchool of rhetoric was founded by L. Plotius Gallus. Of libraries, that of Alexandria was the richeſt. There was alſo a celebrated one at Suſa, in Perſia. Alſo, the libraries of Piſiſtratus at Athens, and of Clearchus at Heraclea. The firſt public library at Rome was founded by L. Æmilius Paulus; it was enriched by Lucullus from the ſpoils of

Pontus; but the moſt celebrated was that of Auguſtus in the temple of Apollo Palatinus.

Philological learning flouriſhed chiefly at Alexandria. The principal grammarians of this period were Callimachus, Apollonius Rhodius, Aratus, Nicander, Zenodotus, Eratoſthenes, Ariſtophanes of Byzantium, and, the moſt renowned of all, Ariſtarchus. The chief hiſtorians were, in Greek, Polybius, Dionyſius of Halicarnaſſus, Diodorus Siculus; and, in Latin, Julius Cæſar, Hirtius, Salluſt, Cornelius Nepos, and Livy. The chief geographers were Nearchus, Dicæarchus, Symnus, Agatharcides, Eratoſthenes, Pytheas of Marſeilles, Hipparchus of Nice, and Dionyſius Periegetes. The mathematics were cultivated by the Platoniſts; but Euclid was the great maſter of this ſcience. The moſt learned of his ſucceſſors were Apollonius of Perga, Cteſibius, Hero, and Archimedes. Aſtronomers; Ariſtarchus of Samos, Hipparchus of Nice, Geminus of Rhodes, Soſigenes of Alexandria. The Roman mathematicians were Papirius, Scipio Naſica, C. Sulph. Gallus, and P. Nigidius Figulus, the particular friend of Cicero. The moſt ancient tactic writer, (who lived in this period, about 360 years before Chriſt,) was Æneas, ſurnamed Tacticus.

Philoſophy, during this period, was by Ariſtotle carried to a degree of perfection which it had never yet attained. His principal ſcholars and followers in the Peripatetic ſchool were Theophraſtus, Strato, Ariſtoxenus, Dicæarchus, Demetrius Phalereus, Heraclides Ponticus. The founder of the Stoic ſchool was Zeno; whoſe principal followers were Cleanthes, Chryſippus, Dionyſius of Babylon, Panætius of Rhodes, Poſidonius of Apamea. Epicurus was alſo the founder of a philoſophic ſchool. His doctrines were finally illuſtrated by Lucretius in his celebrated poem. The ſyſtem of ſcepticiſm had for its author Pyrrho of Elis, whoſe diſciples were Timon, Æneſidemus, Numenius, Nauſiphanes, and Sextus Empiricus. In Italy, philoſophy made little progreſs before Lucullus; but it was cultivated, and highly cultivated, in all its branches, by Cicero, and by ſeveral of his contemporaries.

Of the fine arts, the firſt treatiſe on poetry was written by Ariſtotle. Horace's Epiſtle to the Piſos may alſo be called poetics. As to poetry itſelf, it was ſtill cultivated, but took a new turn in Greece. The Argonautica of Apollodius Rhodius, Lycophron, the Phænomena of Aratus, the Theriaca and Alexipharmica of Nicander, and the Hymns of Callimachus, are all of this period. Paſtoral poetry was brought to its higheſt perfection by Theocritus, Bion, and Moſchus. At Rome, dramatic poetry made its firſt appearance in this period. Its father was Livius Andronicus; ſucceeded by Nævius, Attius, and Pacuvius; but Plautus and Terence matured it; at leaſt with reſpect to comedy; for Rome had yet produced no tragic poet. In other ſpecies of poeſy, however, the Latins excelled towards the end of this period. Lucretius, Catullus, Tibullus, Propertius, Virgil, Horace, Ovid, are all maſterly writers in their various characters; but this was the golden age of Rome. The firſt formal treatiſe on rhetoric, as well as the firſt art of poetry, we owe to Ariſtotle. Of orators, we meet, in Greece, with the names of Demades, Hyperides, Dinarchus, and Demetrius Phalereus: at Rome, thoſe of Cethegus, Cato, the Scipios, the Gracchi, Hortenſius, Craſſus, and Cæſar; and the maſter of eloquence, both in theory and practice, the immortal Tully. The chief writers on ſtatiſtics, or politics, in this period, are Ariſtotle, Cato, Varro, and Cicero. On phyſics, and natural hiſtory, Ariſtotle, Theophraſtus, Lucretius, Antigonus. The medical ſcience, during this period, was cultivated by the peripatetic ſchool with ſucceſs, particularly by Theophraſtus, the diſciple of Ariſtotle; in Egypt, by Herophilus and Eraſiſtratus; and at Rome, by Aſclepiades.

As to the ſtate of juriſprudence: In the Eaſt, the king's will was a law. In Greece, the Ætolic and Achaic union made laws at the time of their general aſſemblies; but theſe were diſregarded by Ariſtotle, who formed a new ſyſtem of poſitive law, founded on the law of nature. At Rome, the people had from the beginning the legiſlative power, but more in appearance than in reality; as the ſenate, by means of the augurs, obtained whatever they wiſhed. The laws of the twelve tables were brought by the decemvirs from Greece 448 years before Chriſt. Beſides theſe, the Prætorial Edicts, and the Senatus-Conſulta, were conſidered as ſtatute-law. The moſt renowned juriſts were Appius Cl. Cæcus, Cn. Fulvius, the Scævolæ, P. Cincius Alimentus, L. Ælius, Servius Sulpicius Ruſus, C. Trebatius Teſta, and Alfenus Varus.

Theology, during theſe days, was in a diſmal ſtate, even among the Jews; who were divided into three ſects, the Phariſees, the Sadducees, and the Eſſenes. In this period, however, the canon of the Old Teſtament was completed; and the Greek verſion of the Bible called the Septuagint was made at Alexandria, in the reign of Ptol. Philadelphus. The heathen world was divided between idolatry, ſuperſtition, and atheiſm.

M. Meuſel not only marks the ſtate of literature in all its branches, and gives the names of the writers who excelled in each, but he points out the beſt editions of their works, and the moderns who have commented on them, or vindicated their particular doctrines. But for this information, in itſelf extremely uſeful, we muſt refer to the work, as it would lengthen this article beyond all reaſonable bounds, and beſides would occaſion us to repeat or to anticipate what muſt be found under the name of each writer reſpectively.

III. *From the Death of Auguſtus to the Irruption of the Goths into Italy*; 396 *years*.

The general diffuſion of knowledge, during this period, was not conſiderable. Although the princes of the race of Auguſtus were the friends of literature, and were in ſome degree learned themſelves, yet learning did not flouriſh, and taſte perceptibly decayed. Free genius was indulged at the riſk of life. Eloquence was abandoned to pedants, philoſophy to ſophiſts, education to ſlaves; and all were at the nod of tyrants. From Quintilian and Petronius, we learn that the period already felt its debility approaching; and in leſs than two hundred years its want of vigour was apparent. The cauſes of this were, (beſides the trammels placed by deſpotiſm on the freedom of thinking and writing,) long and almoſt continual wars, prevailing luxury and effeminacy, the abuſe of philoſophy or rather of its name, the rage for magic, for divination, and for theatrical ſpectacles; and, above all, ſlight and ſuperficial education. To this end, alſo, the propagation of Chriſtianity in ſome meaſure contributed; not from its own nature, but from the circumſtances then exiſting. The chief promoters of learning, during this period, were the emperors Veſpaſian, Trajan, Hadrian, Marcus Aurelius, Alex. Severus, Conſtantine I. and Julian. The writers whoſe general influence, with reſpect to literature, was the greateſt, were, Seneca, the younger Pliny, Plutarch, Lucian, Origen, and Euſebius.

The Jews had ſtill ſchools in Judea, until the deſtruction of Jeruſalem; particularly at Bethoron, Jerunia, and Tiberias. They had alſo ſeminaries at Nahardea, Sora, and Pumbeditha. In the heathen ſchools of Egypt, the chief of which was at Alexandria, were taught the Greek philoſophy, mathematics, juriſprudence, medicine, magic, and aſtrology. In Greece, the ſchools of Athens ſtill flouriſhed; and at Rome and in Italy, they were firſt endowed from the public treaſury by Veſpaſian. The principal ſchool, after that of Rome, was at Milan. In France, that of Marſeilles was the moſt reputable. The Chriſtians had ſchools at Athens, at Antioch, at Nicomedia, at Nicopolis, and at Alexandria. The principal libraries were that of Alexandria, in a great meaſure deſtroyed by Chriſtian fanaticiſm; that of Conſtantinople, founded by Conſtantius, and ſo greatly enriched by Julian, that at length it contained 120,000 volumes; that of Antioch; that of Rome called Ædes Tiberiana; and the Capitolini,

which, under the younger Gordian, contained 62,000 volumes.

The ſtate of philology, during this period, is thus deſcribed: From the ſchools of the Jews iſſued, piece-meal, the Maſora, the Talmuds, and the Cabbala. The moſt renowned ſcholars of that nation were Akiba, Simeon-ben Jochai, (author of the book called *Sohar*,) and R. Nathan of Babylon. The principal Greek philologiſts were Hephæſtion of Alexandria, whoſe Enchiridion was publiſhed by Paw, in 1726; Julius Pollux, author of the Onomaſticon, publiſhed by Lederlin in 2 vols. folio in 1706; Phrynicus of Bithynia, whoſe Eclogues of Attic nouns and verbs were publiſhed by Paw in 4to. 1739; Ælius Moeris, whoſe Attic Lexicon was publiſhed by Pierſon, together with the Philæterus of Ælius Herodianus, in 8vo. 1759. Heſychius of Alexandria, whoſe excellent Gloſſary was moſt ſplendidly edited by Alberti and Ruhnkenius in 1746—1766; to which a very valuable ſupplement from a manuſcript in the library of St. Mark at Venice was given by Schow in 8vo. 1792; Timæus, whoſe Lexicon of the words peculiar to Plato was edited by Ruhnkenius in 1789; Valerius Harpocration of Alexandria, whoſe Lexicon of the ten Athenian Orators was publiſhed by Gronovius in 1696; and Ammonius, whoſe Greek Synonyma were publiſhed, with Valckenær's notes, by C. F. Ammon, in 8vo. 1787. Among the Latins, we find Ælius Donatus, who lived at Rome about the middle of the 4th century, and was St. Jerome's maſter; and to whom he falſely aſcribed Commentaries on Virgil and Terence; Aſconius Pedianus, who wrote a Commentary on ſome of Cicero's Orations, of which we have a few eſtimable fragments; R. Fannius Palæmon, author of a ſort of grammar; M. Valerius Probus, author of Grammatical Inſtitutes, and of notes on Terence and Virgil; Cenſorinus, whoſe tract De Die Natali, with a perpetual Commentary by Lindenbrog, was edited by Havercamp in 1743; Nonius Marcellus, author of a work De Proprietate ſermonum; and F. M. Theodorus, whoſe work On the Quantity of Syllables was publiſhed by Heuſinger in 1766.

The chief hiſtorians of this period were, in Greek, Flavius Joſephus; Plutarch; Arrian, Appian; Pauſanias; Cl. Ælian; Dio Caſſius, ſome inedited fragments of whom were publiſhed by Morellius in 1798; and Herodian. The Latin hiſtorians are Velleius Paterculus; Valerius Maximus; Tacitus; Suetonius; Q. Curtius; Florus; Juſtin; Aulus Gellius; the ſix writers of Hiſtoriæ Auguſtæ; namely Spartian, Jul. Capitolinus, Lampridius, Vulc. Gallicanus, Treb. Pollio, and Flav. Vopiſcus, who were publiſhed together, with the notes of Caſaubon, Salmaſius, and Gruter, in 2 vol. 8vo. 1671, and re-publiſhed by J. P. Schmidt in 1771; Sext. Aur. Victor, Eutropius, and Ammianus Marcellinus. On Chronology, we have Ptolemy, edited at London in 4to. 1620; and Julius Africanus, of whom ſome fragments have been preſerved by Euſebius. On Geography, we have Strabo, of whom the laſt edition was publiſhed by Siebenkees and Tzſuche in 2 vols. 8vo. 1798; Arrian, whoſe Periplus Ponti Euxini, and Periplus Maris Erythræi, were publiſhed in the firſt vol. of Hudſon's Collection; Ptolemy, edited by Mercator in 1605, and by Bertius in 1619, both editions in folio. Pomponius Mela, laſt edition by Kapp, 1781; C. Plinius Secundus, laſt edition by Frauzius, 10 vols. large 8vo. 1791. To theſe may be added the Itinerarium Antonini Auguſti, publiſhed by Weſſeling in 4to. 1735.

Of the mathematical works of this period, the author mentions the Sphærics of Menelaus; Ptolemy's Μεγαλη συνταξις; Serenus on the Cylinder; Philo on Curve Lines; Demetrius on the ſame ſubject; Nicomachus's Introduction to Arithmetic; of which the Arithmetic of Boetius is only a free tranſlation; thirteen books on Arithmetic by Diophantus of Alexandria, of which only ſix are extant; and a book on Polygons by the ſame author. Both works were publiſhed together in Greek and Latin, with the Commentaries of Bachet, and the Obſervations of Fermat, &c. at Thouloufe in folio, 1670. In the former of theſe works, we diſcover the firſt traces of the analytic method, now denominated algebra. Of the mathematical works of Pappus, ſome fragments have been publiſhed by Wallis, Meibomius, and Condamine. Of Theon of Alexandria, there remain a recenſion of Euclid's Elements, Scholia on Aratus, and a commentary on the Syntaxis of Ptolemy. Theon's daughter, Hypatia, wrote obſervations on Apollonius and Diophantus, and conſtructed aſtronomical tables; but her works are loſt. On tactics, Onoſander, a Platoniſt, wrote a work called Strategicology, which was publiſhed, with a French tranſlation, at Nuremberg, in folio, 1762. The Stratagemata of Frontinus, in four books, were publiſhed by Oudendorp in 8vo. 1779; and again much improved by Wiegman in 1798.

The Stoic philoſophy was cultivated by Athenodorus, Q. Sextius, A. Cornutus, Muſonius Rufus, and Epictetus, whoſe Enchiridion was latterly publiſhed by C. G. Heyne in 8vo. 1776, and, together with Cebes's Table, by Schweighauſer 8vo. 1798. Simplicius, a philoſopher of Alexandria in the 6th century, wrote a Greek commentary on the Enchiridion, publiſhed by Heinſius in 1640; and the work of M. Aurel. Antoninus De Rebus ſuis, publiſhed by Gataker at Cambridge in 1652, and at London by Stanhope in 1707, belongs to the ſame claſs. The chief of the Peripatetic philoſophers, during this period, was Andronicus of Rhodes, Alexander Aphrodiſius, and Themiſtius. Of the ſchool of Pythagoras, were Apollonius Tyaneus, and Philoſtratus. The Platonic philoſophy was cultivated by the Chriſtian writers, and blended with the doctrines of Chriſtianity. Juſtin Martyr, Tatian, Theophilus of Antioch, Clement of Alexandria, Origen, &c. were all Platoniſts; as alſo, among the Heathens, were Galen, Albinus, Theon of Smyrna, Taurus, Numenius, Favorinus, Plutarch, Apuleius, Dio Chryſoſtom, M. Tyrius, and Lucian. Philo Judæus was likewiſe a Platoniſt. The diſciples of Epicurus were, Celſus, (the great adverſary of the Chriſtians,) Diogenes Laertius, and Sextus Empiricus the Pyrrhoniſt; the beſt edition of whoſe works is that of Fabricius, reviſed and improved by Mund, 1796. Towards the end of the ſecond century, a new ſect of Platoniſts aroſe, called the Eclectics; of whom the principal were, Amonius Saccas, Longinus, Herinnius, Origen, Plotinus, Jamblichus, &c. Among the Romans, philoſophy had few cultivators: the chief of them was Seneca.

Poetry, as well as oratory, felt an extraordinary decay during this period. The only Greek poet here noticed by the author is Oppian; whoſe works were publiſhed in Greek and Latin by Schneider in 8vo. 1776; and the Cynogetics, reviſed in four manuſcripts by De Ballu, in 4to. and 8vo. 1786. Here M. Meuſel introduces Lucian as a proſe-poet, and recommends the edition of Reitz, 4 vols. in 4to. 1743; re-publiſhed at Deux-ponts in 10 vols. 8vo. 1793. Achilles Tatius, a Chriſtian biſhop, wrote the firſt romance extant, called Clitophon and Leucippe, about the middle of the third century; and Heliodorus, ſomewhat more than a century afterward, wrote his Theagenes and Chariclea; but the beſt of thoſe erotic writers was Longus, whoſe Daphnis and Chloe was correctly edited by Villoiſon in 1778. The Anthia and Abrocomus of Xenophon of Epheſus was republiſhed, from the old edition of Cochi, at London in 1726; and the Chæreas and Callirhoe of Chariton was publiſhed by D'Arvilius at Amſterdam in 1783. All theſe were Greek poets or romancers. The Latins were, Cæſar Germanicus, who tranſlated, in a free manner, the Phænomena and Prognoſtica of Aratus; Phedrus, the freedman of Auguſtus, who put the fables of Æſop into elegant Iambics; Petronius Arbiter, whoſe Satyricon was laſtly publiſhed by Gottleb, at Leipſic, in 1781; Seneca, whoſe tragedies were publiſhed by Shroeder in 1794; Perſius; Lucan; Val. Flaccus; P. Statius; Martial; Silius Italicus; Juvenal; Apuleius; Olympius Nemeſianus, whoſe Cynogeticum was publiſhed at London in 1699, and at the Hague among the poets Rei Venationis 1728; the eclogues of T. Julius Calpurnius were publiſhed in Wernſdorf's Minor

Latin

Latin Poets; Auſonius; and Claudian, of whom a good Engliſh tranſlation is much wanted. In this ſame period appeared ſome Arabic bards, the chief of whom was Abu Tamar; ſome of whoſe pieces, with other fragments of Aſiatic poetry, have been publiſhed by Schultens, Reiſka, and ſir Wm. Jones. Here Meuſel places Oſſian as an ancient Caledonian poet; whoſe ſuppoſed works, from M'Pherſon's Engliſh verſion, have been tranſlated into moſt European languages; into German by Wittenberg; into Italian verſe by Ceſarotti; into French by Le Tourneur; and into Latin by M'Farlan.

The orators and rhetoricians of this period were—St. Chryſoſtom; Ariſtides; Maximus Tyrius; Philoſtratus the Elder and Younger; Athenæus; Libanius; Julian; Himerius; and Themiſtius Euphrades. Hermogenes, Longinus, Alciphron, Aphthonius, Theon, Ariſtenetus, Demetrius Phalereus, the younger Pliny, Seneca, Quintilian, and Symmachus, were rather rhetoricians than orators. On ſtatiſtics, M. Meuſel gives the names of only three writers; Columella, Æmilianus, and Apicius. In the knowledge of natural hiſtory, the following were moſt renowned; Apollonius Diſcolas of Alexandria, Phlegon, Ælian, and Seneca.

Medical ſcience was ſupported by Galen, Themiſon, Soranus, and Cælius Aurelianus. Rufus of Epheſus and Morinnus wrote on anatomy. On the materia medica, Menecrates, Damocrates, Philo of Tarſus, Pharmacion, Scribonius Largus, Andromachus, who invented the theriaca; and, above all, Dioſcorides. Towards the end of the firſt year of this period, a diviſion took place among the phyſicians, which gave riſe to two ſects, the pneumatiſts, and the eclectics. Of the former, the moſt renowned was Athenæus, a Cilician, who practiſed with celebrity at Rome; of the latter, Agathias of Sparta, and Archegenes of Apamæa, who practiſed at Rome in the reign of Trajan. At the ſame time, Ariſtæus ſeems to have flouriſhed; who was the moſt exact obſerver, after Hippocrates, of all the ancient phyſicians. He wrote in Greek.

The principal juriſts of this period were, Antiſtius Labeo, Sempronius, Proculus, Ateius Capito, Maſurius Sabinus, and Salvius Julianus; which laſt made a collection of the preceding Prætorial Edicts, under the title of *Edictum perpetuum*; firſt publiſhed at Paris in 1597. It became a text-book to future juriſts, who commented on it; of whom the moſt remarkable were, Sextus Pomponius, Æmilius Papinianus, Ulpian, Julius Paulus, and Herennius Modeſtinus. The fragments of theſe may be ſeen in Labitt's Index Legum, Paris, 1557. Under Conſtantine the Great, Gregorius collected the Cæſarean Reſcripts from Hadrian to Diocleſian: this collection is called *Codex Gregorianus*, and was publiſhed in Schultens's Juriſprudentia Ant. Juſtitiæ. It was followed by Codex Hermogenianus; which is a ſupplement to the Codex Gregorianus.

The growing influence of Chriſtianity gave a new turn to theology. The great founder of this religion left no writings himſelf; his pretended letter to Abgarus being an evident forgery. The moſt ancient hiſtorical Chriſtian writers are the four evangeliſts; and the other ſacred writers are—James, Peter, Paul, Jude, and John. Towards the end of the firſt year of this period, their writings had been collected, and were now in the hands of moſt Chriſtians. This collection was called the New Teſtament, or Covenant. On the progreſs of the Chriſtian religion, theſe books, as well as the books of what was then called the Old Teſtament, were tranſlated into various languages, and diffuſed all over the Roman empire. The Chriſtian writers, commonly called the church-fathers, who wrote in this period, were, Juſtin Martyr; Irenæus; Clement of Alexandria; Athenagoras; Origen; Athanaſius; Baſil; Gregory of Nazianzen; and John Chryſoſtom. All theſe were Greeks. The Latin fathers were, Tertullian, Minucius Felix, Cyprian, Arnobius, Lactantius, called the Chriſtian Cicero; Ambroſe; Auguſtine, or Auſtin; Jerome, the moſt learned of all the fathers; and Euſebius of Cæſarea, of whom it is much to be lamented that no complete edition has yet been publiſhed.

IV. *From the Irruption of the barbarous Nations to the Cruſades; i. e. from* 500 *to* 1100.

During this period, the ſciences ſuffered a conſiderable decay. The fine taſte of Greece was no more, the radiance of philoſophy was diminiſhed to a glimmering twilight, hiſtory became a dry unintereſting chronicle, and the dark night of ſuperſtition at length expanded her ſable wing over almoſt every object of human knowledge. The chief cauſes of this degeneracy were the exceſſive luxury among the great, and the general depravity of the people; the many civil wars; the blind zeal of the Chriſtians againſt what was termed Pagan lore; the want of a middle rank of citizens; and, laſtly, the riſe of papal deſpotiſm. Yet, even this period could boaſt of many men of learning, of a certain kind. The tenth century itſelf, ſurnamed the dark and iron age, was not quite ſo obſcure as it has been ſometimes repreſented.

The principal promoters of learning were, Theodoſius II. Leo Iſaurus; Juſtinian I. Charlemagne; Leo IV. Conſtantine IX. the firſt three Othos; Dieterich king of the Oſtrogoths; the Saxon king Alfred; and pope Silveſter II. The writers, whoſe influence was moſt general on the ſtate of ſcience, were Auguſtine, the African biſhop of Hippo; Boethius; Caſſiodorus; Iſidore of Hiſpala; Bede; Alcuinus; Rabanus Maurus; John Erigena; Photius; and Michael Pſellus.

The ſchools of the Jews, during this period, declined much. The ſchools of the Pagans gave place to thoſe of the Chriſtians; and theſe, at laſt, were chiefly confined to monaſteries, where devout ignorance and barbariſm prevailed. Ireland and England were, in ſome degree, exceptions, and exhibited a better mode of inſtruction than was to be ſeen in other Chriſtian countries. Theodore archbiſhop of Canterbury contributed much to this pre-eminence. The ſchools of the Arabs were in a more flouriſhing ſtate, particularly at Damaſcus and Bagdad, then the centre of Arabic ſcience. The Arab-Moors had alſo ſchools in Spain, of which the moſt celebrated was that of Cordova. In France, the palace of Charlemagne was the chief ſeminary of learning, under the direction of Alcuinus; who alſo eſtabliſhed a ſchool in the abbey of St. Martin of Tours, (of which city he was biſhop,) which became the parent of many others. In Germany, the principal ſchools were thoſe of Fulda, Hirſhau, Ervey, Paderborn, Triers, Mentz; and, more latterly, thoſe of Utrecht, Bremen, and Cologne. The common courſe of ſtudies in all theſe ſchools was, grammar, logic, rhetoric, muſic, arithmetic, geometry, and aſtronomy. The firſt three were called *Trivium*, or trifling ſtudies; the laſt four *Quadrivium*, or high ſtudies. During a great part of this period, Italy was the moſt barbarous country of Europe; and conſequently had few or no ſchools of any note; nor was Greece in a much better condition until the time of Conſtantine IX. The Neſtorians had a conſiderable Greek ſchool at Edeſſa; which produced ſeveral Syriac verſions of the Greek authors.

In the firſt half of the fifth century, twenty-nine public libraries were eſtabliſhed at Rome; but the various misfortunes of the ſtate occaſioned them to be much neglected. The library founded by Auſtin, at Hippo, was deſtroyed by the Vandals before his own death. The libraries of Conſtantinople, and thoſe of the Greek monaſteries, were either burnt or mangled by Coſroës, and the fury of the iconoclaſts and iconolaters. The emperor Baſil, and the Comneni, endeavoured to reſtore them; but the richeſt library at Conſtantinople was that of the patriarch Photius. Although the Arabs burned the famous library of Alexandria, they found it convenient, in time, to form a new one there, which was gradually enriched with a conſiderable number of manuſcripts; and the

khalif

khalif Al-Mamon, in the ninth century, erected a library at Bagdad. In the western world, the chief collections of books were in the abbey of St. Germain at Paris, at Fulda, at Clugny, and at York.

The more Hebrew philology was neglected by Christians, the more it was cultivated by Jews. During this period, several works were translated into Hebrew from the Arabic. The Babylonish Talmud and the Massora were completed. The text of the Hebrew Scriptures was corrected by Ben-Ascher and Ben-Naphtali; and Nathan Ben-Jechiel, in the beginning of the 11th century, wrote a lexicon of the words in both Talmuds. Saadias Hagaon translated a part of the O. T. into Arabic; and R. Judah Chiug wrote a grammar and dictionary. The principal Greek philologists were Philoponus, Photius, Suidas, Stobæus, and the author of the Etymologicon, which appears to have been compiled about the end of the tenth century. The Latin grammarians were Macrobius, Martianus, Priscian, and Papias; but the Latin language fell daily into disuse, and made way for the Italian, Spanish, and other sister-dialects. The Arabic language was greatly cultivated during this period; and an excellent Lexicon of it was composed about the year 933 by Abu-beker Ibn-Diraid, in three folio volumes. Another lexicographer of note was Abu-Nasri-Ben-Hamed; whose dictionary Scheid proposed to publish some years ago, but we have not heard that he executed his design. There were few good historians during this long period. Indeed, philosophical taste, sound criticism, and all rational judgment, had generally disappeared; credulous bigotry supplied their place, and infected almost every historical composition; all learning, such as it was, the monks monopolized; and legends and pious romances were the fruits of their labours. The best Greek historians of these days were Zosimus, Zonaras, Nicetas Choniates, Nicephorus Gregoras, Chalcondylas, Syncellus, Theophanes, Leo Grammaticus, Cedrenus, Glycas, Constantine Manasses, Agathias, Theophylactus, Genesius, Constantine Porphyrogenitus, Anna Comnena, Cinnamus, George Acropolita, Pachymer, Codinus, Ducas, and Procopius. These are called the *Byzantine writers*; of whom the last edition is that of Venice in 28 vols. folio, 1729, &c. The historians of Italy were Aurelius Cassiodorus, Epiphanis Scholasticus, Jordanus, (not to be confounded with Jornandes,) Paulus Warnfridi, Landulphus Sagax, Liutprandus, and Athanasius Bibliothecarius, a splendid edition of whose Vitæ Pontificum Romanorum was published at Rome by Blanchini in 4 vols. folio, 1735. The other writers are found in Muratori's collection. Spain, during this period, produced several historians, the principal of whom were Paulus Orosius, whose work was translated into Saxon by king Alfred; Isidore of Carthagena, whose Origines Etymologiarum may be considered as a sort of historical encyclopædia; another Isidore, (or perhaps the same,) whose Chronicon was published by Schelstrate; and Ildephonsus, bishop of Toledo. In France we find Gregory of Tours, Fredegarius, and the celebrated Hincmar. In Germany, Eginhard, Reginus, Witikind, Dithmar, Hermann, Lambert, Sigebert, and Marianus Scotus; who, though a native of Ireland, passed the greatest part of his life as a monk at Cologne, Wurtzburg, Fulda, and Mentz. England had no historian of note, except Bede, whose history was published with his other works at Cologne in 1688; and alone, with Alfred's Saxon version, at Cambridge, in 1722. Moses Choronensis wrote the history of Armenia; the last edition of which was lately published in Germany with a Latin version. The Arabs, during this period, had some considerable historians. The chief of those whose works have been published are, Ibn-Omar Alwakedi; Abu-Muhamed-Abdallah Adainwari; Abu-Gaphar Ibn-Gorai Athabari; and Eutychius, or Said-Ibn-Batrik. In chronology, the most conspicuous were Cassiodorus and Dionysius Exiguus, the inventor of the paschal cycle. Geographists and chorographists were, Cosmus of Egypt, and Stephanus of Byzantium.

The mathematical sciences flourished chiefly among the Arabs; who, taking the ancient Greeks for their guides, became in turn the teachers of Europe. Their principal study was astronomy, which was greatly encouraged by the khalifs; and at Bagdad was an astronomical academy, furnished with tables, charts, and instruments. The principal authors were Messaiah, who wrote on the astrolabe; Abu-Aaashar, who composed astronomical tables; Thabet-Ben-Korrah, who translated Euclid's Elements; Al-Batani, called the Arabic Ptolemy, who observed the obliquity of the ecliptic; Geber, from whom algebra is by some supposed to derive its name, and Arzachel of Toledo, author of the Toletan tables. In the khalifat of Al-Mamon, three brothers, sons of Musa Ben-Shaker, were notable geometricians. From the Arabs, the Persians seem to have borrowed a part of the mathematical sciences. The Chinese boast of their ancient knowledge of astronomy, but it falls short of that of the Arabs. In Greece, mathematics were not much cultivated; religious disputation swallowed up every thing. Leo VI. however, founded a mathematical school at Constantinople. Eutocius of Ascalon wrote a comment on some works of Archimedes, and of Apollonius Pergæus. Hiero gave a treatise on geometry, inserted in Montfaucon's Analecta Græca; and Psellus wrote on the four branches of mathematics, published by Xylander at Basil in 1556. In the west, this science was strangely neglected. In Italy, Cassiodorus and Boethius only are worthy to be named. In France, the monk Gerbert, afterwards pope Silvester II. was undoubtedly one of the most learned men of his time, and excelled in mathematical and mechanical knowledge. In Germany, mathematics, as well as every other branch of learning, owes most to Rabanus Maurus. Next to him we find Adelbold bishop of Utrecht; Hermannus Contractus; and Wilhelm abbot of Hirshaw; who all wrote some tracts on the mathematical sciences. On military tactics, and the art of war, the names of Callinichus, Hero, Mauritius, and Constantine VII. appear in M. Meusel's list; but they did little more than borrow from Polybius and Arrian.

Any progress or improvement in philosophy is not to be expected; even what was good and useful in the preceding period was deteriorated in this; the prevailing dialectic was a medley of logic and metaphysics, so confusedly blended, that no clear intelligible consequences could be extracted from it; and this species of logic had a wonderful influence on every other branch of philosophy. In Greece, the new Platonism was attempted to be made subservient to the cause of Christianity; or rather Christianity was compelled to wear a Platonic dress. The most celebrated Platonist of this period was Proclus; who grasped at all the knowledge of his age, and acquired a great share of it. His writings were numerous; some of which have never been published. His life was written by Marinus, his scholar and successor in the school of Athens. Their contemporary, Hierocles, wrote a good commentary on the Golden Verses of Pythagoras. Æneas of Gaza, a scholar of the former, wrote a work on the immortality of the soul, published by Barthius. Simplicius, a true eclectic, wished to unite all sects of philosophers. His commentary on some of Aristotle's works was published at Venice, in Greek only, in 1526. Philoponus of Alexandria attempted to reconcile the peripatetic philosophy with Christianity, which led him to Tritheism. Michael Psellus was an historian, mathematician, orator, physician, and philosopher: above twenty of his works have been published at Venice, or Paris, between the years 1532 and 1624. In the west, philosophy consisted chiefly of the follies of an extravagant dialectic, and the labyrinths of a subtile metaphysic. Little attention was paid to practical philosophy. Boethius is at the head of the Italian philosophers. He had studied at Athens under Proclus, and translated into Latin some of the best works of ancient Greece. He was certainly the most learned man of his day, and may be called the last of the Romans.

mans. His book De Conſolatione Philoſophiæ has been often printed. In Spain, Martin, archbiſhop of Braga, following the footſteps of Seneca, wrote ſeveral tracts of practical philoſophy; which were publiſhed at Baſil, in 1562. Iſidore introduced into his etymologies many logical, moral, and phyſical, obſervations. In France, Claudianus, Ecdicius, Mamertus, and Gerbert, were the only philoſophers of note. The former was a diſciple of Ariſtotle, but not a blind follower. His book De Statu Animæ was publiſhed by Barthius in 1655. Gerbert, afterward Silveſter II. was one of the firſt writers of his age: his letters are replete with philoſophical obſervations, which may be read in Du Chêne; and his book De Rationali et Ratione may be found in Pezius's Theſaurus Anecdotum. In Germany, Alcuinus alone is a hoſt: he was a native of York, but paſſed the greater part of his life in France or Germany, in which he founded ſeveral ſchools. In England, the writings of Lanfranc and Anſelm had a great influence on every ſcience, and conſequently on philoſophy. John Scot was an Iriſhman, and of conſiderable reputation as a philoſopher.

It is ſtrange that, in this period, genuine poetry is chiefly found among the Arabs; not that either Greece or Italy was without poets; but the true poetical taſte had vaniſhed. We now wonder that ſuch compoſitions as the Rophaline and Leonine verſes (the produce of thoſe ages) could be conſidered as prodigies of wit. The principal Greek poets were Nonnus, Coluthus, Tryphiodorus, and Q. Calaber, the beſt Greek poet of this period. The poets of Italy were Boethius, Ennodius, Fortunatus, and the anonymous author of the Expedition of Attila. Spain had its Prudentius; France, its Numatianus, Apollinaris, and Drepanius Florus. Germany poſſeſſed Walafrid Strabo, and Roſweida, a nun of Ganderſheim, who wrote in proſe ſix ſpiritual comedies, and a number of Leonine hexameters: they were publiſhed at Wittemberg in 1707. Some vernacular poets appeared in Germany during this period; the principal of whom was Ottfried. Cœlius Sedulius appears to have been an Iriſhman. His work Mirabilium divinorum is no contemptible performance: indeed, he was the moſt elegant of the Chriſtian poets. The poets in Arabia were numerous. We ſhall only mention Ali-ben-Ali Taleb, Abubeker-Muhamed, Motanabi, and Abul-Olah. Several of their pieces have been publiſhed by Golius, Scheid, and Reiſke.

The principal Greek orators of this period were Syneſius, whoſe works were publiſhed by Petavius in 1612, and often afterward; Theophylactus Simocatta; and the emperor Leo VI. In Italy, Peter Damian, biſhop of Oſtia and a cardinal, born in 1007, was the beſt Chriſtian orator of his age, and indeed of this whole period. His ſtyle is ſuperior to that of all his contemporaries, and his eloquence has ſometimes irreſiſtible charms. His works have been often edited. In France, the letters of Servatus Lupus, publiſhed by Baluze in 1710, are not inelo-quent; nor the Epiſtles of Felbert, publiſhed at Paris in 1608. In Germany, we find only ſome ſcantlings of eloquence in the works of Witekend, Lambert, and Bruno. Among the Arabs, the Converſations of Hareri are generally admired; and it is to be regretted that they have never been all publiſhed.

Statiſtics. The emperor Baſil's Liber Regius, inſcribed to his ſon and ſucceſſor Leo; was publiſhed with a Latin verſion by Dravsfeld at Göttingen in 1642, and may alſo be found in Banduri's Imperium Orientale. The Geoponics of Vindonius Anatolius were firſt publiſhed by Needham, but were corrected by manuſcripts, and republiſhed by Niclas at Leipſig in 4 vols. 8vo. 1781.

State of phyſical (not medicinal) knowledge. Here is a ſtrange blank indeed. The only works quoted by M. Meuſel are Agobard's Tract De Grandine et Tonitrue, edited by Baluze in 1666; a work on Alchemy by Geber, a Latin tranſlation of which, from the Arabic, is to be found in Caſiri's Bibliotheca, and Stephanus's Actiones de Arte Chryſopoeide, publiſhed at Padua in Latin, 1573.

State of medical knowledge. Superſtition ſeized on this branch of ſcience, as well as on religion. Even the moſt ſkilful Greek phyſicians were not free from this defect; the moſt eminent writers were generally mere compilers; and of theſe the Arabs were the beſt. The ſcience paſſed gradually into the hands of monks, abbots, and even biſhops. One of the moſt renowned phyſicians, of the ſchool of Alexandria, was Oribaſus, the profeſſed follower of Zeno. He was appointed queſtor by the emperor Julian, and at his deſire made a compilation from the medical works of former ages, in 40 books; and a ſynopſis in 9 books. His works were publiſhed in Latin by Roſarius, at Baſil, in 1557. About the ſame time lived Nemeſius, firſt biſhop of Emeſſa; who wrote in Greek a work On the Nature of Man; publiſhed at Oxford in 1671. In the middle of the ſixth century, Aëtius of Meſopotamia made a collection ſimilar to that of Oribaſus; of which the laſt and beſt edition is that of Franz, at Leipſig, in 1777. Soon after him, lived Alexander Trallenſis; who thought for himſelf, and ranks as the beſt writer after Galen. He wrote 12 books on the knowledge and cure of diſeaſes; publiſhed in Haller's Principes Medici, at Lauſanne, in 1772. Paul of Ægina has left a compendium of medical ſcience in 7 books, publiſhed at Baſil, in 1538; and ſince at Göttingen, in 1768. In Italy, towards the latter part of this period, the ſchool of Salerno was eſtabliſhed, and ſoon became a renowned ſeat of medical knowledge. The work called Medecina Salernitana, or Regimen Sanitates, in Leonine rhymes, is well known. The laſt edition is that of Ackermann in 8vo. in 1790, with a hiſtory of the Salernian ſchool. Among the Arabs, phyſic was much cultivated during this period. The greater number of their phyſicians were Neſtorian Chriſtians; and ſome of them were Chriſtian prieſts. M. Meuſel gives a liſt of their names; which our readers will, perhaps, thank us for paſſing over; but we muſt not omit Avicenna, whoſe Arabic name is Abu-Æli-Koſani-Ebn-Abdallah-Ebn-Sina. He was a mathematician and philoſopher, as well as an excellent phyſician for thoſe days. His works were printed in Arabic and Latin, at Rome, in 1593. See AVICENNA, vol. ii. p. 563.

The Theodoſian Code was the production of this period; the laſt and beſt edition of which is that of Dan. Ritter, at Leipſig, in 1736–1745. The Novellæ Leges was publiſhed at Leipſig in 1745, but more amply at Faventia in 1766, and at Rome in 1767. About one hundred years afterwards was compiled the Codex Juſtinianus. The lateſt edition of the Corpus Juris Civilis is that of Leipſig, 1740. The firſt ſyntagma of canon-law was compoſed by John the ſcholaſtic, a prieſt of Antioch in the ſixth century. He is alſo the author of the Nomo Canonon. In the ninth century, the celebrated Photius compiled his Syntagma Canonum, and his Nomo Canonon. The former has not been publiſhed; but the latter was given, with a Latin verſion and Balſemon's commentary, by Juſtelle, at Paris, 1615. In the weſt, Dionyſius Exiguus compiled his Codex Canonum in the beginning of the ſixth century, publiſhed by Juſtelle in 1628. Creſconius, an African biſhop, towards the end of the ſeventh century, wrote a work called Concordia Canonum, and a Breviarium; the former of which may be ſeen in Juſtelle, the latter in Meermann's Theſaurus, tom. i. The collection of Dionyſius was improved by Iſidore of Seville, and appropriated to the diſcipline of Spain. About the year 612 were fabricated the falſe decretals of Iſidore Mercator; which ſo much contributed to deſtroy the more ancient diſcipline of the Chriſtian churches, and to erect the wondrous empire of papal power. The author mentions alſo the Breviarium Alaricanum, the Leges Longobardicæ, the Leges Anglo-Saxonicæ, and the Capitularies of Charlemagne, republiſhed by du Chiniac in two vols. folio, 1780.

The corruption of philoſophy, the decay of taſte, and a general ſuperſtition, had a combined and powerful influence over Chriſtian theology. Articles of faith were multiplied, and circumſtantially defined; but contributed neither

neither to a more rational belief nor to a more holy life. Religious quarrels became every year more numerous and acrimonious; and alternate perfecutions and proſcriptions ultimately decided the conteſt. The chief dogmatiſts of the fifth and ſixth centuries propagated their doctrines according to the Platonic philoſophy, as adopted and applied by Origen. The work of Pſeudo-Dionyſius, who lived in the fifth century, introduced a myſtical ſyſtem, which has ever ſince more or leſs prevailed in the Chriſtian church; eſpecially after that compoſition became known in the weſt in the ninth century. The beſt edition of this work, with the ſcholia of Maximus, was publiſhed by Corderius, at Antwerp, in 1634. John Damaſcene, in early life the ſervant of a khalif, and afterward a monk, compoſed the firſt ſyſtem of ſcholaſtic divinity in the beginning of the eighth century; which he called An accurate Expoſition of Orthodox Faith. A ſimilar ſyſtem was compoſed by Anſelm, archbiſhop of Canterbury.

Hermeneutics, both in the eaſt and weſt, were very negligently and aukwardly treated. The Hebrew was totally unknown, and even the Greek but little ſtudied in the weſt. The allegorical method of Origen was generally followed; but Theodorus of Mopſueſté, and his diſciple Theodoret, are exceptions. The works of the latter contain many good interpretations of a great part of the O. T. as well as of the New. Indeed the works of Theodoret on the ſcriptures are, after thoſe of Origen and Jerome, the moſt uſeful of all that have been written by the church fathers. We may rank among the ſcripture interpreters, alſo, Iſiodore of Peluſium, Euthalius, Photius, Theophylactus, and Euthymius Zygadenus, a monk of Conſtantinople, about the year 1118, who wrote a commentary on the four Goſpels, tranſlated by Hentenius, and publiſhed with remarks by Matthei at Leipſig, 3 vols. 8vo. in 1792; a work of merit, which deſerves to be read.

Of Latin interpreters, during this period, the moſt notable were Euchcrius of Lyons, whoſe commentary on Geneſis and Kings was publiſhed by Schott in the ſixth volume of the Biblioth. maxima of Lyons. Junilius, an African biſhop, about the year 530, wrote an Introduction to the Knowledge of Scripture. Rabanus Maurus, and his diſciple Walafried Strabo, gave themſelves the thankleſs trouble of collecting a curſory expoſition of the Bible from all the more ancient interpreters, called *Gloſſa ordinaria*, which was afterward improved by De Lyra. The laſt edition of this huge work is that of Antwerp, in 6 vols. fol. 1633. Claudius Turonenſis wrote ſeveral works on ſcripture, of which his explication of the Epiſtle to the Galatians was publiſhed at Paris in 1543. Angolemus, a Burgundian monk, wrote a commentary on the Firſt Book of Moſes; in which, it is to be remarked, he followed a Latin verſion very different from the preſent Vulgate; probably the old Italic. He alſo wrote on the four Books of Kings, and on the Song of Solomon. Berengærius of Tours wrote ſome comments on parts of ſcripture, but none of them have been publiſhed.

In the firſt half of the ſeventh century, a moſt wonderful revolution, political as well as eccleſiaſtical, happened in the eaſtern world; viz. the eſtabliſhment of Mahometaniſm, which in a ſhort time overran almoſt all the eaſt, and a great portion of the weſt. The doctrines of this new religion are contained in a book called the Koran. It is a ſort of anthology, or collection of the ſayings and decrees of the Arabian prophet, reduced into its preſent order by Abubeker. The Mahometans uſe it only in manuſcript; and wonderful pains are beſtowed in making correct and beautiful copies of it. It has been often publiſhed in Europe, in Arabic and in other languages. Marracci gave it in Arabic and Latin, in a huge folio volume, (with a partial and often ſilly confutation,) at Padua, 1698. The German tranſlation of Boyſen was printed at Halle, 1773; the French of Savary at Paris, 1782, and the Engliſh of Sale at London, in 1734.

V. *From the Cruſades to the Revival of Letters; comprehending about 400 years.*

Many circumſtances concurred, during this period, to repel barbariſm, and to recall a better taſte. The Cruſades, with Aſiatic luxury, had alſo brought into Europe many uſeful arts and ſciences; with a general taſte for chivalry, which poliſhed down the rough warrior, and made him the friend and protector of learning as well as of beauty. The inſtitution of univerſities, in the twelfth century, contributed not a little to the advancement of knowledge; and after the conqueſt of Conſtantinople by the Turks in 1453, a number of learned Greeks came into the weſt, who diſſeminated taſte and claſſic lore over all Europe. The invention of paper from cotton and linen, and that of the more glorious art of printing, the rapid progreſs of free-thinking and free-writing which hence reſulted, the diſcovery of America, and the inſtitution of poſts for carrying letters, &c. all contributed to the diffuſion of learning, and prepared the way for that ſunſhine of ſcience which ſucceeded this period.

The principal promoters of learning were, in Italy, the Viſcontis of Milan, the Carraras in Padua, but chiefly the Medici of Florence, and the popes Gregory IX. and X. Nicholas V. and Pius II. in Spain, Alphonſus of Caſtile and Alphonſus of Arragon; in Portugal, Dionyſius; in France, Louis VII. Philip II. and Charles V. and VII. in Germany, the emperors of the houſe of Swabia, particularly Frederic II. in England, Edward III. and Henry VII. in Denmark, Chriſtian I. in Poland, Caſimir III. in Hungary, Matthias Corvinus. The perſons by whoſe influence learning was chiefly benefited were, Peter Abelard, Robert Groſſetête, Albert the Great, Matthew Paris, Roger Bacon, Petrarch, Raymund Lully, Æneas Sylvius, or Pius II. and the abbot Tritenheim, commonly called Trithemius.

The ſchools of this period were of two ſorts; particular, called *ſtudia*; and general, called *ſtudia generalia*, or univerſities. Both differed from thoſe of former times. They were endowed with privileges by popes, and by ſecular princes. The firſt great privileged ſchools, in Italy, were thoſe of Salerno and Bologna, the archigymnaſium of Rome, and the univerſities of Padua, Perugia, Sienna, Ferrara, Cremona, and Florence; in Sicily, Catania; in Spain and Portugal, Salamanca, Valentia, Siguenza, Toledo, Coimbra, Ferreira, and Liſbon; in France, Paris, Toulouſe, Montpellier, Avignon, Orleans, Grenoble, Perpignan, Angers, Caen, Poitiers, Bourdeaux, and Bourges; in Germany, Heidelberg, Prague, Vienna, Erfurt, Wirtzburg, Leipſig, Ingolſtadt, Roſtock, Triers, Freyburg, Tubingen, Mentz; in Swiſſerland, Baſil; in the Netherlands, Louvain; in Great Britain, Oxford, Cambridge, St. Andrew's, Glaſgow, and Old Aberdeen; in Denmark, Copenhagen; in Sweden, Upſal; in Poland, Cracow. The principal ſchools of the Jews during this period were, in Spain, at Seville, Granada, Cordova, and Toledo. The Orientaliſts had colleges at Bagdad, Damaſcus, Kupha, Baſſora, and Bockhara. In Africa, were ſchools at Morocco, Fez, and Tunis.

Before the invention of printing, great collections of books were rare. The libraries of the Arabian nations conſiſted chiefly of tranſlations from Greek authors. That of Abumanzar Bahaam at Firuzabad contained 7000 volumes. In the twelfth century, Spain poſſeſſed not fewer than ſeventy open libraries belonging to the Moors; the principal of which, at Cordova, is ſaid to have contained 250,000 volumes. The libraries of Conſtantinople were almoſt annihilated by the ravages of the Cruſaders, and the devaſtations of the Turks; but many of the books which eſcaped enriched the collections of Italy, where Bologna was the great book-market. In general, the cloiſters were the chief repoſitories of writings, becauſe the monks had more inclination and leiſure for copying than any other claſs of mankind. It does not appear that, early in this period, there were any open public libraries, even

even in Italy. In 1450, the foundation of that of the Vatican at Rome was laid; and about the ſame period of time the ducal library at Florence, St. Mark's at Venice, St. Paul's in the cathedral at London, and that of Trinity college, Cambridge.

The Jewiſh philologiſts of this period were Aben-Ezra, Salomon Ben-Iſaac Raſhi, Moſes Maimonides, and the three Kimchis. The firſt edition of the Hebrew ſcriptures was printed at Ferrara in 1476. Pope Clement V. in the council of Vienna, 1311, decreed that the Hebrew, Arabic, and Chaldee, ſhould be taught in all the higher ſchools; but this decree was little obſerved. Among the Greeks, philology flouriſhed principally in the twelfth century under the auſpices of the Comnenas. The moſt remarkable learned men among them were Tzetzes, Euſtathius, Emmanuel Chryſoloras, Moſchopulus, Beſſarion, Theodore Gaza, and Laſcaris; whoſe Greek Grammar, firſt printed at Milan in 1476, has been the foundation of all others ſince publiſhed. By him and other Greeks from Conſtantinople, a claſſical taſte was gradually diffuſed from Italy over the reſt of Europe. The fourteenth and fifteenth centuries produced Petrarch, Papias, De Janua, Malpaghino, Angeli, Barzizius, Guarinus, Manetti, Valla, and Bracciolini, commonly called Poggius; alſo Perottus, Philelphus, Hermolus Barbarus, Politian, Marcilius Ficinus, and ſome others of leſs celebrity. During this time, the Italian language was highly cultivated and embelliſhed; and many of the Greek and Latin claſſics were tranſlated into it. The Provençal, or Romanza, was cultivated chiefly in the ſouthern provinces of France; whence it ſoon ſpread into the other provinces, and into the neighbouring regions of Catalonia, Valentia, Murcia, Majorca, Minorca, and Sardinia. France produced not many eminent philologiſts during this period. M. Meuſel mentions only Abelard, Alexander de Ville Dieu, and De Lyra. A ſimilar deficiency prevailed in Germany. Rolef Häuſmann, or Agricola, was the firſt, according to Melanchon, *qui in Germania emendavit genus ſermonis et dialecticum*. Three others are mentioned by the preſent author; viz. Heggius, Liber, and Dringenberg. In England we find Roger Bacon, Richard Aungervyle, and Michael Scot.

In hiſtorical knowledge the Arabs (according to M. Meuſel) were the foremoſt. Bohâddin Ibn-Scheddad, Abulfeda, Bar-Hebræus, Ibn-Alamid or Elmakin, and two or three others, are here particularly noticed. The following were Perſian hiſtorians; Abu-Said, Turan Schah, Sheriffeddin, and Mirkhond. In Greece, we have the authors in the Byzantine collection, Anna Comnena, William of Tyre, (although he wrote in Latin,) and Gemiſtius. The hiſtorians of Italy were Gottfredo di Viterbo, Petro de Vincis, Albertino Muſſaco, Ludovico Bavarico, Petrarch, Leonardo Bruni, Flavio Biondo, Æneas Sylvius, Benedict Acolti, Antonio Beccatelli, Bartoli Sacchi, commonly called Platina, Bernardi Juſtiniani, and Julius Pomponius Lætus. The Spaniſh hiſtorians were, Roderigo Ximenes, Juan Nunoz de Villaſan, Roderigo de Zamora, and Ferdinando de Pulgar. In France, we find the names only of Joinville and Froiſſart. German hiſtorians were, Coſmos of Prague, Otto, Helmold, Arnold von Lübeck, Conrad von Lichtenau, Albrecht, Martinus Polonus, Jacob von Königſhofen, and Gobelinus Perſona. Of the many Engliſh hiſtorians, M. Meuſel mentions as the moſt renowned, William of Malmſbury, Matthew Paris, and Nicholas Trivet. The father of Ruſſian hiſtory was Neſtor, a monk who lived in the beginning of the twelfth century. His annals, written in Ruſſian, were continued by abbot Sylveſter and Simeon biſhop of Suſdal. They were printed at Peterſburg in 1767. Aras, or Aré Frodi, wrote, about the year 1148, annals in Iſlandic, publiſhed by Buſſæus in 1733. Snorro Sturläſon, who died in 1241, was a celebrated hiſtorian, ſtateſman, and warrior; he wrote in Iſlandic a hiſtory of the northern kings, which was publiſhed in 2 vols. folio by Peringſkiöld in 1697, and by Thorlac and Thorkelin in 1782. The firſt good hiſtorians of Denmark were Sweno Aageſon and Saxo Grammaticus. The firſt hiſtory of Poland was written by Vincent Kadlubek, biſhop of Cracow, in 1226: it was publiſhed by Martino Gallo, in folio, 1749. A prieſt named Henry of Lettland wrote a good hiſtory of Livonia, from the year 1184 to 1216, called *Originæ Livoniæ ſacræ et civilis*; publiſhed by J. D. Gruber, at Leipſig, in 1740.

The principal geographers of this period were, Edreſi, a learned Mahometan of Cordova; Abdollatif Ibn-Juſuph of Bagdad; Abulfeda, and Benjamin of Tudela. See the article GEOGRAPHY, vol. viii. p. 347. Here M. Meuſel juſt notices Girold's Topography of Ireland, and Doomſday Book.

The principal mathematicians, or rather aſtrologers, among the Arabic writers, were Alpharagius of Morocco; Abul Walid, Ebn Roſhd, commonly called Averroes, who was at the ſame time theologue, lawyer, phyſician, and philoſopher; Aben Ragel and Alkabiz, both of Toledo; Naſiredolin, and Ulugh-Beigh, uncle to Tamerlane. From the Arabs, the weſtern world drew its firſt leſſons of mathematics; and from their language, Camparus, in 1159, tranſlated Euclid's Elements. The emperor Frederic II. who was himſelf a mechaniſt, aſtronomer, and aſtrologer, cauſed the Almageſt of Ptolemy to be tranſlated in 1230. Alphonſus X. king of Caſtile brought aſtronomy into great repute, by patronizing equally the Arabic, Jewiſh, and Chriſtian, writers on that ſubject. Other mathematicians are, Albertus Magnus, Roger Bacon, Petrus Aponenſis, Franciſcus Cecco, and Paulus Toſcanellus. The mariner's compaſs was diſcovered about the beginning of the fourteenth century, but by whom is uncertain: M. Meuſel thinks that we owe it to the Arabs. Peter Dailly and Nicolaus Cuſanus attempted to correct the calendar; and the latter laboured to find the quadrature of the circle; but Regiomontanus, and Muller, (alſo ſurnamed Regiomontanus,) were the principal mathematicians of that age. Regiomontanus's ſcholar, Bernard Walther, was likewiſe reckoned one of the beſt aſtronomers of his day. His work was printed at Nurnberg in 1544. Military tactics underwent a conſiderable change during this period, from the invention of gunpowder, muſkets, cannons, bombs, &c. Theſe laſt were invented by Siegmund Pandulph Malateſta, of Rimini, about the middle of the fifteenth century.

The platonic philoſophy had hitherto prevailed in the Chriſtian ſchools; and Ariſtotle was ſcarcely noticed; but in this period he ſupplanted his rival ſo completely, that Platoniſm was in its turn neglected and forgotten. The philoſophy of Ariſtotle, thus adapted to the doctrines of Chriſtianity, was called *ſcholaſtic*. At firſt it was very limited; being confined to a ſort of logic termed *dialectic*, and a ſingular ſort of *metaphyſic*; a mere tiſſue of abſtract ideas, uſeleſs diſtinctions, and diſputes about words. The principal ſcholaſtics of this period were, Heldebert, Roſcelinus; the famous Abelard; Hugo de S. Victore; Pullenus or Pullein; John of Saliſbury; Alexander Hales, called the Irrefragable Doctor; Albert the Great; Thomas Aquinas, called the Angel of the Schools, or the Angelical Doctor; Raymond Lulli, Duns Scotus, Durandus, Occam, Walter Burleigh, Burridan, Marſilius Von-Ingen, the celebrated Gerſon, Ganifort, and Gabriel Biel. The Arabs had their Waſel Ebn-Ata, Ibn-Baja, Algazel, Abujarfar, and Averroes. Among the degenerate Greeks, we find Barlaam and Gemiſtus Pletho.

Poetry, during this period, ſeems to have flouriſhed chiefly among the Arabs and Perſians. The moſt remarkable of the Arabian poets are Thograi, Hariri, and Al-Meidani; of the Perſic, Ferduſi, Anweri, Sadi, and Hafez, called (not improperly) the Perſian Horace. Of the Greek poets, the author mentions only Theodorus Prodromus, Tzetzes, and Planudes. In the weſt, this period gave birth to the Provençal poeſy, and to rhyme. The poets were called Trovatori, or Troubadours; i. e. "finders;" who flouriſhed principally in Italy, Spain, and the ſouth of France. For their hiſtory the curious reader

is referred to Tiraboſchi, Millot, and Antonio Sanchez. The author forgets not the minſtrels of Great Britain. William of Glouceſter wrote a chronicle in rhyme, as early as 1280; but our readers will learn more on this head from Percy and Warton than can be obtained from any foreigner. M. Meuſel gives a long account of the German and Scandinavian poets; to which we muſt refer our readers. We alſo paſs over the ſection on the Italian poets, from Guinicelli to Boccacio; becauſe their hiſtory is well known in this country.

The principal advancement of medical ſcience in this period was derived from the ſtudy of anatomy; the father of which was Mondini de' Luzzi, profeſſor at Bologna, in 1315. His work on this ſubject was firſt publiſhed at Lyons in 1551. The principal phyſicians of this period were Arabians; namely Abulcaſis, Aben-Zohar, Eben-Beither, and Averroës. Among the Greeks, Actuarius, and Demetrius Pepagomenus. In the weſt, Roger of Parma, William of Soliceto, Lanfranc of Milan, Thaddæus of Florence, Arnoldus of Villa-nova, Torrigiano Ruſtichelli, Mundini, Simon de Cordo, Palvaticus of Mantua, and Savonarola. All theſe were Italians. From them, the French and other European nations borrowed the little which they knew.

The principal Greek civilian of this period was Hermenopolus of Conſtantinople; and the principal canoniſts were Zonaras and Balſamon. The moſt celebrated juriſts of the weſt, were, Irnerius of Bologna, Bulgarus, (called Golden-mouth,) his rival Martinus Goſianus, Portius Azzo, the two Accurſii, and Ardizzone; all Italians. They were termed Gloſſatores, and were followed by the Commentators, the chief of whom was Bartolus; whoſe works in eleven vols. folio were publiſhed at Venice in 1615. His diſciple Baldus wrote comments on the Digeſts, publiſhed in an equal number of volumes at Venice in 1616. The canon-law was reduced by Gratian to a ſyſtem, commonly called *Codex Decretorum*; which produced a number of commentators; of whom the moſt renowned were Marianus Socinus and Raymond de Pegnafort. France and Germany followed, in general, the Roman juriſprudence; with ſome local rights and privileges of their own. In England, this period gave birth to the famous Magna Charta; the great bulwark of its national freedom to the preſent day.

During the firſt part of this period, theology was a jargon of metaphyſical ſubtleties; an uncouth medley of articles of faith and peripatetic reveries; but, in the twelfth century, the famous monk of Clairvaux, St. Bernard, gave a new turn to the ſcience by large quotations from the ſcripture, which he employed with wonderful eaſe, and with great effect. Some of his homilies are a mere tiſſue of ſcripture-texts, but ſo well put together as to appear one natural ſeries. In the fourteenth and fifteenth centuries, the writings of Wickliff and Huſs gave a new ſhape to divinity, and paved the way for the reformation. Of the ſcripture-commentators of this period, the principal were De Lyra, Rupertus, Hugo of St. Victor, and Toſtatus. The dogmatiſts were Hildebert, Abelard, Bernard, Lombard, (or the maſter of ſentences,) Albert the Great, Bonaventure, and Thomas Aquinas; who have already been mentioned under the head of philoſophy. Of polemic divines, we find among the Greeks, Cantacuzenus, Theophanes, and Simeon of Theſſalonica; in the weſt, Ficinus, Raymond of Pegnafort, Savonarola, Moneta, and Raymond Martini, whoſe work againſt the Jews is well known. To theſe we muſt add the celebrated production of Aquinas, called Summa contra Gentiles. Moral theology was blended with the dogmatic, and treated by the ſame authors; more particularly by the maſter of ſentences and Aquinas; from whom, chiefly Vincent of Beauvais compiled his great Speculum Morale, publiſhed at Douay in 4 vols. folio, 1624. To this period we owe the origin of myſtic divinity, in the weſt at leaſt; where the Pſeudo-Dionyſius (called the Areopagite) had now made his appearance, and was embraced with eagerneſs by the viſionaries of the time; and whoſe doctrines were particularly propagated by the works of Thaulerus. In this claſs, in ſome reſpects, may be ranked the famous book De Imitatione Chriſti, by Thomas à Kempis; which has been as often edited, and tranſlated into as many languages, perhaps, as even the Holy Bible itſelf. It is indeed a wonderful compoſition, and devoid of almoſt all the extravagant abſurdities which diſgrace moſt other myſtical writings. Preaching was revived towards the end of this period, principally by the Dominicans; who were hence called *Fratres Predicatores*, or preaching friars. The moſt celebrated preachers were Jerome Savonarola, and Kaiſerberg of Straſburg.

VI. *From the Revival of Letters to the preſent Time*; i. e. *from* 1500 *to* 1800.

We are now to conſider a portion of hiſtory the moſt intereſting in the annals of mankind. The accounts of the former ages ſeem to regard a totally different claſs of beings; but the events which we are at preſent to contemplate refer immediately to ourſelves, and to our actual ſtate of knowledge. The vaſt ſtrides which ſcience made in this period had been already prepared, ſo far as regarded their external cauſes, chiefly towards the end of the period preceding; and the conqueſt of Conſtantinople, the diſcovery of America, that of a paſſage by the Cape of Good Hope, and, more than all, the invention of the art of printing, had largely contributed to the diffuſion of learning and philoſophy. The increaſed importance of the middle claſs of mankind excited a ſpirit of inquiry, which tended to ſecure their freedom. Luther, Melanchthon, and Calvin, were zealous in the liberation of mankind from the chains of ſpiritual bondage; and the keen ſatire of Eraſmus, Hutten, and Nizolius, brought into deſerved ridicule the falſe learning of the age.

During the confuſion of foreign warfare and internal tumult, a plan for the extenſion of ſcience was laid in England by Bacon; and the principal laws of nature were diſcloſed in Italy by Galileo. Newton, Bayle, Leibnitz, &c. united in eſtabliſhing philoſophy on the ſure baſis of experiment; and Frederic II. Buffon, Hutcheſon, Helvetius, Rouſſeau, Voltaire, &c. ever preaching up reaſon, though even to them its primary principles were not yet clearly evident, were active in diſpelling prejudice from the minds of men. The labours of Hume and of Kant, according to M. Meuſel, have been moſt ſucceſsful in tracing the limits of human intellect, and in pointing out the true baſis of reaſoning.

The principal promoters of learning were, in Italy, the popes Leo X. Gregory XIII. Sextus V. Urban VIII. Benedict XIV. Clement XIV. and Pius VI. in Germany, Maximilian I. Ferdinand I. Maximilian II. Rudolphus II. Ferdinand III. Leopold I. Charles VI. Francis I. and Joſeph II. in Portugal, John V. and Pombal, prime miniſter under king Joſeph Emmanuel; in Spain, cardinal Ximenes, Philip V. Ferdinand VI. and Charles III. in France, Francis I. cardinal Richelieu, Louis XIV. XV. and XVI. in England, Henry VIII. Elizabeth, James I. Charles II. William III. George II. and III. in Denmark, Frederic II. Chriſtian IV. Frederic III. Chriſtian V. and VI. and Frederic V. in Sweden, Guſtavus I. and II. Chriſtina, Frederic, Adolphus-Frederic, and Guſtavus III. in Poland, Stephen Batheri, John Caſimir, John Sobieſky, Auguſtus II. and III. and Staniſlaus Auguſtus; in Ruſſia, Peter I. Elizabeth, and Catharine II. in Pruſſia, Frederic I. and II. Frederic-William III. and beſides theſe, ſeveral German electors, princes, and others.

The perſons by whoſe influence learning was chiefly benefited were, Eraſmus, Luther, Melanchthon, Calvin, Beza, Francis Bacon, Galileo, Grotius, Deſcartes, Conring, Puffendorf, Boyle, Bayle, Locke, Leibnitz, Newton, Thomaſius, Wolf, Moſheim, Voltaire, Rouſſeau, Leſſing, Franklin, and Kant.

The progreſs of the ſciences had a favourable influence on ſchools. Luther and Melanchthon particularly diſtinguiſhed

guiſhed themſelves by their oppoſition to the ſyſtems of education then exiſting in the German univerſities; and their example was followed by Joh. Amos Comnenius, Baſedow, Ronſſeau, &c. Academies for the young nobility, the ſchools of the Jeſuits, the electoral ſchools of Saxony, thoſe of the monaſteries at Würtemburg, &c. ſucceſſively enjoyed great celebrity. We muſt not omit to mention, towards the cloſe of the eighteenth century, the ſchools for the deaf and dumb eſtabliſhed at Paris, Vienna, &c. nor the ſchools of induſtry now ſo generally prevalent. During this period, were eſtabliſhed the following univerſities: In Italy, thoſe of Meſſina, Milan, Parma, Mantua, Urbino; in Portugal, Evora; in Spain, Alcala de Henares (Complutum), Granada, Compoſtella, Baeza, Oſſuna, Oſma, Orikuela, Barcelona, Cervera; and in Spaniſh America, Mexico, Lima, and Caracas; in France, Rheims, Douay, Beſançon, Pont-a-Mouſſon, Sedan, Molſheim, Straſburg, and Pau; in Germany, Frankfort on the Oder, Wittenburg, Marburg, Jena, Dillingen, Altdorf, Helmſtädt, Grätz, Greſen, Rintela, Salzburg, Bamberg, Duiſburg, Innſprück, Halle, Fulda, Göttingen, Erlangen, Bützow, Bonn, and Stuttgard; in Swiſſerland, Geneva and Lauſanne, which, though properly ſpeaking they are not univerſities, were however ſo called; in the Netherlands, Leyden, Franeker, Gröningen, Utrecht, and Harderwyk; in Great Britain and Ireland, Edinburgh, New Aberdeen, and Dublin; in Hungary, Tyrnau; in Sileſia, Breſlau; in Poland and Lithuania, Wilna, Zamoſcia, and Olyka; in Pruſſia, Königſberg; in Sweden, Abo; in Ruſſia, Dorpat, Kiow, and Moſcow. There were alſo founded in this period a vaſt number of academical gymnaſia, colleges, &c. too numerous to mention; for theſe M. Meuſel refers us to Lawätzen's Handbuck, Goetzii Geographia Academica, &c. The Jews eſtabliſhed ſchools at Sapheta in Paleſtine, at Conſtantinople, and Saloniki; as well as in ſeveral parts of Germany, in Poland, in the Netherlands, and in England. The Turks too have inſtituted eleven academies at Conſtantinople, each conſiſting of fewer or more colleges, out of which are ſupplied the miniſters of the church and ſtate; more than 1600 youths are here inſtructed, at the expenſe of the grand ſignior. The number of colleges, or ſchools of ſcience, at Conſtantinople all together exceeds 518; beſides about 1255 inferior ſeminaries, in which reading, writing, and a ſort of catechiſm, are taught. In proportion as collections of books had been hitherto rare, ſo much the more intereſting is M. Meuſel's liſt of public libraries eſtabliſhed in this period in almoſt every part of Europe; ſuffice it, however, for us to obſerve, in general, that not only every univerſity is now poſſeſſed of one or more of them, but that almoſt every town of importance ſeems to partake of this invaluable benefit.

During the former half of this period, philology conſtituted the great purſuit of the learned, as well as their principal ſource of diſtinction. It engroſſed almoſt all the ability of Europe. In the ſeventeenth and eighteenth centuries, the diſcovery of an univerſal philoſophical language, with correſponding characters, (paſiphraſia, and paſigraphia,) exerciſed the talents of Wilkins, Leibnitz, Wolf, Solbrig, and others. The Jews in the ſixteenth and ſeventeenth centuries paid much attention to their Hebrew literature, though chiefly, perhaps, to that which was rabbinical. The firſt printed Hebrew Bible was publiſhed by Dan. Bomberg of Antwerp, at Venice, 1518. Bomberg alſo, in 1520, printed the Talmud, which called forth the ſevereſt cenſures from the popes Julius III. and Paul IV. In the two following centuries, many learned Jews commented on their ſacred books, and tranſlated them into the pure German; as alſo into that dialect of it which was uſually ſpoken by Jews. The moſt celebrated of theſe commentators were Gozel, Veibſch, (father and ſon,) Mendelſſohn, Euchel, Friedländer, and Wolfsſohn. The Chriſtians alſo, particularly the proteſtants, have cultivated Hebrew literature, ſince the ſixteenth century, with much greater diligence than formerly. At firſt, however, they all failed, owing to their copying too ſervilely the Jewiſh ſyſtem of philology; and it was not till the end of the ſeventeenth and beginning of the eighteenth century, that they adopted the more rational plan of employing the other oriental languages to illuſtrate the Hebrew. They did not ſtop here; ſo naturally did the ſtudy of one tongue ſeem to lead to that of another, that grammars and lexicons of every dialect, in any way connected with the ſcriptures, were ſoon publiſhed. This might indeed be called the age of language-learning; and the author has given us a kind of catalogue raiſonné, conſiſting of ſixty pages, and containing the names of learned men of all countries, who have been eminent within the laſt three centuries for facilitating the acquiſition, not only of the claſſical languages, but of every other language that is known to exiſt. For information ſo copious, and ſo detailed, we muſt refer to the work itſelf; ſince it would be impoſſible to do juſtice to it by any abſtract.

In this period, the ſtudy of hiſtory became very general; and hiſtory itſelf has derived great advantages from the increaſing culture of claſſical literature, and from the more enlightened ſtate of general philoſophy. One of its chief improvements is due to Reinerus Reineccius, a German, (profeſſor at Helmſtädt towards the cloſe of the ſixteenth century,) who firſt introduced the practice of marginally citing his authorities; indeed, to the Germans in general M. Meuſel gives the preference for induſtrious compilation; though the French, he thinks, from the very beginning of this period, bore away the palm for hiſtorical compoſition. Various ſyſtems and compendia of univerſal hiſtory were publiſhed at an early period, particularly by Carion, Melancthon, Sleidan, Cluverius, Boſſuet, and Cellarius; ſince whom Hübner, Zopf, Gatterer, Schroeckh, Swinton, Sale, Pſalmanazar, Campbell, and Bower, together with Rollin and other French writers, have contributed to give to it a more methodical arrangement, as well as to diſſeminate a better taſte in the ſtudy of it. In ancient hiſtory, properly ſo called, little more had been done than to collect materials, until nearly the middle of the eighteenth century; ſince which time the Germans have to boaſt their Gatterer, Beck, Remer, and Eichhorn; the Grecian hiſtory has been written of late years with great ability by Stanyan, Mably, Goldſmith, Denina, Gaſt, Gillies, and Mitford; the Roman, by Hooke, Rollin, Crevier, Macquer, Goldſmith, Gibbon, Beaufort, Ferguſon, and Stuart. The hiſtory of the middle ages lay in deep obſcurity even till late in the eighteenth century. One of the firſt and moſt clear-ſighted authors, who undertook to inquire into the general ſtate of the hiſtorical world during thoſe ages, and thence to illuſtrate the events which occurred in them, was Robertſon; who, in the préface to his Hiſtory of Charles V. has given a ſketch of the progreſs of ſociety in Europe, from the downfall of the Roman empire to the beginning of the ſixteenth century. This department of hiſtory has thence aſſumed a very diſſimilar form; men have learnt to inquire into the nature, the origin, and the ſecret cauſes, of events, and to view many of them in a different light: ſtill, however, much remains to be done. Krauſe, Koch, and Remer, may on this head be peruſed with advantage. The hiſtory of the modern ſtates of Europe has been recorded within the laſt century under every poſſible form of publication. Of compendious works, the beſt, according to M. Meuſel, have been written by Germans; though, at the ſame time, every nation has ſeveral of this deſcription which poſſeſs great merit. For particulars, our readers would do well to conſult M. Meuſel's liſt of authors.

The knowledge of eccleſiaſtical hiſtory became ſo neceſſary at the reformation, that the learned of either party began to ſtudy it with greatly-increaſed diligence, accuracy, and freedom; yet it muſt be confeſſed that, till very lately, ſince toleration has approximated the different religious parties, eccleſiaſtical hiſtory was ſeldom more than a furiouſly-abuſive enumeration of ſects and hereſies, ſtigmatizing

ſtigmatizing as abſurd and damnable whatever militated againſt that ſet of opinions which happened to be favoured by the writer. The hiſtory of learning has been much ſtudied in Germany ſince the ſixteenth century; Morkof, towards the end of the ſeventeenth, pointed out the right path, and has been followed by Conring, Paſch, and others. Geſner, ſo early as 1545, publiſhed a general literary lexicon; among others, Konigmencke, Jöcher, and Adelung, have purſued the ſame path, and far ſurpaſſed their predeceſſors; but ſtill without exhauſting the ſubject. Biography, which had been ſo much cultivated by the ancients, and which in the middle ages was ſo ſadly neglected, revived with the revival of literature. Among the writers in this line, ſome of the moſt prominent have been Camerarius, Gaſſendi, Leclerc, Middleton, Moſheim, Geſner, Schroeckh, Fabroni, Schirach, Eberhard, Vogel, Meiners, Eichhorn, and Schlichtegroll. Some, too, have diſtinguiſhed their names by the memoirs of themſelves, as Cardan, Buchanan, de Thou, Huet, Rouſſeau, Hume, &c. Chronology in this period derived much light from mathematics and hiſtory, and in return it reflected much light on them. Great labour was employed in collating ancient dates, and in reconciling the chronology of the claſſical writers with that of the holy ſcriptures. By means of compendious treatiſes and tables, this once obſcure and intricate ſubject is now rendered familiar to every ſtudent. After all, as the object of chronology is to point out epochs and æras of received notoriety, and as the date from which in this country we begin the Chriſtian æra is of univerſal uſage in the weſtern parts of the Chriſtian world; the chronologiſt perhaps will beſt conſult the convenience of his Engliſh reader, if he commences the Chriſtian æra from the vulgar date; and for the hiſtorian it will be moſt ſafe, becauſe it will leſs tend to perplex, if he follows the common courſe of chronology, and takes his date of our Lord's nativity from the year which ordinary cuſtom has long ſanctioned. See the article CHRONOLOGY, vol. iv. p. 539, 40. Upon the ſubject of GEOGRAPHY alſo during this period, ſee that article, vol. viii. p. 347.

The ſubject of ſtatiſtics was never ſcientifically treated before the eighteenth century; for, though the ancients have handed down to us ſome ſtatiſtical accounts, (as Xenophon, for inſtance, of Athens and Lacedæmon,) yet theſe all want that regular and ſyſtematic form which is eſſential to a *ſcience*. During the fifteenth century, when Venice became, as it were, the focus of all European politics, the Venetian government enjoined its ambaſſadors to draw up accounts of the internal ſtate of thoſe countries and courts to which they were delegated. Theſe, as they came to hand, were carefully depoſited in the archives; and, in the ſixteenth century, they were partially publiſhed. Other powers adopted the practice; and thus, by degrees, the ſtrength and weakneſs of ſtates, which till then had been little regarded, or had been cautiouſly involved in myſtery, became topics of general diſcuſſion; and this gave riſe to the works of Sanſorino (1567), of Botero (1592), and of others; hence alſo the Theſaurus Politicus of Gaſpar Ens (1609). The Germans very early took the lead in this inveſtigation; Conring, profeſſor at Helmſtädt (1660), firſt rendered it an univerſity-ſtudy; and he gave lectures on it, treating it as an appendage to political ſcience. His example was followed in the eighteenth century by various univerſities of Germany. Eberhard Otto (1726), ſeparated the ſcience of ſtatiſtics altogether from that of politics; he called it *Notitiam præcipuarum Europæ Rerumpublicorum*; and by his lectures on it, he excited a great zeal for the ſtudy. M. Meuſel, however, ſtyles Achenwall of Gottingen (1749) the father of ſtatiſtics; he was the firſt, indeed, who called the ſcience by that name; and he exhibited it under a form incomparably more correct, complete, and regular, than any of his predeceſſors. The Germans, it ſhould ſeem, aſſume the honours of this ſcience almoſt excluſively; and Büſching's Magazine may be conſidered as beginning comparatively a new epoch in ſtatiſtics.

A more extenſive ſtudy of ancient authors had enabled the learned, about the beginning of the ſixteenth century, to publiſh, with a tranſlation and commentary, ſome of the beſt mathematical works of antiquity. Their next ſtep was to venture into the path of original invention. The earlieſt attempts of this kind were made in Italy, and referred, as might naturally be expected, to the eaſier parts of pure mathematics. Tartaglia, teacher of mathematics, in Venice (1557), was the firſt who in any degree diſtinguiſhed himſelf. Commandine and Maurolycus followed the ſame courſe (1575); and Lucas Valerius of Rome (1618), went beyond the boundaries of ancient diſcovery; he particularly determined, what had been neglected by Archimedes, the centre of gravity in all ſolid conoids, ſphæroids, and their ſegments; and he invented a new quadrature of the parabola. In France, little was done till the ſeventeenth century. "No nation," ſays M. Meuſel, "could at that time boaſt of more geometricians than Germany;" he eſpecially mentions Byrge, as having contrived the proportional compaſs, which others have aſcribed to Galileo, and as having paved the way for the ſubſequent invention of logarithms. This ſplendid diſcovery was reſerved for baron Napier (1614); it was at firſt, indeed, imperfect, but was afterward improved by Kepler, Briggs, and others. Algebra is almoſt entirely the production of this period; for the little which had been exhibited by the Greeks ſince the fourth century, and after them by the Arabs, could ſcarcely be called a beginning. In the early part of the fifteenth century, Leonardo da Piſa ſeems to have been the firſt writer who made known to the world the diſcoveries of the Arabs; but it was Lucas Pacioli who, nearly at the end of the century, brought the ſcience, for the firſt time, into any general eſteem; and even *he* did not advance beyond equations of the ſecond order. Ferrei was the firſt perſon who found out a method of ſolving cubical equations; he confided the treaſure to his ſcholar Fiore; but Tartaglia, getting poſſeſſion of the ſecret, communicated it to Cardan; who then, under the pretence that the rule itſelf only had been imparted to him, and that he had invented the demonſtration of it, publiſhed it as his own (1545), in his work intitled, Ars Magna; and hence it has unjuſtly been called, ever ſince, Cardan's Rule. Ferrari, a ſcholar of Cardan, invented a ſolution of biquadratic equations. Bombelli (1579) united, improved, and conſiderably extended, the diſcoveries of his predeceſſors. The ſubſequent hiſtory of this ſcience is pretty generally known. See the article ALGEBRA, vol. i. p. 281, 2.

Unfitted as were the Peripatetic doctrines to combine with the Chriſtian religion, ſince they completely excluded the Deity from the government of the world, and contained no proofs of the immortality of the ſoul, yet they had ſo thoroughly infected the ſcholaſtic philoſophy, that it was long ere the world could reſolve to ſhake them off, and think for itſelf. They were ſtudied, admired, and propagated, in the early part of this period, by perſons the moſt celebrated for their learning, as well proteſtants as Roman catholics. The Ionian, the Stoic, the Pythagorean, and Eleatic, ſyſtems, had alſo each of them its votaries. In the ſixteenth and ſeventeenth centuries, flouriſhed the ſect of Theoſophi; who ſtyled themſelves Philoſophi per ignem, being much given to chemiſtry, and diſtinguiſhed their philoſophy by the title of Cabbala. At length, on the revival of the doctrines of Roſenkreutz by Andreæ (1586), they united themſelves with the Roſicrucians, and aſſumed their name. In ſuch a confuſion of ancient and modern ſyſtems of philoſophy, it is not ſurpriſing that ſcepticiſm alſo ſhould find its place; and accordingly, the ſect of Modern Sceptics, as they were called, has been dignified by the names of many illuſtrious members, from Sanchez, Charron, Huet, &c. of the ſeventeenth century, down to David Hume. In the ſixteenth century,

century, ſome of the learned, tired of perpetual conteſt, endeavoured to combine two or more ſeveral ſyſtems, and thence obtained the name of *Synkratiſts*; but the ſyſtem of Synkratiſm was ſoon overturned, partly owing to the endleſs contradictions which it was found to involve, and ſtill more on account of the numerous phænomena of nature, unknown to the ancients, but diſcovered in the progreſs of ſcience, with which it was ſhown to be incompatible. This gave riſe to the wiſer practice of rejecting all that in the ancient ſyſtems was, by later experience, proved to be falſe, and of connecting with the new diſcoveries all parts of them that could be retained; the ſet of doctrines thus formed conſtituted what was called the Eclectic Philoſophy. Its firſt great founder was Francis Bacon; and it has been generally predominant ever ſince his time. For the opinions of Hobbes, des Cartes, Thomaſius, Leibnitz, Buddeus, Wolf, Hollman, Cruſius, Bentley, and others of this period, M. Meuſel may be conſulted with advantage: for us, it is ſufficient to conſider them as various modifications of the ſyſtems already mentioned.

Logic was cleared, during this period, from the thorns and briars of the ancient dialectics, by Ramus, Acontius, Bacon, des Cartes, Malebranche, and others; but little farther progreſs was made, or could be made, until our immortal Locke had paved the way, by pointing out the true origin of our ideas. The different branches of metaphyſics, ontology, pſychology, &c. ſo engroſſed the genius of the middle ages, as to leave little leiſure for the ſtudy of practical philoſophy. For the knowledge of the rights of nature, and the law of nations, M. Meuſel refers to Winkler, Grotius, Selden, Hobbes, Bacon, Puffendorf, &c. Though the ancients, particularly Plato, Ariſtotle, Dionyſius, Longinus, Quintilian, and others, have furniſhed us with many elegant and uſeful remarks on the beautiful in nature and art, yet the moderns have the merit of having firſt eſtabliſhed any general theory of it on ſound philoſophical principles. Baumgarten of Berlin, firſt undertook the ſubject in this light, and gave to the new ſcience the title of *Æſthetics*; he has been followed by Salzer, Blankenburg, Abbt, Mendelſſohn, Leſſing, lord Kaimes, Kant, and others.

Poetry, the nearer we approach to modern times, appears to have become more and more the favourite purſuit of genius in all nations. To enumerate the great names of poets, as well as writers on the art of poetry, which illuſtrate this period, would be ſuperfluous and tedious. We may content ourſelves with obſerving, in general, that, ſince the fifteenth century, the ſpirit of poetry has extended itſelf, not only through thoſe countries which it animated in the times of old, but alſo through the whole of the ſouth and north of Europe. Denmark, Sweden, Lapland, Poland, Ruſſia, have all felt its influence, and have ſignalized themſelves at ſundry times, and particularly within the laſt century, by productions of genuine beauty and ſublimity. Eloquence has alſo been ſtudied with conſiderable aſſiduity, and numerous treatiſes on it have appeared in moſt civilized countries; in Italy, by Patrizi and Corticelli; in Spain, by Salinas, Nunez, Paton, and Majans; in France, by Lami, Fenelon, Rapin, Rollin, and Batteux; in Germany, by Melanchthon, Voſs, Erneſti, Baſedow, Löbel, and Maaſs; in Great Britain, by Lawſon, Blair, Sheridan, Monboddo, Ward, &c. In Italy, proſe may be ſaid to have been created by Boccacio (1375), and to have been conducted to its greateſt purity and perfection by Machiavelli (1482). This pure proſe, however, made but ſlow progreſs in ſociety, and, till late in the eighteenth century, was only to be learnt from the writings of Boccacio, Machiavelli, and the reſt of the Italian claſſics. The two beſt Italian orators have been Della Caſa and Speroni. In Spain and Portugal, the beſt proſe-writers lived in the ſixteenth and part of the ſeventeenth centuries; they were chiefly hiſtorians and moraliſts. That Spaniſh pulpit-eloquence is very low, we learn from Franz de Iſla, himſelf a Spaniſh jeſuit, in his Hiſtoria del Fray Gerundio de Compazas, (1758.) Of Portugueſe orators, no one is much known out of his own country, excepting the jeſuit Vieyra, whoſe works were publiſhed at Liſbon (1679–1718) in fourteen quarto volumes, of which the firſt thirteen conſiſt entirely of ſermons.

The hiſtory of French, Engliſh, and German, literature, is too well known to require notice in this place. See the articles ENGLAND, FRANCE, and GERMANY. On a comparative view of European literature, it may be obſerved that the Italians, its firſt reſtorers, excel in poetry, hiſtory, and other departments of the belles lettres; but about the year 1600, their taſte began to decline, and a mental effeminacy aroſe, which is conſpicuous in the fantaſtic ſocieties and academies, and in the extravagant flatteries which every writer thought due in politeneſs to another; the term Illuſtrious becoming as familiar as that of Signior and Madama, a waſte of literary fame, which rendered it of no value. The French even originally excelled in romance and light poetry, and that pleaſing and minute ſpecies of biography called memoirs; they have produced few works of original genius, but yield to no nation in ſcientific productions, and in literary diſquiſitions, written with good ſenſe, preciſion, and accuracy. Spaniſh literature forms a vaſt treaſure, little known to other nations; and ſcarcely any department can be named, in which excellent writers do not appear. The native German, Daniſh, and Swediſh, literature, is but of recent celebrity. To complete the ſole intention of this parallel, the grand feature of Engliſh literature, is original genius, tranſmitted even from Roger Bacon, to our Shakeſpeare, Milton, Newton, and Locke; not to dwell here on claims more minute, but equally firm. In the ſcientific departments, England muſt yield to France, except in the various branches of mathematical knowledge; the inſtitution of the Royal Society, and the genius of Newton, having attracted the greateſt talents within their ſphere, to the neglect of other departments of curious inveſtigation. The Engliſh clergy, who far exceed in learning any other body of that deſcription in Europe, have always cultivated claſſical literature, with diſtinguiſhed zeal and predilection. An old writer obſerves, that during the civil war under Charles I. there were "more good and more bad books printed and publiſhed in the Engliſh tongue, than in all the vulgar languages of Europe." Perhaps Germany may now exceed our literary efforts; yet more novels are ſuppoſed to be publiſhed in England in one month than in all the reſt of Europe in a year. Our literary journals, in which we may alſo claim a great degree of excellence, may indicate to foreigners the vaſt extent of modern Engliſh literature.

The numerous important changes, which have taken place in the principal governments of Europe within the laſt three centuries, have afforded the materials of the *theory of government*. Of theſe events, none have been more fruitful of political inſtruction than Luther's reformation, the diſturbances in France and in the Netherlands during the latter half of the ſixteenth century, and, in England, the rebellion againſt Charles I. and the revolution in 1688. The principal writers on this highly-intereſting ſcience, mentioned by M. Meuſel, are Machiavelli, Botero, Bodinus, Languet, (in his Vindiciæ contra Tyrannos, 1581,) Boucher, Raynald, Mariana, Grotius, Hobbes, Milton, Salmaſius, Algernon Sidney, Locke, Bolingbroke, Lipſius, Monteſquieu, Rouſſeau, and the abbé Raynal. The magnagement of the national reſources, including political œconomy, the promotion of the arts and manufactures, &c. was never ſcientifically treated before the latter part of this period. A knowledge of the ſubject, particularly of the financial branch of it, had been hitherto conſidered, both in theory and in practice, as a ſtate-ſecret; indeed it was a very generally received prejudice that ſuch knowledge was to be obtained ſolely from practice, and theory was of courſe in a great meaſure neglected. The political ſyſtems of Sully and Colbert are very deficient, on this ſcore; more eſpecially as they are built

built on that principle which Adam Smith has now ſo ſatisfactorily proved to be falſe, that the wealth of a nation is to be eſtimated by its pecuniary capital. Towards the middle of the eighteenth century, under the protection of Frederic-William I. king of Pruſſia, public lectures on this ſcience were delivered in the univerſity of Halle by S. P. Gaſſer, and in that of Frankfort by J. C. Dithmar; and the example was followed at Rinteln, Brunſwick, Vienna, &c. The authors moſt diſtinguiſhed on the money-ſyſtem were Zincke, Gottlob von Juſti, Schreber, Bielefeld, Beauſobre, Bergnis, and Daries. About this time, however, a ſecond ſyſtem came very much into vogue, called the ſyſtem of *phyſiocracy*; according to which the ſtrength and proſperity of a nation are to be eſtimated by the amount of its natural produce. The principal ſupporters of it have been, in France, Mercier de la Riviere, Mirabeau, Dupont, Condillac, le Troſne, and Turgot; in Swiſſerland, Iſelin; in Germany, Schlettwein, Springer, Mauvillon, Schmalz, &c. On the other hand, the abſurdity of regarding huſbandmen and builders as the only productive claſſes of ſociety, and of rejecting all conſideration of thoſe arts and manufactures which, in return for ornamental labour, introduce into a country the wealth and produce of foreign lands, has been abundantly ſhown by Linguet, Necker, Schloſſer, Dohm, Pfeiffer, count Brühl, Büſch, Arthur Young, count Veri, &c. At length Adam Smith, in his much-read and much-admired work on the Wealth of Nations, (firſt printed in the year 1775-6,) laid the foundation of a third ſyſtem, which has been ever ſince continually gaining ground. He does not, like the phyſiocrats, confine the national capital to its *natural produce*, but extends it to the *collective amount of every thing which the induſtry of man can render profitable*; and his leading principle is, "that the productive labour of the inhabitants, the grand ſource of the ſtrength and wealth of a nation, is beſt promoted by their freedom from oppreſſion, and from every kind of clog and reſtraint on their trade, commerce, and agriculture." On this ſubject we may conſult with advantage the writings of Stewart, Genoveſi, Sonnenfels, Jung, Walther, Voſs, and Benſen.

The various departments of political ſcience have, for the moſt part, been ſeparately treated with great ability within this period: legiſlation, by Monteſquieu, Voltaire, Iſelin, Filangieri, Beccaria, and others; the regulations of the police, by de la Maze, Juſti, Pfeiffer, Sonnenfels, and des Eſſarts; and that part of it, in particular, which regards the health of the inhabitants, by Frank. The principal writers on finance are Juſti, Pfeiffer, Röſſig, and Borowſky.

Huſbandry and the mechanical arts have been much promoted by the vaſt diſcoveries made in experimental chemiſtry and in mathematics. The art of engraving on copper has greatly contributed to the ſame end, by ſupplying the means of making public the deſcriptions of machines and inſtruments, as well as the modes of working them. As the earlieſt writers of note on theſe ſubjects, M. Meuſel mentions Coler, Hohberg, and Marperger, of the ſeventeenth century; for fuller information he refers us to the works of Juſti, Zincke, Münchauſen, Duhamel, Schubart, Beckmann, Sprengel, Lamprecht, Jung, and Walther, and the dictionaries of Jacobſon and Krünitz. On trade, we may conſult the two Savary des Bruslons (father and ſon), Ludovici, May, Reimar, Beckmann, Büſch, and Berghaus.

Natural hiſtory in general derived conſiderable advantage in the beginning of this period, though rather in the way of minute individual deſcriptions than of any ſcientific claſſification, from the labours of Geſner and Aldrovandus. In claſſification, Ray may be ſaid to have ſet the firſt example; about half a century later the great Linnæus appeared, and infinitely eclipſed all the writers on the ſubject who had ever preceded him, giving to it that ſcientific form and arrangement which it ſtill bears. See his article, p. 757. He was, however, vigorouſly oppoſed, particularly on the ſcore of his claſſification of animals, by Klein; who attempted in vain to ſubſtitute another ſyſtem, more conformable to the principle of Ray, but much too complex for ordinary uſe.

The hiſtory of natural philoſophy, from its connection with that of mathematical ſcience, has already in part been anticipated. The perſons of greateſt celebrity who have treated of it are Galileo, des Cartes, and Newton. The ſyſtem of des Cartes has been ably illuſtrated by Silvain Regis, Van Roy, Rohault, le Grand, Clauberg, and Sturm. Among the multitudinous defenders of the Newtonian ſyſtem, we particularly notice Pemberton, Keil, s'Graveſande, Maclaurin, Deſaguliers, Muſchenbroeck, Algarotti, Voltaire, &c. In modern days, the controverſy between le Sage and Kant, the former an advocate for the *atomic*, the latter for the *dynamic*, ſyſtem, has attracted conſiderable notice. They join iſſue at once on the primary notion of matter. Le Sage contends that matter fills ſpace by its actual ſubſtance, that it is infinitely diviſible, that there are vacuities between its conſtituent atoms, and that elaſtic fluids are compoſed of ſeparate particles. Kant, on the other hand, argues that the eſſence of matter conſiſts in attractive and repulſive force, and that by means of this inherent power it occupies ſpace; that it is not infinitely diviſible, that it fills ſpace *continuately*, and that there is no vacuum, nor any fluid compounded of *diſcrete* particles. The principal ſcholars of le Sage are de Luc and Prevoſt; of Kant, Weber, Eſchenmayer, and Schelling.

The general ſpirit of inquiry, which had been excited towards the end of the preceding period, was very beneficial to the ſcience of medicine. Yet, ſo bigotted was the medical world to the doctrines of Galen and his Arabian followers, that the ſcience could make but feeble progreſs until Lunigo (or Leonicenus), early in the ſixteenth century, dared to bid defiance to prejudice, and became the reſtorer of the Hippocratian ſyſtem. He was ably abetted in England by Linacre, and in France by Fernel. About the year 1619, Harvey firſt made public his diſcoveries reſpecting the circulation of the blood. The abſurdities of Paracelſus, and of the Theoſophi and Alchemiſts, which had been introduced into the ſcience of medicine in the ſixteenth century, continued till late in the ſeventeenth to lead away the medical world in purſuit of the Panacæa, or univerſal remedy. Sennertus was among the firſt who ſelected with judgment, from the chemiſtry of his day, whatever might be really uſeful to the phyſician; he firſt eſtabliſhed a ſchool of rational chemiſtry, and publiſhed a compendium of the ars medica, which long continued to be generally uſed. About the ſame time, the Carteſian philoſophy inſinuated itſelf into the ſcience of medicine. Regius, one of its early votaries, was the founder of the *mechanic* ſyſtem, which propoſed to explain all the diſorders of the human body on principles of mechaniſm. This innovation was violently reprobated by the advocates for what was called the *methodic* ſyſtem, which was built on the doctrines of Hippocrates and Galen. Sylvius (1672) undertook to account for every diſorder from the fermentation of the animal acids and alkalis; and he had a numerous band of admirers. In the next century, the mechanic theory received ſtrong ſupport from Hoffman and Hales; but it was again ſtrenuouſly attacked by Stahl, the inventor of the *organic* theory, who referred the diſeaſes of the human frame, not to the emotions of the body, but to thoſe of the mind or ſoul. Nearly at the ſame time Boerhaave came forward with a third ſyſtem, diſtinct from any of the foregoing, though ſomewhat inclining to the mechanical hypotheſis. Among the great diſcoveries in this ſcience during the eighteenth century, we muſt not omit to mention Haller's celebrated principle of *incitability*, ſo ably illuſtrated by Brown; according to whom all the diſorders of the human frame are reducible to two claſſes, ſthenic, which proceed from too much, and aſthentic, which proceed from too little, irritability.

The number of eminent civilians in this period forms a very copious liſt, in which the French appear to ſtand

foremoſt, and next to them the Netherlanders. Meanwhile, the feudal law in its ſeveral departments was ſtudiouſly inveſtigated, purified by degrees from whatever was moſt oppreſſive to the ſubject, and gradually melted down, in various forms, into the conſtitutions of the different ſtates of Europe. The penal laws alſo began in moſt countries to aſſume a milder character. By Luther's reformation, the rights of the church underwent a very eſſential change, but ſtill not ſuch as totally to overthrow the Romiſh canon-law; the papiſts, however, were neceſſitated to exert themſelves in eſtabliſhing, on better grounds, its pretenſions to ſupremacy; and the whole code was diligently reviſed.

The ſtudy of the Bible, and the expounding of its doctrines, had hitherto been ſo ſadly neglected, that many old and reſpectable divines, even ſo late as the beginning of this period, had ſtill to learn the contents of the New Teſtament; but now the art of printing, and the revived taſte for literature, had introduced a more active ſpirit of inveſtigation, highly favourable to the right underſtanding of the ſcriptures. The publication of the Complutenſian Polyglott, the critical labours of Reuchlin, Eraſmus, and others, and, more than all, Luther's tranſlation of the entire Bible, excited a zeal for the ſtudy of the ſacred writings, which neither the anathemas of the church nor the coercive powers of the laws were able to ſuppreſs. Though the thoughts of the generality of theologians were ſtill immoderately occupied by polemic divinity, yet editions of the Bible were continually multiplied; and by degrees the original text of the Old and New Teſtament became not leſs ſtudied than the claſſical writings of Greece and Rome. Dogmatic divinity kept pace with the increaſing knowledge of the ſcriptures: Melancthon, ſo early as 1521, publiſhed his Loci Communes Theologici; and the practice ſoon grew very general. Morality, for its intimate connection with this ſubject, was thus much more extenſively inculcated; and we may ſafely affirm that, from the few dogmatical works of Melancthon, Luther, Weller, the two Riviers, &c. more ſound moral inſtruction may be collected than from all the ſyſtems united of the ancient philoſophers. Yet ſtill, as a regular ſcience, moral philoſophy was on the whole but little underſtood before the ſeventeenth century, when Calixtus firſt ſeparated it from dogmatic divinity, and treated of it diſtinctly by itſelf. This important work, which Calixtus did not live to perfect, was carried on by his ſcholars with no ſmall ſucceſs; and, doubtleſs, their ſucceſs would have been much more rapid, had they not unfortunately choſen to dreſs up their new ſcience in the ſtiff drapery of ſcholaſtic argumentation. The later moraliſts have adopted a more natural and more pleaſing method; the pattern of which was given by Baumgarten and Moſheim.

Thus have we finiſhed our ſketch from this very uſeful work, which we cannot too ſtrongly recommend to the attention of ſuch of our readers as are converſant in the German language. We have preferred a foreign work for our ground-work in this inquiry, becauſe the deficiencies which muſt naturally occur in every ſuch inquiry will be moſt readily ſupplied by the Engliſh reader, while many particulars will be found which no Engliſh work could ſupply.

Few engines can be more powerful, and at the ſame time more ſalutary in their tendency, than *literature*. Without inquiring into the cauſe of this phenomenon, it is ſufficiently evident in fact, that the human mind is ſtrongly infected with prejudice and miſtake. The various opinions prevailing in different countries, and among different claſſes of men, upon the ſame ſubject, are almoſt innumerable; and yet of all theſe opinions, only one can be true. Now the effectual means for extirpating theſe prejudices and miſtakes ſeems to be literature. Literature has reconciled the whole thinking world reſpecting the great principles of the ſyſtem of the univerſe, and extirpated the dreams of romance and the dogmas of ſuperſtition. Literature has unfolded the nature of the human mind; and Locke, and others, have eſtabliſhed certain maxims reſpecting man, as Newton has done reſpecting matter, that are generally admitted for unqueſtionable. Diſcuſſion has aſcertained, with tolerable perſpicuity, the preference of liberty over ſlavery; and the Mainwarings, the Sibthorpes, and the Filmers, the race of ſpeculative reaſoners in favour of deſpotiſm, are almoſt extinct. Local prejudice had introduced innumerable privileges and prohibitions upon the ſubject of trade; ſpeculation has nearly aſcertained that perfect freedom is moſt favourable to her proſperity. If in many inſtances the collation of evidence have failed to produce univerſal conviction, it muſt however be conſidered, that it has not failed to produce irrefragable argument, and that falſehood would have been much ſhorter in duration, if it had not been protected and inforced by the authority of political government. Indeed, if there be ſuch a thing as truth, it muſt infallibly be ſtruck out by the colliſion of mind with mind. The reſtleſs activity of intellect will for a time be fertile in paradox and error; but theſe will be only diurnals, while the truths that occaſionally ſpring up, like ſturdy plants, will defy the rigour of ſeaſon and climate. In proportion as one reaſoner compares his deductions with thoſe of another, the weak places of his argument will be detected, the principles he too haſtily adopted will be overthrown, and the judgments, in which his mind was expoſed to no ſiniſter influence, will be confirmed. All that is requiſite in theſe diſcuſſions is unlimited ſpeculation, and a ſufficient variety of ſyſtems and opinions. While we only diſpute about the beſt way of doing a thing in itſelf wrong, we ſhall indeed make but a trifling progreſs; but, when we are once perſuaded that nothing is too ſacred to be brought to the touchſtone of examination, ſcience will advance with rapid ſtrides. Men, who turn their attention to the boundleſs field of inquiry, and ſtill more who recollect the innumerable errors and caprices of mind, are apt to imagine that the labour is without benefit, and endleſs. But this cannot be the caſe, if truth at laſt have any real exiſtence. Errors will, during the whole period of their reign, combat each other; prejudices that have paſſed unſuſpected for ages, will have their era of detection; but, if in any ſcience we diſcover one ſolitary truth, it cannot be overthrown.

Such are ſome of the arguments that may be advanced in favour of literature; the reader's imagination will ſuggeſt many more. We ſhall at preſent advert but to one; namely, *convenience*. Since authorſhip has become a trade, the love of gain has operated in the literary as it has ever operated in the mercantile world, and books have been produced in proportion to the demand for them. In former times, when the ſole incitement to publiſh was the deſire of fame, or the hope of inſtructing mankind, books appeared in ſmall numbers, and were only of certain deſcriptions; now, ſince the motive which impels to authorſhip is different, ſince avarice is more active and predominant than ambition, books have been ſhowered on us in the largeſt abundance; diverſified in their character, and unlimited in the variety of their ſubjects. That evils have accompanied this abundance cannot be denied; the fears of public cenſure and the hopes of public applauſe have been weakened by the love of gain; ſome of the books which have appeared add nothing to truth, many contain falſehood, and few amply repay the toil of peruſal. Such evils were indeed to be foreſeen; for it would be abſurd to expect that a building, erected according to the circumſtances of the moment, or in the view of preſent gain, ſhould have the ſolidity and perfection of one which was deſtined to laſt through all time. If, however, we balance oppoſite arguments, and compare the good with the evil that has reſulted from this change of motive, mankind will appear perhaps to have gained by it. Our treatiſes on certain ſubjects may be leſs profound than they were formerly, but they are more numerous; and we may be allowed to hope that there is no author who will not contribute *ſomething* to the common ſtock of

knowledge. If former works contained a greater variety and richneſs of matter, there were few perſons only to whom it could be imparted; now we have books level with every capacity, and adapted to diffuſe knowledge through all ranks. The elaborate refinement and ſcrupulous exactneſs, which care and long meditation gave to the productions of paſt times, are now to be hoped from frequency of practice and repetition of trial; and, when the experiments are numerous beyond computation, we may allow for many failures.

If we turn from the convenience of theſe literary productions to the effects of their influence on ſociety, the advantage will evidently appear to be with modern times; for, if knowledge exiſted formerly, in larger ſeparate maſſes, it is now without doubt more generally diffuſed; and what moraliſt will deny that knowledge contains the germs of virtue and happineſs? If, in the luxury of preſent times, the temptations to vice be increaſed, exhortations to goodneſs are more frequent; and moral depravity is aſſailed on every ſide, and under every form, in proſe and in poetry, by novels and by ſerious eſſays. In paſt times, men were rarely impelled to the queſt of knowledge, and never allured; ſcience was difficult of acceſs, and her features were harſh and forbidding. Now ſhe advances to meet the ſtudent, and ſtrives to captivate by every art; the curioſity of the inquiſitive is excited, the idle are tempted to uſeful occupation, and the buſy reſort to her for relaxation.

The general objects of intellectual purſuit are not only different, but each object is purſued with different means and views; language, poetry, antiquities, mathematics, are the claſſes into which the objects of mental inquiry are diſtributed; but each of theſe (the ſcience of mathematics for inſtance) is ſtudied under a difference of views and circumſtances; for ſome ſtudents are ambitious of a variety of knowledge, while others only aim at correctneſs; ſome are contented with the ſpiritual and philoſophical utility of mathematical ſcience, others demand a groſs and material utility; ſome ſeek for truth, truth naked and abſtract; and ſome require that it ſhould be clothed with power, and ſubſervient to the purpoſes of common life. Adapted to the diſſimilitude of taſte and capacities, books have been written, which are either ſyſtematical and coherent, or familiar and illuſtrative; ſpeculative, or applied to practical purpoſes; either exact in their logical deduction, or copious in the variety of their matter.

It now only remains to inquire what are the encouragements to literature; we mean on the ſcore of profit to the profeſſors. And we ſhall preſently find, that *literary property* is of a nature different from every other; leſs permanent, of courſe leſs profitable.

The right which an author may be ſuppoſed to have in his own original literary compoſitions, ſo that no other perſon without his leave may publiſh or make profit of the copies, is claſſed by Blackſtone among the ſpecies of property acquired by *occupancy*; being grounded on labour and invention. He expreſſes however ſome doubt whether it ſubſiſts by the common law; and, this being ſtill, after all the determinations on the ſubject, in ſome meaſure, a doubtful queſtion, the following remarks may deſerve attention. When a man, by the exertion of his rational powers, has produced an original work, he ſeems to have clearly a right to diſpoſe of that identical work as he pleaſes; and any attempt to vary the diſpoſition he has made of it, appears to be an invaſion of that right. Now the identity of a literary compoſition conſiſts entirely in the ſentiment and the language. The ſame conceptions clothed in the ſame words, muſt neceſſarily be the ſame compoſition; and, whatever method be taken of exhibiting that compoſition, to the ear or the eye of another, *by recital*, [ſee the caſe of Colman v. Wathen,] by writing, or by printing, in any number of copies, or at any period of time, it is always the identical work of the author which is ſo exhibited: and no other man, it has been thought, can have a right to exhibit it, eſpecially for profit, without the author's conſent. This conſent may perhaps be tacitly given to all mankind when an author ſuffers his work to be publiſhed by another hand, without any claim or reſerve of right, and without ſtamping on it any marks of ownerſhip; it being then a preſent to the public, like building a church or bridge, or laying out a new highway. But, in caſe the author ſells a ſingle book, or totally grants the copy-right, it has been ſuppoſed, in the one caſe, that the buyer has no more right to multiply copies of that book for ſale than he has to imitate for the like purpoſe the ticket which is bought for admiſſion to an opera or a concert; and, in the other, that the whole property, with all its excluſive rights, is perpetually transferred to the grantee. On the other hand it is urged, that though the excluſive property of the manuſcript, and all which it contains, undoubtedly belongs to the author before it is printed or publiſhed; yet, from the inſtant of publication, the excluſive right of an author, or his aſſigns, to the ſole communication of his ideas, immediately vaniſhes and evaporates; as being a right of too ſubtle and unſubſtantial a nature, to become the ſubject of property at the common law, and only capable of being guarded by poſitive ſtatutes and ſpecial proviſions of the magiſtrate. 2 *Comm.* 405, 6.

The Roman law adjudged, that, if one man wrote any thing on the paper or parchment of another, the writing ſhould belong to the owner of the blank materials, meaning thereby the mechanical operation of writing, for which it directed the ſcribe to receive a ſatisfaction; for in works of genius and invention, as in painting on another man's canvas, the ſame law gave the canvas to the painter. As to any other property, in the works of the underſtanding, that law is ſilent; though the ſale of literary copies, for the purpoſes of recital or multiplication, is certainly as ancient as the times of Terence, Martial, and Statius. 2 *Comm.* 407.

But, whatever inherent *copy-right* might have been ſuppoſed to ſubſiſt by the common law, the ſtatute 8 Ann. c. 19, has now declared, that the author and his aſſigns ſhall have the ſole liberty of printing and reprinting his works for the term of fourteen years, *and no longer* [the words of the ſtatute]; and has protected that property by additional penalties and forfeitures; directing farther, that if, at the end of that term, the author himſelf be living, the right ſhall then return to him for another term of the ſame duration. A ſimilar privilege is extended to the new inventors of prints and engravings, by ſtats. 8 Geo. II. c. 13. 7 Geo. III. c. 38. 17 Geo. III. c. 57. The above parliamentary protections appear to have been ſuggeſted by the exception in the ſtatute of monopolies, 21 Jac. I. c. 3; which allows a royal patent of privilege to be granted for fourteen years to any inventor of a new manufacture, for the ſole working or making of the ſame; by virtue whereof it is held, that a temporary property therein becomes veſted in the king's patentee. See LETTERS PATENT.

Whether the productions of the mind could communicate a right of property, or of excluſive enjoyment, in reaſon and nature; and, if ſuch a moral right exiſted, whether it was recogniſed and ſupported by the common law of England; and whether the common law was intended to be reſtrained by the ſtatute of queen Anne; are queſtions upon which the learning and talents of the higheſt legal characters in this kingdom have been powerfully and zealouſly exerted. Theſe queſtions have, by the ſupreme court of judicature in the kingdom, been ſo determined, that an author has no right at preſent beyond the limits fixed by that ſtatute. See the caſe of Donaldſon v. Beckett; *Bro. P. C.* As that determination, however, was contrary to the opinion of lord Mansfield, of Blackſtone, and of ſeveral other judges, Mr. Chriſtian has remarked, that every perſon may ſtill be permitted to indulge his own opinion upon the propriety of it, without incurring the imputation of arrogance. But it is worthy of remark, that this deciſion, which was ſuppoſed, at the time,

time, to have given a mortal blow to the property and proſperity of authors and bookſellers, has, in fact, been one great means of increaſing both. Few books are now republiſhed without conſiderable alterations, additions, or annotations, by means of which they become, in fact, new works; and it is not worth any body's while then to pirate them in their original ſtate. This has proved a ſpur to the induſtry of authors, and the liberality of bookſellers; and perhaps no period ever produced ſo many new publications of acknowledged utility, as that which has elapſed ſince the memorable deciſion above alluded to; which for the moment caſt a melancholy gloom over thoſe who now enjoy its beneficial effects.

In Ireland, before the union there was no ſtatute to protect the copy-right of authors. The following is a general abſtract of the ſtatutes relative to this intereſting ſubject, and of ſome points determined on their conſtruction.

The Britiſh ſtat. 8 Ann. c. 19, enacts, That the author of any book, and his aſſigns, ſhall in future have the ſole liberty of printing it for fourteen years, to commence from the day of the firſt publiſhing thereof; and if any perſon within the ſaid time ſhall print, reprint, or import, any ſuch book, without the conſent of the proprietor in writing, or ſhall knowingly ſell, publiſh, or expoſe to ſale, any ſuch book, without ſuch conſent, the offender ſhall forfeit the books and ſheets to the proprietor, and alſo 1d. for every ſheet found in his cuſtody, either printed or printing; half to the crown, and half to him who will ſue in any court at Weſtminſter. § 1. No bookſeller, printer, or other perſon, ſhall be liable to theſe forfeitures, unleſs the title to the copy of the book [the whole book and every volume thereof, ſtat. 15 Geo. III. c. 53. § 6.] ſhall before ſuch publication be entered in the regiſter-book of the company of ſtationers, at their hall in London, and unleſs the conſent of the proprietor be entered, paying 6d. for each entry; § 2. nor unleſs nine copies of each book, *printed and publiſhed as aforeſaid*, be delivered to the company's warehouſekeeper before publication; for the uſe of the royal library in the Britiſh Muſeum, the libraries of the univerſities of Oxford and Cambridge, of the four univerſities in Scotland, of Sion College in London, and of the advocates at Edinburgh. § 5. and ſee ſtat. 15 Geo. III. c. 53. § 6. & 41 Geo. III. c. 107. But an action may be brought, or an injunction obtained in a court of equity, *though the publication be not entered in the regiſter of the ſtationers' company*. It has been explicitly determined, that an author, whoſe work is pirated before the expiration of twenty-eight years from the firſt publication of it, may maintain an action on the caſe for damages againſt the offending party, although the work was not entered at ſtationers' hall, and although it was firſt publiſhed without the name of the author affixed. 7 *Term Rep.* 620. In the houſe of lords, Feb. 1811, an appeal from the court of ſeſſion in Scotland was proceeded in, relative to the copy-right of Burns' Poems. The appellants, Meſſrs. Cadell and Davies, and Mr. Creech of Edinburgh, had applied to the court of ſeſſion for an interdict, to prevent Mr. Robertſon, of Edinburgh, from publiſhing thoſe poems; and damages, on the ground that they poſſeſſed the copy-right, were refuſed, on the ground that the work was not entered at ſtationers' hall. Mr. Adam was heard for the appellants; and, the lord chancellor having ſtated the law upon the ſubject to be clear, the decree of the court of ſeſſion was ordered to be reverſed, and an interdict to be iſſued.

If the clerk of the ſtationers' company ſhall neglect to make due entry, or to give a certificate thereof, then, notice being given in the Gazette, the proprietor ſhall have the ſame benefit as if an entry were actually made; and the clerk ſhall forfeit 20l. 8 *Ann.* c. 19. § 3. 41 *Geo.* III. U.K. c. 107. § 4, 5.

The above ſtat. 8 Ann. c. 19, particularly provided, by § 9, that the right of the univerſities or any other perſon, to the printing or reprinting of any book already printed, ſhould not be either prejudiced or confirmed. After the determination of the caſe of Donaldſon v. Beckett, the univerſities were ſo much alarmed at the deciſion, that they applied for and obtained an act, ſtat. 15 Geo. III. c. 53; which ſecured to the two univerſities in England, the colleges or houſes of learning within the ſame, the four univerſities in Scotland, and the colleges of Eton, Weſtminſter, and Wincheſter, a perpetuity in the copy-right of all books given or reviſed to, or in truſt for, them by the authors; which was ſanctioned by the ſame penalties as thoſe contained in the ſtat. 8 Ann. ſo long as the books or copies belonging to the ſaid univerſities or colleges are printed only at their own printing-preſſes, within the univerſities or colleges, and for their ſole benefit. § 8.

Muſical compoſitions have been held to be within the meaning and protection of the ſtatute. *Cowp.* 623. A fair and bonâ fide abridgment of any book, is conſidered as a new work; and, however it may injure the ſale of the original, yet it is not deemed in law to be a piracy, or violation of the author's copy-right. 1 *Bro. C. R.* 451. 2 *Ath.* 141.

By the act 41 Geo. III. c. 107. (paſſed after the union of Great Britain and Ireland,) for the further encouragement of learning in the united kingdom; it is enacted, that authors of books already compoſed and not publiſhed, and of books hereafter to be compoſed, and their aſſigns, ſhall have the ſole right of printing ſuch books for fourteen years from the day of firſt publiſhing the ſame, (and for fourteen years more if the author be living at the end of the firſt fourteen years;) that bookſellers, printers, &c. in any part of the united kingdom, or in any part of the Britiſh European dominions, who ſhall print, reprint, or import, or publiſh, or expoſe to ſale, any ſuch book, without conſent of the proprietor, ſhall be liable to a ſpecial action on the caſe for damages at the ſuit of the proprietor, and ſhall alſo forfeit all the books to the proprietor; and further 3d. per ſheet, half to the king, and half to the informer. § 1. This act ſhall not extend to books heretofore publiſhed, nor indemnify againſt penalties under former acts. § 2. The right of printing books given or bequeathed to Trinity college, Dublin, is ſecured to that college under like penalties. § 3. Bookſellers, &c. ſhall not be liable to the penalty of 3d. per ſheet, unleſs the title to the copy-right be entered before publication at ſtationers' hall; nor if the conſent of the publiſher be ſo entered. § 4. Two additional copies of all books entered at ſtationers' hall ſhall be delivered there for the uſe of Trinity College and King's Inns, Dublin. § 6. So that now no leſs than eleven copies of every work, upon the beſt paper, muſt be delivered for the uſe of the public; a very enormous tax upon coſtly works, and from which the bookſellers are endeavouring to obtain relief by an application to parliament.

It had been generally underſtood, that it was not neceſſary (under the ſtatute of Anne) to deliver the nine (now eleven) copies, unleſs the author choſe to enter his work at ſtationers' hall, ſo as to be enabled to recover the penalties againſt thoſe who might pirate it. And therefore, when the univerſity of Cambridge recently came forward to claim the delivery of books which had not been regiſtered, it was reſiſted as an unfounded demand. That it was unequitable of itſelf, and oppreſſive to literature, was ſtrongly felt. The univerſity brought an action for the non-delivery of Mr. Fox's hiſtorical work, and the action was defended. A ſpecial caſe was made upon it for argument before the court of king's bench, in which it was contended, that the act of Anne, according to its true ſpirit and object, as well as according to the literal meaning of the words *as aforeſaid*, enjoined the delivery of thoſe copies only, which in conformity with the preceding part ſhould be regiſtered. The court of king's bench however determined, That the act of Anne was to be conſtrued by itſelf; and that this compels the delivery of copies of all books, whether regiſtered or not. By this deciſion, the former opinions of the meaning of the act of Anne have been invalidated; the penalties of a ſtatute above a century old have been ſuddenly revived; and literature, the ornamen-

ment of all countries, the ſource of all their improvements, the moſt powerful handmaid of their civilization, the provider of our pureſt pleaſures, has been ſubjected to a grievance, to a peculiar taxation, which, though ſtatutary law, is certainly hoſtile both to reaſon and to equity.

The hiſtory of the delivery of the copies may be thus ſuccinctly ſtated. It began in the year 1662; and in the free ſpirit of our preſent enviable conſtitution we may truly ſay, that nothing could have a worſe beginning; for its injunction is a portion of an act paſſed in that year, than which a more diſgraceful ſtatute was never enacted in any country pretending to have emerged out of barbariſm, to poſſeſs any love of literature, or to enjoy any public liberty; a ſtatute which, for the committed or anticipated offences of a few obſcure perſons, viſited the whole body of Engliſh literature with bonds and ſcourges, calumny, ſuſpicion, and diſcouragement. By this act, (13 & 14 Car. II. c. 33.) after prohibiting heretical or ſeditious publications, it was ordered that no perſon ſhould print any book unleſs it was firſt licenſed and authoriſed; law-books, by the chancellor, or chief juſtices, or chief baron; books on hiſtory or ſtate-affairs by the ſecretary of ſtate; books on heraldry by the earl marſhal; books on divinity, phyſic, philoſophy, ſcience, or art, by the archbiſhop of Canterbury or the biſhop of London.

It proceeds afterwards, as declared in its preamble, to reduce and limit the number of printing-preſſes; and for this purpoſe it declares, that in future no man ſhould be a maſter-printer until the then maſter-printers were reduced to twenty; and the maſter letter-founders were to be four. The maſter-printers and letter-founders were to be nominated and allowed by the archbiſhop of Canterbury and biſhop of London; and no man, unleſs he had been maſter of the ſtationers' company, was to keep more than two preſſes. The moſt inquiſitorial powers were then given to meſſengers authorized by warrants from the king, ſecretary of ſtate, or maſter and wardens of the ſtationers' company, *to enter at what time they ſhould think fit*, and to ſearch, *all houſes* where they ſhould know, or upon ſome probable cauſe ſuſpect, any books to be printed, bound, or ſtitched; and to examine whether the ſame be licenſed or not.

Theſe violent enactments having been made, and adequate penalties impoſed, the ſame ſtatute then proceeds to enact, that every printer ſhould ſend *three copies* of every book new printed, or reprinted with additions, to the ſtationers' company, to be ſent to the king's library, and the vice-chancellors of the two univerſities of Oxford and Cambridge, for the uſe of their public libraries. Until this ſtatute there is not a trace of any law enjoining theſe deliveries. On this ſtatute they began; and it is clear, by its whole complexion, that they were enacted in an arbitrary and ill-tempered ſpirit againſt literature and printing in general; for it makes no diſcrimination. It is not confined to heretical or ſeditious books. It includes in its ſweeping wrath publications which ſurely muſt have been harmleſs; as books on heraldry, phyſic, ſcience, and art; and makes the prelates of our church the judges of works on medicine and art. It was however ordered to remain in force but for two years. In 1664 it was continued for another ſeſſion of parliament. In the ſame year, for another. In the next year, 1665, it was continued until a following ſeſſion, with the addition of penalties on non-deliveries; and it was then ſuffered to expire, within a few years after it had appeared.

From this time to the end of the reign of Charles II. no ſimilar enactment took place; but the preſs became free, and the delivery of the three copies ceaſed to be law. But it was one of the firſt acts of the violent and arbitrary reign of James II. to revive this obnoxious ſtatute. In the firſt year of his reign, 1685, it was revived for ſeven years, and thus the delivery of the three copies became again enjoined for that period. The revolution under William III. then occurred. In his reign ſuch a ſtatute was not long kept alive; it was allowed to expire in 1694. See the article LIBERTY *of the* PRESS, p. 602 of this volume.

From the final expiration of theſe ſtatutes in 1694, to 1709, literature was again freed from this burthen. But in 1709 the ſtatute of Anne was made, which has led to the grievance complained of. On conſulting the records of the houſe, it appears that the bill for this act as brought in required the delivery of *three copies* only as before. In paſſing through the houſe, however, two copies were added, one for Sion College, and one for the Faculty of Advocates at Edinburgh. It was in the houſe of lords that the other four copies were added for the Scotch univerſities, making in all the *nine copies*.

Now, until this act paſſed, it is undeniable that ſix of theſe libraries, Sion College and the five in Scotland, never had any copies before. They cannot therefore urge any *antecedent right*. The royal library and the two Engliſh univerſities had the tranſient boon to urge which the obnoxious ſtatute of Charles had given them, which had twice expired. But, although theſe nine libraries became intitled to copies under this act of Anne, it has been obſerved before, that the practical conſtruction and operation of this ſtatute was, that copies of thoſe books only were delivered which the proprietors choſe to enter in the ſtationers' regiſter. If this optional delivery had been continued, authors and their aſſigns would not have complained. It is from this ſudden change of the conſtruction and application of the act, to the compulſory delivery of all books, whether regiſtered or not, that they now ſeek relief.

The firſt compulſory delivery of copies which the parliament enacted, ſeems to have had chiefly in view the prevention of libellous and unlicenſed writings, by compelling printed copies to be given to thoſe public libraries from which the knowledge of them would come with ſpeed and certainty to government. This object will certainly now not influence the legiſlature, becauſe it has taken a meaſure of its own on this very ſubject, which adds another copy to the eleven now demanded. By the 39th of George III. c. 79. § 27, 29. it is directed, not only that the printer's name ſhall be printed to every work, but alſo that he ſhall reſerve a copy of the work he prints. Thus, in fact, twelve copies are ſubtracted from every publication.

In taking eleven copies of every work compulſorily from its author or proprietor, his right of property is directly invaded; it is invaded as completely as if it were to be enacted, that a ſilverſmith ſhould give to theſe public bodies eleven ſilver candleſticks of every new pattern he produces. So long as the act of Anne was conſtrued to enforce a delivery of thoſe copies only which the owner choſe to regiſter, the objection would not ſo fully attach. The proprietor had then an option: of that he is now deprived; and therefore the compulſory delivery of eleven copies becomes a direct infringement on that right of property, which ought never to be violated, unleſs the welfare of the nation requires the ſacrifice. Does the *ſalus publica* make this violation neceſſary? does it exact this ſacrifice?

Let the extent of this ſacrifice be firſt conſidered. The act of Anne directs the beſt-paper copies to be delivered. Now the actual amount of eleven beſt-paper copies of the following works would, at their ſelling price, amount to the following formidable ſums:

	£.	s.	d.
Gell's Topography of Troy	92	8	0
Daniel's Voyage to India	104	10	0
Wilkins's Antiquities of Greece	92	8	0
Hewlett's Bible, 31 Parts	123	4	0
Pallas's Travels, 2 vols. (only 50 printed)	78	13	0
Pinkerton's Voyages, 16 vols.	277	4	0
Morier's Travels (only 75 printed)	46	4	0
Nichols's Hogarth, 2 vols. (only 250 printed)	184	16	0
Dibdin's Bibliomania (only 18 printed on beſt paper)	92	8	0

	£.	s.	d.
Johnes's Froiſſart, 4 vols. (only 26 printed)	335	10	0
——— Monſtrelet, 4 vols. (only 26 printed)	335	10	0
Daniel's Oriental Scenery, 6 ſeries, 200 guineas	2310	0	0
Lord Valentia's Travels, 3 vols. largeſt paper, 50 guineas (only 50 of ſuch printed)	577	10	0
Salt's Views, 26 guineas - - -	300	6	0
Bloomfield's Norfolk, 11 vols. 4to. 22 guineas (only 120 copies printed; 2 copies only printed on large paper, worth 100 guineas each) - - - -	254	2	0
Britiſh Gallery of Engravings, large paper	1065	13	6
Coſtumes of the World, 7 vols. - -	532	2	6
Dryden's Works, 18 vols. - - -	138	12	0
Sir R. Hoare's Ancient Wiltſhire (only 60 printed) - - - - -	207	18	0
Giraldus, 2 vols. 4to. - - - - -	127	1	0
Perry's Conchology - - -	184	16	0
Hodges's India - - - - -	369	0	0
Philoſophical Tranſactions abridged, 18 vols. (only 150 printed) - - -	605	0	0
Boke of St. Alban's (only 150 printed) -	55	0	0
Shaw's Staffordſhire, folio - - -	110	0	0
Dilletanti Specimens, folio (only 350 printed)	165	0	0
11 Copies of 26 Works—	£8764	16	0

Numerous liſts might be added to theſe. We will only mention a few ſtriking individual caſes.

A new edition of Wood's Athenæ Oxonienſes is preparing, with additions. The price of each copy of this, on the beſt paper, will be 72 guineas. If the editor be compelled to give away 11 copies of this work, it will be a loſs to him of 830l.

A new edition of Dugdale's Monaſticon is preparing, with additions. The ſubſcription-price of this, on the beſt paper, is 130 guineas for each ſet. This will be a very expenſive work to the reverend gentleman who has undertaken it, from the number of plates which it will contain. If he ſhould be compelled to give 11 copies of this, it will be a loſs to him of 1500l.

The Rev. T. Frognall Dibdin is well known to be publiſhing a new edition of Ames's Typography, with many valuable additions, the fruit of his active and unwearied reſearches. This work will be completed in ſix volumes, of which the price is ſix guineas each volume for the beſt paper. The loſs to him, if he muſt give 11 copies, will be above 400l. Mr. Dibdin will loſe 207l. 18s. on the Bibliotheca Spenceriana, which he is preparing, if he has to deliver eleven copies of it on the beſt paper.

Eleven copies of Mr. Nichols's Hiſtory of Leiceſterſhire would be to him a loſs of 288l. 15s. Eleven copies of his Bibliotheca Topographica Britannica, 10 volumes quarto, (of which in the whole only 250 copies were printed,) 231l. Eleven copies of his Literary Anecdotes of the Eighteenth Century, ſix very large octavo volumes, the labour of thirty years, 80l. 17s. The ſame gentleman has alſo undertaken to complete the Hiſtory of Dorſetſhire; 11 copies of which are 184l. 16s. An extract from his own letter will ſhow that this would be a loſs, without any balance of profit ſoever. "Of the Hiſtory of Dorſetſhire, the greater part of vols. i. and ii. was deſtroyed by fire; but, that the work might not remain wholly incomplete, the author, the proprietor, and the editor, being all dead, I volunteered my ſervices as editor of vols. iii. and iv. at a price that left me no chance of a return of any *profit* whatever, and not even with a certainty of being repaid my prime coſt. In fact, the price which the *whole number* printed would produce, will barely cover the expenſe of paper, printing, and copper-plates; and from this, eleven copies on large paper would ſubtract 184l. 16s."

Several works are now in the preſs that will coſt from 50 to 70 guineas each; of which the value of eleven copies will be from 500l. to 700l. And we may add two others, of a ſtill higher price: Eleven copies of Dr. Rees's Cyclopædia, as far as it has proceeded, namely, to the 24th volume, will coſt 950l. 8s. and, when completed to the propoſed 36 volumes, 1425l. 6s.—Eleven copies of the Encyclopædia Londinenſis, to the end of the 12th volume, which it has nearly reached, will coſt 748l. and, ſhould it extend to 24 volumes, eleven complete ſets of the fine-paper edition, coloured, will coſt 1496l.

Theſe individual caſes (and a great number of others preciſely ſimilar at this moment exiſt, and might be mentioned) are not the caſes of gentlemen with large fortunes publiſhing books. Indeed, inſtances are rare of gentlemen of fortune riſking any part of that in expenſive publications. Theſe, and ſuch like, are the caſes of public-ſpirited authors, who, with a laudable zeal for literature, and an honourable deſire of an honourable remuneration from the public for their labours, undertake theſe arduous, troubleſome, and expenſive, works.

Thus ſtands the caſe as to large-paper copies; and it is probable that every one will feel that the delivery of theſe ought to ceaſe. We will now ſtate the caſe on the ſuppoſition that eleven *common-paper* copies were only required. One moſt reſpectable publiſher took the trouble to make an accurate calculation of the ſum to which the delivery of eleven copies, on *common paper*, of all the books he had publiſhed for the laſt three years, would have amounted; and he found that the amount would have been 1436l. 9s. 3d. Another highly-reſpectable publiſher has ſtated, that, on the average of his publications for the laſt ten or twelve years, the eleven copies would have been to him a taxation of above 300l. a-year, excluſive of works in which he was but a partner. If there had been time to have collected from every publiſher the amount of the ſacrifice which he would have made by the delivery of eleven copies of all books publiſhed by him, the aggregate of the whole would have ſurpriſed the reader. But from theſe two inſtances the total amount of eleven copies of every work, even on common paper, that is publiſhed in Great Britain and Ireland, may be conjectured; and it may be fairly aſked, if a taxation ſo heavy as this ought to be impoſed on the authors and owners of literary property?

A few inſtances will ſhow how heavy the burthen would be even on common-paper copies. The delivery of eleven copies of the following fifteen works, on common paper, would have coſt the publiſhers 2699l. 8s.

	£.	s.	d.
Johnſon's Poets, 21 vols. 8vo. by Chalmers	275	0	0
Britiſh Eſſayiſts, 45 vols. 18mo. - -	115	10	0
——— Noveliſts, 50 vols. 18mo. - -	138	12	0
Bowles's Pope's Works, 10 vols. 8vo. -	57	15	0
Wakefield's Pope's Homer, 9 vols. 8vo. -	44	11	0
Dryden's Works, by Scott, 18 vols. 8vo. -	103	19	0
Swift's Works, by Nichols, 19 vols. 8vo.	99	0	0
Camden's Britannia, 4 vols. folio - -	184	16	0
Miller's Gardeners' Dictionary, 2 vols. folio	161	14	0
Buffon's Natural Hiſtory, 20 vols. 8vo. -	132	0	0
Aikin's Biography, 10 vols. 4to. -	173	5	0
Inchbald's Theatre, Farces, and Modern Theatre, 42 vols. 18mo. - -	121	16	6
Somers's Tracts, 10 vols. 4to. - -	346	10	0
Harleian Miſcellany, 10 vols. 4to. - -	381	3	0
State Trials, 21 vols. royal 8vo. - -	363	16	6
	£2699	8	0

To theſe we may add, as before, Rees's Cyclopædia, 24 vols. eleven copies, 528l. ditto, when complete, 792l. Encyclopædia Londinenſis, 12 vols. eleven copies of the cheapeſt of the four editions of which that work conſiſts will coſt 344l. 4s. 2d. and, when complete, 688l. 8s. 4d.

Thoſe who have attended to the nature of the publications that perpetually iſſue from the Britiſh preſs, will know that this liſt might be made very extenſive. So that it is clear that to emancipate literature from the delivery only of the beſt-paper copies will not be a ſufficient relief. Unleſs parliament alſo extend the relief to the com-

mon-paper copies, the burthen will ſtill be ſevere, and will frequently operate to prevent the publication of many works on which the chance of their ſale is uncertain. And, as the act now ſtands, if any book ſhould be reprinted with additions, this expenſe is to be borne again, for the act of Anne enjoins in this caſe alſo another delivery of the copies; and, if this be not altered, the republication of many books, with any improvements, will be greatly diſcouraged. The extenſive operation of the grievance will be more evident, when it is ſtated, that it has been even thought that newſpapers are within the meaning of the ſtatute; and, in that caſe, eleven copies of them might be every day demanded.

But it is ſaid by ſome, "You have only to print eleven more, and the tax will not be felt." The anſwer is, that, by ancient cuſtom, which cannot now be altered, the printers charge by 250 copies; that is, if they print 260, or any number above 250, they charge the ſame as for 500; if they print 505, they charge the ſame as for 750, and ſo on. If, then, an author thinks he cannot venture to print above 250 or 500, which is the caſe with the vaſt majority of publications, it is not of ſmall importance to him to print eleven copies more. If he thinks he can ſell 250 copies, and has to print eleven copies for the compulſory delivery, theſe eleven copies, as far as relates to the working off at the preſs, actually double the coſt of his printing. He muſt pay as much to print theſe eleven copies as to print 250 copies. The expenſe of theſe eleven copies is, therefore, a very ſerious grievance.

When authors undertake expenſive or important works, to whom is it ſo natural for them to look for a portion of their remuneration as to the great public libraries of the united kingdom? Theſe bodies ought, by *buying* ſuch books, to patroniſe ſuch undertakings; and, as the law has hitherto ſtood, not compelling the delivery of copies, let it be ſaid to their honour that they *do* purchaſe them. In the liſt of ſubſcribers to Mr. Dibdin's Typographical Antiquities, we ſee the Public Library at Cambridge, the Britiſh Muſeum, and the Library of the Faculty of Advocates at Edinburgh. And to Mr. Nichols's Leiceſterſhire, the Bodleian Library, the Public Library at Cambridge, Trinity College, Dublin, and the Britiſh Muſeum. We are happy to ſay that this liſt might be made of conſiderable extent. This is the true way to encourage literature and learning; but, if the act of Anne had been enforced according to its new conſtruction, inſtead of theſe public bodies contributing to Mr. Dibdin's or Mr. Nichols's expenſes and remuneration, they would have been compelled to have delivered their copies *gratis*. So to the heavily-expenſive republications, with additions, of Dugdale's Monaſticon and Stephens's Theſaurus, now preparing, many of the colleges have ſubſcribed. To give theſe public bodies the eleven copies, would be, in many caſes, a direct and poſitive injury to the authors, beſides the actual coſt of the paper and print.

It has ever been the principle of public taſte, that things ſhall be valued in proportion as they are rare. That which every one may have, ſcarcely any one cares for. This is as true in literature as in every other object of natural or artificial production. Hence in moſt of the expenſive and important publications, the number muſt be made as few as poſſible to anſwer at all; otherwiſe that price will not be given for the work which can alone indemnify the author. Hence the addition of eleven copies will often ſeriouſly operate to the deterioration of a work, when only a few are printed. It is likewiſe obvious, that to put works gratuitouſly into eleven public libraries, will very often ſatisfy the temporary curioſity of a large number, and thus operate to an author's prejudice to an undefinable extent.

For theſe reaſons, it is obvious that the eleven copies will be always a heavy grievance, except in the common popular works. But thoſe who have any experience in the ſelling of books, know to their coſt, that the proportion of the popular works, to thoſe of moderate and limited ſale, is as one to twenty. If two ſell rapidly, eighteen, and thoſe commonly the moſt expenſive and valuable, advance very ſlowly. Hence the grievance falls heavieſt on thoſe which are the leaſt able to bear it.

It has been ſaid that the exiſtence of extenſive public libraries is beneficial to ſociety:—Unqueſtionably. But can no public libraries be formed, unleſs every author be taxed in eleven copies of his works? Let the numerous public libraries of the various inſtitutions of the metropolis, that have ſtarted up like magic among us, prove how eaſily public libraries may be formed without any invaſion of another's right of property. That the compulſory delivery of eleven copies is not neceſſary to the inſtruction or benefit of the public is clear, from the aſtoniſhing progreſs of knowledge, literature, and national greatneſs, in England, during the laſt thirty years at leaſt, in which the delivery of copies has been of ſo ſmall an extent.

But it may be ſaid, that to buy the modern books will put the univerſities to expenſe. Certainly, to buy all the modern books would occaſion heavy expenſe, and would needleſsly burthen the ſhelves of their libraries; but to buy the books that each univerſity, for its fair improvement, will actually need, would not coſt much.

The univerſities of Great Britain and Scotland have an advantage which the authors and proprietors of Great Britain and Ireland do not poſſeſs: parliament has beſtowed on them a perpetual copyright in all works given or bequeathed to them. Poſſeſſed of this ſuperior boon, might not funds be eaſily provided to give their libraries the books they might ſelect? They have alſo another great advantage above all other publiſhers; they have the privilege of printing their books in the learned languages on paper *free of duty*. When it is recollected that paper now pays a duty that is from 15 to 20 per cent. it will be obvious how much they may underſell the regular publiſhers; or, if not, yet what a ſuperior profit they derive from their publications. Oxford and Cambridge have alſo, with the king's printer in England, the ſole liberty of printing bibles and prayer-books in England. Scotland and Ireland have ſimilar privileges.

In conſidering the public utility of the ſubject, it may be wiſe to advert to the practice of other countries. France has ſtood next to England in her ſcience and literature. Under the former government, every publiſher was required to give two copies to the king's public library; one to that of the louvre; one to the chancellor; and one to the keeper of the ſeals; the latter were, no doubt, connected with the ſuperintendence of the police. Under the new regime, theſe copies have been felt to be too many; and the law now orders only *two copies* to be depoſited in the national library. In America, only one copy is required.

For theſe reaſons, and many others which are detailed in a well-written pamphlet intitled "Reaſons for a Modification of the Act of Anne directing a Delivery of Books, and Copyright," the bookſellers have petitioned parliament for relief in the premiſes. They propoſe, that the eleven libraries ſhould be furniſhed with a copy of every new work at half price; or, if parliament ſhould diſapprove of this regulation, it is then ſubmitted that the claim of public utility would be ſatisfied if *three copies* only were required; one for each of the three kingdoms. This would be but a moderate taxation. Collections of all books in London, in Edinburgh, and in Dublin, acceſſible to the public of each country, would be abundantly ſufficient for their curioſity, as well as for their inſtruction. If the Engliſh univerſities ſhould inſiſt on the gratuitous delivery to them of the copies, and if parliament ſhould think it right to extend the burthen ſo far; yet it is truſted that the delivery of *five copies*, on the paper on which the greateſt number is printed, one to each of the chief public libraries of London, Edinburgh, Dublin, Oxford, and Cambridge, ought not to be exceeded. It is alſo ſubmitted that in this caſe no delivery ſhould be exacted of very ex-

penſive publications, nor of thoſe of which only a ſmall number is printed. Nor ſhould copies be given nor entries made of mere pamphlets, newſpapers, ſongs, and muſic.

It is alſo wiſhed to alter that ſection of the act which makes the ſecond fourteen years of copyright to depend upon the life of the author of the work. The act (as before quoted) directs, that authors ſhall have the ſole liberty of printing their works for fourteen years; and, if they ſhould be alive at the end of that time, it provides that their copyright ſhall return to them for fourteen years more. As this act now ſtands, if an author ſhould die before the firſt fourteen years expire, his family loſe all the profits of his labours, at the very time when, from the event of his death, they are in the greateſt need of them. It ſeems the dictate of reaſon and juſtice that authors ſhould have at leaſt the full twenty-eight years' copyright, without any reference to their life or death.

The term of fourteen years is clearly too ſmall. Some few works may dart into immediate popularity and profit; but theſe are rare inſtances; the vaſt majority advance but ſlowly. Very valuable works have appeared and are daily appearing from the preſs, which ſcarcely get known to the public during the firſt fourteen years; Shakeſpeare's Plays, Milton's Paradiſe Loſt, Hartley's work on Man, Dr. Campbell's Political State of Great Britain, Harte's Guſtavus Adolphus, Collins's beautiful Odes, Cowper's Poems, Dr. Henry's Hiſtory of Great Britain, and Mr. Strutt's valuable Works, are well-known inſtances. It would be invidious and improper to mention the works of living authors; and yet many might be referred to, that are highly important, but which have been eight or ten years coming into public knowledge and eſtimation. This is ſo true, that it is almoſt a proverb, that works which acquire a rapid popularity, are uſually thoſe which are not deſtined to live in future times. Some ſplendid exceptions occur to this remark; yet it is certain that Hume complains, that of his Hiſtory his bookſeller ſold but forty-five copies in a twelvemonth; and Dr. Adam Smith's celebrated work remained long unnoticed and unſold, till Mr. Fox happened to quote it in the houſe of commons. Shakeſpeare's Plays and Milton's Paradiſe Loſt are remarkable inſtances of the uncertainty of the immediate ſale of any work. From the year 1623, when Shakeſpeare's Plays were firſt publiſhed, to 1664, a period of forty-one years, two editions only were ſold. Milton's Paradiſe Loſt had alſo a very tardy ſale. The firſt edition was publiſhed in 1667; it was ſeven years in ſelling. In 1674 the ſecond edition appeared, which ſold in four years. Thus, during eleven years, but two editions were ſold. The copyright was then the property of Milton's widow. The author had, in his life-time, been paid ten pounds for his work; his widow received five pounds on the ſecond edition, and ſold the copyright afterwards for eight pounds more. But ſuch little profit appeared likely to reſult from it in 1680, which was in the fourteenth year after its publication, that the bookſeller himſelf ſold the copyright to another for twenty-five pounds. See Todd's Life of Milton, p. 109. The bookſeller has been often blamed for giving Milton no more than 10l. for his firſt edition. That, after ſelling two editions, he ſhould himſelf get no more for his copyright than 25l. is a proof that he gave the poet no unfair price for his work.

Theſe tardy ſales muſt be the caſe with the far greater number of valuable works. When an author's name has become eſtabliſhed in the popular eſtimation, his future works have a good chance of ſelling. Alſo, when a nobleman, or any eminent character, ſets forth a work, public curioſity often faſtens on it immediately. A lucky title, or ſome caſual incident, may aſſiſt others. But, when an author, before unknown, lays before the public the labour of many years, how can that public immediately know the value of the work? The publication of a book conſiſts in advertiſing it, and placing it in a bookſeller's ſhop. A length of time frequently elapſes before it comes under the inſpection of men competent to judge of it, and diſpoſed to appreciate it fairly; and a much longer time before the ſmall ſtill voice of the judicious few becomes ſo impreſſive in ſociety as to make the circulation of the work equal to its merit. That a work is twelve or fourteen years in becoming popular is no reaſon that it will not ultimately be ſo; and yet, till it has attained that ſtate, the author does not obtain his remuneration.

If it has been thought juſt that the univerſities ſhould have their copyrights in perpetuity, it cannot be deemed unjuſt that authors and their aſſigns ſhould have them for at leaſt the preſent twenty-eight years, without any clauſe of contingency. In an age of increaſed liberality, let literature receive this additional encouragement—the augmented riſk now incurred by publication certainly requires it.

The remaining ſections of this ſtatute are as follows. No perſon ſhall import into any part of the united kingdom for ſale any book firſt written or printed and publiſhed within the united kingdom, and reprinted elſewhere; on penalty of forfeiture of the books, 10l. and double the value of each copy ſo imported. Books may be ſeized by officers of cuſtoms and exciſe, who ſhall be rewarded by their reſpective commiſſioners. Theſe penalties do not extend to books not having been printed in the united kingdom within twenty years: nor to books reprinted abroad, and inſerted among other books or tracts for the moſt part foreign. § 7. All actions, indictments, &c. for offences againſt this act muſt be commenced within ſix months after commiſſion of the offence. § 8.

The following are the principal features and diſtinctions of the three ſtatutes relative to prints and engravings. The ſtat. 8 Geo. II. c. 13, gives an excluſive privilege of publiſhing, to thoſe who invent or deſign any print, for fourteen years only. The ſtat. 7 Geo. III. c. 28, extends the term to twenty-eight years abſolutely, to all who either invent the deſign, or make a print from another's deſign or picture; and thoſe who copy ſuch prints within that time, forfeit all their copies to be deſtroyed; and five ſhillings for each copy. The ſtat. 17 Geo. III. c. 57, gives the proprietor an action on the caſe to recover damages and double coſts for the injury he has ſuſtained by the violation of his right.

In analogy alſo to the above doctrine of literary property, the ſtat. 27 Geo. III. c. 38, gives to the proprietors of new patterns in printed linens, cottons, muſlins, &c. the ſole right of printing them for two months; and gives the proprietor injured his remedy by an action for damages.

There is alſo a kind of prerogative copy-right ſubſiſting in certain books, which is held to be veſted in the crown upon ſeveral reaſons. Thus, 1. The king, as the executive magiſtrate, has the right of promulgating to the people all acts of ſtate and government. This gives him the excluſive privilege of printing at his own preſs, or that of his grantees, all acts of parliament, proclamations, and orders of council. 2. As ſupreme head of the church, he has a right to the publication of all liturgies and books of divine ſervice. 3. He is alſo ſaid to have a right by purchaſe to the copies of ſuch law-books, grammars, and other compoſitions, as were compiled or tranſlated at the expenſe of the crown. And upon theſe two laſt principles, combined, the excluſive right of printing the tranſlation of the Bible is founded. See 2 *Comm. c.* 27.

LITER'NUM. See LINTERNUM, p. 761.

LITHAGO'GI, *ſ.* [from the Gr. λιθος, a ſtone, and αγω, I bring away.] A name given by ſome medical writers to ſuch medicines as work by urine, and are ſuppoſed to have the virtue of expelling the ſtone.

LITHAGROS'TIS, *ſ.* in botany. See COIX.

LITH'ARGE, *ſ.* [from the Gr. λιθος, a ſtone, and αργυρος, ſilver.] A metalline ſubſtance, formed of the ſpume of lead; or, it is a calx of lead in an imperfect ſtate of vitrification. When ſilver is refined by cupellation with lead, this latter metal, which is purified, and which cauſes the ſcorification of the imperfect metals alloyed with the ſilver,

ſilver, is transformed into a matter compoſed of ſmall ſemi-tranſparent ſhining plates, reſembling mica, which is *litharge*. See the article CHEMISTRY, vol. iv. p. 295.

This preparation of lead is of great uſe in roaſting the ſtubborn ores of gold, ſilver, and copper; for it melts all kinds of ſtones and earth into glaſs, ſooner than the metals; and by this means the metal, which is heavier, will fall through the glaſs, which is a thin and light ſubſtance, and will be collected under it into a regulus, with only a few duſty ſcoriæ adhering to it. But, if it be copper that is thus ſeparated, a ſmall portion of it is always deſtroyed; and, if gold or ſilver, a like ſmall portion is always lodged and detained in the ſcoriæ. But, as the litharge penetrates through all ſorts of veſſels, and while melting riſes into a ſcum, that often runs over their edges, the aſſayers never uſe it alone, but always mix with it ſuch ſubſtances as may give it a clammineſs, as flints, ſands, clay, or the like; they mix two parts of litharge with one part of any of theſe ſubſtances, and add ſome nitre, or common ſalt, that the whole may run the more eaſily.

Litharge is more or leſs white or red, according to the metals with which the ſilver was alloyed. Accordingly the white is called *litharge of ſilver*, and the red has been improperly called *litharge of gold*. But litharge may be eaſily revived into lead; accordingly, much of that which is produced by refining in great is reduced, by being melted upon burning coals. The part which is leaſt altered by mixture with other metals is thus reduced, and thus good and ſaleable lead is obtained. The reſt of the litharge of theſe refineries is ſold and uſed for various purpoſes. The potters uſe much of it to give a beautiful gloſs to their wares; it is alſo employed in the compoſition of ſome glaſſes, for it is very fuſible, and aſſiſts the fuſion of other ſubſtances; and it is alſo uſed by painters, dyers, ſkinners, and glaziers. When mixed with wine, it gives it a bright ſprightly colour, but renders it extremely unwholeſome. In general, it has the ſame properties with the other calces of lead. The litharge commonly ſold is obtained from refineries, and the quantity thus procured is more than ſufficient for the demand. It is employed for the preparation of ſome plaſters and other external remedies.

LITHAY', or LITEY, a town of the duchy of Carniola, on the Save: eight miles north-north-eaſt of Weixelburg, and fifteen eaſt of Laybach. Lat. 46. 8. N. lon. 15. E.

LI'THE, *adj.* [liðe, Sax.] Limber; flexible; pliant; eaſily bent:

Th' unwieldy elephant,
To make them mirth, us'd all his might, and wreath'd
His *lithe* proboſcis. *Milton's Paradiſe Loſt.*

LI'THENESS, *ſ.* Limberneſs; flexibility.

LITH'ER, *adj.* Soft; pliant:

Thou antick death,
Two Talbots, winged through the *lither* ſky,
In thy deſpight ſhall 'ſcape mortality. *Shakeſpeare.*

[Lýðen, Sax.] Bad; ſorry; corrupt. It is in the work of Robert of Glouceſter written *luther*.

LITH'ER, *adj* Lazy, ſluggiſh. *Cole.*

LITH'ERLINESS, *ſ.* Lazineſs. *Chaucer.*

LITH'GOW (William), a Scotchman, whoſe ſufferings by impriſonment and torture at Malaga, and whoſe travels, on foot, over Europe, Aſia, and Africa, ſeem to raiſe him almoſt to the rank of a martyr and a hero. He publiſhed an account of his peregrinations and adventures; and, though he deals much in the marvellous, the horrid account of the ſtrange cruelties of which, he tells us, he was the ſubject, have however an air of truth. Soon after his arrival in England from Malaga, he was carried to Theobald's on a feather-bed, that king James might be an eye-witneſs of his *martyred anatomy*, by which he means his wretched body, mangled and reduced to a ſkeleton. The whole court crowded to ſee him; and his majeſty ordered him to be taken care of, and he was twice ſent to Bath at his expenſe. By the king's command he applied to Gondamar, the Spaniſh ambaſſador, for the recovery of the money and other things of value which the governor of Malaga had taken from him, and for 1000l. for his ſupport. He was promiſed a full reparation for the damage he had ſuſtained; but the perfidious miniſter never performed his promiſe. When he was upon the point of leaving England, Lithgow upbraided him with the breach of his word in the preſence-chamber, before ſeveral gentlemen of the court. This occaſioned their fighting upon the ſpot; and the ambaſſador, as the traveller oddly expreſſes it, had his fiſtula (with which diſorder he was afflicted) contrabanded with his fiſt. The unfortunate Lithgow, who was generally condemned for his ſpirited behaviour, was ſent to the Marſhalſea, where he continued a priſoner nine months. At the concluſion of the octavo edition of his *Travels* he informs us, that, in his three voyages, "his painful feet have traced over (beſides paſſages of ſeas and rivers) 36,000 and odd miles, which draweth near to twice the circumference of the whole earth." Here the marvellous ſeems to riſe to the incredible; and to ſet him, in point of veracity, below Coryat, whom it is nevertheleſs certain that he far outwalked. His deſcription of Ireland is whimſical and curious. This, together with the narrative of his ſufferings, is reprinted in Morgan's Phœnix Britannicus.

LITHI'ASIS, *ſ.* [from λιθος, Gr. a ſtone.] In ſurgery, the diſorder in which calculous concretions are formed in the urinary organs, and more eſpecially in the bladder, occaſioning a variety of ſymptoms dependent upon their ſhape, ſize, and ſituation.

LI'THIC, *adj.* [from λιθος, Gr. a ſtone.] Partaking of the nature of ſtone: proceeding from ſtone; forming ſtone, particularly the ſtone in the bladder.

LITHIC ACID. See the article CHEMISTRY, vol. iv. p. 163. It is now called URIC ACID.

LI'THNESS, *ſ.* Lenity; mildneſs. *Obſolete.*

LITHOBO'LIA, *ſ.* [Gr. lapidation.] In antiquity, a feſtival celebrated by the Træzenians, in memory of Lamia, and Auxeſia, two virgins, that, coming from Crete to Træzene in a time of tumult and ſedition, became a ſacrifice to the fury of the people, by whom they were ſtoned to death. Hence the name of the ſolemnity.

LITHOBOLIA, or *Lapidation*, was alſo a common puniſhment inflicted by the primitive Greeks upon ſuch as were taken in adultery.

LITHOCOL'LA, or LITHOCOLLUM, *ſ.* [from the Gr. λιθος, ſtone, and κολλα, glue.] A cement uſed by the lapidaries to faſten their precious ſtones, in order for cutting them. It is compoſed of reſin and brick-duſt. For diamonds, they uſe melted lead, putting them into it before it be quite cold; for other cements, they mix marble-duſt with ſtrong glue; and, to faſten their ſparks, add the white of an egg, and pitch.

LITHODÆ'MON, or LAPIS DÆMONUM, *ſ.* A name given by ſome authors to jet. See *Bitumen gagas*, under the article MINERALOGY.

LITHODEN'DRON, *ſ.* A name by which, according to Dioſcorides, many of the ancients expreſs the common red coral.

LITHOGENE'SIA, *ſ.* [from the Gr. λιθος, a ſtone, and γενεσις, generation.] The generation of ſtones.

LITHOGLYPH'IC, *adv.* [from the Greek λιθος, a ſtone, and γλυφω, to grave.] Belonging to the art of graving in ſtone.

LITHOG'RAPHY, *ſ.* [from the Gr. λιθος, a ſtone, and γραφω, to write.] The art or practice of engraving upon ſtones.

LITHOI'DES, *ſ.* [Greek.] A bone of the temples.

LITHOLO'BON, *ſ.* [from the Gr. λιθος, a ſtone, and λαβω, to take hold of.] An inſtrument with which the ſtone is extracted from the bladder.

LITHOLO'GY, *ſ.* [λιθος, a ſtone, and λογος, a diſcourſe.] A treatiſe or lecture on ſtones; a ſyſtematic arrangement of ſtones.

LITHOM'ANCY,

LITHOM'ANCY, *ſ.* [λιθος, a ſtone, and μαντεια, divination.] In antiquity, a ſpecies of divination performed with ſtones. Sometimes the ſtone called *ſiderites* was uſed; this they waſhed in ſpring-water in the night by candle-light; the perſon that conſulted it was to be purified from all manner of pollution, and to have his face covered; this done, he repeated divine prayers, and placed certain characters in an appointed order; and then the ſtone moved of itſelf, and in a ſoft gentle murmur, or (as ſome ſay) in a voice like that of a child, returned an anſwer. By a ſtone of this nature, Helenus is reported to have foretold the deſtruction of Troy.

LITHOMARG', *ſ.* Potters' clay. See *Argilla lithomarga* under the article MINERALOGY.

LITHONTHLAS'PI, *ſ.* in botany. See IBERIS and THLASPI.

LITHONTRI'BON, *ſ.* [from the Greek λιθος, a ſtone, and τριβω, to tear.] A medicine to break or expel the ſtone.

LITHONTRIP'TIC, or LITHONTHRYPTIC, *adj.* [from the Gr. λιθος, a ſtone, and τριβω, to tear, or θρυπτω, to break.] Proper to diſſolve ſtones in the kidneys or bladder.

LITHONTRIP'TIC, *ſ.* A medicine to diſſolve the ſtone. Though the different ſtones that are generated in the human bladder require different ſolvents when out of the body; and though art has not yet afforded a medicine, which, when injected into the bladder, will, without injury thereto, diſſolve the ſtone therein lodged; it cannot thence be concluded, that there are no lithontriptic medicines.

The calculous diatheſis is ſo imperfectly known, and calculus of the bladder ſo rare a diſeaſe, that little has been attempted to prevent it. As ſtone, however, when once extracted, will ſometimes recur, preventives, at that time, ſhould be employed. In this claſs, general tonics will be found uſeful; and, if there is any whoſe action is more particularly directed to the kidneys, theſe ſhould be preferred. The uva urſi has been ſuppoſed to have this effect, and it may be employed with the decoction of the bark; at the ſame time, a mild diet, with every plan that will dilute the urine, without ſtimulating the urinary veſſels. The free uſe of watery fluids; ſome of the diuretic vegetables; fruit, of which Linnæus ſeems to prefer ſtrawberries; are proper, though with a mixture of mild animal food. The acidulous ſoda-water will be an uſeful drink. If the danger is apparently more urgent, the uſe of the bitters may be occaſionally intermitted; and ſoap, with lime-water, given for ſix weeks or two months, when the bitters may be again reſumed. The patient ſhould never ſuffer the urine to ſtagnate, but uſe himſelf to diſcharge it at ſtated times in the day and night, which will ſoon bring on the habit of doing ſo, whatever the quantity in the bladder may be. This however muſt not be too often practiſed. Once in the night, and three times in the courſe of the day, at leaſt, the diſcharge ſhould be encouraged. If his life is a ſedentary one, it ſhould be more frequent.

A calculus, however, at laſt ſhows itſelf by ſymptoms ſomewhat equivocal, and differing alſo according to its ſeat. Acrid matter in the urine, a coagulum of blood or gluten, will ſometimes occaſion violent pain, which will be miſtaken for a fit of ſtone, and nothing can aſcertain the complaint but the catheter, unleſs the offending cauſe ſhould be diſcharged. An abſceſs of the proſtate, or in the rectum, preſſing on the bladder, has been ſaid alſo to imitate the pain of a calculus; yet, as theſe are eaſily aſcertained by an examination per rectum, the error can neither be long-continued nor dangerous.

When a calculus exiſts in the bladder, it produces pain chiefly by paroxyſms. There are intervals, often long ones, of the moſt perfect eaſe, but the paroxyſms are extremely ſevere. The diſeaſe, however, remains; and it muſt then be conſidered whether it be ſuch a calculus as that the operation of the knife ſhould be hazarded, or the ſolution of the ſtone attempted by internal medicines. The operation, though ſevere, is not peculiarly dangerous; yet, to attempt it on exhauſted conſtitutions would be highly improper; if firm, no period of life is an obſtacle. Many, however, will not ſubmit; and, in all, we think lithontriptic medicines ſhould be tried; for, though we have no deciſive evidence of their diſſolving ſtone, they greatly mitigate the pain, render the paroxyſms more diſtant, as well as more mild. It has been found, from the experiments of Fourcroy, that almoſt every ingredient in calculi is diſſolved by the cauſtic alkali; and various experiments have ſhown that the whole calculus yields to its powers. Lime-water has been found alſo a ſolvent of calculus out of the body. It is obvious, however, that what is taken by the mouth, has not only a circuitous route to reach the bladder, but is ſubject to many chemical changes; nor, indeed, are there many well-authenticated facts of the urine being ſo changed as to become a menſtruum for the ſtone. Almoſt the only inſtance, except the caſe of Dr. Newcombe, recorded by Dr. Whytt, is that of Mr. Home. Yet, though it may not be ſo accumulated in the urine as to render it an active ſolvent, it may deſtroy the animal oxyd in it, or prevent its tendency to concretion; and it may have ſufficient powers to ſoften the ſurface of the ſtone ſo as to leſſen the irritation, and, of courſe, the ſpaſinodic ſymptoms, which are its conſequence. It is, we believe, an incontrovertible fact, that, where the ſtone has been unchanged, the paroxyſms of pain have been greatly mitigated; and, to leſſen pains ſo violently excruciating, is ſurely an object of no little importance.

Lime was long known as a ſolvent of ſtone, and different methods were employed to adminiſter it with ſafety. One of theſe plans fell into the hands of Mrs. Joanna Steevens, daughter of a gentleman of a reſpectable family in Berkſhire; and her ſucceſs occaſioned a conſiderable anxiety to diſcover the ſecret. At laſt, parliament bought it for 5000l. after different trials had been made of it with advantage. In many inſtances, ſtones which had been ſenſibly felt, were no longer to be diſcovered; and, as the *ſame* perſons were examined by ſurgeons, men of the greateſt ſkill and eminence, both before and after the exhibition of her medicine, it is fair to conclude that in ſome inſtances they were diſſolved. Mrs. Steevens, it is ſaid, firſt gave the calcined egg-ſhells only, but, finding theſe produce coſtiveneſs, ſhe added ſoap. In time ſhe rendered her proceſs more complicated, adding ſnails burnt to blackneſs, a decoction of camomile-flowers, honey, parſley, ſweet-fennel, and the greater burdock. When we conſider the effects of bitters, we ſhall not perhaps think theſe additions to have been wholly uſeleſs. It is ſingular, however, that the egg-ſhells, though calcined, were expoſed to the air till reduced to a fine powder. No one ſeems to have carefully examined them in this ſtate; and it is only preſumed that they retained ſome portion of the cauſtic acrimony. Various other ingredients were confeſſedly uſed as *diſguiſes* only. As ſoap was with reaſon ſuppoſed to add conſiderably to the virtues of the lime, it led to the uſe of the cauſtic alkali, ſoftened by a more pleaſing mucilage, veal broth. Since that time it has been uſed alone. The following is the beſt mode of preparing and adminiſtering it: Take of kali prepared, eight ounces; of freſh quick-lime, four ounces; of diſtilled water, a quart; mix them well together in a large bottle, and let them ſtand for twenty-four hours; then pour off the lye, filter it through paper, and keep it in well-ſtopped phials for uſe. Of this the doſe is from thirty drops to two drams, which is to be repeated two or three times in a day. Mix the quantity to be uſed in the day with three pints of plain broth, which has been made with the lean part of veal, all the fat or oily parts being ſeparated from it, by putting it, when made, into a large bowl, and ſkimming them off with a ſpoon when cold; and let the patient drink within an hour a pint of this broth three times a-day, early in the morning, at noon, and in the evening; continue the uſe for three, four, or more,

more, months, living during this courſe on ſuch things as leaſt counteract the effect of the medicine.

It appeared, however, ultimately, that the ſolvent power of Mrs. Steevens's medicine was a gratuitous ſuppoſition; for on examining, after death, the bodies of the perſons in thoſe very inſtances, on the ſucceſs of which the reward was given, it was diſcovered that the ſtones had all the time remained in the bladders of the patients, though they were ſuppoſed to have been voided by the gradual ſolution of them effected by the medicine. The principal inſtance of a ſuppoſed cure which was brought forward, was that of Mr. Gardiner. This man was examined in December 1748, by able ſurgeons, and found to have a ſtone in his bladder; after this he took Mrs. Steevens's medicines for eight months without intermiſſion; and at the end of that time he declared himſelf free from all his uſual complaints; and on ſearching him no ſtone was perceived in the bladder. Mr. Gardiner died about three years afterwards, and his body was opened. When the bladder was examined, there were found in it ſix preternatural apertures of different ſizes, the largeſt of which was capable of admitting the end of a finger. Theſe paſſages led to morbidly-formed ſacs in the internal coat of the bladder, which had ſhielded the calculi from the touch of the ſurgeon's ſounding-ſtaff.

The truth appears to be, according to the reſult of accurate obſervation, that all the alkaline and abſorbent medicines, pot-aſh, ſoda, lime, magneſia, &c. and eſpecially the alkalies, are capable of affording very material relief to the diſtreſſing feelings connected with the preſence of calculi in the urinary paſſages; that they operate as preventives of a farther increaſe of the bulk and quantity of theſe concretions; but that they do not reach the urinary organs (after having paſſed the organs of the digeſtion, been taken up by the lacteals, and mixed and circulated with the blood) unchanged in their chemical qualities, or in a ſufficient quantity to produce any diminution of the calculi already exiſting there. It is farther to be obſerved, however, that there is one variety of calculus found in the urinary paſſages, for which the alkalies and abſorbents are incapable of affording any relief; as, from its chemical compoſition, it is altogether inſoluble in theſe ſubſtances, even when directly immerſed in them. It is a triple ſalt formed by combination with the phoſphoric acid, and is, therefore, only to be diſſolved or decompoſed by an agent of a directly oppoſite quality to that of the alkalies; namely, by a mineral acid, which unites with the earthy and alkaline baſe.

Dr. Hartley publiſhed, in the London Gazette, the following receipt for making a lithontriptic electuary: Take five pounds of Alicant ſoap, ſhaved, and one pound of oyſter-ſhell-lime; put them into a tin veſſel, and pour upon them five quarts of water; make the water boil till the ſoap be perfectly diſſolved in it, and then ſtrain all into a glazed earthen veſſel. Expoſe the maſs to the air, ſtirring it every day till it becomes both mild to the taſte, and of a proper conſiſtence to be formed into pills, or long pellets, without ſticking to the fingers. This may be expected to happen in two or three months. If it becomes ſufficiently mild before it has acquired a due conſiſtence, it may be brought to this by being heated over the fire in a tin veſſel; if it acquires too hard a conſiſtence before it is ſufficiently mild, it muſt be ſoftened with water. This is what the doctor calls the *lithontriptic maſs*, or *electuary*; which he orders to be made in a tin veſſel, becauſe a braſs or copper one would render it emetic.

He gives another more expeditious way of making it, which is this: Pour two gallons of water upon a pound of oyſter-ſhell-lime; ſtir it two or three times, and, when it has fallen to the bottom, pour off the clear part of the water. Repeat this fifteen or twenty times, or till the clear water, which is poured off, be almoſt taſteleſs; leaving about five pints of water upon the lime, after the laſt ablution. Then pour this mixture of water and dulcified lime upon five pounds of Alicant ſoap, ſhaved; and procced as directed in the firſt receipt. The maſs, prepared in this manner, will be fit for uſe in a few days, or even immediatcly; but then the doctor prefers the foregoing receipt, where time can be allowed for it.

Where a perſon is ſuppoſed to have a large ſtone in the kidneys or bladder, he ought to take every day as much of the maſs or electuary as contains two ounces of the ſoap, unleſs his pain and provocation to make water be violent; in which caſe it will be proper to begin with about half this quantity, and to increaſe it as he can bear. The medicine ought alſo in this caſe to be dulcified in an extraordinary degree. By this medicine, the doctor thinks the generation of gravel, and gravel-ſtones, may be entirely prevented.

The inconveniences ariſing from the uſe of large quantities of ſoap and lime-water, are, impaired digeſtion, and, conſequently, debility and emaciation. With the ſuperfluous, the neceſſary acid ſeems to be deſtroyed. This effect has not, however, followed the ſoda with an exceſs of carbonic acid; though the bitters are ſuſpected, by long continuance, of diminiſhing the tone they were intended to preſerve. Generally ſpeaking, therefore, theſe remedies ſhould not be continued long without intermiſſion; yet they will not ſoon produce a change; and a trial of three months is at leaſt neceſſary. If no benefit is then obtained, they ſhould be relinquiſhed or changed. If any amelioration of the ſymptoms ſhould be obſerved, they may be purſued longer; yet in no caſe, probably, beyond nine or twelve months, without ſome intermiſſion, or interpoſing a warm tonic for a few weeks.

It has been lately recommended to inject the cauſtic alkali into the bladder, diluted in any mucilaginous fluid; and experiments have been adduced to ſhow, that the bladder can bear, without inconvenience, a ſufficient quantity to render the urine an active ſolvent of calculus. On this ſubject, however, we would lay down no preciſe rule; for the bladder differs greatly in irritability in different perſons, and it will be proper to begin with a ſmall proportion. The plan is too obviouſly uſeful to be neglected; and we may add, that weak vinegar, which can with ſafety be injected into the bladder of a horſe, is found, from the experiments of Vauquelin and Fourcroy, an effectual ſolvent for the calculus of that animal.

LITHOPH'AGI, *ſ.* [from the Gr. λιθος, ſtone, and φαγω, to eat.] A name given to thoſe who are capable of eating and digeſting ſtones; inſtances of which are given by Boyle, Exp. Phil. p. ii. and others. About twenty years ago, a man appeared in London who pretended to have this faculty.

LITHOPH'ILA, *ſ.* [ſo called by Dr. Swartz, from λιθου φιλος, Gr. a lover of rocks, or ſtones, as being an inhabitant of barren ſtony places.] In botany, a genus of the claſs diandria, order monogynia. The generic characters are—Calyx: perianth three-leaved; leaflets lanceolate, ſharp. Corolla: petals three, ovate-lanceolate, upright, converging, length of the leaflets of the calyx. Nectary two-leaved; leaflets oppoſite, ſmaller than the corolla, keeled, acute, upright, compreſſed. Stamina: filaments two, awl-ſhaped, upright, from the baſe of the germ, of the length of the nectary; anthers roundiſh. Piſtillum: germ roundiſh, ſuperior; ſtyle upright, length of the ſtamens; ſtigma obtuſe, emarginate. Pericarpium: two-celled.—*Eſſential Character.* Calyx three-leaved; corolla three-petalled; nectary two-leaved.

1. Lithophila muſcoides, the only ſpecies known. Native of Navaza, a deſert iſland in the Weſtern Ocean. Root very firmly attached to the rocks. Stems numerous, branched, very ſhort, thickiſh; branches ſet with withered whitiſh ſcales. Leaves ſmall, almoſt ſeſſile, narrower and embracing the ſtem at their baſe, linear, obtuſe, channelled, ſpreading. Flowers crowded together, whitiſh, on axillary and terminal ſtalks; each flower the ſize of a ſmall pin's

pin's head. The whole plant is extremely minute, ſcarcely half an inch high, and the parts of fructification are ſo ſmall as to require a magnifying-glaſs for examination.

LITHOPHY'TA, *ſ.* [from the Greek λιθος, a ſtone, and φυτον, a plant.] A plant that approaches to the hardneſs of ſtone; the coral kind.

LITHOSPER'MUM, *ſ.* [from the Gr. λιθος, a ſtone, and σπερμα, a ſeed; which is of a ſtony hardneſs, and marbly poliſh.] GROMWELL; in botany, a genus of the claſs pentandria, order monogynia, natural order of aſperifoliæ, (borragineæ, *Juſſ.*) The generic characters are—Calyx: perianth five-parted, oblong, ſtraight, ſharp, permanent; diviſions awl-ſhaped, keeled. Corolla: one-petalled, funnel-form, length of the calyx; tube cylindric; border half-five-cleft, obtuſe, upright; throat perforated, naked. Stamina: filaments five, very ſhort; anthers oblong, incumbent, covered. Piſtillum: germs four; ſtyle filiform, length of the ſtamens; ſtigma obtuſe, emarginate. Pericarpium: none; calyx grown larger, upright, containing the ſeeds in its boſom. Seeds four, rather oblong, obtuſe, gibbous.—*Eſſential Character.* Calyx five-parted; corolla funnel-form, perforated at the throat, naked.

Species. 1. Lithoſpermum officinale, common or officinal gromwell: ſeeds ſmooth, and even, corollas ſcarcely longer than the calyx, leaves lanceolate. Root perennial, ſtrong. Stems erect, roundiſh, rough with cloſe-preſſed briſtles, and clothed with alternate entire leaves, which are ſlightly revolute on their margin, hairy beneath, rough above with minute cartilaginous tubercles. Each of the numerous flowering branches terminates in a recurved leafy ſpike of pale yellowiſh flowers; in the ſeeding-ſtate theſe branches become erect, much elongated, and the leaves they bear are conſiderably enlarged, being broader than thoſe on the ſtem. It is ſeldom that more than two ſeeds are perfected in each flower; they are exquiſitely poliſhed, of a grey or yellowiſh hue, very hard, but brittle, ſeeming of a ſtony ſubſtance; whence the generic name, and whence alſo the ancient celebrity of theſe ſeeds as a cure for the ſtone, without the leaſt ſhadow of a reaſon. Gærtner calls them ſtony egg-ſhaped nuts, marked on the inſide with a ſtreak and two obſolete lines, imperforate, one-celled, valveleſs; ſeed ovate-beaked, black-brown. Native of moſt parts of Europe, in dry, gravelly, and chalky, ſoils; with us in general ſparingly, but common in ſome woods. It flowers in May and June.

2. Lithoſpermum arvenſe, corn or baſtard gromwell: ſeeds ovate, wrinkled; calycine leaflets lanceolate, corollas ſcarcely longer than the calyx, leaves lanceolate ſharpiſh, hiſpid. Root annual, ſmall, and not much branched; its bark abounding with a deep red dye, which ſtains paper, linen, &c. and is eaſily communicated to oily ſubſtances. Hence the name of *baſtard alkanet*, ſometimes given to this plant. Linnæus, in his Flora Suecica, informs us, that the country girls in the north of Sweden uſe the root to ſtain their faces on days of feſtivity. Stem upright, a foot high or more, round or ſlightly angular, rough with cloſe-preſſed hairs, often much branched at top. Leaves alternate, lanceolate, entire, rigid, ſeſſile, rough with briſtly hairs cloſe-preſſed, ſtanding out from the edge. Flowers ſolitary, nearly ſeſſile, in the axils of the upper leaves; corolla ſmall and white, with five ſwellings round its orifice, exactly as in L. purpuro-cæruleum. Very near the bottom of the tube ſtand the five very ſhort minute ſtamens, on a level with the ſtyle, which is about half as long as the tube. Seeds brown, rugged; rather covered with hard tubercles than wrinkled; two, three, or four, but generally three, with one abortive; ſometimes when there are four perfect ſeeds, there are two others abortive, and ſix diviſions in the calyx. Frequent in corn-fields and waſte places, flowering from May to July.

3. Lithoſpermum incanum, or hoary gromwell: ſeeds rough; ſpikes terminating, compound, contracted; leaves linear, villoſe. This is a ſhrubby ſpecies, found in Teautea and Savage iſlands.

4. Lithoſpermum Virginianum, or Virginian gromwell: corollas longer than the calyx, acute, rough-haired on the outſide, leaves ovate, acute, hiſpid, nerved. Root perennial. Stems ſeveral, very hairy, about a foot and a half high. Flowers in ſhort reflexed ſpikes at the ends of the branches; corolla white, longer than the calyx, the ſegments ending in acute points. Linnæus remarks, that the dots ſcattered over the leaves are excavated, and that the wider of theſe have a briſtle iſſuing from them. Native of Virginia and Maryland; it flowers here in June, and the ſeeds ripen in autumn. Cultivated by Mr. Miller in 1759.

5. Lithoſpermum tinctorum, or dyers' gromwell: ſeeds ſmooth and even; ſpike ſolitary, terminating, directed one way; bractes lanceolate; leaves linear-lanceolate, blunt. Root fuſiform, two inches long, annual. Stems ſeveral, a finger's length, quite ſimple, ſhaggy with hairs, as is the whole plant; the lateral ones decumbent, the middle one erect. Leaves ſeſſile; thoſe next the root near two inches long, narrowed towards the baſe; thoſe on the ſtem an inch long, and blunt.

It differs from L. apulum, to which it is very nearly allied, in having a laxer ſtem, longer blunt leaves, a ſolitary ſpike terminating the ſtem, and as long if not longer than it, narrower blue corollas, and ſeeds twice as big. Native of Egypt.

6. Lithoſpermum orientale, yellow gromwell, or bugloſs: flowering branches lateral, bractes cordate embracing. Stem barren, upright, with fewer hairs. Leaves lanceolate, narrower at the baſe, quite entire, blunt, with dewy hairs on each ſide. It is a perennial plant, with long trailing branches; the under leaves are long, broad, and hairy, diminiſhing as they approach the top. The flowers are about the ſame ſize with thoſe of common bugloſs; there is a ſucceſſion of them great part of the year. Native of the Levant. Cultivated in 1713, in the botanic garden at Chelſea; it flowers in May and June.

7. Lithoſpermum purpuro-cæruleum, or creeping gromwell: ſeeds ſmooth and even; corollas twice as long as the calyx; leaves lanceolate, ſomewhat hairy. The long woody perennial root produces many round hairy leafy ſtems, moſt of which are procumbent, and throw out roots; the flowering ones only are perfectly erect, and from twelve to eighteen inches high. The beautiful flowers appear in April or May, ſtanding erect in a ſort of double leafy ſpike, with the extremities a little curved downwards before flowering; corolla firſt purple, then blue, with a pale reddiſh tube. Native of moſt of the temperate parts of Europe. Found in the weſt of England, as in Somerſetſhire near Taunton; near Denbigh, in Wales; Mr. Latham diſcovered it in a chalky ſoil near Greenhithe in Kent.

8. Lithoſpermum tenuiflorum, or thin-leaved gromwell: corollas filiform, leaves linear-lanceolate, ſtrigoſe. This is an annual plant, a hand or a ſpan in height, like the ſecond ſpecies in miniature. Native of Egypt.

9. Lithoſpermum fruticoſum, or ſhrubby gromwell: ſhrubby, leaves linear, hiſpid, ſtamens equalling the corolla. Root perennial, running deep into the ground. Stem upright, ſhrubby, from two to three feet high, pretty cloſely ſet with hairs. The flowers are produced in ſhort reflex ſpikes; corollas reddiſh purple, changing to a deep purple; the two upper ſegments are turned back. Native of the South of Europe and the Levant. Cultivated in 1683, by Mr. James Sutherland; it flowers in May and June.

10. Lithoſpermum calloſum, or hard gromwell: leaves lanceolate-linear, callous, warted, hiſpid; ſtem ſuffruticoſe, hiſpid. Stem a long ſpan in height, with a white bark, villoſe at bottom, hiſpid at top; branches the height of the ſtem, once or twice divided at top. It varies with the branches more or leſs erect.

11. Lithoſpermum ciliatum, or hairy gromwell: leaves ovate,

ovate, hoary, callous at the edge ciliate, ſtem ſuffruticoſe, muricated, hiſpid. This is a ſmall ſtiff ſhrub, upright, a long ſpan in height, hoary, muricated at top, hiſpid, very much branched.

12. Lithoſpermum diſpermum, or two-ſeeded gromwell: ſeeds only two, calyxes ſpreading. Root annual. Stem herbaceous, a hand in height, round, hiſpid, upright; dividing at top into two almoſt-upright branches, ſeldom more. Flowers alternate; corolla bluiſh white, ſmall; border flattiſh. Native of Spain, between Madrid and Cadiz.

Propagation and Culture. Theſe plants may be cultivated by ſowing their ſeeds ſoon after they are ripe, in a bed of freſh earth, allowing them room, and keeping them clear from weeds. They will thrive in almoſt any ſoil and ſituation; and, if the ſeeds be permitted to ſcatter, the plants will in general riſe without care. Some of the ſorts are not without their beauty. The firſt, being wild, is ſeldom cultivated; and the ſecond is a common weed among corn. See ANCHUSA, COIX, LINUM, MYOSOTIS, PULMONARIA, and STELLERA.

LITHOSTRA'TA, *ſ.* [from the Greek λιθος, a ſtone, and στρωννυμι, to pave.] A moſaic pavement compoſed of pieces of fine marble and other ſtones curiouſly joined together.

LITHOT'OMIST, *ſ.* [from the Greek λιθος, a ſtone, and τεμνω, to cut.] One that performs the operation of cutting for the ſtone.

LITHOTO'MUS, *ſ.* A ſtone-cutter, a lithotomiſt. *Phillips.*

LITHOT'OMY, *ſ.* The operation of cutting for the ſtone. See the article SURGERY.

LITHOX'YLUM, *ſ.* in botany. See FUCUS.

LI'THRUS, in ancient geography, a town of Armenia Minor. *Strabo.*

LITHUA'NIA (Great, or Ruſſian), a country of Europe of conſiderable extent, anciently a ſeparate duchy, and afterwards united to Poland. Its capital was Vilna, or Wilna; but its principal town was Grodno. When it was governed by its own ſovereigns under the title of Great-Dukes, a rivalry ſubſiſted between this duchy and the contiguous ſtates of Ruſſia and Poland, which was the occaſion of frequent conteſts. At ſo early a period as the 11th century, the Lithuanians, deſcended from the ancient ſtock of the Sclavonians, are enumerated by Neſtor in his chronicle, under the appellative *Litwa*, among the nations tributary to the Ruſſian monarchy; nor could they find means to render themſelves an independent nation, till the time when dangerous inteſtine diviſions ſprang up in Ruſſia under the ſucceſſors of Vladimir the Great, who died in the year 1015. At this time they were freed from the Ruſſian ſupremacy, enlarged their borders at the expenſe of their former maſters, and at length grew to be formidable to all their neighbours. Their return under the Ruſſian yoke we ſhall preſently have occaſion to notice. In the year 1386, the great duke Ladiſlaus Jaghellon, or Yaghello, having eſpouſed the Poliſh queen Hadevige, and embraced the Chriſtian religion, was raiſed to the Poliſh throne, and reigned over both Poland and Lithuania. In conſequence of the union of the two countries, the conquered Ruſſian provinces devolved to this united kingdom. Ladiſlaus manifeſted the reality of his converſion by endeavouring to propagate the Chriſtian doctrines among his idolatrous ſubjects in Lithuania; accordingly he cut down the hallowed groves, deſtroyed the oracular ſhrine, extinguiſhed the ſacred fire, and ſlew the ſerpents that were worſhipped as gods by his ſuperſtitious ſubjects. A belief had univerſally prevailed among the people, that whoever attempted to deſtroy theſe objects of their worſhip, would be ſtruck with inſtantaneous death; but the falſity of this tradition was evinced by the impunity of thoſe who were concerned in the ſuppoſed ſacrilege. The Lithuanians flocked in ſuch crowds to be converted, that the prieſts could only confer ſeparate baptiſm on perſons of diſtinction; but diſtributed the multitude in ranks, and, ſprinkling them with water, gave one Chriſtian name to each rank without diſtinction of ſex. Ladiſlaus, having thus introduced the Chriſtian religion into Lithuania, nominated his brother Caſimir Skirgello governor of the duchy, and returned to Poland; but a civil war being excited by the ambition of Alexander, ſurnamed Vitoldus, and by the diſcontents of the people, ſtill attached to their pagan rites, Lithuania was for ſome time a ſcene of tumult and hoſtility. At length, by a compromiſe in 1392, Vitoldus was appointed great duke, and Ladiſlaus contented himſelf with a nominal ſovereignty. In 1401 the nobles of Lithuania aſſembled at Wilna, and entered into an offenſive and defenſive alliance with the king and republic of Poland. In 1413, it was ſtipulated in a diet of Poles and Lithuanians, held in the town of Hrodlo, that, upon the demiſe of Vitoldus, the Lithuanians ſhould acknowledge no other great duke but the perſon who ſhould be appointed by the king, and with the agreement of the two nations; that, if Ladiſlaus died without iſſue, the Poles ſhould elect no king without the conſent of Vitoldus and the Lithuanians, and that a diet, compoſed of repreſentatives from both nations, ſhould meet at Lublin or Panzow. From the demiſe of Vitoldus, who expired in 1439, in the 80th year of his age, the great dukes were ſometimes, in conformity to this compact, nominated by the kings of Poland, at other times in violation of it by the Lithuanians. At length, Sigiſmund I. fortunately united in his perſon the two ſovereignties, and was ſucceeded in both by his ſon Sigiſmund Auguſtus. The connection between the two nations was, however, more an alliance than an union; but Sigiſmund Auguſtus, having no children, and being the only ſurviving male heir of the Jaghellon family, planned the union of Poland and Lithuania, leſt upon his deceaſe the two nations ſhould again be governed by different princes. For this purpoſe a general diet was held at Lublin in 1569; and, upon the ratification of the union, Sigiſmund Auguſtus renounced all hereditary right to Lithuania. From this time the ſame perſon was uniformly elected king of Poland and great duke of Lithuania, and the two nations were incorporated into one republic.

Lithuania, called *Litwa* by the Poles, was formerly very woody, and the greateſt part of it lay uncultivated. But, by the tranquillity it enjoyed under Sigiſmund I. and his ſucceſſors, this country was greatly improved by cutting down the woods, and agriculture was duly encouraged. Great quantities of pot-aſh and wood-aſhes are made here; and the country produces a great deal of corn. Here is alſo great plenty of honey, with which are made liquors called lippitz, mallinieck, and mead. The meadows and paſtures of this province are very fertile, and afford nouriſhment to numerous flocks and herds. The ſheep yield fleeces of very fine wool. Here are alſo ſeveral lakes, in which are profitable fiſheries. In the foreſts of Lithuania are bears, wolves, wild boars, buffaloes, deer, and prodigious flights of woodcocks. All ſorts of proviſions are very cheap; but caſh is ſo ſcarce, that ten per cent. is the common intereſt for money. All the common people, except the burghers of the royal towns, and the Germans, are vaſſals. The nobility are very numerous, and for the moſt part poor; but the principal nobility are exceedingly rich, and have eſtates equal to the revenues of princes; ſo they generally retain ſome hundreds of the poor nobility in their ſervice. They are alſo inveſted with the higheſt poſts in the kingdom, and live in great pomp and ſplendour.

Lithuania has ſhared the fortunes of Poland; and, with the gradual extinction of it, has likewiſe fallen a prey to her ſtronger and more powerful neighbours. At the partition of the year 1773, Lithuania furniſhed the whole ſhare which Ruſſia at that time obtained, and out of which the preſent vice-royalties of Mohilef and Polotſk are formed. In the ſubſequent partition of the year 1793, this grand duchy again loſt one thouſand ſeven hundred and thirty-one ſquare miles, and 850,000 ſouls, which now belong to the vice-royalty of Minſk; and, in the final

partition of the year 1795, the laſt remains of Lithuania alſo fell to the Ruſſian empire, of which at preſent the vice-royalties of Wilna and Slonimſk are formed. Theſe provinces of the Ruſſian empire are therefore thoſe in which Lithuanians reſide; but the number of people of which this nation conſiſts can hardly be given with any degree of accuracy, as they are every-where mingled with Ruſſians and Poles.

LITHUA'NIA (Little, or Pruſſian), a province of Pruſſia, about 100 miles in length and 50 in breadth. This country was anciently over-run with thickets and woods; and, in the year 1710, it was almoſt depopulated by a peſtilence. In 1720, king Frederic William, at the expenſe of 5,000,000 of rix-dollars, induced 20,000 Switzers, French Proteſtants, Palatines, and Franconians, to ſettle in this country; and, in 1732, 350,000 dollars were alſo diſtributed among a freſh colony of 12,500 Salzburgers. By the ſkill and induſtry of the emigrants, this deſolate country has been extremely well cultivated; the ſuperfluous woods have been rooted up, the moraſſes drained, and a great number of towns, villages, farm-houſes, and churches, built; ſo that in a few years the country has put on quite a new appearance, and now makes ample returns for the money which his Pruſſian majeſty laid out upon it. The richneſs of the paſtures; the many thouſand laſts of corn, which are either laid up in the king's granaries, or exported; the fine horned cattle, excellent horſes, and numerous flocks of ſheep, with the excellent butter, cheeſe, &c. which this country affords; are inconteſtible proofs of its uncommon fertility. It likewiſe abounds with wood for fuel, and has plenty of fiſh and game. Several manufactures are alſo eſtabliſhed here; particularly for coarſe and fine cloth, leather, &c. The ancient inhabitants of this country have a peculiar language, into which the Bible and ſome other books of devotion have lately been tranſlated. Among theſe coloniſts, the Switzers are moſtly employed in grazing and breeding cattle; the French are very well verſed in trade, and ſkilful in the cultivation of tobacco, which they have introduced into this country; and the Salzburgers are remarkable for their ſkill in agriculture. The Switzers, French, and Franconians, are all Calviniſts; ſo that there are ten German and French reformed pariſhes, as they are called, in Little Lithuania. The reſt are Lutherans, with a very few papiſts among them. The principal towns are Memel, Tilſit, Ragnit, and Inſterburg.

LI'THY, *adj.* [from *lith.*] Humble, quiet, ſubmiſſive. *Chaucer.*

LIT'IGANT, *ſ.* [*litigans*, Lat. *litigant*, Fr.] One engaged in a ſuit of law.—The caſt *litigant* ſits not down with one croſs verdict, but recommences his ſuit. *Decay of Piety.*—The *litigants* tear one another to pieces for the benefit of ſome third intereſt. *L'Eſtrange's Fables.*

LIT'IGANT, *adj.* Engaged in a juridical conteſt.—Judicial acts are thoſe writings and matters which relate to judicial proceedings, and are ſped in open court at the inſtance of one or both of the parties *litigant*. *Ayliffe's Parergon.*

To LIT'IGATE, *v. a.* [*litigo*, Lat.] To conteſt in law; to debate by judicial proceſs. To bring into litigation:

What ſcruples, leſt ſome future birth
Should *litigate* a ſpan of earth. *Shenſtone.*

To LIT'IGATE, *v. n.* To manage a ſuit; to carry on a cauſe.—The appellant, after the interpoſition of an appeal, ſtill *litigates* in the ſame cauſe. *Ayliffe's Parergon.*

LIT'IGATING, *ſ.* The act of conteſting in law.

LITIGA'TION, *ſ.* Judicial conteſt; ſuit of law.—Never one clergyman had experience of both *litigations*, that hath not confeſſed, he had rather have three ſuits in Weſtminſter-hall than one in the arches. *Clarendon.*

LITIG'IOUS, *adj.* Inclinable to law-ſuits; quarrelſome; wrangling.—His great application to the law had not infected his temper with any thing poſitive or *litigious*. *Addiſon.*

Soldiers find wars, and lawyers find out ſtill
Litigious men, who quarrels move. *Donne.*

Diſputable; controvertible.—In *litigious* and controverted cauſes, the will of God is to have them to do whatſoever the ſentence of judicial and final deciſion ſhall determine. *Hooker.*

No fences parted fields, nor marks, nor bounds,
Diſtinguiſh'd acres of *litigious* grounds. *Dryden's Georg.*

LITIG'IOUSLY, *adv.* Wranglingly.

LITIG'IOUSNESS, *ſ.* A wrangling diſpoſition; inclination to vexatious ſuits.

LITISPEN'DENCE, *ſ.* [from the Lat. *lis litis*, ſtrife, and *pendeo*, to hang.] The time in which a law-ſuit is depending. *Not uſed.*

LI'TIZ, a Moravian town of Pennſylvania: eight miles from Lancaſter, and ſeventy weſt of Philadelphia.

LIT'MUS, or LACMUS, *ſ.* A blue pigment, formed from ARCHIL; which ſee, vol. ii. p. 59, 60.

LI'TOMYSL. See LEUTMISCHL, p. 558.

LI'TOWISCH, a town of Poland, in Volhynia: fifty-ſix miles ſouth-weſt of Lucko.

LI'TRE, *ſ.* A French meaſure of capacity, equal to 60 Engliſh cubic inches, or nearly $2\frac{1}{8}$ wine pints.

LI'TRON, *ſ.* A meaſure for corn and dry commodities, in the old ſyſtem of France; 16 litrons being equal to a boiſſeau, each boiſſeau being 780 Engliſh cubic inches, and 11 boiſſeaux, 4 Engliſh buſhels.

LITROTOND', a town of Aſiatic Turkey, on the ſouth-weſt coaſt of Natolia. Lat. 36. 51. N. lon. 27. 35. E.

LIT'SCHAU, a town of Auſtria: fourteen miles weſt-north-weſt of Bohmiſch Waidhofen: ſeventy miles north-weſt of Vienna. Lat. 48. 48. N. lon. 14. 55. E.

LIT'TAU, a town of Moravia, in the circle of Olmutz: eight miles north-north-eaſt of Olmutz. Lat. 49. 28. N. lon. 16. 59. E.

LIT'TER, *ſ.* [*litiere*, Fr.] A kind of vehiculary bed.—He was carried in a rich chariot *litter*-wiſe, with two horſes at each end. *Bacon's New Atlantis.*

Litters thick beſiege the donor's gate,
And begging lords and teeming ladies wait
The promis'd dole. *Dryden's Juvenal.*

Du Cange derives the word from the barbarous Latin *lectaria*, ſtraw or bedding for beaſts. Others will rather have it come from *lectus*, bed; there being ordinarily a quilt and a pillow to a litter, in the ſame manner as to a bed. The litter was much in uſe with the Romans, among whom it was borne by ſlaves kept for that purpoſe; as it ſtill continues to be in the eaſt, where it is called a *palanquin*. The Roman lectica, made to be borne by four men, was called *tetraphorum*; that borne by ſix, *hexaphorum*; and that borne by eight, *octaphorum*.

The invention of litters, according to Cicero, was owing to the kings of Bithynia. In the time of Tiberius they were become very frequent at Rome, as appears from Seneca; and even ſlaves themſelves were borne in them, though never by more than two perſons, whereas men of quality had ſix or eight. Beſides this, the litter was of two kinds, covered and uncovered. The covered is called by Pliny *cubiculum viatorum*, traveller's bedchamber: and indeed we are informed that Auguſtus frequently ordered his ſervants to ſtop his litter that he might ſleep upon the road. This vehicle differed from the uncovered litter, or *ſella*; for in the firſt the traveller could recline himſelf for ſleep, in the latter he was obliged to ſit. The covered litter was invented in Bithynia; the *ſella* was a Roman machine, and eſteemed the more honourable of the two.

LIT'TER, *ſ.* The ſtraw laid under animals, or on plants.—Take off the *litter* from your kernel-beds. *Evelyn.*—Their *litter* is not toſs'd by ſows unclean. *Dryden's Virgil.*—A brood of young.—A wolf came to a ſow, and very kindly offered to take care of her *litter*. *L'Eſtrange.*

Full many a year his hateful head had been
For tribute paid, nor ſince in Cambria ſeen:
The laſt of all the *litter* 'ſcap'd by chance,
And from Geneva firſt infeſted France. *Dryden.*

A birth of animals:

Fruitful as the ſow that carry'd
The thirty pigs at one large *litter* farrow'd. *Dryden.*

Any number of things thrown ſluttiſhly about:

Strephon, who found the room was void,
Stole in, and took a ſtrict ſurvey
Of all the *litter* as it lay. *Swift.*

To LIT'TER, *v. a.* To bring forth: uſed of beaſts, or of human beings in abhorrence or contempt.—We might conceive that dogs were created blind, becauſe we obſerve they were *littered* ſo with us. *Brown.*—The whelps of bears are, at firſt *littering*, without all form or faſhion. *Hakewill on Providence.*—My father named me Autolycus, being *littered* under Mercury, who, as I am, was likewiſe a ſnapper-up of unconſidered trifles. *Shakeſpeare.*

Then was this iſland,
Save for the ſon that ſhe did *litter* here,
A freckled whelp, hag-born, not honour'd with
A human ſhape. *Shakeſpeare's Tempeſt.*

To cover with things negligently or ſluttiſhly ſcattered about:

They found
The room with volumes *litter'd* round. *Swift.*

To cover with ſtraw:

He found a ſtall where oxen ſtood,
But for his eaſe well *litter'd* was the floor. *Dryden.*

To ſupply cattle with bedding.

LIT'TERING, *ſ.* The act of bringing forth as applied to ſome animals; that which is provided for litter.

LIT'TERMORE, an iſland near the weſt coaſt of Ireland, and county of Galway, about four miles long, and two wide. Lat. 53. 17. N. lon. 9. 40. W.

LIT'TLE, *adj.* comp. *leſs*, ſuperlat. *leaſt*; [*leitels*, Goth. lytel, Sax.] Small in extent.—The coaſt of Dan went out too *little* for them. *Joſhua* xix.—Not great; ſmall; diminutive; of ſmall bulk.—His ſon, being then very *little*, I conſidered only as wax, to be moulded as one pleaſes. *Locke.*

One would have all things *little*; hence has try'd
Turkey poults, freſh from the egg, in batter fry'd. *King.*

Of ſmall dignity, power, or importance.—When thou waſt *little* in thine own ſight, waſt thou not made the head of the tribes? 1 *Sam.* xv. 17.—Not much; not many.—A *little* ſleep, a *little* ſlumber, a *little* folding of the hands to ſleep; ſo ſhall poverty come upon thee. *Proverbs.*

A *little* learning is a dang'rous thing;
Drink deep, or taſte not the Pierian ſpring. *Pope.*

Some; not none: in this ſenſe it always ſtands between the article and the noun.—I leave him to reconcile theſe contradictions, which may plentifully be found in him, by any one who will but read with a *little* attention. *Locke.*

LIT'TLE, *ſ.* A ſmall ſpace:

Much in *little* was writ; and all convey'd
With cautious care, for fear to be betray'd. *Dryden.*

A ſmall part; a ſmall proportion.—He that deſpiſeth little things, ſhall periſh by *little* and *little*. *Ecclus.*—I gave thee thy maſter's houſe, and the houſe of Iſrael and Judah; and, if that had been too *little*, I would have given ſuch and ſuch things. 2 *Sam.* xii. 8.—They have much of the poetry of Mæcenas, but *little* of his liberality. *Dryden.*

Nor grudge I thee the much that Grecians give,
Nor murm'ring take the *little* I receive. *Dryden.*

A ſlight affair:

As if 'twere *little* from their town to chaſe,
I through the ſeas purſued their exil'd race. *Dryden.*

I view with anger and diſdain,
How *little* gives thee joy or pain:
A print, a bronze, a flow'r, a root. *Prior.*

Not much.—Theſe they are fitted for, and *little* elſe. *Cheyne.*

LIT'TLE, *adv.* In a ſmall degree.—The received definition of names ſhould be changed as *little* as poſſible. *Watts's Logic.*—In a ſmall quantity.—The poor ſleep *little*. *Otway.*—In ſome degree, but not great.—Where there is too great a thinneſs in the fluids, ſubacid ſubſtances are proper, though they are a *little* aſtringent. *Arbuthnot.*—Not much.—The tongue of the juſt is as choice ſilver; the heart of the wicked is *little* worth. *Prov.* x. 20.

LIT'TLE (John), a moſt egregious miſer, who died at Kentiſh Town, in May 1798, at the age of 84. Some days previous to his death, his phyſician perſuaded him to take a little wine, as indiſpenſably neceſſary to recruit his decayed ſtrength, occaſioned by his miſerable and parſimonious living. Mr. Little, fearful of truſting his ſervant with the key of the wine-cellar, inſiſted upon his carrying him down ſtairs, to get a ſingle bottle; when the ſudden tranſition from a warm bed to a damp cellar brought on a fit of apoplexy, which occaſioned his death. On examination, it appeared that he poſſeſſed upwards of 25,000l. in the different tontines; 11,000l. in the 4 per cents. beſides 2000l. per ann. of landed property; which then devolved to a brother, to whom he never afforded the leaſt aſſiſtance, on account of his being married, matrimony being a ſtate into which he himſelf never entered, and for which he always entertained the greateſt deteſtation. He reſided upwards of forty years in the ſame houſe, one room of which had not been occupied for the ſpace of fourteen years; but which on his death was found to contain 173 pairs of breeches, with a large proportion of other articles of wearing apparel; and in the coach-houſe were diſcovered, ſecreted in different parts of the building, 180 wigs, which had been bequeathed to him by different relatives.

LITTLE ALGON'QUINS, Indians who inhabit near the Three Rivers, and can raiſe about 100 warriors.

LITTLE BAIR'AM. See BAIRAM, vol. ii. p. 632.

LITTLE BERK'HAMSTEAD, a village about four miles from Hertford. Near the church has been lately built a lofty tower, which commands a moſt extenſive proſpect. Here is alſo the elegant ſeat of James Bourchier, eſq. not far from which is Woolmers, the ſeat of S. Whitbread, M. P.

LITTLE BRIT'AIN, a poſt-town of America, in Orange county, New York; 294 miles from Waſhington.—A townſhip in Lancaſter county, Pennſylvania, containing 1365 inhabitants.—A townſhip in Cheſter county, in the ſame ſtate.—A ſtreet in London.

LITTLE CHES'TER. See DERBY, vol. v. p. 471.

LITTLE COM'PTON, a townſhip of North America, in Newport county, Rhode Iſland, affording greater quantities of meat, butter, cheeſe, vegetables, &c. than any other town of its ſize. The inhabitants, who are induſtrious, manufacture linen and tow-cloth, flannels, &c. of an excellent quality, and in conſiderable quantities, for ſale.

LITTLE CREE'K, a town of America, in Kent county, Delaware, containing 1908 inhabitants.—A town in Suſſex county, Delaware, containing 2164 inhabitants.

LITTLE DE'AN, in Glouceſterſhire, is three miles diſtant from Great Dean. It is a very ſmall town on the verge of the foreſt, (ſee DEAN, vol. v. p. 630.) and had formerly a market. The only manufacture carried on here is making of nails; and thoſe made in this place are ſuperior to moſt in the kingdom. Contiguous to the town is a penitentiary-houſe and bridewell for the foreſt-diviſion of the county.

LITTLE FA'LLS, a town of United America, in the ſtate of New York, on the Mohawk river: ſeven miles eaſt of German Flats, and eighty weſt of Albany. The road

road by which you approach it on the eaſtern ſide is made at a great expenſe, on the north part of the Mohawk. On the right of it are ſtupendous highlands, which ſeem almoſt wholly compoſed of rocky ſtrata. In two or three places they are piled almoſt perpendicularly, and their ſummits are crowned with trees of conſiderable ſize. A traveller, who is given to romancing, might eaſily imagine them to be the maſſive walls of ſome Udolphian caſtle. The oppoſite ſhore is in every reſpect ſimilar to this; and the river is compreſſed between them to leſs than half its uſual breadth. A remarkable phenomenon has given this paſſage ſome adventitious ſublimity. The rocks have been obſerved to be worn away like thoſe under a cataract; ſome of them which are excavated, evidently from aqueous attrition, may be ſeen from the ſtage on the borders of the road. From this circumſtance a belief has ariſen, that the waters of the Mohawk were formerly arreſted by theſe everlaſting hills, forming a lake, which extended many miles weſtward, and that at length they burſt their barrier, and ruſhed out. The country weſtward of them ſeems to favour the ſuppoſition. For ſeveral miles in that direction, the river is bounded on each ſide by a broad and beautiful intervale, which was probably the bottom of the ancient lake.

LITTLE GRAN'SDEN, a village in Cambridgeſhire, near Caxton.—Great Granſden is near it, but in the adjoining county of Huntingdon.

LITTLE HAMP'TON, a ſeaport town of England, in the county of Suſſex, at the mouth of the Adur, with about ſix hundred inhabitants: four miles ſouth of Arundel, and ſixty ſouth of London.

LITTLE HAR'BOUR, a bay in the Straits of Magellan, on the coaſt of Patagonia: five miles north-weſt of Bachelor's river.

LITTLE I'SLAND, a ſmall iſland of Ireland, in the river Suire, two miles below Waterford.

LITTLE I'SLAND, an iſland in the river Lee, in Ireland, about three miles in circumference: ſix miles eaſt of Cork.

LITTLE I'SLAND, or LITTLE SALVADO'R, one of the ſmaller Bahama iſlands. Lat. 23. 46. N. lon. 75. 26. W.

LITTLE KE'Y, or BUSH KEY, an iſlet near the ſouth coaſt of the iſland of Cuba. Lat. 21. 26. N. lon. 84. 40. W.

LITTLE RIV'ER, a river of America, in Kentucky, which runs into the Cumberland in lat. 36. 32. N. lon. 88. 30. W.—A river which runs into the Tennaſee in lat. 35. 46. N. lon. 83. 47. W.—A river of Georgia, which runs into the Savannah ſixteen miles below Peterſburg.—A river of the weſtern territory of America, which runs into the Wabach in lat. 38. 45. N. lon. 88. 5. W.—A river of South-Carolina, which runs into the Saluda in lat. 45. 10. N. lon. 81. 46. W.—A river of North-Carolina, which runs into the Pedee in lat. 35. 8. N. lon. 79. 52. W.—A river of North-Carolina, which runs into the Neuſe in lat. 35. 26. N. lon. 78. 15. W.—A river of North-Carolina, which runs into Albemarle Sound in lat. 36. 6. N. lon. 76. 26. W.—A river of Connecticut; it joins the Shetucket to form the Thames.

LITTLE ROCK' RIVER, a river of America, which runs into the Wabaſh in lat. 40. 22. N. lon. 86. 44. W.

LITTLE SO'DUS, a harbour of Lake Ontario: fifteen miles ſouth of Oſwego.

LITTLE WAL'DEN, a village in Eſſex, and a hamlet to Saffron Walden; now called *Audley-End*; on the ſide of the Cambridge road. Audley-End was once a royal palace, the largeſt in England; and of which there ſtill remains one large court. It was built out of the ruins of Walden-Abbey, by Thomas lord Audley, ſon of Thomas duke of Norfolk, who married the only daughter and heireſs of the afore-named lord Audley. This Thomas was ſummoned to parliament, in queen Elizabeth's time, as lord Audley of Walden; and was afterwards created earl of Suffolk by James I. to whom he was firſt chamberlain, and afterwards lord high-treaſurer. It was deſigned for a royal palace for Edward III. and, when it was finiſhed with all the elegance and taſte of the times, the king was invited to ſee it; and, as he paſſed to Newmarket, he took up a night's lodging there; when, after having viewed it with great ſurpriſe and aſtoniſhment, the earl aſked him how he approved of it? He anſwered, "Very well; but troth, man," ſaid he, "it is too much for a *king*; but it may do for a lord high-treaſurer;" and ſo left it upon the earl's hands, who is reported to have had then an eſtate of 50,000l. a-year. King Charles II. indeed, purchaſed it for a royal palace, as the builder intended it, and mortgaged the hearth-tax to James earl of Suffolk, to anſwer the purchaſe; but, upon the revolution, when the ſaid tax was taken off, the ſtate not being in a condition to ſpare the money, king William re-granted the houſe to the family; upon which, Henry earl of Suffolk pulled down a great part of it. It now belongs to lord Howard of Walden, who in 1764 cauſed the ground in the front of the houſe to be elegantly laid out, and a bridge built over a piece of water that was formed by a rivulet which divides the road from the houſe. Its internal grandeur and external beauties, replete with all the varieties of hill and vale, wood and water, are rarely to be found combined within ſuch limits.

At a ſmall town called Littlebury, not far from Audley-End, is a houſe which was erected by the famous Mr. Winſtanley, who built Eddyſtone light-houſe, and periſhed in it, as mentioned in vol. vi. p. 242. The ſame gentleman was famous alſo for his water-works, full of whimſical but ingenious contrivances.—Streathall, north-weſt of Saffron Walden, is in old records reckoned a hamlet to Littlebury.

Near Ickleton and Streathall, upon the river Cam, lies Cheſterford; where, in the year 1719, were diſcovered the veſtiges of a Roman city. The foundation of the walls is very apparent quite round, though level with the ground, including about fifty acres. Great part of it ſerves for a cauſeway to the public Cambridge road from London. The Crown Inn is built upon it. At the north-weſt end of the town is the foundation of a Roman temple. Many Roman coins have been found in the Borough-Field, as they term the ancient city, whoſe name was *Camboritum*, according to Dr. Stukeley. In this pariſh, they ſay, has been a royal manor. Not far off, by Audley-End, is a great Roman camp, upon an eminence, where now ſtand the ruins of a hunting-tower of brick.

A little north of this part of the country riſes the river Stour, which, for a courſe of fifty miles or more, parts the two counties of Suffolk and Eſſex; paſſing through or near Haveril, Clare, Cavendiſh, Melford, Sudbury, Buers, Nayland, Stretford, Dedham, Manningtree, and into the ſea at Harwich.

LITTLE YORK', a town of Upper Canada, ſituated on the north-weſtern ſide of Lake Ontario, and is the ſeat of government of that province. It was taken by the Americans on the 27th of April, 1813; but they were ſoon compelled to quit it. It is 40 miles north by weſt of Niagara Fort, and 120 weſt-ſouth-weſt of Kingſton. Lat. 43. 57. N. lon. 80. 35. W.

LIT'TLEBOROUGH, four miles above Gainſborough, but in Nottinghamſhire, is the *Agelocum*, or *Segelocum*, of the Romans; now a ſmall village, juſt upon the edge of the water, in a nook. It ſeems to have been only environed with a ditch, and was of a ſquare form. The water ran quite round it; for to the weſt, where White's Bridge is, a watery valley hems it in, ſo that it was ſufficiently ſtrong. The Trent has waſhed away part of the eaſtern ſide of the town. Foundations and pavements are viſible in the bank. Here an urn, with a coin of Domitian, was found; and great numbers of coins have been taken up in ploughing and digging, which they call *ſwine-pennies*, becauſe thoſe creatures ſometimes root them up, and the inhabitants take little care to preſerve them. *Britiſh Directory*, vol. ii.

LIT'TLEBOROUGH, a town on the weſt coaſt of the iſland of Nevis: two miles north of Charleſtown.

LIT'TLENESS, *ſ.* Smallneſs of bulk:—We may ſuppoſe a great many degrees of *littleneſs* and lightneſs in theſe earthy particles, ſo as many of them might float in the air. *Burnet.*

All trying, by a love of *littleneſs*,
To make abridgments, and to draw to leſs
Even that nothing which at firſt we were. *Donne.*

Meanneſs; want of grandeur.—The Engliſh and French, in verſe, are forced to raiſe their language with metaphors, by the pompouſneſs of the whole phraſe to wear off any *littleneſs* that appears in the particular parts. *Addiſon.*—Want of dignity.—The angelic grandeur, by being concealed, does not awaken our poverty, nor mortify our *littleneſs* ſo much, as if it was always diſplayed. *Collier.*

LIT'TLETON, a village in Glouceſterſhire, on the north ſide of Marſhfield.—A village in Hampſhire, between Stockbridge and Itchingſtoke.—A village in Middleſex, on the river Aſh, near Lalam; ſo called from the ſmall quantity of ground belonging to it.—A village in Wiltſhire, in the pariſh of Lavington-Biſhops; with a fair at Midſummer.—A village in Somerſetſhire, between Midſummer Norton and Penſford.—A village in Surry, near Guildford.—A village in Suſſex, north-weſt of Midhurſt.—A village in Wiltſhire, three miles from Trowbridge.

LIT'TLETON, North, South, and Middle, are three ſmall villages on the eaſt borders of the county of Worceſter, but only two pariſhes; noted for a petrifying ſpring, on the top of that which they call Harrow-Hill, ſituate in the North and Middle Littleton, two miles from Eveſham; the water is ſaid to be very excellent for ſore eyes. There is no church at North-Littleton, and that at Middle-Littleton is diſuſed.

LIT'TLETON, a poſt-town of America, in Middleſex county, Maſſachuſetts, twenty-eight miles north-weſt of Boſton.—A poſt-town in Grafton county, New Hampſhire, incorporated in 1784.—A townſhip, now called *Waterford*, in Caledonia county, Vermont, on the weſt ſide of Connecticut river.

LIT'TLETON (Sir Thomas), an eminent Engliſh lawyer and judge, was born about the beginning of the fifteenth century. He was the eldeſt ſon of Thomas Weſtcote, eſq. of the county of Devon, by the heireſs of Littleton of Frankley in Worceſterſhire, whoſe name he aſſumed. After an education at one of the univerſities, he was entered of the Inner Temple, where he became one of the law-readers. In the reign of Henry VI. he was made judge of the marſhalſea-court and king's ſergeant; and, in 1455, went the northern circuit as judge of aſſiſe. He was continued in the ſame poſt by Edward IV. and was appointed one of the judges of the common-pleas in 1466. During the ſame reign he was created a knight of the bath. He died in a good old age in 1481, leaving three ſons, from whom many conſiderable families of the name are deſcended. Sir Thomas Littleton diſtinguiſhed himſelf in his profeſſion by his valuable treatiſe of the "Tenures and Titles by which Eſtates were anciently held in England." It was written in law French; but the date neither of its compoſition nor of its firſt publication is aſcertained. A commentary upon it (with a tranſlation) forms the firſt book of Coke's Inſtitutes.

LIT'TLETON (Edward), diſtinguiſhed for his great knowledge in the common-law, ſon of ſir Edward, a Welſh judge, was born in 1589, and purſued his college-exerciſes at Chriſt-church, Oxford, whence he removed to the Inner Temple. He was an active member of parliament in the year 1628, and, together with ſir Edward Coke and ſir Dudley Digges, carried up the Petition of Right from the commons to the lords; he was alſo a leading manager in the accuſation againſt the duke of Buckingham, in which his judicious conduct obtained for him the good opinion of the prince and people. He ſucceeded his father as a Welſh judge, and was choſen recorder of London. In 1634 he was made by Charles I. ſolicitor-general, and knighted; in 1639 he was ſworn lord chief juſtice of the common-pleas; and, in the following year, he was advanced to be lord keeper of the great ſeal of England, and called to the houſe of peers by the title of lord Littleton. He afterwards loſt the favour of the king, though it is believed without reaſon, which he could never after regain. He died in Auguſt 1645, at Oxford, where he was buried on the north ſide of the choir in the cathedral of Chriſt-church, and had a funeral oration pronounced over him by Dr. Henry Hammond. He publiſhed a book of Reports of Caſes in the Courts of Common Pleas and Exchequer, from the ſecond to the eighth of Charles I. ſome ſpeeches in parliament; and ſeveral arguments and diſcourſes.

LIT'TLETON (Adam), a learned philologiſt, was born in 1627 at Hales-Owen, in Shropſhire, of which pariſh his father was vicar. He received his ſchool-education at Weſtminſter under Dr. Buſby; and, in 1644, was elected a ſtudent of Chriſt-church college in Oxford. He was ejected by the parliament-viſitors in 1648, and ſupported himſelf for ſome years as an uſher at different ſchools. In 1658 he was appointed ſecond maſter of Weſtminſter ſchool. After the reſtoration he became king's chaplain in ordinary, accumulated his degrees in divinity, and, in 1674, was inducted into the rectory of Chelſea, at which place he had kept a ſchool for ſome years. He was alſo made a prebendary of Weſtminſter, and afterwards ſubdean. He died at Chelſea in 1694. Mr. Littleton was a man of an amiable private character, and a very general ſcholar. Beſides the claſſical languages, he was converſant in the Hebrew, Chaldee, and Arabic, and was well acquainted with the abſtruſer parts of mathematics. He was the author of ſeveral works in divinity and philology; but is chiefly remembered for his Latin Dictionary, which was in general uſe in the Engliſh ſchools before that of Ainſworth. It was firſt publiſhed in 1678, 4to. and reprinted with additions in 1685.

LIT'TLETON (Lord). See LYTTELTON.

LIT'TLETON's I'SLAND, a ſmall iſland in the Florida Stream. Lat. 24. 42. N. lon. 81. 40. W.

LIT'TLETON-UPON-SEV'ERN, a village near Thornbury in Glouceſterſhire.

LIT'TLETON-WICK-GREE'N, a village three miles from Maidenhead in Berkſhire.

LIT'TLING, *ſ.* [from *little.*] Any thing very little.

LIT'TON, ſouth-weſt of Bridport, in Dorſetſhire, is a large pariſh in a level encloſed country, at the foot of ſteep chalky hills that riſe on the north of it. It had a market, now diſuſed. Here is a charity-ſchool. The church ſtands towards the north ſide of the pariſh, and has a neat high tower, which was rebuilt about 1500.

LIT'TORAL, *adj.* [*littoralis*, Lat.] Belonging to the ſhore.

LITTOREL'LA, *ſ.* [dimin. from *littus*, Lat. the ſhore; this plant growing on the ſea-coaſt.] In botany, a genus of the claſs monoecia, order tetrandria, natural order of plantagines, *Juſſ.* The generic characters are—I. Male. Calyx: perianth four-leaved, upright. Corolla: one-petalled; tube the length of the calyx; border four-parted, upright, permanent. Stamina: filaments four, filiform, very long, inſerted into the receptacle; antheræ heart-ſhaped. II. Female in the ſame plant. Calyx: none. Corolla: one-petalled, conic, with ſlightly four-cleft mouth; permanent. Piſtillum: germ oblong; ſtyle filiform, very long; ſtigma acute. Pericarpium: the inveſting corolla. Seed: nut one-celled. The flower is that of plantain, but the fruit different.—*Eſſential Character.* Male: calyx four-leaved; corolla four-cleft; ſtamina long. Female: calyx none; corolla ſlightly four-cleft; ſtyles long; ſeed a nut.

Littorella lacuſtris, or plantain ſhore-weed; the only ſpecies known. The root ſhoots out long running fibres, which take root afreſh, and thus in a ſhort time cover the brink of the lakes with tufts of ſemi-cylindrical, linear, acute,

acute, leaves, about two inches long. Three, four, or more, naked ſtalks ariſe from between the leaves, about an inch and a half long, terminated each with one greeniſh male flower. The female flowers are ſeſſile, commonly two, ſometimes three, at the baſe of the male ſtalk. Linnæus in his earlier works, following Tournefort, placed this plant with the Plantagos. It has indeed their flower; but the ſtamens and piſtils being found in ſeparate flowers, though on the ſame plant, and the fruit being different from that of the plantains, he afterwards ſeparated it from that genus. He remarks, that the male flower is on a ſtalk, taller than the female; the female flower ſeſſile at the root, and the ſtyle often as long as the ſtalk of the male flower. Native of the north of Europe, on the ſhores of lakes. Ray, who ranges it with the ruſh-graſſes, and calls it the ſmalleſt marſh-plantain, obſerved it near Cambridge, Glaſgow, and Penzance. It is frequent alſo in Scotland and ſome parts of Wales; on Hounſlow heath; near Loweſtoff, Suffolk; Hoſeley-lough, Northumberland, &c. and on the margins of all the lakes in Ireland that have gravelly ſhores.

LITU'BIUM, in ancient geography, a town of Liguria. *Strabo.*

LITVINTZO'VA, a town of Ruſſia, in the government of Irkutſk: thirty-ſix miles ſouth of Ilimſk.

To LIT'URATE, *v. a.* To blot out. *Cole.*

LITUR'GIC, *adj.* [from *liturgy.*] Belonging to the liturgy.

LIT'URGY, *ſ.* [λειτεργια, Gr. of λεὶος, public, and εργον, work.] Form of prayers; formulary of public devotions.—We dare not admit any ſuch form of *liturgy*, as either appointeth no ſcripture at all, or very little, to be read in the church. *Hooker.*—The bleſſedeſt of mortal wights began to be importuned, ſo that a great part of divine *liturgy* was addreſſed ſolely to her. *Howel.*

Liturgy is uſed among the Romaniſts to ſignify the *Maſs*; and among us the *Common Prayer.*

All who have written on liturgies agree, that in the primitive days divine ſervice was exceedingly ſimple, attended with very few ceremonies, and conſiſting of but a ſmall number of prayers; but, by degrees, they increaſed the number of external ceremonies, and added new prayers, to make the office look more awful and venerable to the people. At length things were carried to ſuch a pitch, that a regulation became neceſſary; and it was found proper to put the ſervice, and the manner of performing it, into writing; and this was what they called a *liturgy.*

In the more early ages of the church, every biſhop had a power to form a liturgy for his own dioceſe; and, if he kept to the analogy of faith and doctrine, all other matters were left to his own diſcretion. Afterwards the practice was for the whole province to follow the metropolitan church, which alſo became the general rule of the church; and this Lindwood acknowledges to be the common law of the church; intimating that the uſe of ſeveral ſervices in the ſame province, which was the caſe in England, was not to be warranted but by long cuſtom. The Liturgy of the Church of England was compoſed in the year 1547, and eſtabliſhed in the ſecond year of Edward VI. In the fifth year of this king it was reviewed; becauſe ſome things were contained in that liturgy which ſhowed a compliance with the ſuperſtition of thoſe times, and exceptions were taken againſt it by ſome learned men at home, and by Calvin abroad. Some alterations were made in it, which conſiſted in adding the General Confeſſion and Abſolution, and the Communion to begin with the Ten Commandments. The uſe of oil in confirmation and extreme unction was left out, and alſo prayers for ſouls departed, and what tended to a belief of Chriſt's real preſence in the euchariſt. This liturgy, ſo reformed, was eſtabliſhed by the act of 5 & 6 Edw. VI. c. 1. However, it was aboliſhed by queen Mary, who enacted, that the ſervice ſhould ſtand as it was moſt commonly uſed in the laſt year of the reign of king Henry VIII. The liturgy of 5 & 6 Edw. VI. was re-eſtabliſhed, with ſome few alterations and additions, by 1 Eliz. c. 2. All the biſhops preſent diſſented both in this and the former acts; and, therefore, the expreſſion "lords ſpiritual" doth not occur in either of them. *Gibſ.* 268. Some farther alterations were introduced, in conſequence of the review of the Common Prayer Book, by order of king James, in the firſt year of his reign; particularly in the office of Private Baptiſm, in ſeveral rubrics and other paſſages, with the addition of five or ſix new prayers and thankſgivings, and all that part of the Catechiſm which contains the doctrine of the ſacraments. The Book of Common Prayer, ſo altered, remained in force from the firſt year of king James to the fourteenth of Charles II. But the laſt review of the liturgy was in the year 1661, and the laſt act of uniformity enjoining the obſervance of it, is 13 & 14 Car. II. c. 4. See COMMON PRAYER.

Set forms of prayer, precompoſed, and daily repeated, have ever been in uſe where there has been any conſtant practice of religious duties; and ſuch eſtabliſhed forms appear neceſſary, not only to aſſiſt the meditations of thoſe who cannot always command their thoughts, and direct them to the proper object; but alſo for the purpoſe of uniting perſons in public devotion, which could never be carried on without ſome ſettled and known expreſſion of ſentiment and words, in which they all agreed, and to which they all were accuſtomed.

The practice of the Jewiſh and Chriſtian church has been the ſame, in conforming to the uſe of ſome pre-compoſed prayers. We are told, that David appointed the Levites *to ſtand every morning to thank and praiſe the Lord, and likewiſe at even*, 1 Chron. xxiii. 30; which could not be performed by many perſons together, without ſome ſet form in which they all could join. As our Saviour always joined in communion with the Jewiſh church, he lent his ſanction to ſuch ſet forms by his compliance with them; and he finally gave the ſtrongeſt approbation to continuing the practice, by delivering to his diſciples at leaſt one ſet form of prayer, when they aſked it of him. No doubt, the apoſtles and diſciples joined in the Jewiſh worſhip till our Lord's aſcenſion; and, when they had formed Chriſtian aſſemblies, it is plain they uſed in them precompoſed forms, more eſpecially *in pſalms, and hymns, and ſpiritual ſongs*, Epheſ. v. 61; which, and the like deſcriptions of public devotions, ſo frequently mentioned in the New Teſtament, give an idea of ſome liturgical order obſerved among thoſe who had converſed with Chriſt; and gave a degree of credit to the liturgies which have been, from the earlieſt ages, aſcribed to St. Peter, St. Mark, and St. James; which, though not compoſed by thoſe perſons, are certainly of an age very near to them.

That the primitive Chriſtians uſed ſet forms of prayer, is alſo evident from the expreſſions to be found, in the earlieſt fathers, of "common prayers," "conſtituted prayers," and "ſolemn prayers." But this matter is put out of all doubt, by the evidence of the Apoſtolical Conſtitutions, where the forms both of morning and evening prayer are given, with as much regularity as in any modern liturgy. After the period of that work, which, though not apoſtolical, as it purports to be, is of a very high and acknowledged antiquity, the forming of liturgies became an exerciſe for ſome of the moſt eminent among the fathers. St. Baſil, St. Chryſoſtom, and St. Ambroſe, compoſed each their orders and forms of prayer, which we now poſſeſs. In this claſs of works may be reckoned, the Lectionary of St. Jerome, and the Sacramentary of St. Gregory; which laſt perſon ſeems to have brought the offices of the weſtern church to a more complete form than they had yet received; and, by ſuch eminent ſervices to the church, he obtained the ſurname of the Great.

Out of theſe various liturgies had been compiled, at different times, the forms of public ſervice that were uſed in this kingdom, for many centuries, during the reign of popery. They were known, under the ſeveral names of Breviaries, Miſſals, and Maſs-books; and thoſe of the ſame name and deſcription differed the one from the other;

hence there were in the kingdom divers forms of public prayer; there was the uſe of *Sarum*, the uſe of *York*, the uſe of *Bangor*, and the uſe of *Lincoln*. Theſe offices were all in Latin; ſo that the laity, who had not the advantage of a learned education, could not join in them, nor receive any edification from them; they were alſo mixed with many of thoſe corruptions into which the mother-church of the weſtern world, the church of Rome, had fallen; namely, addreſſes to the ſaints, adorations of the hoſt, images, and other inventions that were no longer looked on with reverence when Henry VIII. began the great work of reformation. It was then thought neceſſary to correct and amend theſe offices; and not only to have the ſervice of the church in the Engliſh tongue, but to reſtore it to its original purity; it being the deſign of our reformers not to introduce a new form of worſhip, but to correct and amend the old one, till it was rendered more agreeable to Scripture, and the practice of the primitive church in the pureſt ages of Chriſtianity. In this reformation they proceeded with moderation, and gradually, according as they were able; and thus at length our Common Prayer, framed upon the moſt approved models of primitive Chriſtianity, and brought to its preſent ſtate after ſucceſſive reviſions, has been judged to be as comprehenſive and as unexceptionable a form of public ſervice as is uſed in any church in the world. We have the teſtimony of the celebrated Grotius, that it comes nearer to the primitive patterns than thoſe of any of the reformed churches. It has always been in high eſteem with the moſt eminent proteſtants abroad; and it has been admired even in the eaſtern churches: it is diſapproved only by the papiſts, who grudge that it retains not more of their ſervice; and by the diſſenters, who are jealous that it retains ſo much.

Archdeacon Paley obſerves, that it would be no difficult taſk to contract the liturgies of moſt churches into half their preſent compaſs; and yet retain every diſtinct petition, as well as the ſubſtance of every ſentiment which can be found in them. Although this author does not admit the propriety of ſtudying brevity too much, he is of opinion, that the too-great length of church-ſervices is unfavourable to piety. It begets in many an early and unconquerable diſlike to the public worſhip of their country or communion. They come to church ſeldom; and enter the doors when they do come under the apprehenſion of a tedious attendance, which they prepare for at firſt, or ſoon after relieve, by compoſing themſelves to a drowſy forgetfulneſs of the place and duty, or by ſending abroad their thoughts in ſearch of more amuſing occupation. Although there may be ſome few of a diſpoſition not to be wearied with religious exerciſes, yet, where a ritual is prolix, and the celebration of divine ſervice long, no effect is in general to be looked for, but that indolence will find in it an excuſe, and piety be diſconcerted by impatience. It might further be obſerved, that the extent of our eſtabliſhed liturgy does not leave time ſufficient for public inſtruction; that the attention is fatigued before this part of our public ſervice commences; and that exceſs in our public diſcourſes, which admit of variety, is more excuſable than the ſame fault in our devotional exerciſes, during which the attention ought to be kept alive, and the underſtanding and heart properly engaged; whereas, on the contrary, as the ſervice (eſpecially the morning-ſervice) is ſo long, ſermons are now generally ſhort, and catechizing altogether omitted. But the length and repetitions complained of in our liturgy are not ſo much the fault of the compilers, as the effect of uniting into *one* ſervice, what was originally diſtributed into *three*. Accordingly we obſerve, that the Lord's Prayer in particular is enjoined to be publicly uſed every Lord's day in our ordinary ſervice, when there is no communion, no leſs than ſeven times, viz. five times in the morning and twice in the afternoon; and when there is a communion, and alſo afternoon ſermon or lecture, then nine times; and if the office of baptiſm, and the other of churching of women, happen to come in, as they may and do ſometimes, both morning and afternoon, then thirteen times. The Gloria Patri is introduced commonly, and moſt uſually, ſeven or eight times; not unfrequently nine or ten; and may alſo occur eleven times, in the courſe of our morning ſervice only. Notwithſtanding that dread of innovation, which, ſays archdeacon Paley, ſeems to have become the panic of the age, few, as he ſuppoſes, would be diſpleaſed with ſuch omiſſions, abridgments, or change in the arrangement, as the combination of ſeparate ſervices muſt neceſſarily require, even ſuppoſing each to have been faultleſs in itſelf. If, together with theſe alterations, the Epiſtles and Goſpels, and the Collects which precede them, were compoſed and ſelected with more regard to unity of ſubject and deſign; and the Pſalms and Leſſons either left to the choice of the miniſter, or better accommodated to the capacity of the audience, and the edification of modern life; the church of England would be in poſſeſſion of a liturgy, in which thoſe who aſſent to her doctrines would have little to blame, and the diſſatisfied muſt acknowledge many beauties. The ſtyle throughout is excellent; calm, without coldneſs; and, though everywhere ſedate, oftentimes affecting. The pauſes in the ſervice are diſpoſed at proper intervals; the tranſitions from one office of devotion to another, from confeſſion to prayer, from prayer to thankſgiving, from thankſgiving to "hearing of the word," are contrived, like ſcenes in the drama, to ſupply the mind with a ſucceſſion of diverſified engagements. As much variety is introduced alſo in the form of praying as this kind of compoſition ſeems capable of admitting.

It would be diſingenuous not to acknowledge, that the chief part of our liturgy was in uſe in the Roman-catholic church, from which the church of England is reformed; but it would betray a want of acquaintance with eccleſiaſtical antiquity to ſuppoſe that theſe prayers and ſervices originated in that church, as ſeveral of them were in uſe from the firſt ages of Chriſtianity, and many of the beſt of them before the name of pope or popery was known in the earth. *Clarke's Bible*, p. xxv. *Cookſon's Com. Prayer.*

LIT'UUS, *ſ.* Among the Romans, was the ſtaff made uſe of by the augurs in quartering the heavens. It bore a reſemblance to the croſier of a biſhop, but was ſhorter. It was crooked at one end, and thickeſt in the curved part, according to A. Gellius. We frequently meet with a repreſentation of it upon medals, amongſt other pontifical inſtruments. It was called *Lituus Quirinalis*, from Quirinus, a name of Romulus, who was ſkilled in all the myſteries of augury. On ſome coins of Nero the lituus appears at his breaſt; and from badly-preſerved coins has been taken by ſome medallic writers for a ſerpent.

LITUUS was alſo an inſtrument of muſic in uſe in the Roman army, in the form of the augural ſtaff, whence it had its name. It was a ſpecies of clarion, or octave trumpet, made of metal, and extremely loud and ſhrill, uſed for the cavalry, as the ſtraight trumpet was for the foot. Horace diſtinguiſhes it from the *tuba*, or trumpet:

> Multos caſtra juvant, et lituo tubæ
> Permiſtus ſonitus, ——— *Od.* i. 23.

as Claudian does from the flute:

> Tibia *pro* lituis, et pro clangore tubarum
> Molle lyræ, fuſtumque canant.

A genuine ancient metalline lituus is now in the poſſeſſion of ſir Joſeph Banks; it was found, with many other antiquities, both Roman and Anglo-Saxon, in clearing the bed of the river Witham, near Tatterſhall, Lincolnſhire, in 1761, and is perhaps the only inſtrument of the kind that is now extant. It is a long narrow tube, with a ſwelling curve at the end; it is neatly made of very thin braſs, with three joints, or pieces, like German flutes; and has been well gilt. Its length is upwards of four feet, though the upper end has been evidently broken off. An inſtrument of this kind, made of caſt braſs, was found in digging a well near Battle in Suſſex, and was then

filled with ſmall ſhells: there is an engraving of it in Groſe's Military Antiquities, vol. ii. A ſimilar trumpet is engraved in Montfaucon's Roman Antiquities. This inſtrument frequently appears on ancient medals as a ſymbol of war, and is terminated with the head of a boar, and ſometimes with that of a ſnake, as on an ancient family-medal of Albinus, ſtruck during the time of the republic, between the firſt Punic war and the reign of Auguſtus. See the article MUSIC.

LITYER'SA, *ſ.* in ancient muſic, the ſong of the reapers. Theocritus, Apollodorus, Julius Pollux, Suidas, and others, mention this ſong, and call it *lityerſa*, from Lytiurſas, the natural ſon of Midas; a rude and ferocious prince, who obliged ſtrangers to work with him in the fields at harveſt-time, and thoſe who were too feeble and unable to work, he put to death. Hercules killed him in the life-time of his father. Julius Pollux ſays that this ſong was mournful, and ſung round the ſhearers to conſole Midas for the death of his ſon.

LIT'ZENDORF, a town of Bavaria, in the biſhopric of Bamberg: ſix miles eaſt-north-eaſt of Bamberg.

LIV O'E, a ſmall iſland of Denmark, in Lymfiord Gulf; its form is like a tadpole, with a long tail running out from its ſouthern ſhore, a mile and a half in length, called *Liv Tap*. On the iſland is a village. Lat. 56. 53. N. lon. 9. 6. E.

LIVA'DIA, a province of European Turkey, bounded on the north by Theſſaly, on the eaſt by the Archipelago, on the ſouth by the Gulf of Lepanto, which ſeparates it from the Morea, and the Gulf of Engia, and on the weſt by the Mediterranean; one hundred and eighty miles in length from north-weſt to ſouth-eaſt, and about thirty-five in its mean breadth. This province comprehends what was properly called *Greece*, which included Acarnania, Etolia, Ozolæa, Locris, Phocis, Doris, Epiknemidia, Bœotia, Megara, and Attica. In this country are the celebrated mountains, ſo much ſpoken of by the ancients, Parnaſſus, Helicon, and Cythæron. The places of moſt note at preſent are Lepanto, Livadia, and Athens.

LIVA'DIA, a city of European Turkey, in a province of the ſame name; it is a large populous town, ſituated on the Gulf of Lepanto, built round a mountain, which terminates in a peak, having on it a caſtle. It carries on a pretty good trade: 324 miles weſt-ſouth-weſt of Conſtantinople, twenty-eight north of Corinth, and ſeventy-two weſt of Lariſſa. Lat. 38. 37. N. lon. 23. 54. E.

LIVADOS'TA, a town of European Turkey, in Livadia, on the eaſt extremity of the Gulf of Lepanto: twenty miles ſouth-eaſt of Livadia.

LIVARO'T, a town of France, in the department of the Calvados: eight miles ſouth-ſouth-weſt of Liſieux, and fifteen eaſt-north-eaſt of Falaiſe.

LIV'AT WA'TER, a river of Scotland, which riſes near Scalan, in the ſouth part of the county of Banff, and runs into the Avon two miles above Kirkmichael.

LIU'BIM, a town of Ruſſia, in the government of Jaroſlavl: forty miles north-eaſt of Jaroſlavl. Lat. 58. 55. N. lon. 40. 50. E.

LIU'BITCH, a town of Ruſſia, in the government of Tchernigov, on the Dnieper: twenty miles weſt of Tchernigov. Lat. 51. 22. N. lon. 26. 44. E.

LIU'DER, a town of Sweden, in the province of Smaland: thirty-one miles weſt of Calmar.

To LIVE, *v. n.* [lyfian, lyfigan, Sax.] To be in a ſtate of animation; to be not dead:

Is't night's predominance, or the day's ſhame,
That darkneſs does the face of earth intomb,
When *living* day ſhould kiſs it? *Shakeſpeare's Macbeth.*

To ſave the *living*, and revenge the dead,
Againſt one warrior's arms all Troy they led. *Dryden.*

To paſs life in any certain manner with regard to habits, good or ill, happineſs or miſery.—O death, how bitter is the remembrance of thee to a man that *liveth* at reſt! *Eccluſ.* xli. 1.—Dr. Parker, in his ſermon before them, touched them ſo near for their *living*, that they went near to touch him for his life. *Hayward.*—A late prelate, of a remarkable zeal for the church, were religious to be tried by lives, would have *lived* down the pope, and the whole conſiſtory. *Atterbury.*—If we are firmly reſolved to *live* up to the dictates of reaſon, without any regard to wealth and reputation, we may go through life with ſteadineſs and pleaſure. *Addiſon.*—To continue in life.—The way to *live* long muſt be, to uſe our bodies ſo as is moſt agreeable to the rules of temperance. *Ray on the Creation.*

See the minutes how they run;
How many make the hour full complete,
How many hours bring about the day,
How many days will finiſh up the year,
How many years a mortal man may *live*. *Shakeſpeare.*

To live, emphatically; to be in a ſtate of happineſs;

Live while you live, the Epicure would ſay,
And ſnatch the pleaſures of the preſent day;
Live while you live, the ſacred preacher cries,
And give to God each moment as it flies.
Lord, in my views let both united be:
I *live* to pleaſure when I *live* to thee. *Doddridge.*

To be exempt from death, temporal or ſpiritual.—My ſtatutes and judgments, if a man do, he ſhall *live* in them. *Lev.* xviii. 5.—He died for us, that, whether we wake or ſleep, we ſhould *live* together with him. 1 *Theſſ.* v. 10.—To remain undeſtroyed.—It was a miraculous providence that could make a veſſel, ſo ill-manned, *live* upon ſea; that kept it from being daſhed againſt the hills, or overwhelmed in the deeps. *Burnet.*

Mark how the ſhifting winds from weſt ariſe,
And what collected night involves the ſkies!
Nor can our ſhaken veſſels *live* at ſea.
Much leſs againſt the tempeſt force their way. *Dryden.*

To continue; not to be loſt.—Men's evil manners *live* in braſs; their virtues we write in water. *Shakeſpeare.*

Sounds which addreſs the ear are loſt and die
In one ſhort hour; but that which ſtrikes the eye
Lives long upon the mind; the faithful ſight
Engraves the knowledge with a beam of light. *Watts.*

To converſe; to cohabit: followed by *with*:

The ſhepherd-ſwains ſhall dance and ſing,
For thy delight each May morning,
If theſe delights thy mind may move,
Then *live with* me, and be my love. *Shakeſpeare.*

To feed.—Thoſe animals that *live* upon other animals have their fleſh more alkaleſcent than thoſe that *live* upon vegetables. *Arbuthnot.*—To maintain one's ſelf; to be ſupported.—A moſt notorious thief; *lived* all his life-time of ſpoils and robberies. *Spenſer.*—They which miniſter about holy things, *live* of the things of the temple. 1 *Cor.* ix. 13.—The number of ſoldiers can never be great in proportion to that of people, no more than of thoſe that are idle to that of thoſe who *live* by labour. *Temple.*—He had been moſt of his time in good ſervice, and had ſomething to *live* on now he was old. *Temple.*—To be in a ſtate of motion or vegetation:

Cool groves and *living* lakes
Give after toilſome days a ſoft repoſe at night. *Dryden.*

To be unextinguiſhed:

Pure oil and incenſe on the fire they throw:
Theſe gifts the greedy flames to duſt devour,
Then on the *living* coals red wine they pour. *Dryden.*

LIVE, *adj.* [from *alive*.] Quick; not dead.—If one man's ox hurt another that he die, they ſhall ſell the *live* ox, and divide the money. *Exodus.*—Active; not extinguiſhed.—A louder ſound was produced by the impetuous eruptions of the halituous flames of the ſaltpetre, upon caſting of a *live* coal upon it. *Boyle.*

LIV'E-EVER, in botany. See SEDUM.

LIV'E-

LIV'E-IN-IDLENESS. See VIOLA.

LIV'E-LONG. See TELEPHIUM.

LI'VELESS, *adj.* Wanting life; rather *lifeleſs*:

Deſcription cannot ſuit itſelf in words,
To demonſtrate the life of ſuch a battle,
In life ſo *liveleſs* as it ſhows itſelf. *Shakeſpeare.*

LI'VELIHOOD, *ſ.* [corrupted from LIVELODE.] Support of life; maintenance; means of living.—Trade employs multitudes of hands, and furniſhes the pooreſt of our fellow-ſubjects with the opportunities of gaining an honeſt *livelihood*. *Addiſon.*

Ah! luckleſs babe! born under cruel ſtar,
And in dead parents' baleful aſhes bred;
Full little weeneſt thou what ſorrows are
Left thee for portion of thy *livelihood!* *Fairy Queen.*

LI'VELINESS, *ſ.* Appearance of life.—That *livelineſs* which the freedom of the pencil makes appear, may ſeem the living hand of nature. *Dryden's Dufreſnoy.*—Vivacity; ſprightlineſs.—Extravagant young fellows, that have *livelineſs* and ſpirit, come ſometimes to be ſet right, and ſo make able and great men; but tame and low ſpirits very ſeldom attain to any thing. *Locke.*

LI'VELODE, *ſ.* [*live*, and *lode*, from *lead*; the means of leading life.] Maintenance; ſupport; livelihood:

She gave like bleſſing to each creature,
As well of worldly *livelode* as of life,
That there might be no difference nor ſtrife. *Hubberd.*

LIV'ELONG, *adj.* Tedious; long in paſſing; entire.—The obſcur'd bird clamour'd the *livelong* night. *Shakeſpeare.*

Seek for pleaſure to deſtroy
The ſorrows of this *livelong* night. *Prior.*

How could ſhe ſit the *livelong* day,
Yet never aſk us once to play? *Swift.*

Many a time, and oft,
Have you climb'd up to walls and battlements,
Your infants in your arms; and there have ſate
The *livelong* day, with patient expectation,
To ſee great Pompey paſs. *Shakeſpeare's Julius Cæſar.*

Laſting; durable. *Not uſed:*

Thou, in our wonder and aſtoniſhment,
Haſt built thyſelf a *livelong* monument. *Milton.*

LI'VELY, *adj.* [from *life* and *like*.] Briſk; vigorous; vivacious:

But wherefore comes old Manoa in ſuch haſte,
With youthful ſteps; much *livelier* than ere while
He ſeems; ſuppoſing here to find his ſon,
Or of him bringing to us ſome glad news? *Milton.*

Gay; airy:

Dulneſs, delighted, ey'd the *lively* dunce,
Rememb'ring ſhe herſelf was Pertneſs once. *Pope.*

Repreſenting life.—Since a true knowledge of nature gives us pleaſure, a *lively* imitation of it in poetry or painting muſt produce a much greater. *Dryden's Dufreſnoy.*—Strong; energetic.—The colours of the priſm are manifeſtly more full, intenſe, and *lively*, than thoſe of natural bodies. *Newton's Optics.*—Imprint upon their minds, by proper arguments and reflections, a *lively* perſuaſion of the certainty of a future ſtate. *Atterbury.*

LI'VELY, properly LIVELILY, *adv.* Briſkly; vigorouſly.—They brought their men to the ſlough, who, diſcharging *lively* almoſt cloſe to the face of the enemy, did much amaze them. *Hayward.*—With ſtrong reſemblance of life.—That part of poetry muſt needs be beſt, which deſcribes moſt *lively* our actions and paſſions, our virtues and our vices. *Dryden.*

LI'VELYHEAD, *ſ.* Living form:

If in that picture dead
Such life ye read and virtue in vaine ſhow:
What mote ye weene, if the trew *livelyhead*
Of that moſt glorious viſage ye did vew. *Spenſer.*

LIV'ENEN, a narrow valley of Swiſſerland, at the foot of Mount St. Gothard, about twenty miles in length, watered by ſeveral ſmall rivers and lakes; ceded by the duke of Milan to the canton of Uri in 1441. The inhabitants are in number about 12,000; they ſpeak a corrupt Italian; are ſober, robuſt, and ingenious, but indolent. The inhabitants of this valley, who may be deemed the deſcendants of the ancient Lepontii, have been hardly treated by their ſovereigns, and have often endeavoured to free themſelves, but in vain; and, in 1755, the canton of Uri, aſſiſted by the other cantons, diſarmed them and deprived them of their ancient privileges. Faido is the principal place.

LIVEN'SK, a town of Ruſſia, in the government of Voronez: eighty miles ſouth-ſouth-weſt of Voronez. Lat. 50. 25. N. lon. 38. 10. E.

LIVEN'SK (Niznei), a town of Ruſſia, in the government of Voronez: thirty-ſix miles weſt-ſouth-weſt of Voronez. Lat. 51. 8. N. lon. 38. 14. E.

LIVEN'ZA, a river of Italy, which riſes near Polcenigo, and empties itſelf into the Gulf of Venice ſeventeen miles eaſt of Trevigio.

LIV'ER, *ſ.* One who lives:

Be thy affections undiſturb'd and clear,
Guided to what may great or good appear,
And try if life be worth the *liver*'s care. *Prior.*

One who lives in any particular manner with reſpect to virtue or vice, happineſs or miſery.—The end of his deſcent was to gather a church of holy Chriſtian *livers* over the whole world. *Hammond's Fundamentals.*—If any looſe *liver* have any goods of his own, the ſheriff is to ſeize thereupon. *Spenſer on Ireland.*—Here are the wants of children, of diſtracted perſons, of ſturdy wandering beggars and looſe diſorderly *livers*, at one view repreſented. *Atterbury.*—[From lıfene, Sax.] One of the entrails. See the article ANATOMY, vol. i. p. 615.

With mirth and laughter let old wrinkles come:
And let my *liver* rather heat with wine,
Than my heart cool with mortifying groans. *Shakeſpeare.*

Plato, and others of the ancients, fix the principle of love in the liver; whence the Latin proverb, *Cogit amare jecur*; and in this ſenſe Horace frequently uſes the word; as when he ſays, *Si torrere jecur quærus Idoneum.* The Greeks, from its concave figure, called it ηπαϱ, "vaulted, ſuſpended;" the Latins call it *jecur*, q. d. *juxta cor*, as being "near the heart." The French call it *foye*, from *foyer*, *focus*, or "fireplace;" agreeable to the doctrine of the ancients, who believed the blood to be boiled and prepared in it. Eraſiſtratus, at firſt, called it *parenchyma*, i. e. effuſion or maſs of blood; and Hippocrates, by way of eminence, frequently calls it the *hypochondrium*.

LIV'ER *of* ANTIMONY, ARSENIC, and SULPHUR. See the article CHEMISTRY, vol. iv. p. 150.

LIV'ER-CASE, *ſ.* The ſurgeon's phraſe for a diſorder ariſing from an obſtruction in the liver.

LIV'ER-COLOUR, *ſ.* The colour of the liver; the dark red.

LIV'ER-COLOUR, *adj.* Dark red.—The uppermoſt ſtratum is of gravel; then clay of various colours, purple, blue, red, *liver-colour*. *Woodward.*

LIV'ER-COLOURED, *adj.* Coloured like the liver; dark red.

LIV'ER-GROWN, *adj.* Having a great liver.—I enquired what other caſualties were moſt like the rickets; and found that *liver-grown* was neareſt. *Graunt.*

LIV'ER-STONE. See the article MINERALOGY.

LIV'ER-WORT, *ſ.* A plant.—That ſort of *liver-wort* which is uſed to cure the bite of mad dogs, grows on commons, and open heaths, where the graſs is ſhort, on declivities, and on the ſides of pits. This ſpreads on the ſurface of the ground, and, when in perfection, is of an aſh-colour; but, as it grows old, it alters, and becomes of a dark colour. *Miller.*—See ANEMONE and LICHEN.

LIV'ER-WORT (Marſh). See RICCIA.

LIV'ER-

LIV'ER-WORT (Noble). See ANEMONE, vol. i.

LIV'ERMERE, Great and Little, villages in Suffolk, ſouth-weſt of Great and Little Fakenham.

LIV'ERMORE, a town of America, in Cumberland county, Maine, ſituated on both ſides of Androſcoggin river: nineteen miles north-weſt of Hallowell.

LIV'ERNON, a town of France, in the department of the Lot: eight miles weſt-north-weſt of Figeac, and twenty-one eaſt-north-eaſt of Cahors.

LIV'ERPOOL, a market-town, borough, and ſea-port, in the county of Lancaſter, on the eaſtern bank of the river Merſey, which flows into the Iriſh Sea not far north of Liverpool. The population of this town, according to the parliamentary returns of 1811, amounted to 94,376 perſons.

This place is called in the Saxon *Liferpole*; others name it Letherpoole, Lyverpoole, Lyrpole, Lerpoole, Leerpool, Livrepol, Lyverpol; and about thirty years ſince it was moſtly ſpelt *Leverpool*, which is indeed juſtified by ſome ancient manuſcripts and charters as far back as the year 1524. The etymology is not eaſily aſcertained; every thing hitherto produced has been mere conjecture. Some imagine it to have taken its name from a bird, formerly found in this place, which was called *lever*; but this very bird ſeems to have had no other than a fabulous exiſtence; a bird, however, has been from time immemorial impreſſed on the corporation-ſeal. Others imagine it to be derived from a ſea-weed known by the name of *liver* in the weſt of England; or from *liver-wort*, frequently found on the ſea-coaſt. Others, again, ſuppoſe it might originate from the family of *Lever*, which is of ancient date, and whoſe arms are exemplified in a manuſcript in the Harleian collection at the Britiſh Muſeum, ſuppoſed to have been written as early as 1567. With reſpect to the latter part of the name, it is generally agreed, that it was owing to a body of water with which this place was formerly overſpread like a *pool*.

The early hiſtory of this town is equally as unknown as the derivation of its name. But perhaps the deficiency of records will be no great loſs, as there ſeems little reaſon to ſuppoſe it was of any importance, either commercially or politically, previous to the commencement of the laſt century; hence it may be called a modern town. In the Conqueror's ſurvey, it is ſtated, that all the land between the rivers Ribble and Merſey belonged to Roger de Poictiers; but there is no mention either of a town or village: hence it may be reaſonably ſuppoſed none exiſted at that time. A caſtle, however, is noticed by Camden, as having been built ſhortly after the conqueſt, the command of which was beſtowed on Vivian de Molyneux, a Frenchman, in whoſe family it continued till the 30th year of the reign of queen Elizabeth. Neither hiſtory nor tradition determine any thing certain, concerning either its founder or the period of its erection. The tower, which forms part of a priſon in Water-ſtreet, is the only building of antiquity which Liverpool can now boaſt of. The original founder of this tower we are as ignorant of as we are of the founder of the caſtle. Seacombe, in his Memoirs of the Stanley family, is the firſt author who mentions it. He tells us, that it was the property of ſir Thomas Latham, in the reign of Edward III. whoſe daughter and heireſs married ſir John Stanley; but ſays nothing of its erection. The croſs which formerly ſtood at the corner of Pinfold-lane, oppoſite the Flaſhes, has been long demoliſhed. This tradition reports to have been placed there in commemoration of St. Patrick, who, it is ſaid, reſted in this neighbourhood on his way from England to Ireland.

The firſt charter in favour of Liverpool, according to Enfield's folio Hiſtory, was in the reign of Henry I. but is extremely doubtful. It is certain, however, that in the charter granted by king John in 1203, nearly a century afterwards, this town is called a borough by preſcription. Henry III. confirmed the privileges of the corporation in the year 1227. From this period to 1555, we are totally in the dark as to its hiſtory or condition; nor is there any thing worth remarking for the ſixteen years following, when the inhabitants ſent a memorial to queen Elizabeth, praying relief from a ſubſidy which her miniſters had impoſed upon them. In this petition they ſtyle themſelves "her majeſty's poor decayed town of Liverpool." How the town became ſo *decayed*, it is now difficult to comprehend, as, from the records ſeveral years previous, it does not ſeem to have been any better than a fiſhing-hamlet, containing about 138 houſeholders and cottagers, and poſſeſſing 12 barks, navigated by 75 men. Camden, however, who wrote in 1586, conſidered it in his time as more famous for its beauty and populouſneſs than for its antiquities. To reconcile theſe oppoſite ſtatements, it is only neceſſary to admit, that a very trifling village may arrive at conſiderable opulence in the ſhort period of one-and-twenty years; and who will deny the poſſibility of ſuch an event at the preſent day?

From Camden's time nothing is recorded of Liverpool deſerving of notice till the year 1644; when the town and its caſtle were poſſeſſed by the parliamentary troops under colonel Moore. It was fortified and ſecured on the land-ſide by a high mud-wall, and a ditch twelve yards wide and three deep: batteries were erected at different points, and the ends of the ſtreets were defended by artillery. The garriſon was numerous, and, being well ſtored with proviſions, made a vigorous defence for the ſpace of a month. At laſt, however, the king's army, under the orders of prince Rupert, ſucceeded in taking the town, when the caſtle ſurrendered without further reſiſtance. Some traces of this ſiege can yet be diſcovered at different points. When the foundation of the preſent infirmary was ſunk, the marks of trenches were diſtinctly viſible, and many articles of modern warfare were found within their ſcope. A few years ago, as ſome workmen were removing the earth in a field where Glouceſter-ſtreet now ſtands, they laid open the foundation of a battery, and diſcovered military utenſils of different kinds.

In the year 1710, the increaſe of trade firſt ſuggeſted the neceſſity of a dock, and an act paſſed for empowering the inhabitants to conſtruct one. About this time the firſt ſhip is ſaid to have ſailed from Liverpool to Africa; and not much earlier their direct traffic to the Weſt Indies muſt have commenced. From this period, the increaſe of the town in wealth and population has been very rapid. The number of inhabitants in 1720 was computed at 10,446; being more than doubled ſince the firſt year of the century; in 1740 the inhabitants were augmented to more than 18,000; in 1765, to 25,000; in 1773, to 34,407; and, in 1789, to upwards of 55,000. This quick advancement of a town in wealth and population cannot be contemplated without aſtoniſhment, and admiration; and a reflecting mind is naturally led to inquire into the cauſes of ſuch extraordinary effects; of which the principal, perhaps, may be its favourable ſituation for commerce, near the mouth of the Merſey which falls into the Iriſh Sea; the number of navigable rivers and canals with which all the country round it to a great extent is interſected; its neighbourhood to the manufacturing towns in Lancaſhire; and, above all, the induſtry and enterpriſing ſpirit of the inhabitants. From theſe cauſes combined, this town has ſo much increaſed in trade ſince the commencement of the preſent century, that it is now the greateſt ſea-port in England except London, having exceeded Briſtol conſiderably of late years; as will appear by the following account of the cuſtom-duties, received in the ſeveral ports of London, Liverpool, and Briſtol, ſo long ago as the year 1784, taken from the report of the commiſſioners for inſpecting the ſtate of public accounts.

London, - - -	£5,187,052	9	5½
Liverpool, - - -	640,684	2	2½
Briſtol, - - -	334,909	19	3½
Liverpool exceeded Briſtol,	£305,774	2	11

The increaſe of its trade for a century paſt cannot be better aſcertained than by conſulting the following Table of Dock-duties from the year 1752, with the number of ſhips cleared out from this port in each year:

Years.	Ships.	£	s.	d.	Years.	Ships	£	s.	d.
1757	1371	2336	15	0	1777	2361	4610	4	9
1758	1453	2403	6	3	1778	2292	4649	7	7
1759	1281	2372	12	2	1779	2374	4957	17	10
1760	1245	2330	6	7	1780	2261	3528	7	9
1761	1319	2382	0	2	1781	2512	3915	4	11
1762	1307	2526	19	6	1782	2496	4249	6	3
1763	1752	3141	1	5	1783	2816	4840	8	3
1764	1628	2780	3	4	1784	3098	6597	11	1
1765	1930	3455	8	4	1785	3429	8411	5	3
1766	1908	3653	19	2	1786	3228	7508	0	1
1767	1704	3615	9	2	1787	3567	9199	18	8
1768	1808	3566	14	9	1788	3677	9206	13	10
1769	2054	4004	5	0	1789	3619	8901	10	10
1770	2073	4142	17	2	1790	4223	10,037	6	2½
1771	2087	4203	19	10	1795	3948	19,368	16	4
1772	2259	4552	5	4	1800	4740	23,337	13	6
1773	2214	4725	1	11	1802	4781	28,192	9	10
1774	2258	4580	5	5	1805	4618	33,364	13	1
1775	2291	5384	4	9	1807	5791	62,831	5	10
1776	2216	5064	10	10	1809	6023	97,580	19	3

Liverpool abounds in docks for the ſafety and repair of its numerous ſhipping. The firſt dock was conſtructed here in 1710. Its ſcite was the *pool*, from which the town derived the latter portion of its name. This baſon of water is called the Old Dock, and was principally the receptacle of Weſt-India and African ſhips, being contiguous to the warehouſes of the merchants who were engaged in the ſlave-trade. The King's Dock is 290 yards in length, and 90 wide. On the eaſt ſide of this dock ſtands the tobacco-warehouſe, where that article is lodged by the cuſtom-houſe officers till the duties are paid. It was erected by the corporation, and is rented by government at 500l. per annum. St. George's Dock was the third made in Liverpool. It is about 250 yards long, and 100 broad; and is eſteemed commodious. The largeſt, laſt-conſtructed, and beſt-finiſhed, however, is the Queen's Dock, which is ſituated at the bottom of Parliament-ſtreet. Salt-houſe Dock, which is the ſecond oldeſt of the whole, compriſes an area of 21,928 ſquare yards; and has a length of quay of 640 yards. Beſides theſe, there are five graving docks, and three dry docks, independent of a ſmall one, which belongs to the earl of Bridgewater, for the uſe of the canal flats. Some of theſe docks communicate, ſo that ſhips can paſs from one to the other, and into the graving-docks, without being obliged to go into the river. All the wet docks are likewiſe connected by large tunnels, for the purpoſe of one dock cleanſing or waſhing another. When large ſhips loaded arrive at neap-tides, they are compelled to remain in the river till the flow of the ſpring-tides, as the dock-gates have not depth of water ſufficient to admit them. This circumſtance is certainly a great inconvenience, but it is amply compenſated by the capaciouſneſs and excellent arrangement of the docks themſelves.

The cuſtom-houſe is ſituated at the eaſt end of the Old Dock. It is built of brick, in rather a neat ſtyle. A ſmall flight of ſteps leads to a piazza, over which is the long room; and behind it are extenſive warehouſes. At the ſouth end of the town is St. James's Walk, from which the ſpectator has a fine view of the town, the harbour, the river, the ſea, and the Welſh mountains. Behind this lies an excellent quarry, the entrance of which is by a ſubterraneous paſſage, ſupported by arches. Bootle-ſprings, about four miles diſtant from Liverpool, ſupply the town with water, which is conveyed by means of pipes.

Liverpool ſhares a portion of the commerce of almoſt every country in the world. Of late years its trade has conſiderably decreaſed, in common with that of all the other towns in the kingdom. What effect the abolition of the ſlave-trade may ultimately have upon Liverpool, it is not poſſible to prognoſticate. For the preſent, however, the mercantile houſes, formerly engaged in that traffic, muſt undoubtedly ſuffer conſiderable difficulties before they can turn their capital and attention to ſome object more honourable than the purchaſe and ſale of human beings. Independent of the advantages Liverpool poſſeſſes for foreign commerce, it has communication with all the interior counties by canals. Theſe again, being joined by others at different points, extend themſelves to the Severn, to the Humber, and to the Thames; thus connecting the four principal trading ports in England. To the beneficial effects of theſe canals Liverpool has to attribute much of her preſent greatneſs.

The principal manufactures are thoſe of China and earthen ware, the ſeveral branches of watch-making, and extenſive ſalt, iron, and copperas, works. It is computed that about 3000 ſhipwrights are conſtantly employed in the different dock-yards of this town. Sugar baking and refining is a buſineſs which, ever ſince the increaſe of foreign commerce, has been carried on in this place: there are eight ſugar-houſes, in which about 6000 hogſheads of ſugar are annually refined. Public breweries are exceedingly numerous in Liverpool. It is computed that near 50,000 hogſheads of ale are brewed in theſe public breweries annually, of which upwards of 47,000 are for home-conſumption. There are, in or near the town, twenty-ſeven windmills; of which ſixteen are for grinding corn, one for grinding colours, &c. one for raſping and grinding dyer's wood, and one for raiſing water at the ſalt-works. To ſupply the ſhipping, &c. there are in different parts of the town fifteen roperies. The river, which is here about 1200 yards broad, abounds with ſalmon, cod, flounders, and turbot. Ships of any burden may come up to this town with perfect ſafety, even at the loweſt tides. The accommodations for ſea-bathing have, of late years, received vaſt improvements, and are not perhaps inferior to any in the kingdom.

Having taken as comprehenſive a view as our limits would admit of matters relating to the commerce of this flouriſhing ſea-port, the tranſition is eaſy to a deſcription of its public buildings, and thoſe places deſigned for improving knowledge or affording amuſement.

This town contains fifteen churches belonging to the eſtabliſhment, ſome of which merit particular attention.

The Old Church, dedicated to St. Nicholas, was formerly a chapel of eaſe to the church of Walton, and continued ſo till the town of Liverpool was made a diſtinct pariſh in 1699. Near this church formerly ſtood an image of St. Nicholas, to which the ſailors uſed to make an offering on their going out to ſea. This edifice was elegantly rebuilt about five-and-twenty years ago; but has been ſince damaged by a calamitous accident. On Sunday, the 12th of February, 1810, juſt as the officiating clergyman was entering the church, the key-ſtone of the tower gave way, and the north-eaſt corner, compriſing the north and eaſt walls, with the whole of the ſpire, came down, and with a tremendous craſh broke through the roof, falling along the centre aiſle, till it reached near to the communion-rails, and in its fall carrying with it the whole peal of ſix bells, the weſt gallery, the organ, and the clergyman's reading-deſk, totally demoliſhing them, and ſuch ſeats as it came in contact with. Not more than from fifteen to twenty adult perſons were in the church at the time, and of theſe the greater part eſcaped; but the children of a charity-ſchool, who are marched in proceſſion ſomewhat earlier than the time of ſervice, had partly entered. The boys, following laſt, all eſcaped; but a number of the girls, who were either entering the porch, or proceeding up the aiſle, were overwhelmed in a moment beneath the falling pile. The craſh of the ſteeple, and the piercing ſhrieks of terror which inſtantly iſſued from thoſe who had eſcaped in the church, or were ſpectators in the church-yard, immediately brought a large concourſe of people to the ſpot, who

did not ceaſe to make unabated efforts to reſcue the unfortunate victims from the falling maſonry, till all the bodies were extricated, notwithſtanding the tottering appearance of the remaining part of the tower and roof of the church, which momentarily menaced a ſecond fall. Many inſtances of hairbreadth deliverance occurred. All the ringers eſcaped except one, who was caught in the ruins, and yet was extricated alive by his brethren. The alarm it is ſaid was firſt given to the ringers, by a ſtone falling upon the fifth bell, which prevented its ſwing; the men ran out; and a moment did not elapſe before the bells, beams, &c. fell to the bottom of the tower, and their eſcape would have been impoſſible had not the belfry been upon the ground-floor. The rector owed his ſafety to the circumſtance of his entering the church at an unaccuſtomed door. The officiating miniſter was prevented from entering by the children of the ſchool who were preſſing forward. The teacher was killed; he had juſt ſeparated the children to afford himſelf a paſſage, when a perſon exclaimed, "For God's ſake come back!" He ſtepped back, and beheld the ſpire ſinking; but the whole fell in upon him. Twenty-two perſons were either killed or died of their bruiſes. This number, if we conſider the peril, may be called comparatively ſmall, but, in the eye of humanity, awfully great.

St. Peter's church was built by aſſeſſment, and conſecrated in 1704. The tower is an octagon, agreeably proportioned; on each ſide of the angles is a candleſtick, and a gilt vane repreſenting a flame. The church is handſomely paved, and well-lighted within; the galleries are ſupported by four tall pedeſtals of oak, richly carved; over theſe are many ſlender columns which ſupport the roof. At the weſt end is a good organ, on each ſide of which is a gallery for the ſingers. The altar is decorated with carved work, &c. above which is a window, which appears rather like a breach in the wall. On the ſouth ſide of the chancel is a ſuperb monument of marble to the memory of Foſter Cunliffe, merchant. On a medallion is his portrait; on each ſide of a vaſe is an orphan, well deſigned, lamenting his loſs.

St. George's church is a modern building, in a ſtyle that diſcovers both elegance and taſte. Though an act was obtained for the building of this church in 1715, it was not entirely finiſhed till 1734. It is ſituated on an eminence, and forms one ſide of an area made uſe of for a market-place. The body of the church is one complete range of the Doric order, crowned with an attic wall, decorated with a variety of vaſes. There is but one range of windows to afford light to the galleries as well as the aiſles; but they appear uncommonly large, and out of all proportion. On the ſouth ſide of this church is an elegant terrace, ſupported by ſix ruſtic arches, under which is a convenient receſs for the market-people. At each end is an octagonal building, that on the weſt being an office for the clerk of the market, that on the eaſt a temporary confinement for delinquents. Under the church is a ſpacious open vault, wherein many perſons of note are interred. The tower-part of the ſteeple is ſquare, and conſiſts of three ſtories of the Doric, Ionic, and Corinthian, orders; but, on looking up, the ſteeple appears larger above than at the bottom, from an unlucky projection and diſproportion of the Corinthian pilaſters. From the cornice of theſe pilaſters riſes an octagon tower of the Compoſite order. In the niches between the pilaſters were originally paintings of the ſaints; but, being thus expoſed, it is not to be wondered at that they are totally defaced. The inſide of the church is elegantly finiſhed; the pews are neat, the galleries are ſupported by ſlender pedeſtals, and the roof by beautiful Corinthian columns. The pulpit, organ-loft, altar-piece, and front of the galleries, are of mahogany; the whole is decorated with rich carvings. This alſo is the chapel of the corporation, in which the mayor, aldermen, and common-council, ſometimes hear divine ſervice.

St. Thomas's church was conſecrated in 1750. The ſteeple and ſpire are well-proportioned and lofty, being together two hundred and ſixteen feet from the ground; the pedeſtal conſiſts of windows decorated in the Greek taſte. On four columns of the Corinthian order are four Gothic pinnacles, which ſeem to have no affinity with the reſt of the ſtructure, unleſs with the Gothic ſpire above. The body of the church conſiſts of a ruſtic baſe and two rows of windows, between which are Ionic pilaſters, above which is a cornice, and a balluſtrade decorated with vaſes. At the eaſt end is a Venetian window made in a ſemi-circular projection with the chancel; which has a bad effect, as the upper part of the arch ſeems to overhang the reſt of the window. This church is very light, and finiſhed with an elegant ſimplicity. The pews are well-conſtructed; the galleries are ſupported by eight pedeſtals, over which are the ſame number of Corinthian pillars; on theſe is a light entablature which ſuſtains the roof. The chancel has elegant pannels and ornaments, with Corinthian pilaſters gilt, between which are ſeveral inſcriptions. The organ, its gallery, and the clock below, would have an agreeable effect, were the two large Gothic figures removed, which ſeem to be very ill placed on the top of the organ.

St. Paul's church was built at the expenſe of the town, and was conſecrated in 1769. It is, on the whole, very elegant. On the weſt ſide is a bold portico of the Ionic order, of which the pediment, by its projection, caſts an agreeable ſhade upon the building, and finely relieves the four columns which ſupport the front. The pediments of the north and ſouth fronts are ſupported in the ſame manner, but do not project ſo much. At each of theſe fronts is a handſome flight of ſteps, leading to the ſeveral avenues. The body of the church is of the Ionic order, ſupported by a low ruſtic baſe. The ſtone-work is crowned with plain vaſes, and a range of balluſtrades. In the centre, on an octagon, riſes the dome, on which is a lantern, crowned with a large ball and croſs. The church ſtands in an open ſquare; it may be viewed to moſt advantage from the weſt avenue. The dome is ſupported in the inſide by eight Ionic pillars, which are lofty, large, unfluted, of a dark grey colour, and have a clumſy appearance. The galleries retreat behind theſe columns, and are privately ſupported by brackets inſerted in the ſhafts of the pillars. The ground is occupied by open ſeats for the uſe of the poor. The altar is in an oval receſs, and, though plain, is not without neatneſs. The pulpit is movable, of which the ſtair-caſe is in the centre, inviſible to the congregation, through which the preacher gradually aſcends, as in St. Paul's cathedral in London, to public view. This dome rendering the ſpeech very indiſtinct, and ſometimes unintelligible, ſeveral expedients have been tried to remedy this defect, particularly by covering the bottom with oiled paper, in the ſame manner as a drum is with parchment; but the eyes of the ſpectators are more offended by the ſight than the ears of an audience are benefited by it.

St. Anne's church is a neat ſtructure; it was erected at the joint expence of two private gentlemen; it is of brick and ſtone, but ſmall, and in the Gothic ſtyle. It has two ranges of windows, and a tower decorated with pinnacles. The inſide is furniſhed with a neat range of pews, which are divided into aiſles. The altar is placed in a niche at the eaſt end. The gallery is ſupported by ſlender iron columns.

St. Catharine's chapel, in Temple-court, was originally a diſſenters meeting-houſe, and known by the name of the Octagon. This is a modern building; and, though not large, yet is planned and executed with a degree of taſte ſeldom to be met with in ſtructures of this kind. It is, as its name imports, built in an octangular form, and it is lighted on each ſide with large windows. The gallery is ſupported by ſlender pillars tipped with gold; the roof terminates in a cove, in the centre of which is a gilt ſtar. On the entrance-ſide are the pulpit and reading-deſk, and behind thoſe, in front of the gallery, an elegant clock,

clock. This chapel is alſo furniſhed with an organ. On the front of the building is a ſtone-portico, through which the miniſter paſſes by a flight of ſteps directly into the pulpit; and over the portico is the veſtry, with three Gothic windows, between which, and on the angles, are Ionic pilaſters ſupporting a neat pediment. The whole is ſurrounded by a handſome burial-place, incloſed.

St. Mary's and the other churches have nothing connected with their ſtructures or appearances deſerving of particular notice; though all of them are entitled to be called neat. Beſides the places of worſhip belonging to the eſtabliſhment, there is a great number of diſſenting meeting-houſes, or chapels, for various deſcriptions of religioniſts.

The public edifices connected with the trade and commerce of the town are, the exchange-buildings, town-hall and manſion-houſe, cuſtom-houſe, corn-exchange, tobacco-warehouſe, and other warehouſes. Of theſe the exchange is the moſt ſpacious in plan, and ornamental in its exterior architecture. It was erected by a ſubſcription of 80,000l. raiſed by 800 transferable ſhares: the buildings occupy three ſides of a quadrangle, having the town-hall on the ſouth ſide: the whole ſurrounds an area of 194 feet by 180. It was built from deſigns by Wyatt; and it compriſes public exchange-rooms, coffee-rooms, and various offices. The town-hall, formerly called the exchange, is a large inſulated pile of building, the greater part of which was erected in 1750, from the deſigns of Wood of Bath. The whole of its interior was burnt in 1795. It was ſoon repaired, and appropriated to the uſe of the mayor, for offices belonging to the corporation, ſeſſions-rooms, &c.

The blue-coat hoſpital was in 1709 merely a charity-ſchool. A ſmall building, now part of the free-ſchool, was erected by benefactions; and forty boys and ten girls were provided with clothes and education by an annual ſubſcription of thirty pounds, and twenty pounds more granted by order of the biſhop out of the ſacrament-money. An additional contribution of two hundred pounds was given by Bryan Blundell, eſq. and, in 1714, fifty children were on the foundation, forty-two boys and eight girls. The ſame gentleman ſoon after planned a ſubſcription for erecting a building in which the children might be *lodged*, and ſupplied with all the neceſſaries of life. The building was begun in 1716, and children were admitted about two years after. The original deſign was completed in 1726, at which time the number of children was increaſed to ſixty, who were taught to work and to ſpin cotton. By various donations, legacies, &c. the number of children has been continually increaſed, ſo that now there are no leſs than three hundred children, viz. two hundred and fifty boys, and fifty girls, who are completely clothed, lodged, and dieted, by this charity. The boys are taught reading, writing, and arithmetic; alſo navigation, when intended for ſea; and the girls reading, ſewing, ſpinning, and knitting, and the work of the houſe. The children learn their books one half of the day, and work the other half; the boys at pin-making. The children are admitted into the hoſpital at eight years old, and put out apprentices at fourteen; the boys moſtly to ſea. The expenſes of the hoſpital one year with another are about 2200l. The building is of brick, ornamented with ſtone; the apartments numerous and well laid out. In the body of the building is a neat hall and ſtair-caſe, which leads to a large room uſed occaſionally for a chapel. There is a large yard behind; and in front a ſpacious area, with handſome gates and iron rails.

The infirmary has been founded and ſupported upon the moſt liberal principles. It receives not only proper objects in Liverpool, but likewiſe thoſe who come from a diſtance, on the recommendation of a ſubſcriber. The deſign was firſt formed about the year 1745, when a ſubſcription was opened by the principal inhabitants of Liverpool, and ſome gentlemen in the vicinage; and a field was given by the corporation for nine hundred and ninety-nine years. The work was begun the ſame year, in July; but the national diſturbances of that memorable year put a ſtop to it, and the houſe was not finiſhed till the latter end of the year 1748; it was opened the next year for the admiſſion of patients. The building is of brick and ſtone, ſituated on a hill at one end of the town. It is neat and elegant, and forms one edifice with the hoſpital for ſeamen's widows. The principal building has three ſtories, containing large wards and other neceſſary offices. It is connected with thoſe ſpacious apartments which compoſe the ſeamen's hoſpital by two handſome colonnades. On the top of each building is a turret, and in the middle of the pediment a clock.

The poor-houſe is a handſome edifice, 90 feet long and 24 broad, built in a plain ſtyle, ſuitable to its uſe. On the eaſt ſide of this ſtructure is a ſtone building, called the *recovery-ward*, where perſons infected with fevers, and coming under the cognizance of phyſicians and ſurgeons of the diſpenſary, are received. A variety of alms-houſes range out on both ſides of the poor-houſe. In Church-ſtreet is the diſpenſary, which is a very good brick-building, with a large circular portico, and having in front a ſmall bas-relief of the good Samaritan. This inſtitution is conducted by a preſident, two auditors, ſeven phyſicians, three ſurgeons, and an apothecary who officiates as ſecretary. Two phyſicians and a ſurgeon attend every day at certain hours. About 10,000 perſons are ſaid to receive medicine and advice here annually. The lunatic-aſylum is contiguous to the infirmary; but this cannot be called a complete charity, as patients are not admitted free of expenſe. At the entrance into the town, on the road leading from Preſcot, ſtands the ſchool of induſtry for the indigent blind. The original projector was Mr. John Chriſtie, who was himſelf unfortunately deprived of his ſight at the age of nineteen. In this ſchool pupils are taught various trades, which enable many of them to make a comfortable proviſion for life. See the article BLIND, vol. iii. p. 119. Beſides theſe charitable inſtitutions, there is a number of others, under different names, intended for the relief of different deſcriptions of perſons; but the laſt we ſhall notice is a ſociety inſtituted on the 25th of October, 1809, for preventing cruelty to brute-animals. To ſuch an inſtitution every friend to humanity muſt wiſh ſucceſs; but whether it has ſucceeded, or now ſubſiſts, we are not informed. Its intentions are explained in the report of their committee, the ſubſtance of which may be ſeen in the Monthly Magazine for April 1810.

Liverpool, as may be ſuppoſed from its great trade, is not without rooms appropriated to public correſpondence, and the tranſacting of buſineſs. The Atheneum, which compriſes a news-room, library, &c. is ſituated on the ſouth ſide of Church-ſtreet, and is a handſome ſtone building. The ſubſcribers, about 450 in number, are ſupplied with the London and country newſpapers, the ſhipping and trade liſts, and various periodical publications. Every ſubſcriber is allowed the privilege of introducing a friend, provided he be a non-reſident of the town. There are alſo ſeveral more inſtitutions of a ſimilar kind in different parts of the town. Of theſe, the Lyceum is the moſt worthy of attention: it is ſituated at the bottom of Bold-ſtreet, and is another remarkable inſtance of the munificence and public ſpirit of Liverpool. An academy, for the encouragement of the fine arts, has recently been eſtabliſhed. The places of public amuſement are now little inferior to thoſe in the metropolis. The theatre is a ſpacious and commodious building, but little inferior to that of Covent-garden in the extent of its ſtage. It generally opens at the time the London houſes ſhut, when many of the firſt performers reſort to it. In Bold-ſtreet ſtands the muſic-hall, which was opened in 1785. It is a large building, finiſhed with great elegance. The new priſon, according to the Howardian plan for ſolitary confinement, is on a very extenſive ſcale, and has every poſſible convenience.

When a ſtranger firſt comes to Liverpool, he may think that

that the ſtreets are too narrow for health, convenience, or ornament. In the ancient parts of the town, indeed, little attention ſeems to have been paid to regularity or elegance; and the houſes are ſo crowded, that the inhabitants are more indebted for health to nature than art. Neatneſs and convenience ſeem to be the higheſt points which the architecture here arrived at for many years. But the extenſion of commerce and increaſe of opulence have introduced a taſte for ſplendour. Several entire new ſtreets at the ſouth end of the town, which have obtained the name of New Liverpool, are a proof of what is here advanced. One great beauty of the town ſeems to have eſcaped the obſervation even of the natives; that is, the gradual opening from the dock, at the bottom of Pool-lane, to St. George's church. This ſtreet gradually riſes and extends in the form of a cornucopia, till it terminates in a ſpacious market. In ſhort, the town exhibits, at preſent, the appearance of opulence and refinement. The ſtreets are well paved, and during winter tolerably furniſhed with lamps. Of late years it has received many great alterations and improvements, which ſtill continue to proceed notwithſtanding the preſſure of the times. In the year 1790, it conſiſted of 8876 houſes; but their number now is little ſhort of 15,000, of which 1406 are (July 1813) uninhabited.

On the 14th of September, 1802, a fire broke out, the moſt extenſive in its devaſtation which Liverpool has ever known; and, in reſpect to waſte of property, one of the moſt deſtructive which has happened in the Britiſh dominions ſince the great fire of London in 1666. A little before ten o'clock in the evening, a ſmoke was obſerved to iſſue from a lower room in one of the largeſt warehouſes (ſaid to be occaſioned by a ſnuff of candle falling among ſome ſhavings), which continued to increaſe for a conſiderable time before the doors and windows were forced; but, as ſoon as an entrance was given to the external air, the ſmothered flames burſt out with a violence and impetuoſity that equally defied reſiſtance and approach. In a few hours this immenſe pile of warehouſes from Brunſwick-ſtreet to Water-ſtreet, and alſo the noble range of warehouſes erected in front, next to the dock, were reduced to a heap of ruins. Theſe piles of warehouſes had for ſeveral years been the admiration of all, and probably were not to be matched in the whole world. The celebrated warehouſes at Antwerp, as well as thoſe of Venice, equally famous, were neither ſo lofty nor commodious. The whole number deſtroyed was about thirty, from ſix to thirteen ſtories high, and of a proportionable depth. The tide being fortunately at flood, it afforded an opportunity to the ſhipping to remove beyond the reach of the flames. Providentally alſo not a ſingle individual loſt his life during the conflagration; though one died in conſequence of the bruiſes he received by ſome ruins falling upon him. The value of the property deſtroyed, according to a medium computation, may be ſtated thus: Buildings, 52,000l. ſugar, 51,000l. cotton, 26,000l. coffee, and other Weſt India produce, 40,000l. grain, 110,000l. tallow, hemp, &c. 16,000l. total, 295,000l.

Liverpool has two weekly markets, Wedneſday, and Saturday; fairs, July 25, Nov. 11, and every Wedneſday fortnight for all ſorts of cattle. It is a corporate town, and ſends two members to parliament. It ſent members 23 & 35 Edward I. but made no other return till the reign of Edward VI. It is governed by a mayor, annually choſen on St. Luke's day, a recorder, and common-council of forty-one, including the mayor, recorder, and town-clerk. Whoever has borne the office of mayor is afterwards ſtyled an alderman. Right of election (1729, March 5) was agreed by the counſel on both ſides to be in the mayor, bailiffs, and freemen, of the ſaid borough, and not receiving alms. Number of voters, 2300; returning-officers, the mayor and two bailiffs. "Previous to the reign of Charles II. the freemen at large exerciſed the right of chooſing their own mayor, aldermen, and common-council, as in the city of London; but about that time the body corporate aſſumed the power of filling up all vacancies, without their will and approbation: they have lately, however, reſumed their right, which had been ſo arbitrarily and illegally withheld from them. The freemen of Liverpool are free alſo of Briſtol, and of Waterford and Wexford in Ireland." *Oldfield's Hiſt. Bor.* The members in the preſent parliament are Iſaac Gaſcoyne, eſq. and the right hon. George Canning. Liverpool is 20 miles north of Cheſter, and 203 north-weſt of London. Lat. 53. 23. N. lon. 2. 58. W.

The boundaries of Liverpool extend conſiderably beyond the town in different directions. Theſe are marked by ſtones, placed at certain diſtances, called *meer-ſtones*. The ſpace contained within theſe boundaries is called the *liberties* of the town; and it is cuſtomary for the mayor and corporation to ride round them annually. The extent of theſe liberties from eaſt to weſt is 2300 yards, and from north to ſouth 4420 yards. Near the town is a five-mile horſe-race courſe; the fineſt, for its length, in England.

Liverpool, with the country about it, including the ſouthern part of Lancaſhire, formerly conſtituted a part of the kingdom of the Brigantes, according to Richard de Cirenceſter, a monk of Weſtminſter. In the time of the heptarchy, the country about Liverpool was a part of the kingdom of Northumberland; the river Merſey being, in the Saxon times, the boundary of the kingdom of Mercia.

From hence, the Merſey opening into the Iriſh ſea, may be ſeen the great and famous road of Hayle-Lake, remarkable for having been the rendezvous of the army and fleet under king William, for the conqueſt of Ireland, anno 1689; for here the men of war rode, as our ſhips do in the Downs, till the tranſports came to them from Cheſter and this town.

The ſoil is dry and ſandy for two miles round Liverpool. The north-eaſt ſhore diſcloſes a proſpect of barren ſands for an extent of twenty miles; between the town and Kirkdale is a fine vale of rich marl under the ſurface, which affords excellent paſture; this was formerly arable land. The land near the town is very fertile in potatoes, a root no leſs uſeful to the poor than agreeable to the rich and profitable to the farmer. The cultivation of this vegetable has been ſo much encouraged here, that the landholder frequently depends more upon a good crop of potatoes than of wheat or other grain.

Six miles north of Liverpool, upon the ſhore, near Croſby-point, are the remains of a large foreſt, extending, at preſent, upwards of a mile towards Formby. What might have been its original extent, either in that or in any other direction, ſeems at preſent impoſſible to aſcertain; but it is wonderful to remark, that veſtiges of it are viſible, dipping weſtwardly, even into the ſea, which, doubtleſs, from the changes made in a ſeries of years, covers great part of the land on which a conſiderable portion of it grew. Upon a ſhore where there are frequent wrecks, and pieces of ſhip-timber ſo often thrown up, it is probable, from the ſimilarity of appearances, that this foreſt has not been often noticed with much diſtinction from ſuch wrecks of the ſea; but the ſmalleſt degree of inquiſitive inſpection is ſufficient to diſcover, to a certainty, that this was originally a foreſt, as there are numberleſs trunks of trees, ſtanding upright ſome feet above the ſurface, in the very places where they muſt have grown, with their prodigious roots extending into the ground in all directions, in their natural poſitions, though a great part of their branches, by being thrown promiſcuouſly about, exhibit, at the firſt view, very much the appearance of an ancient ſhipwreck, or rather of many of them together.

Having ſatisfied the mind of the reality of a foreſt, a conſiderable degree of aſtoniſhment ariſes on its being found in a place where it is impoſſible it ſhould have grown, ſuppoſing the adjoining objects to have been in the ſtate they now are. Not that it is impoſſible for trees to flouriſh on the ſea-coaſt, experience having proved the contrary;

contrary; but that they ſhould actually have grown in the ſea, between high and low water marks, is utterly ſo.

As the changes of the circumſtances of this foreſt muſt have been effected principally, though perhaps not wholly, by the river Merſey and the ſea, it ſeems neceſſary to direct ſome attention to thoſe two objects, and the probable alterations made by time. It does not ſeem unphiloſophical to ſuppoſe that rivers are not all equally ancient, and that we are not obliged to refer them to any given point of time, as the flood, or the creation; for, as new ſprings may iſſue from the mountains, ſo may they, in a ſeries of ages, become the ſources of very conſiderable rivers; but, if this cannot be the fate of every ſpring, yet it is very probable that it is ſo of many. In their earlier days, as their channels are ſmall, ſo muſt be their openings into the ſea, giving little opportunity for thoſe greater devaſtations which that powerful element is able to cauſe after it has overcome ſome temporary obſtruction. The *imagination* can eaſily look back into times of remote antiquity, and trace the Merſey, or any other river, from a brook, in its ſeveral ages and gradations, till it has attained its preſent maturity and greatneſs. But the *life* of man is too ſhort to obſerve ſlow and gradual changes; and therefore we muſt naturally and properly refer the firſt exiſtence of large rivers to the earlieſt ages of the world; but it does not hence follow that great changes may not have been made at their junction with the ocean at a much later period, and that ſuch changes, when begun, may not have advanced with great rapidity.

Whoever will ſurvey that part of the chart of the Iriſh Sea now called the Liverpool Channel, which comprehends the openings or mouths of the Dee and Merſey, and the adjoining ſhores, will not find it very difficult to ſuppoſe, from the violence of the north-weſt ſea upon this angular and pent-up ſituation, that what now forms the banks of Burbo and Hoyle may have been land attached to the peninſula of Cheſhire, and the eaſtern banks attached in like manner to Croſby and Formby, with the river Merſey quietly running through them, in a narrow inconſiderable ſtream, until ſuch time as the ſea, having once gained an accidental advantage, muſt have laid the foundation for that large expanſe of water before and above the town of Liverpool, which, though bearing the name of a river, is in reality a portion of the ſea. The like, it is probable, happened to the Dee; for, if we go a very few miles only up either of theſe apparently-great rivers, we ſhall not find ſtreams that ſhall ſatisfactorily of themſelves account for ſuch bodies of water; and this is in ſome ſort confirmed by the ſucceſsful labours of the River-Dee Company, who are daily re-gaining the ground that the ocean has formerly overwhelmed. The like may probably happen at the mouths of all rivers, but in different degrees both as to extent and time.

We are always reduced to perplexities when we attempt, by force of argument, to prove things that are ſelf-evident; and, were it required only to ſhow that the wood in queſtion has in part ſuffered from the inundation, or rather incroachment, of the ſea, it would be ſufficient to direct the curious to view it; but that the banks were formerly land, attached to Cheſhire and Lancaſhire, is an opinion that requires ſome ſupport, which the ſituation and preſent circumſtances of this ancient aſſemblage of large trees conſiderably afford. This opinion ſeems farther confirmed by the ſame appearance of old trees, now to be ſeen, in Cheſhire, oppoſite to the banks of Hoyle, which was moſt probably only a continuation of the ſame foreſt; with the Merſey hardly making a viſible diviſion of it, perhaps fordable, or not too large for a bridge, and whoſe union with the ſea muſt have been conſiderably beyond what it now is. If this opinion ſhould be thought to want ſtill farther confirmation, we need but direct our attention to the fate of the property and eſtates of earl Godwin; which, in the courſe of a few centuries only, have been as wonderfully converted from dry land into thoſe immenſe ſands and banks, the dread of mariners, ſo well-known by the name of the Goodwin Sands.

It would be difficult to aſcertain at what period the ſea deſtroyed ſo conſiderable a portion of this wood; but, for ſuch parts as were reſerved for other modes of deſtruction, ſome ſatisfactory conjectures may be formed, as they were probably exiſting in a flouriſhing ſtate about the time of the Roman conqueſts in Britain. Before war and bloodſhed acquired a rank amongſt the arts and ſciences, and geometry and chemiſtry had taught civilized nations how to effect a ſpeedier extermination of the human race, each barbarous nation had a mode of attack and defence peculiar to itſelf. In the rude ages of Britain, its inhabitants not only found great ſecurity from their numerous and almoſt impenetrable woods, but could greatly annoy their invaders from their ambuſcades at favourable junctures; which was found ſo detrimental to the progreſs of conqueſt, that the Romans determined on, and accompliſhed, the deſtruction of moſt of the foreſts in the iſland, and particularly ſuch as were in moſſy or boggy ſituations, ſometimes by the axe, but generally by fire, and thus ſecured a quiet poſſeſſion of Britain for ſome centuries. Suetonius Paulinus, at the time he ſubdued the iſle of Angleſey, ordered all the foreſts to be cut down; and, though hiſtorians do not inform us of the extent of the execution of this order, yet it is moſt probable that it ſhould comprehend not only the immediate object of conqueſt, but alſo its neighbourhood; in which Cheſhire and the lower parts of Lancaſhire muſt certainly be included. This conjecture receives conſiderable confirmation from the great age of the wood, which is now as black as ebony, which it very much reſembles, though evidently oak; as well as from the moſt unequivocal marks of their deſtruction being wilful, not only from the apparent labours of the axe, but from the great quantity left to periſh where it has been cut down, without applying it to any domeſtic or uſeful purpoſe; from which conſiderations it is moſt likely that ſuch part of this great foreſt as eſcaped the ravages of the ocean fell a victim to the fury of the Roman conqueſt. Thoſe devaſtations were, doubtleſs, ſeverely felt and deprecated by the then inhabitants of this iſland; but theſe ſeemingly-great evils laid the foundation for that general clearance of the country ſo neceſſary for the unreſtrained progreſs of agriculture, which has been the bleſſing of future ages. *Zoologic Mag.* vol. iii. *Britiſh Directory*, vol. iii. *Monthly Mag.* vol. xiv. and xxix. *Enfield's Hiſt. of Liverpool. Aikin's Deſcr. of the Country* 40 *Miles round Manchester.*

LIV'ERPOOL, a town on the ſouth ſide of the bay of Fundy, in Queen's county, Nova Scotia, ſettled from New England. Between this town and Annapolis lies a conſiderable lake, called Roſſignol. It is thirty-two miles north-eaſt of Shelburne, and fifty-eight north-weſt of Halifax; and was formerly called Port Roſſignol.

LIV'ERSEDGE, a townſhip of Yorkſhire, in the weſt riding: five miles north-eaſt of Huddersfield.

LIVE'SA, a town of France, in the department of the Eaſt Pyrenees: twenty-one miles ſouth-weſt of Prades, and four north-eaſt of Puycerda.

LIV'ERY, *ſ.* [from *livrer*, Fr.] The act of giving or taking poſſeſſion:

You do wrongfully ſeize Hereford's right,
Call in his letters patents that he hath
By his attorneys-general to ſue
His *livery*, and deny his offered homage. *Shakeſpeare.*

Releaſe from wardſhip.—Had the two houſes firſt ſued out their *livery*, and once effectually redeemed themſelves from the wardſhip of the tumults, I ſhould then ſuſpect my own judgment. *King Charles.*—The writ by which poſſeſſion is obtained.—The ſtate of being kept at a certain rate.—What *livery* is, we by common uſe in England know well enough, namely, that it is an allowance of horſe-meat; as they commonly uſe the word ſtabling, as to keep

horſes at *livery*; the which word, I gueſs, is derived of *livering* or *delivering* forth their nightly food; ſo in great houſes, the *livery* is ſaid to be ſerved up for all night, that is, their evening allowance for drink; and *livery* is alſo called the upper weed which a ſerving-man wears; ſo called, I ſuppoſe, for that it was delivered and taken from him at pleaſure: ſo it is apparent, that, by the word *livery*, is there meant horſe-meat, like as by the coigny is underſtood man's meat. *Spenſer on Ireland.*—The clothes given to ſervants.—If your dinner miſcarries, you were teized by the footmen coming into the kitchen; and, to prove it true, throw a ladleful of broth on one or two of their *liveries*. *Swift.*

Ev'ry lady cloth'd in white,
And crown'd with oak and laurel ev'ry knight,
Are ſervants to the leaf, by *liveries* known
Of innocence. *Dryden's Flower and Leaf.*

A particular dreſs; a garb worn as a token or conſequence of any thing:

At once came forth whatever creeps the ground,
Inſect, or worm: thoſe wav'd their limber fans
For wings, and ſmalleſt lineaments exact,
In all the *liveries* deck'd of ſummer's pride,
With ſpots of gold and purple, azure, green. *Milton.*

In London, the collective body of liverymen. The privilege of a particular company; as, He was admitted to or upon the *livery* of the Stationers' company.

LIVERY, in law, hath three ſignifications. In one ſenſe, it was uſed for a ſuit of clothes, cloak, gown, hat, &c. which a nobleman or gentleman gave to his ſervants or followers, mentioned in ſtat. 1 Rd. II. c. 7, and divers other ſtatutes. Formerly great men gave liveries to ſeveral who were not of their family, to engage them in their quarrels for that year; but afterwards it was ordained, that no man of any condition whatſoever ſhould give any livery, but to his domeſtics, his officers, or counſel learned in the law. By ſtat. 1 Rd. II. it was prohibited on pain of impriſonment; and the ſtat. 1 Hen. IV. c. 7, made the offenders liable to ranſom at the king's will, &c. which ſtatute was farther confirmed and explained, 2 & 7 Hen. IV. and by 8 Hen. VI. c. 4. and yet this offence was ſo deeply rooted, that Edward IV. was obliged to confirm the former ſtatutes, and further to extend the meaning of them, adding a penalty of 5l. to every one who gave ſuch livery, and the like on every one retained for maintenance either by writing, oath, or promiſe, for every month. But moſt of the above ſtatutes are repealed by ſtat. 3 Car. I. c. 4.

Livery, in the ſecond ſignification, meant a delivery of poſſeſſion to thoſe tenants who held of the king *in capite*, or knights ſervice; as the king by his prerogative hath *primer ſeiſin* of all lands and tenements ſo holden of him. *Staundf. Prærog.* 12.

In the third ſenſe, livery meant the writ which lay for the heir of age, to obtain the poſſeſſion of ſeiſin of his lands at the king's hands. *F. N. B.* 155. But, by ſtat. 12 Car. II. c. 24, all wardſhips, liveries, &c. are taken away.

LIVERY *of* SEISIN; a delivery of poſſeſſion of lands, tenements, and hereditaments, unto one that hath a right to the ſame; being a ceremony in the common law uſed in the conveyance of lands, &c. where an eſtate of fee-ſimple, fee-tail, or other freehold, paſſeth. *Bract. lib.* 2. *c.* 18.

The common-law conveyance by feoffment is by no means perfected by the mere words of the deed; this ceremony of livery of ſeiſin is very material to be performed, for without this the feoffee has but a mere eſtate at will. *Lit.* § 66. This livery of ſeiſin is no other than the pure feodal inveſtiture or delivery of corporal poſſeſſion of the land or tenement, which was held abſolutely neceſſary to complete the donation. 2 *Comm. c.* 20. *p.* 311.

Inveſtitures, in their original riſe, were probably intended to demonſtrate, in conquered countries, the actual poſſeſſion of the lord; and that he did not grant a bare litigious right, which the ſoldier was ill qualified to proſecute, but a peaceable and firm poſſeſſion. And, at a time when writing was ſeldom practiſed, a mere oral gift, at a diſtance from the ſpot that was given, was not likely to be either long or accurately retained in the memory of the by-ſtanders, who were very little intereſted in the grant. Afterwards they were retained as a public and notorious act, that the country might take notice of and teſtify the transfer of the eſtate; and that ſuch as claimed title by other means might know againſt whom to bring their action. 2 *Comm.* 311.

In eccleſiaſtical promotions, where the freehold paſſes to the perſon promoted, corporal poſſeſſion is required at this day to veſt the property completely in the new proprietor. So alſo even in deſcents of lands by our law, which are caſt on the heir by act of the law itſelf, the heir has not *plenum dominium*, or full and complete ownerſhip, till he has made an actual corporal entry into the lands; for, if he dies before entry made, *his* heir ſhall not be entitled to take the poſſeſſion, but the heir of the perſon who was laſt actually ſeiſed. 2 *Comm.* 312.

The corporal tradition of lands being ſometimes inconvenient, a ſymbolical delivery of poſſeſſion was in many caſes anciently allowed, by transferring ſomething near at hand, in the preſence of credible witneſſes, which by agreement ſhould ſerve to repreſent the very thing deſigned to be conveyed; and an occupancy of this ſign or ſymbol was permitted as equivalent to occupancy of the land itſelf. To this day the conveyance of our copyhold eſtates is uſually made from the ſeller to the lord or his ſteward, by delivery of a rod or verge; and then from the lord to the purchaſer, by delivery of the ſame in the preſence of a jury of tenants. 2 *Comm.* 313.

Conveyances in writing were the laſt and moſt refined improvement. Written deeds were introduced in order to ſpecify and perpetuate the peculiar purpoſes of the party who conveyed; yet ſtill, for a very long ſeries of years, they were never made uſe of but in company with the more ancient and notorious method of transfer by delivery of corporal poſſeſſion. 2 *Comm.* 314.

Livery of ſeiſin, by the common law, is neceſſary to be made upon every grant of an eſtate of freehold, in hereditaments corporeal: whether of inheritance or for life only. In hereditaments incorporeal it is impoſſible to be made, for they are not objects of the ſenſes; and in leaſes for years, or other chattel-intereſts, it is not neceſſary; the ſolemnity being appropriated to the conveyance of a freehold. And this is one reaſon why freeholds cannot be made to commence *in futuro*, becauſe they cannot, at the common law, be made but by livery of ſeiſin; which livery, being an actual manual tradition of the land, muſt take effect *in præſenti*, or not at all. 2 *Comm.* 314.

LIV'ERY-GOWN, *ſ.* The gown of a livery-man in the city of London.

LIV'ERY-MAN, *ſ.* One who wears a livery; a ſervant of an inferior kind.—The witneſſes made oath, that they had heard ſome of the *livery-men* frequently railing at their miſtreſs. *Arbuthnot.*—[In London.] A privileged man of ſome livery-company.

In the companies of London, livery-men are choſen out of the freemen, as aſſiſtants to the maſters and wardens, in matters of council, and for better government; and, if any one of the company refuſe to take upon him the office, he may be fined, and an action of debt will lie for the ſum. Out of this body the common-council, ſheriffs, aldermen, and other officers for the government of the city, are elected; and they only have the privilege of giving their votes in common-hall for members of parliament, &c. from which the reſt of the citizens are excluded. For the arms of the livery-companies, and other particulars, ſee the article LONDON, vol. xiii.

LIV'ERY-OFFICE, *ſ.* An office appointed for the delivery of lands.

LIV'ERY-STABLE, *ſ.* A ſtable where horſes are taken care of at a certain price; a ſtable where horſes ſtand at livery.

LIVES, *ſ.* The plural of *life:*

So ſhort is life, that every peaſant ſtrives,
In a farm houſe or field, to have three *lives.* *Donne.*

LIV'IA, a woman's name; the name of ſeveral Roman ladies.

LIV'IA DRUSIL'LA, a Roman empreſs, was the daughter of Livius Druſus Calidianus, who joined the party of Brutus and Caſſius, and killed himſelf after the battle of Philippi. Livia married Tiberius Claudius Nero, by whom ſhe had two ſons, Druſus and Tiberius. Her charms made ſuch an impreſſion upon Octavianus, afterwards the emperor Auguſtus, that he forcibly took her from her huſband, though ſhe was then far advanced in pregnancy, and, repudiating his own wife Scribonia, married her. She was thenceforth the partner of his whole reign; poſſeſſed of his entire confidence; and by her prudent and artful conduct exerted an influence over him which was attended with important conſequences. Of a character naturally haughty and imperious, ſhe was ſupple and inſinuating when her intereſt required it. It is ſaid, that, being aſked by what means ſhe had gained ſuch an aſcendancy over the mind of Auguſtus, ſhe replied, by a conſtant obedience to his will, by never expreſſing a deſire to dive into his ſecrets, and by affecting ignorance of his amours. She had no children by the emperor, who adopted her two ſons for his own. The eldeſt, Druſus, died when a young man; and from that time it was the great object of her ambition to ſecure the ſucceſſion of the empire to Tiberius; and her policy for that purpoſe has incurred various charges of criminality. Thus ſhe was ſuſpected, but without any proof, to have had a ſhare in the death of Marcellus, and of the two Cæſars, Auguſtus's grandſons. She had the credit of being the adviſer of the pardon of Cinna, an act of clemency which ſecured Auguſtus from any future conſpiracies; and ſhe is ſaid frequently to have interpoſed in favour of ſenators in diſgrace. She likewiſe brought up the children of ſome indigent ſenators, and aſſiſted others in portioning their daughters. The ſuſpicion of her having given poiſon to Auguſtus, through apprehenſion of his reconciliation to his grandſon, is rendered entirely improbable by the account of his laſt illneſs, and by the tenderneſs he expreſſed for her in the laſt words he uttered. By his teſtament ſhe was inſtituted his co-heireſs with Tiberius, adopted as a daughter, and directed to aſſume the name of Julia Auguſta. On his deification ſhe became the prieſteſs of the new god. Her ſon, whoſe elevation to the throne had been the great object of her policy, diſappointed her expectations of ſharing with him the imperial power. He treated her with coldneſs and reſerve, and ſubjected her to various mortifications. An open rupture between her and Tiberius took place ſome time before her death; which event happened A. D. 291, in the eighty-ſixth year of her age. Her funeral was leſs ſplendid than her rank ſeemed to demand; and either the good ſenſe or the want of affection of her ſon cauſed him expreſsly to forbid the adulation of deifying her. He paid little regard to her teſtament; and never began the erection of a triumphal arch which the ſenate had decreed to her memory. Tacitus ſketches her portrait by ſaying, that "in ſtrictneſs of conduct ſhe was not inferior to the Roman matrons of old, though her demeanour was freer than they would have approved; that ſhe was an imperious mother, a compliant wife, and a match for her huſband in art, and her ſon in diſſimulation." *Taciti Annal. Sueton. in Auguſt. Crevier.*

LIV'ID, *adj.* [*lividus*, Lat. *livide*, Fr.] Diſcoloured, as with a blow; black and blue.—It was a peſtilent fever, not ſeated in the veins or humours, for that there followed no carbuncles, no purple or *livid* ſpots, the maſs of the blood not being tainted. *Bacon.*

Upon my *livid* lips beſtow a kiſs:
O envy not the dead, they feel not bliſs! *Dryden.*

LIVID'ITY, *ſ.* Diſcoloration, as by a blow.—The ſigns of a tendency to ſuch a ſtate, are darkneſs or *lividity* of the countenance. *Arbuthnot.*

LIV'IDNESS, *ſ.* Lividity, the ſtate of being livid. *Scott.*

LIVIGNAC', a town of France, in the department of the Aveiron: nine miles eaſt of Figeac, and four north of Albin.

LIVINE'IUS (John), a learned Flemiſh divine, born at Dendermond about the year 1540. The care of his education was undertaken at Ghent by his maternal uncle, Levinus Torrentius, afterwards the illuſtrious biſhop of Antwerp, who inſpired him with a taſte for ſacred literature, and engaged him to direct his views to the church. He purſued his academical ſtudies at Cologne, where he outſtripped all his contemporaries by his proficiency in the various departments of learning; and, having entered into holy orders, he was preſented to a rich benefice at Liege. At a later period, when his uncle had poſſeſſion of the ſee of Antwerp, he was promoted to a canonry and made precentor in the cathedral church of that city. He united with William Canter in ſuperintending the edition of Plantin's Greek Bible; and afterwards he performed a ſimilar taſk at Rome, whither he went to avail himſelf of the rich treaſures in the Vatican library. He was cut off by a ſtroke of apoplexy in 1599, about the age of fifty. He publiſhed, 1. Emendationes et Notæ in XII. Panegyricos Veteres. 2. Theodori Studitæ Catecheſes CXXXV. e Sirleti Cardinalis Bibliotheca, cum Scholiis. 3. Gregor. Nyſſen. et Johan. Chryſoſtom. de Virginitate. 4. Andronici Imper. Diſputatio cum Judæo. He alſo left behind him in manuſcript, tranſlations of the tragedies of Euripides, and of the works of Athenæus.

LIV'ING, *participial adj.* Vigorous; active: as, A *living* faith.—Being in motion. Having ſome natural energy, or principle of action: as, The *living* green, the *living* ſprings.

LIV'ING, *ſ.* Support; maintenance; fortune on which one lives.—The Arcadians fought as in unknown place, having no ſuccour but in their hands; the Helots, as in their own place, fighting for their *livings*, wives, and children. *Sidney.*—All they did caſt in of their abundance; but ſhe of her want did caſt in all that ſhe had, even all her *living*. *Mark.*—Power of continuing life.—There is no *living* without truſting ſome body or other in ſome caſes. *L'Eſtrange.*—Livelihood.—Actors muſt repreſent ſuch things as they are capable to perform, and by which both they and the ſcribbler may get their *living*. *Dryden's Duf.*

Iſaac and his wife, now dig for your life,
Or ſhortly you'll dig for you *living*. *Denham.*

Benefice of a clergyman.—The parſon of the pariſh preaching againſt adultery, Mrs. Bull told her huſband, that they would join to have him turned out of his *living* for uſing perſonal reflections. *Arbuthnot.*

LIV'INGLY, *adv.* In the living ſtate.—In vain do they ſcruple to approach the dead, who *livingly* are cadaverous; or fear any outward pollution, whoſe temper pollutes themſelves. *Brown's Vulgar Errors.*

LIV'INGSTON, a county of Kentucky, in America, bounded north by the Ohio, weſt by the Miſſiſſippi, and ſouth by Teneſſee; ſeventy miles long and ſixty broad. The principal rivers are the Cumberland and Teneſſee.

LIV'INGSTON, a large townſhip in Columbia county, New York, extending from the eaſt bank of Hudſon river to the Maſſachuſetts line, ſouth of Hudſon adjoining.

LIVINIE'RE, a town of France, in the department of the Herault: twelve miles ſouth of St. Pons, and twenty-four weſt of Breziers.

LIVISTO'NA, *ſ.* [named by Mr. Brown, in memory of lord Liviſtone, who, when the Edinburgh botanic garden was firſt eſtabliſhed, greatly enriched it from his own private collection, where he had above a thouſand ſpecies in cultivation. This nobleman travelled over France in ſearch of plants, where he died of a fever, about the middle of the ſeventeenth century.] In botany, a genus of the claſs hexandria, order monogynia, natural order palmæ. Eſſential generic characters—Calyx: deeply three-cleft; corolla

corolla deeply three-cleft; filaments ſeparate, dilated at their baſe. Germens three, cohering; ſtyles three, united into one; ſtigma undivided; berry ſolitary, of one cell; ſeed ſolitary; albumen with a ventral cavity; embryo at the back.

Species. 1. Liviſtona inermis, or unarmed liviſtona: ſegments of the leaves with intermediate threads; footſtalks without thorns. Stems from fourteen to thirty feet high. 2. Liviſtona humilis, or dwarf liviſtona: footſtalks thorny. Stem from four to ſix feet high. Natives of the tropical part of New Holland. *Brown's Prodr. Nov. Hall.* vol. i. p. 267.

LIV'IUS (Andronicus), is regarded as the moſt ancient of the Roman poets. He was the firſt who attempted to compoſe a drama in verſe, which he himſelf ſung and acted, while a player on the flute accompanied him in uniſon to keep him in tune. He was encored, and obliged to repeat his pieces ſo often, that he loſt his voice; and, being unable to ſing or declaim any longer, he was allowed to have a ſlave to ſing, while he only acted the part behind him. Hence came the cuſtom of dividing the declamation or melody of the piece, with which the Roman people were extremely delighted. Andronicus repreſented his firſt piece on the ſtage in the year of Rome 514, B. C. 240, a year before the birth of Ennius. He is ſaid to have been a ſlave, of Greek origin, and to have received his Latin name *Livius* from Livius Salinator, whoſe children he inſtructed, and who made him free. His productions were principally dramatic, and probably, for the moſt part, comedy, but rude in their deſign, and barbarous in language. But he wrote, beſides, hymns to the gods, one of which, in honour of Juno, is ſaid by Livy and Val. Maximus to have been ſung through the city by girls. An Odyſſey is likewiſe attributed to him. His lines are frequently quoted by grammarians and critics; and theſe quotations are the only relics left of him: they have been printed, along with the fragments of the other ancient Latin poets, in the Comici Latini, and the Corpus Poetarum. His poetry was grown obſolete in the age of Cicero, whoſe nicety and judgment would not even recommend the reading of it.

LIV'IUS (Titus), in Engliſh commonly called LIVY, a very eminent Roman hiſtorian, was a native either of the city or territory of Padua. He came to Rome in the reign of Auguſtus, where he appears to have been admitted to the familiarity of ſeveral perſons of rank, and of the emperor himſelf. Suetonius mentions that Claudius, afterwards emperor, undertook to write hiſtory in his youth on the perſuaſion of Livy, whence it has been ſuppoſed that he had ſome concern in that prince's education. He made himſelf known by ſome philoſophical dialogues; but his literary reputation was principally built upon his great Hiſtory of Rome, from the foundation of the city to the death of Druſus, in one hundred and forty-two books, of which only thirty-five are extant. No work of the kind ſeems to have been received with greater applauſe. Even during his life-time ſo high was his fame, that, as we are informed by Pliny the younger, a Spaniard from Cadiz came to Rome on purpoſe to obtain a ſight of him; and, having gratified his curioſity, immediately departed. Of the circumſtances of Livy's life we are almoſt totally uninformed. He died at Padua, in the fourth year of the reign of Tiberius, A. D. 17, at the age of ſeventy-ſix.

The hiſtory of Livy is mentioned with the higheſt praiſe by all the poſterior Roman writers, as Seneca, Pliny the elder, and eſpecially Quintilian; and from that portion of it, which has come down to our times, its merits do not appear to have been exaggerated. His deſcriptions are ſingularly lively and picturesque; and there are few ſpecimens of oratory ſuperior to that of many of the ſpeeches with which, in conformity with the practice of antiquity, his narratives are copiouſly interſperſed. Although he may occaſionally be too favourable to his own countrymen, yet he frequently puts into the mouth of his foreign ſpeakers the ſevereſt ſtrictures on the injuſtice of the Roman policy. He does not poſſeſs the philoſophic ſpirit of Tacitus and ſome other hiſtorians, and has been charged with credulity in recording the vulgar prodigies of every year; yet he gives ſufficient reaſon to believe that this was only in compliance with the cuſtom of other annaliſts, and that he was no dupe to pious frauds. He beſtowed ſuch liberal praiſes on Pompey, that Auguſtus uſed to call him a Pompeian, yet did not ſhow the leſs friendſhip to him on that account. His ſtyle was cenſured by Aſinius Pollio, as not entirely free from *Patavinity*; by which he doubtleſs meant a certain taint of the provincialiſm of his native country; and ſome modern critics have very uſeleſsly employed themſelves in endeavouring to detect the veſtiges of this defect. The emperor Caligula thought proper to charge him with being both verboſe and unfaithful; but that imperial madman was equally the enemy of many other great authors, and his judgment can command little reſpect.

The works of Livy have been divided by ſome of the moderns into fourteen decades, each conſiſting of ten books. The firſt decade comprehends the hiſtory of 460 years. The ſecond decade is loſt. The third comprehends the hiſtory of the ſecond Punic war, which includes about 18 years. In the fourth decade, Livy treats of the wars with Macedonia and Antiochus, which contain about 23 years. For the firſt five books of the fifth decade, we are indebted to the reſearches of the moderns: they were found at Worms, A. D. 1431. The third decade ſeems to be ſuperior to the others; yet the author has not ſcrupled to copy from his contemporaries and predeceſſors, and we find many paſſages taken word for word from Polybius, in which the latter has ſhown himſelf more informed in military affairs, and ſuperior to his imitator. Theſe are the books that remain of Livy's hiſtory; though an epitome of the whole, excepting two books, is preſerved; but this gives no more than the heads of the matter. But the loſs which the celebrated work has ſuſtained by the ravages of time, has in ſome meaſure been compenſated by the labours of Freinſhemius, who with great attention and induſtry has made an epitome of the Roman hiſtory, which is now incorporated with the remaining books. Of the editions of Livy, thoſe moſt eſteemed are that of Gronovius cum Notis variorum, 3 vols. 8vo. Lugd. Bat. 1679; of Leclerc, Amſt. 10 vols. 12mo. 1709; of Crevier, Paris, 6 vols. 4to. 1735; and of Drakenborch, Amſt. 7 vols. 4to. 1738. They have been tranſlated into almoſt all modern languages. *Voſſii Hiſt. Lat. Harwood.*

LI'UNG, a town of Sweden, in Weſt Gothland: eight miles ſouth of Uddevalla.—A town in Eaſt Gothland: eight miles north-north-weſt of Linkioping.

LIUN'GA, or JUN'QA, a river of Sweden, which riſes in the province of Harjedalen; and takes the name of Niurunda, at Hafro, in the province of Medelpad.

LI'UNGBY, a town of Sweden, in the province of Schonen: ſixteen miles eaſt of Helſingborg.

LIV'NI, a town of Ruſſia, in the government of Orel, on the Soſva: eighty-four miles eaſt of Orel. Lat. 52. 58. N. lon. 38. 22. E.

LIVO'NIA, a province of Ruſſia, with the title of a duchy, which, including Eſthonia, lies in lat. 58. N. and is bounded on the north by the gulf of Finland, on the eaſt by Novogorod, on the ſouth by Poland, and on the weſt by the Baltic; being 190 miles from north to ſouth, and 180 from weſt to eaſt, and containing 725,300 inhabitants.

The ancient hiſtory of the duchy is very dark and obſcure. Paganiſm prevailed here down to the twelfth century, when, by the following accident, the Chriſtian religion was firſt introduced into Livonia, properly ſo called. In the year 1158, ſome merchants of Bremen, bound to Wiſby in Gothland, were driven by ſtreſs of weather on the coaſt of Livonia, and landed at the mouth of the river Duna, near the Baltic. The inhabitants of thoſe parts, who called themſelves *Liven*, were at firſt for op-

poſing their landing; but, becoming more tractable by degrees, they trafficked together. Theſe beginnings the Bremeners improved by reſorting hither in greater numbers with commodities to trade with the natives; and, with the conſent of the inhabitants, went about ſix miles up the Duna, where they pitched their tents. After this, they built a ſtrong warehouſe of timber, on an eminence in which they depoſited their goods. The German coloniſts increaſed in number, brought with them, probably about the year 1186, an eccleſiaſtic, of the name of Meinhard, who was an Auguſtine monk. This monk, having learned the language of the country, perſuaded ſome of the inhabitants to be baptized. From this time, ſeveral German families came and ſettled in Livonia. About the ſame æra, namely, 1196, Canute VI. king of Denmark, made an expedition into Eſthonia; and, having ſubdued that province, he introduced Chriſtianity, erected churches in the country, and ſent prieſts to officiate in them. Towards the middle of the ſixteenth century, the czar Iwan Baſilowitz formed the deſign of conquering this country; which induced the city of Revel and the duchy of Eſthonia to put themſelves under the protection of Sweden; and on this was grounded the claim of that crown to Livonia, and the ſuperior privileges which Eſthonia enjoyed beyond Livonia. Gotha Ketler, who was chief of the order, gave up Livonia to the king of Poland, as great duke of Lithuania, upon which it was annexed to that crown; ſolemnly reſigned his command; and, in 1561, was created the firſt duke of Courland, but was to hold this duchy as a fief of Poland. The Poles alſo got poſſeſſion of Riga and Lettonia; and now this country became the cauſe, as well as the diſmal ſcene, of very bloody wars betwixt Ruſſia, Sweden, and Poland, for a whole century; namely, from the year 1561 to 1660. By the peace of Oliva, which was concluded in 1660, Livonia was given up by Poland to Sweden; and the Duna was agreed on as the boundary betwixt the Swediſh and Poliſh dominions. In 1681, the decrees of the diet, held at Stockholm in 1680, concerning the re-aſſumption of alienated crown-lands, began to be put in execution here; which was an extreme grievance to the nobility. In the famous northern war, which broke out in the beginning of the laſt or eighteenth century, this country was miſerably ravaged; till at laſt, by the treaty of Nyſtadt, concluded in the year 1721, Sweden agreed to cede Livonia for ever to Ruſſia.

The Eſthonians, and the Lieves or Livonians, are of Finniſh origin; they appear to have been the moſt ancient inhabitants of maritime Livonia and Courland Proper. The Lettons are evidently the ſame nation as the Lithuanians, their language and manners prove it inconteſtibly, but their origin is uncertain; it is, however, a fact, that the Lettons, as well in Livonia as in Courland, were conſtantly at variance with the Lieves, whom by degrees they oppreſſed, and compelled to adopt the Lettonian language in their divine worſhip. At preſent, there are very few of the Lieves; they are confounded with the Lettons. From theſe two races is compoſed the maſs of the people in the provinces of Courland, Livonia, and Eſthonia. Bent under the ſame yoke, they yet preſerve, on both ſides, their national pride and their hereditary hatred; they rarely contract marriages together. Their mutual averſion is manifeſt even in the colour of their clothes; an Eſthonian always wears brown, and a Lettoni never leaves off grey.

Livonia conſiſts partly of woods and moraſſes, and partly of a fertile ſoil which yields the inhabitants all the neceſſaries of life in great plenty. The air is clear and ſalubrious; and, though the winter be long and ſevere, and the ſummer, conſequently, but ſhort; yet the heat of the climate during the latter ſeaſon is ſuch, that the grain ſown both in ſummer and winter ripens at the proper time. In a plentiful year, when the crops have not failed, the inhabitants export many thouſand laſts of rye and barley to Holland, Spain, and other foreign countries: hence Livonia is called the granary of the north. Before the corn is threſhed, it is dried and hardened in kilns, heated by large ſtoves or ovens, which are built contiguous to their barns; however, this does not render it unfit for ſowing, or for making bread and malt; beſides, it keeps the better for it. The horned cattle, horſes, and goats, of this country, are very numerous, and much eſteemed; but the ſheep are not extraordinary, their wool being coarſe, and reſembling goat's hair. Vaſt quantities of flax, hemp, linſeed, leather, and ſkins, are exported from hence. It is now called The Government of Riga, from the capital. *Malteburn's Picture of Poland. Crutiwell's Gaz.*

The tract of country called *Poliſh Livonia*, which, under the government of the Teutonic order, formed likewiſe a part of the Livonian ſtate, reverted in the year 1561, with the whole province of that name, to Poland. At the peace of Oliva, by which Livonia came under the ſovereignty of Sweden, this ſole diſtrict however remained to the Poliſh ſtate, retaining from that time its name in contradiſtinction to Swediſh Livonia. On the partition in 1773, this country, which had hitherto conſtituted its particular vaivodeſhip, was annexed to Ruſſia, and now comprehends the two circles of Dunaburg and Reſitza, in the viceroyalty of Polotſk. *Tooke's View of the Ruſſian Empire.*

LIVO'NIAN, *ſ.* An inhabitant or native of Livonia.

LIVO'NIAN, *adj.* Belonging to Livonia; brought from Livonia.

LIVO'NIAN EARTH, a kind of fine bole uſed in the ſhops of Germany and Italy, of which there are two ſpecies, the yellow and the red. The red is the beſt, though both are dug out of the ſame pit, in the place whence they have their name, and in ſome other parts of the world. They are generally brought to us made up in little cakes, and ſealed with the impreſſion of a church, and an eſcutcheon with two croſs keys; and recommended in diarrhœas, dyſenteries, &c.

LIV'OR, *ſ.* [Latin.] With ſurgeons, a livid appearance on any part of the body.

LIVOR'GNE, a town of France, in the department of the Dora: ſeven miles weſt of Aoſta.

LIVORNI'NA, *ſ.* An old coin of Leghorn, equal in value to 4s. 5½d. ſterling.

LIVOR'NO. See LEGHORN, p. 449.

LIVOR'NO, a town of France, in the department of the Seſia: four miles north of Creſcentino, and eleven north-eaſt of Chivaſſo.

LI'UR, a town of Sweden, in Weſt Gothland: thirty-three miles north-eaſt of Gotheborg.

LI'VRE, *ſ.* A French money of account, in the old ſyſtem, conſiſting of twenty ſols; each ſol containing twelve deniers and four liards. The origin of the word is derived hence, that anciently the Roman *libra*, or pound, was the ſtandard by which the French money was regulated; twenty ſols being made equal to the libra. By degrees the libra became a term of account; ſo that any coin juſt worth twenty ſols was a livre, or libra; and, ſince the time of Charlemagne, all contracts have been made on the foot of this imaginary coin; though the ſols have frequently changed their weight and alloy.

The livre is of two kinds, Tournois and Pariſis. The *livre Tournois*, as above, contains twenty ſols Tournois, and each ſol twelve deniers Tournois. The *livre Pariſis*, is twenty ſols Pariſis, each ſol Pariſis worth twelve deniers Pariſis, or fifteen deniers Tournois; ſo that a livre Pariſis is equivalent to twenty-five ſols Tournois; the word Pariſis being uſed in oppoſition to Tournois, on account of the rate of money, which was one-fourth higher at Paris than at Tours.

The franc and livre were formerly ſynonymous; but, in the coinage of 1795, the franc was made too heavy, and its value was accordingly raiſed 1¼ per cent. thus, 80 francs = 81 livres. In 1796, it was ordered that the piece of five francs ſhould paſs for five livres one ſol three deniers Tournois, from which the proportion of the franc to the

livre of 100 to 101¼ is determined; but the accuracy of this proportion has been queſtioned by writers of the firſt authority, who have calculated it to be as 100 to 101½.

LIVRON', a town of France, in the department of the Drôme: ten miles ſouth of Valence, and ſeven weſt of Creſt.

LIV'RY, a town of France, in the department of the Seine and Oiſe: nine miles north-eaſt of Paris.

LIUS'DAL, a town of Sweden, in the province of Helſingland: thirty-two miles weſt-north-weſt of Hudwickſwal.

LIUS'NAN, a river of Sweden, which riſes in the mountains of Harjedalen, and runs into the Gulf of Bothnia eight miles ſouth of Soderhamn. Lat. 61. 15. N. lon. 17. E.

LIUS'NEBRUCK, a town of Sweden, in the province of Helſingland: five miles ſouth of Soderhamn.

LIUSTER'NO, an iſland of Sweden, in the Baltic. Lat. 59. 30. N. lon. 18. 30. E.

LIUS'TORP, a town of Sweden, in Medelpadia: fifteen miles north of Sundſwall.

LIUS'UDBORG, a town of Sweden, in Nericia: forty miles north of Orebro.

LI'UTPRAND, or LUITPRAND, an hiſtorical writer of the tenth century, is by ſome accounted a Spaniard, but more probably was an Italian of Pavia. His father was a perſon in the confidence of Hugo king of Italy. Liutprand was placed when young in the court of Berenger II. who obtained the kingdom by diſpoſſeſſing Hugo; and was ſent by him ambaſſador to the Greek emperor Conſtantine Porphyrogenitus. For this office he was choſen on account of his acquaintance with the Greek language, in which he improved himſelf on his embaſſy. Some time afterwards he loſt the favour of Berenger, and was obliged, about the year 958, to go as an exile to Germany. During his reſidence there, he compoſed the hiſtory of his own times, which is extant. He was then a deacon of the church of Pavia. The fall of Berenger, who was ſtript of his dominions in 961 by Otho I. reſtored Liutprand to his country; and he was ſoon after conſecrated biſhop of Cremona. In this quality he attended an aſſembly of biſhops held at Rome in 963, in oppoſition to pope John XII. In 968 he went again as ambaſſador to the court of Conſtantinople, in the name of Otho, to demand the daughter of the Greek emperor for the ſon of Otho. His miſſion, however, was ineffectual; and he returned full of ill-will againſt that court, the pride and ignorance of which he ſatirized in a relation of this embaſſy, annexed to his hiſtory. It is not known how much longer he ſurvived; but his ſignature occurs in a ſynod held at Ravenna in 970, under the name of Liuzio biſhop of Cremona, by which name he is alſo mentioned by another writer. The hiſtorical work of Liutprand is in ſix books; but it is ſuppoſed that the ſix laſt chapters of the ſixth book are by another hand. The narration commences with the emperor Arnulph, and cloſes with Otho. It is written in a much more agreeable and poliſhed ſtyle than that of his contemporary hiſtorians; but at the ſame time ſarcaſtic and ſatirical, eſpecially when he ſpeaks of Berenger and his wife Villa. It has been ſeveral times printed; the laſt edition is that of Muratori in his Scriptores Rerum Ital. *Voſſii Hiſt. Lat.*

LIUT'ZIN, a town of Ruſſia, in the government of Polotſk: ſixty miles north-north-weſt of Polotſk. Lat. 56. 25. N. lon. 27. 34. E.

LI'W, a town of the duchy of Warſaw: forty miles eaſt of Warſaw.

LIX'A, or LIXUS, in ancient geography, a town on the Atlantic near the river Lixus; made a Roman colony by Claudius Cæſar; famous in mythology for the palace of Antæus and his encounter with Hercules. *Pliny.* Now LARACH, ſixty-five leagues to the ſouth of the ſtraits of Gibraltar. See p. 238.

LIXE'ME, a town of Pruſſia, in Oberland: five miles ſouth-ſouth-weſt of Saalfeldt.

LIX'HEIM, or LIXEIM, a town of France, in the department of the Meurte: nine miles weſt of Savern, and three north-eaſt of Sarburg.

LIXIV'IAL, *adj.* [from *lixivium*, Lat.] Impregnated with ſalts like a lixivium.—The ſymptoms of the excretion of the bile vitiated, were a yellowiſh colour of the ſkin, and a *lixivial* urine. *Arbuthnot.*—Obtained by lixivium.—Helmont conjectured, that *lixivial* ſalts do not pre-exiſt in their alcalizate form. *Boyle.*

LIXIV'IATE, *adj.* Making a lixivium.—*Lixiviate* ſalts, to which pot-aſhes belong, by piercing the bodies of vegetables, diſpoſe them to part readily with their tincture. *Boyle.*

LIXIV'IOUS, *adj.* [from *lixivium.*] Belonging to lye; lixivial. *Scott.*

LIXIV'IUM, *ſ.* [Latin.] Lye; water impregnated with alkaline ſalt, produced from the aſhes of vegetables; a liquor which has the power of extraction.—I made a *lixivium* of fair water and ſalt of wormwood; and, having frozen it with ſnow and ſalt, I could not diſcern any thing more like to wormwood than to ſeveral other plants. *Boyle.*

LIXNAW', a barony in the county of Kerry and province of Munſter in Ireland, which gives title of baron to the earls of Kerry; the village here of this name being their ancient ſeat, where the caſtle was erected. This ſeat ſtands agreeably on the river Brick, which is here cut into ſeveral pleaſant navigable canals, that adorn its plantations and gardens. Lat. 52. 15. N. lon. 9. 15. W.

LIX'TOER. See LOGSTOER.

LIXU'RI, a town of the iſland of Cephalonia: twelve miles weſt of Cephalonia.

LIYANG', a town of China, of the third rank, in Kiang-nan: twenty-five miles ſouth-weſt of Tchan-tcheou.

LIZ'ARD, *ſ.* [*liſarde*, Fr. *lacertus*, Lat.] An animal reſembling a ſerpent with legs added to it. See LACERTA, p. 30.—There are ſeveral ſorts of *lizards*; ſome in Arabia of a cubit long. In America they eat *lizards*; it is very probable likewiſe that they were eaten in Arabia and Judæa, ſince Moſes ranks them among the unclean creatures. *Calmet.*

Adder's fork, and blind-worm's ſting,
Lizard's leg, and owlet's wing. *Shakeſpeare's Mac.*

LIZARD, in naval rigging, an iron thimble ſpliced into the main bow-lines, and pointed over to hook a tackle to.

LIZ'ARD, or LIZARD POINT, a promontory on the ſouth coaſt of Cornwall, and moſt ſouthern point of land in England, at the north entrance of the Engliſh Channel. Lat. 49. 59. N. lon. 5. 12. W.

LIZ'ARD ISLAND, one of the iſlands called Direction Iſlands, in the South Pacific Ocean, about 240 miles in circumference, in general very rocky and barren. The name was given by Capt. Cook, from the number of lizards found there, ſome of which were of a very large ſize; twenty miles north-eaſt of Cape Flattery.

LIZ'ARD ISLAND, one of the ſmaller Bahama iſlands.

LIZ'ARD's TAIL, in botany. See PIPER and SAURURUS.

LI'ZOU-TCHE'OU, a city of China, of the firſt rank, in Quang-ſi, on the river Long: 1037 miles ſouth-ſouth-weſt of Peking. Lat. 24. 12. N. lon. 108. 47. E.

LI'ZY-SUR-OU'RCQUE, a town of France, in the department of the Seine and Marne, and chief place of a canton in the diſtrict of Meaux. The place contains 1200, and the canton 11,885, inhabitants.

LLA'LA, a town of Peru, in the audience of Lima: 100 miles north of Lima.

LLA'MA, or LAMA. See the article THIBET.

LLA'MA, LAMA, or GLAMA. See CAMELUS lama, vol. iii. p. 651.

LLAM'AMON IN YA'LE, a village in Denbighſhire, North Wales; with fairs on Oct. 19 and Nov. 30.

LLA'MAS, a ſmall iſland in the Pacific Ocean, near the coaſt of Chili. Lat. 45. 50. S.

LLAM'ELIN, a town of Peru, in the archbiſhopric of Lima, and juriſdiction of Guanuco.

LLANAR'TH,

LLANAR'TH, a town of South Wales, in the county of Cardigan; with a weekly market on Tuesday, and 826 inhabitants: fifteen miles west of Llanbeder, and 212 west of London. Lat. 52. 14. N. lon. 4. 19. W.

LLAN'AVAN VAW'R, a town of South Wales, in Brecknockshire, with 633 inhabitants: three miles north-west of Builth.

LLAN'BADRIG, a town of North Wales, in the island of Anglesea, containing 957 inhabitants: four miles west of Amlwch.

LLAN'BADARN VAW'R, a market-town and parish in Cardiganshire, Wales. This place is supposed to have been anciently called *Mauritania*; and to have changed its name in the sixth century, in memory of St. Paternus, who built a monastery here, which was afterwards constituted an episcopal see. This dignity it retained till the inhabitants, quarrelling with the bishop, murdered him; when it was united to the see of St. David's. The government of the town is vested in a portreeve. It has a small harbour; but the little trade it formerly possessed has of late years been transferred to Aberystwith, which is only two miles distant, to the west. The (Tuesday) market for meat is now likewise held at the same place; so that this town is much declined. The ancient church, built in the form of a cross, and surmounted by a massive square tower, is a large edifice, in an early style of architecture. It is remarkable as having been the seat of one of the oldest bishoprics in Wales. The interior contains a few modern monuments, one of which was raised to the memory of Lewis Morris, the celebrated author of the Celtic Remains. In the church-yard is an ancient cross, finely decorated with fret-work. The parish is very extensive, and contains a number of hamlets, of which Aberystwith is the largest and most populous. The waste lands, or commons, may be about 8000 acres. Several old British forts and tumuli can easily be traced in different parts of it. In a vale, called Dyfryn-castell, is a circle of stones, which tradition informs us was a druidical temple and court of judicature. The town and parish were entirely laid waste by the Danes in the year 988. The town was soon rebuilt; but in little more than thirty years after again suffered a similar fate, being burnt to the ground by Gruffydd al Llywellin, during his contest for the sovereignty of this district with Howel ap Edwin. It is 197 miles west of London.

LLANBE'DER, commonly called *Lampeter*, and by some *Llanbeder-Pont-Stephen*, as supposed, from a bridge, according to tradition, built by king Stephen over one of his principal trenches when he encamped in this neighbourhood, (which seems to be probable, as there are some trenches and lines remaining to this day;) a market and post-town in Cardiganshire, South Wales, twenty-four miles north-by-east from Cardigan, and 197 west-south-west of London. It is situate in a pleasant fertile vale, nearly on the banks of the river Tivy, which abounds with trout and other excellent fish. The river Tivy, between Newcastle-Emlin and Cardigan, is famous for the best salmon in the kingdom. The market is on Saturday, and affords an ample supply of corn and grain, as likewise butter, cheese, poultry, butcher's meat, &c. and the markets from the 12th of May to the 10th of July are for cows and calves, ewes, lambs, &c. Here are eight fairs in the year, viz. the first Wednesday after Whitsuntide, July 10, first Saturday in August old stile, 27th of August, first Saturday in September old stile, 26th of September, 19th of October, and the first Saturday in November old stile. The two first are generally the largest, being for horses, horned cattle, sheep, pedlery, &c. and the following days store pigs; the other six fairs exhibit the same commodities, sheep only excepted.

The chief magistrates are a portreeve, bailiff, town-clerk, two constables, and all those who have passed the chair (having served the office of portreeve) are aldermen by prescription; which chief magistrates inspect and regulate the fairs and markets; and Cardigan, Lampeter, and Aberystwith, are equally concerned in choosing a member, the three towns being contributory boroughs, and, together, send one representative to parliament. Lat. 52. 11. N. lon. 4. 6. W.

LLANBE'DER, a river of South Wales, which runs into the Artro near the town of Llanbeder.

LLANDAFF', [a corruption of the British words *Llanar-dâf*, i. e. the Church on the Banks of the Taff, or Tave, as the walls of the church-yard are in part washed by a branch of that river.] A very ancient city in Glamorganshire, South Wales, though at present it has not even a market; but only two fairs annually, viz. one on the 9th of February, and the other on Whit Monday, which is noted for a fine show of cattle, horses, sheep, &c. &c. It carries on a good trade, as it has a very good harbour that opens into the Severn-sea, about four miles distant.

Llandaff deserves notice principally on account of its cathedral-church, which is said to have been first founded here soon after the introduction of Christianity into Britain, i. e. A. D. 186. It was not, however, till the beginning of the sixth century, that Llandaff was raised to the dignity of a bishop's see, by Myric king of the Silures, who endowed it with all the lands between the rivers Taff and Elwy. The original church being destroyed at the time of the conquest, or at least its oldest part, the present was erected in the year 1120, by bishop Urban. Its situation is truly monastic, in a bottom surrounded by rising ground. According to Grose, it measures in length, from east to west, 263½ feet. The breadth of the body is 65 feet, and the height from the floor to the centre of the roof 119 feet. The west front is a beautiful relic of the Norman and pointed styles of architecture united. At the corners of this front formerly rose two magnificent towers, one of which is now nearly destroyed; that on the north-west, still remaining entire, is embellished with a profusion of sculpture; the entrance on this side is under a semi-circular arch, over which are three windows, with lancet-shaped arches. The interior contains several monuments of the bishops; also, one in honour of the lady Godiva, the celebrated patroness of the men of Coventry. A full description of this church, with views and details, will be found in Cooper's Architectural Reliques. Nothing can exceed the absurd and fantastical appearance of this edifice, when viewed as a whole. Beneath the towers has been ingrafted an Italian summer-house with a Venetian window, also pilasters and flower-pot jars upon the parapet. The ecclesiastical establishment of this see consists of a bishop, a dean, an archdeacon, a sub-dean, a chancellor, precentor, and nine prebendaries. The choral service has long been discontinued; and the cathedral used as the parish-church: it has no organ. The petty sessions for the hundred of Kibbor are holden at Llandaff. The bishop has no palace here, nor are there any established houses for other members of the church. The diocese contains about three-fourths of the county of Glamorgan, and all Monmouthshire except seven parishes. A gateway and a ruined tower, which formerly contained the great bell called Peter, now at Exeter, are the only remains of the bishop's palace. It is two miles north of Cardiff, and 166 west of London. Lat. 51, 23. N. lon. 3. 8. W.

LLANDAFF', a township of United America, in Grafton county, New Hampshire; incorporated in 1774.

LLANDE'GLA, a small town in Denbighshire, North Wales, seven miles west of Wrexham; with fairs, March 11, April 25, June 23, Aug. 4, and Oct. 26.

LLAN'DERFEL, a town in Merionethshire, North Wales; with a fair on August 17.

LLANDEW'Y, a town in Pembrokeshire, North Wales, fourteen miles north-east of Pembroke; with a fair on March 14.

LLANDIBE'A, a town in Carmarthenshire, South Wales, with a fair on Whit-Wednesday.

LLANDIL'O, a market-town in Carmarthenshire, South

South Wales, pleaſantly ſeated on the ſide of a hill, at the foot of which runs the river Towy, with a ſtone bridge over it. It has the firſt manufactory for flannel in North Wales. It is diſtant from London 201 miles weſt-north-weſt, and from Caermarthen ſeventeen north-eaſt; has a market on Saturday, well ſupplied with fleſh, fowl, &c. and the town well ſupplied with ſalmon, eels, trout, &c. from the river Towy; and ſeven fairs in the year, viz. February 20, Palm Monday, May 12, June 21, Auguſt 23, November 12, and on Monday before Chriſtmas. This town, being ſeated on an eminence, commands a delightful proſpect of the rich vale of Towy, bordered on each ſide with ſloping hills, which terminate in barren rocky mountains, and afford a ſtriking contraſt with the fertile vale below.

On an eminence about one mile diſtant from the town to the ſouth-weſt ſtands the picturesque ruins of Dinevor, or Dinas-fawr, caſtle, which commands ſome of the fineſt and moſt romantic views of the ſcenery of Newton-park, and the extenſive vale of Tywi. This caſtle was built by Rhys ap Theodore, in the reign of William the Conqueror; it ſeems to have been originally of a circular form, and ſtrongly fortified by a double moat and rampart; it was for ſome time the reſidence of the princes of South Wales. South from it are the ruins of Cappel-yr-Ywn, ſtanding between two round towers: this was formerly a chapel of eaſe to the mother-church. At ſome diſtance to the weſtward is Grongar-hill, which has been immortalized by the muſe of Dyer. At a ſhort diſtance, on a rugged hill, ſtand the mouldering fragments of Druſlwyn-caſtle. About four miles ſouth-eaſt of the town are the picturesque ruins of *Craig-Cenen-Caſtell*, i. e. the Caſtle on the Rock by the Cenen. The ſituation is ſingularly romantic, being ſeated on an inſulated rock, which was inacceſſible on all ſides but one. It is ſuppoſed to have been erected by Goronw, lord of Is-Cenen, who was one of the knights of king Arthur's round table. The well in this caſtle is conſidered a ſingular curioſity. The farm-houſe, called Cwrt Bryn y Beirdd, which lies about a mile to the ſouth of this caſtle, was formerly a celebrated bardiſh reſidence. Here the river Llychwr takes its riſe, iſſuing with a copious ſtream immediately from the ſolid rock. Cloſe to this ſpring is a cavern, in ſome places ſo narrow as hardly to permit a perſon to paſs through, but in other parts extremely ſpacious, and exhibiting a variety of beautiful petrifactions. At Llan-de-Faen, which lies to the ſouth-weſt, at the diſtance of four miles, is a well formerly conſidered as very efficacious in paralytic and ſcorbutic affections. According to the hiſtory of Wales, by Carradoc of Llancarvan, the laſt deciſive battle between the forces of Edward I. and Llewellin, prince of Wales, was fought in this neighbourhood. The victory remained with the Engliſh, and put a final period to the independence of Wales.

LLANDO'VERY, or Llan-ym Ddyfri, a market-town, in Caermarthenſhire, South Wales, ſituated on the river Brane, near its junction with the Towy. It conſiſts of five ſtreets, containing, according to Mr. Carliſle, about 800 inhabitants. On a mount near the centre of the town, and ſurrounded by a deep trench, are the ruins of a ſmall caſtle, built by Richard de Powers; and it is remarkable for the birth and reſidence of the celebrated Rees Pritchard, (Rhys Prytherch,) well-known throughout Wales as author of the Vicar's Book, a collection of very ſimple poetry. The ſcite of this caſtle is very remarkable, being an inſulated rock of ſome elevation, totally unconnected with any adjacent riſing ground. A handſome ſtone-bridge is here thrown acroſs the river Brane. The church ſtands on an eminence at one end of the town. The market is held on Friday every week; and, conſidering the extent of the place, is one of the largeſt and beſt-ſupplied in Wales. The Britiſh Directory (upon what authority we know not) aſſigns two market-days, Wedneſday and Saturday, to this ſmall place; and ſix fairs; July 31, Wedneſday after Oct. 10, Nov. 26, Wedneſday after Epiphany, Wedneſday after Lent-Sunday, and Whit-Tueſday.

Llandovery is undoubtedly a town of conſiderable antiquity: it roſe upon the ruins of a Roman ſtation, which was at or near Llan-Fair-ar-y-Brynn, about half a mile diſtant. That theſe celebrated conquerors had a fixed reſidence there, is ſufficiently clear from the number of Roman bricks, earthen pots, coins, and other remains of antiquity, which have been diſcovered on that ſpot. This town was formerly a contributary borough to Caermarthen, but the privilege has been loſt for a conſiderable period. It ſtill, however, retains its charter, by virtue of which a bailiff is annually elected, as are likewiſe a recorder, a town-clerk, aldermen, and ſerjeants at mace; but their offices at preſent ſeem to be little more than nominal. The county-magiſtrates hold here the petty ſeſſions for the upper diviſion of the hundred of Penfedd. It poſſeſſes no leſs than five benefit-ſocieties, three for men and two for women.

The neighbourhood of Llandovery is diſtinguiſhed by a moſt enchanting diſplay of the more placid deſcription of mountain-ſcenery. The paſs of Cwm-Dwr, which winds round the Black Mountain to the eaſt, is peculiarly fine. On a part of this mountain the decayed town of Trecaſtle is ſituated; but it contains nothing worthy of attention, except the remains of a caſtle erected by Bernard de Newmarch in the reign of William Rufus. On the ſummit of the Gaer-hill is a Roman encampment, part of the fortifications of which are ſtill tolerably entire; and on Pen-y-Craig an oval one, with three foſſes and two vallums, ſuppoſed to be of Britiſh conſtruction. A monumental ſtone, about ſix feet high, called Maen-y-Morynnion, is placed on an old Roman cauſeway which joins the road to Brecknock. It ſeems to have been richly ſculptured.

LLANDRINDOD', or Trinity-Church, a village of South Wales, in Radnorſhire; near which are medicinal ſprings, much frequented: eight miles weſt of New Radnor.

LLANDWNOG', a town in Caermarthenſhire, South Wales; with a fair on Monday before Whit-Sunday.

LLANED'WEN, a village in the iſland of Angleſey, North Wales, about five miles to the north-eaſt of Newborough, is diſtinguiſhed as the birth-place of Henry Rowland, biſhop of Bangor, and author of the *Mona Antiqua Reſtorata*, who died in 1723. Almoſt cloſe to the village is the ferry of Moel-y-Don, by which Agricola croſſed over into the iſland of Angleſey, and where the army of Edward I. ſuſtained a ſignal defeat in 1282. The field of Maes-mawr-gad, or the plain of the great army, has been ſuppoſed by ſome to be the ſcene of the firſt ſanguinary battle recorded by Tacitus as fought in this country; and by others to allude to an engagement between Gryffydd ap Cynan, king of Gwynedd, and the uſurper Trahaiarn ap Caradog, which took place in 1082. Plas-Newydd, a ſeat of the earl of Uxbridge, is ſituated cloſe to the north bank of the Menai, and occupies a portion of thoſe groves, once ſo celebrated as embowering the principal temples of the ancient Druids. Here, and for ſeveral miles round, appear numerous memorials of the religious rites practiſed during the prevalence of that extraordinary worſhip. Near the manſion of Plas-Newydd is a large cromlech, with another of ſmaller dimenſions cloſe to it. Particular accounts of theſe, with an engraving, are contained in King's Munimenta Antiqua. Near a pathway leading into the road from Plas-Newydd to Llanidan is a large carnedd, which was opened about ſeventy years ago, and found to contain a vault ſtrewed with an immenſe quantity of human bones. This is conjectured to have had a ſubterraneous connection with the cromlech, and to have formed a place of confinement for the wretched victims deſtined to be ſacrificed. At Tan-ben-Ceven, on the river Brient, are two large entrenchments of a ſquare form, generally regarded as outworks to the chief ſeat of the arch-druid at Tre'r

Dryw. The Bryn Gwyn, or royal tribunal of this fovereign prieſt, ſtill continues diſtinctly marked. It is a circular hollow, one hundred and eighty feet in diameter, ſurrounded by a vaſt agger of earth and ſtones. Near it was one of the Gorſeddau's, now diſperſed, but once conſiſting of a great heap of ſtones, on which ſate aloft the Druid whoſe duty it was to harangue and inſtruct the people when collected on any important occaſion. *Pennant's Tour in Wales*, vol. iii.

LLANNEL'LY, or LLANELTHY, a market-town in Caermarthenſhire, South Wales, with market-days on Thurſday and Saturday. The buildings of the town are irregularly ſituated upon a creek near the ſea-ſhore. At the mouth of this creek is a ſmall iſland, formed by the river Bury, where a monaſtery, founded by St. Piro, formerly ſtood. The church, dedicated to St. Elliw, is an old ſtructure, remarkable for its high ſquare embattled tower. The inhabitants of this place are chiefly miners and ſailors. The coal wrought in the vicinity is reckoned remarkably fine. The harbour is tolerably large, and is the controuling port both for Caernarvon and Kidwelly. Two fairs are held here annually; one on Aſcenſion day, and the other on the 30th of September. The pariſh contains about 15,000 acres of land, of which nearly 3000 lie unincloſed and without cultivation. The hamlets are Berwich, Glynn, Hên Coed, Weſtſtowe, and the Borough-hamlet. At Berwich and at Ddewi the ruins of two chapels can ſtill be diſtinguiſhed. The chapel of St. John has been lately repaired by ſubſcription, and is at preſent uſed as a meeting-houſe by the methodiſts. Pembree-hill, a few miles diſtant from the town, commands one of the fineſt and moſt extenſive marine views to be found in any part of Great Britain.

LLA'NES, a town of Spain, in Aſturia, near the north coaſt; fifty-two miles eaſt-north-eaſt of Oviedo.

LLANGADOCK', a market-town in the county of Caermarthen, South Wales, between the rivers Brane and Sawdde. It is tolerably well built; but was formerly much more extenſive than at preſent. It lies about ſix miles ſouth-ſouth-weſt of Llandovery, and 190 weſt by north from London. A ſmall manufacture of coarſe woollens and ſtockings is carried on here, principally to ſupply the conſumption of the town. The market-day is Thurſday; fairs, on the 12th of March, laſt Thurſday of May, 9th of July, firſt Thurſday after the 11th of September, and ſecond Thurſday after the 11th of December. The ancient caſtle, mentioned by touriſts, has been for many years entirely demoliſhed. A collegiate church is ſaid to have been founded here, A. D. 1283, by Thomas Beck, biſhop of St. David's, in honour of St. Maurice and his companion, and St. Thomas the Martyr. This diſtinction ſeems to have been enjoyed but a very ſhort time, if it ever actually took place. The preſent church is dedicated to St. Cadog.

LLANGAT'TOCK, a town of South Wales, in the county of Brecknock, on the right ſide of the Uſk, oppoſite Crickhowel.

LLANGERNIEW', a town in Denbighſhire, North Wales; with fairs on March 29, May 16, June 29, Sept. 29, and Nov. 29.

LLANGEVELACH', a town of South Wales, in Glamorganſhire; four miles north of Swanſea.

LLANGINDA'IRN, a ſmall town in Caermarthenſhire, South Wales; with a fair on the 5th of Auguſt.

LLANGOL'LEN, a market-town in the county of Denbigh, North Wales. The place has a mean appearance; and the church is nowiſe remarkable, excepting for the length of the name of its patron ſaint, *i. e.* St. Collen ap Gwynnawg ap Clydawg ap Cowdra ap Caradog Fruchfras ap Lleyn Merim ap Eynion Yrth ap Cunedda Wledig. The market is on Saturday; and there are five fairs annually. The ruins of Caſtell Dinas Brân nearly cover the ſummit of a vaſt conoid hill, which begins its aſcent near the foot of the bridge oppoſite to the town: this is one of the primitive Welſh caſtles, but the name of its founder is unknown: the form of it is oblong, extending about 300 yards in breadth, and 150 in length. On one ſide of the hill, which is leſs ſteep than the others, deep trenches are cut through the ſolid rock. In the reign of Henry III. this caſtle ſerved as an aſylum to the traitor Gryffydd ap Madog, who, baſely taking part with the enemies of his country, was compelled to ſecure himſelf in this aerial faſtneſs. It afterwards became the reſidence of Muſamvay Vechan, the beautiful and accompliſhed miſtreſs of Hoel ap Eynion, one of the moſt illuſtrious of the Welſh bards. It is remarkable that this caſtle ſtands at leaſt 600 yards above the level of the ſea: the two ſprings within its walls are never deficient in water. On the north-ſide of the hill may be ſeen a vaſt rock, called *Craig Eglwyſeg*, or the Eagle's Rock; the ſtrata of which are ſo placed upon one another as to form a ſeries of ſteps parallel with the horizon, known to naturaliſts by the name of *ſaxa ſedilia*. The bridge at the bottom of the hill is one of the moſt beautiful and romantic in Wales, and is generally reckoned among the wonders of the principality. The foundation is on the ledge of a rock: it conſiſts of four arches, the centre one of which is 30 feet in diameter. Tradition informs us it was the work of Trevin biſhop of St. Aſaph, in the year 1400. About two miles from the bridge ſtands the abbey of de Valle Crucis, one of the fineſt ſpecimens of architectural antiquity in Wales. The weſtern window has been adorned with a variety of ſculptural ornaments, but moſt of them are entirely defaced. Concerning the etymology of the name of this abbey, hiſtorians are not agreed; ſome deriving it from the buildings being in the form of a croſs, and others from the circumſtance of its monks having made a preſent of a part of the true croſs to Edward I. At the diſtance of a quarter of a mile hence, is the remainder of a round column, called the Pillar of Eliſeg, which is perhaps one of the moſt ancient Britiſh pillars now exiſting. It was entire till the time of the grand rebellion, when it was thrown down and broken by ſome ignorant fanatics, on account of its reſemblance, in figure, to a croſs. This pillar was no doubt erected to perpetuate the memory of ſome celebrated chief: it ſtood on a great tumulus, and, when complete, meaſured twelve feet in height. The tumulus was opened ſome years back, when ſome bones were diſcovered placed between flat ſtones.

The beauties of the Vale of Llangollen are celebrated both in proſe and verſe. It is watered by the river Deva, and has a canal from the Pont-y-Cryſylltau aqueduct running throughout its whole length to the Oernant ſlate-quarries. The low price of labour, and the great plenty of proviſions and fuel, have lately induced ſeveral adventurers in the cotton-manufacture to eſtabliſh extenſive works in this neighbourhood. The great mail-road from London to Holyhead paſſes through both the vale and town. The pariſh is very extenſive, and is divided into three portions, called Traian y Glynn, Traian Llangollen, and Traian Trevor; each of which contains ſeveral hamlets. We might have mentioned the romantic reſidence of two ladies, who for many years lived together in the vicinity of this town. They were viſited by all faſhionable touriſts. Whether they "live there ſtill," we have no means of knowing. Miſs Seward viſited them in Sept. 1795. Since that time great changes may have happened. The deſcription of this place, as given in her Letters, may be ſeen in the Monthly Review for November 1811. A later traveller (Aug. 1803) ſpeaks of this romantic retreat and its inhabitants in terms leſs romantic: "At Llangollen, we were attracted by fame to viſit the cottage inhabited by the Iriſh women of quality, whoſe ſtory is detailed, with ſome ſlight variation, in every tour which has been lately publiſhed. It certainly diſplays no taſte, either in its exterior conſtruction or the immediate environs, but appears like any other ordinary houſe contiguous to a little dirty market-town. Indefinable as a modern cottage is, this will be found to have no ſingle characteriſtic, excepting

excepting ſmallneſs. It is whiſpered, that theſe female anchorites, as they have advanced in life, have diſcovered no ſmall curioſity to know what is paſſing in the world they left twenty years ago with inviolable reſolutions of perfect ſecluſion."

A kind of coarſe woollen, called *ſmall cloth*, is the manufacture of this neighbourhood. It is indeed entirely manufactured in the pariſh of the Glynn. Small cloth is about ⅛ of a yard narrower than what is called ſtrong cloth; its length is the ſame. This cloth is uſed chiefly for dying; ſome is indeed ſent off in its native or white ſtate; but all that is dyed is, or ought to be, of this kind; the reaſon of which is, that the coarſer ſort of the high-country cloth abounds with long white hairs, incapable of taking the dye, called *kemps*. This fabric is made of the coarſer part of the very long wool that grows round Oſweſtry. Of this wool the finer part is converted into a ſort of flannel called *Oſweſtry flannel*, in ſubſtance between a common Welſh flannel and a web; its breadth is ¾ of a yard. Oſweſtry is the market for this article, as well as for ſmall cloth. The purpoſes to which theſe cloths are applied abroad are many and various. The clothing of the ſlaves in the Weſt Indies and South America creates a large demand; ſtockings are ſaid to be made of them in Germany and other parts of the continent; and the empreſs of Ruſſia at one time clothed part of her troops with them.

LLANHARN'. See LLAUGHARN.

LLANNERCHYMEDD', a market-town, in the county of Angleſey, North Wales. Market on Wedneſdays; fairs, 5th of February, 25th of April, 6th of May, and Thurſday after Trinity. This town owes its ſupport principally to the neighbourhood of the Parys mountain. The petty ſeſſions are held here.

LLANNERIL'LO, a town in Merionethſhire, North Wales, five miles eaſt of Bala; with fairs on February 25, July 5, Aug. 28, and Nov. 14.

LLA'NOS, a town of Mexico, in the province of Mechoacan: 100 miles north-north-eaſt of Mechoacan.

LLA'NOS DE ALME'RIA, a town of Spain, in the province of Grenada, on the coaſt of the Mediterranean: twenty miles weſt-ſouth-weſt of Almeria.

LLA'NOS DE MAN'SO, or YAPIZLA'GA, a province of South America, in the viceroyalty of Buenos Ayres, of great extent, ſituated to the ſouth of the Vermejo River. This country was called *Llanos de Manſo*, or the Plains of Manſo, from a captain of that name, who in 1556 undertook to build a town; but, when he thought himſelf in perfect ſecurity, he, with all his attendants, was murdered by the Indians; of whom there are ſeveral nations. The country is but little known.

LLANRHAI'DAR, a town in Denbighſhire, North Wales, near which is a natural caſcade of Rhaidr river; with fairs on May 5, July 24, Sept. 28, and Nov. 8. William Morgan, D.D. an eminent divine, and the perſon who firſt tranſlated the Bible into Welſh, was vicar here, till tranſlated to the ſee of Llandaff by queen Elizabeth in the year 1595. The rectory is a ſinecure in the patronage of the biſhop of St. Aſaph.

LLANRW'ST, a market-town and pariſh, ſituated in the weſtern extremity of the hundred of Uwch Dulas, and county of Denbigh, North Wales. The town is watered by the river Conway, over which, at this place, is a noble bridge of three arches, built by the celebrated Inigo Jones in the year 1636. The market is on Tueſday, (Crutwell's Gaz. marks it Wedneſday;) and there are five fairs in the year. Here are held the petty ſeſſions for the hundred. Mr. Burke calls this "the moſt charming ſpot in Wales." In the town is a good market-hall, and a richly endowed free-ſchool. A ſmall trade is carried on in harp-making, and it is the centre of all the buſineſs of the populous vale in which it ſtands. The church is ſuppoſed to have been built in 570, and is dedicated to St. Grwſt, who was a biſhop of London about the year 360. In this church is ſome curious carved work, ſaid to have been brought from the neighbouring abbey of Mænan. Adjoining to it ſtands a chapel, erected by ſir Richard Wynne, after a deſign by the architect already mentioned. Here are a few monuments in honour of the Wynne family, which deſerve the attention of the curious. They are braſſes, each containing, beſides the inſcription, a portraiture of the perſon to whoſe memory they were engraved. An ancient monument of Howel Coytmor has been lately removed from the church to this place. Near it is a large ſtone coffin, ſuppoſed to be that of prince Llewelyn ap Jerwerth, who was denominated Llewelyn the Great. The high road from Shropſhire to Holyhead paſſes through the town. The fairs here are on April 25, June 21, Aug. 9, September 17, and December 11. It is 15 miles weſt of Denbigh, and 209 north-weſt of London.

In the neighbourhood ſtands Gwydw-houſe, an ancient manſion, conſiſting of an extenſive pile of buildings, of irregular appearance, but ſufficient to denote the great opulence and ſplendour of its former poſſeſſors. Immediately behind the houſe the ground riſes rapidly to the foot of the perpendicular cliffs which form the weſtern boundary of the valley. All this ſpace is now covered with fine plantations of different kinds of trees. Half-way up the rock, on an irregular plain of nearly five acres in extent, are the remains of a terrace, and handſome domeſtic chapel, in the pointed ſtyle of architecture.

About a mile from the town, at the hamlet of Mayne, is a ſpring in high repute for its medicinal virtues. Five miles to the ſouth-eaſt lies the ancient nunnery of Gwythwin, where St. Winefrid is ſaid to have been buried. The box which contained the relics of this ſaint is ſtill pointed out to ſtrangers; but her chapel on the ſouth-ſide is totally demoliſhed. The church-yard contains four upright ſtones, one of which is in the ſhape of a priſm, and bears an inſcription now illegible. North of Llanrwſt, at the diſtance of three miles, the abbey of Mænan formerly ſtood: its ſcite is now occupied by a large old houſe, built out of the ruins.

LLANRW'STED, a village in Cardiganſhire, near Aberyſtwith; remarkable for having near it two druidical ſepulchres conſiſting of two upright ſtones, one of which when perfect meaſured eleven feet in height above the ground, and five feet ſix inches in breadth.

LLANSAD'WIN, a ſmall town in Caermarthenſhire, South Wales; with a fair Oct. 5.

LLANSAN'NAN, a town in Denbighſhire, North Wales; with fairs April 25, June 21, Auguſt 9, Sept. 17, and December 11.

LLANSANFRA'ID, a village in Monmouthſhire, between Hardwick Chapel and Ragland Caſtle.

LLANSTEPHAN', a village in the county of Caermarthen, South Wales, ſeated beneath a hill, in a woody vale; whence the ſituation is peculiarly pictureſque and intereſting. Here is a well, called St. Anthony's, which formerly was in high eſtimation for its medicinal virtues. Here was formerly a caſtle, now in ruins. It is ſituated on an eminence, on the weſtern ſide of the entrance of the navigable river Tywi, or Towy. Its broken walls encloſe a large area; and, furniſhed with ſeveral encircling earthen ramparts, appear to have poſſeſſed conſiderable ſtrength. This caſtle is ſaid to have been built by the ſons of Uchtred, prince of Merionethſhire, A.D. 1138. There is a handſome modern houſe on the hill on which the caſtle ſtands. The chief trade is coals. It is ſix miles north-weſt of Kidwelly, and 232 weſt-north-weſt of London. Lat. 51. 48. N. lon. 4. 25. W.

LLANSTEPHAN POINT', a cape on the ſouth coaſt of Wales, in the Briſtol Channel, at the mouth of the Towy.

LLANTIL'IO GROS'SENNY, a village in Monmouthſhire, near the river Trothy, north-eaſt of Abergavenny.

LLANTRIS'SENT, [in the Britiſh, "Church of Three Saints."] An ancient borough-town of Glamorganſhire; which, in connection with Cardiff, Cowbridge, Swanſea, Lougher, Aberavon, Kenfig, and Neath, ſends one member

to parliament. It has a weekly market on Friday; and fairs, May 1, Auguſt 1, and October 18. This town is ſeated on the ſide of a ſteep hill, and is a place of but little trade; it is governed by a portreeve, &c. There are conſiderable quantities of lead-ore raiſed in this neighbourhood on the lands of the earl of Bute, who is lord of the manor. It formerly had a caſtle, and there are many fabulous accounts of it; but there is at preſent nothing remaining except the ſide of an old tower, which at a diſtance very much reſembles the trunk of an huge oak. Here is a very compact market-place, which, together with a good town-hall, were built by the preſent lord of the manor, and are within the boundaries of the old caſtle. It is ten miles diſtant from Cardiff, the ſame weſt from Llandaff, thirty-nine weſt-ſouth-weſt of Monmouth, and 166 weſt of London. Lat. 51. 25. N. lon. 5. 22. W.

LLANVIHAN'GEL, the name of two villages in Herefordſhire, and ſix in Monmouthſhire.

LLANVYL'LING, or LLANFILLING, a ſmall town in Montgomeryſhire, North Wales, with a weekly market on Thurſday, ſays Wilkes's Britiſh Directory; on Saturday, ſays the laſt edition of Crutwell's Gazetteer; on Tueſday, ſays Rees's Cyclopædia. The fairs, according to the firſt of theſe authorities, are, on Wedneſday before Eaſter, May 24, June 28, and Oct. 5. The town ſtands in a pleaſant valley, near the river Cane, fifteen miles from Montgomery, and 186 from London. It was firſt incorporated by Llewellyn ap Gruffydd, lord of Mechain and Mochnant, in the reign of Edward I. and is governed by two bailiffs, choſen annually, who are juſtices of the peace during the time of office. Many Roman coins have been found here.

LLANW'NEN, a town in Cardiganſhire, South Wales; with a fair on December 24.

LLANWM'YNECK, a town in Shropſhire, ſix miles from Oſweſtry; with fairs on May 29 and Sept. 29.

LLAN'WRTYD WEL'LS, a medicinal ſpring of South Wales, in the county of Brecknock: twelve miles weſt of Builth.

LLANYD'LOS, a town in Montgomeryſhire, North Wales, with a market on Saturdays; and fairs on the firſt Saturday in April, May 11, July 17, firſt Saturday in September, and Oct. 28. It is eighteen miles ſouth-weſt of Montgomery, and 180 weſt-north-weſt of London; pleaſantly ſituated near the bank of the river Severn. Some of the ſtreets are ſpacious; but the buildings are irregular, and chiefly of lath and plaſter. The church is a neat edifice, ſupported by ſix arches, the pillars of which have capitals of palm-leaves, and are ſaid to have been brought from Cwmber-abbey. About the town are ſeveral very extenſive ſheep-walks; and a number of perſons are conſtantly employed in the neighbouring ſlate-quarries. Llandylos was formerly a contributory borough to Montgomery; but was diſfranchiſed with Pool and Llanvyllin: the town however has ſtill the nominal appendages of a mayor, and his ſubordinate officers. A conſiderable manufactory of flannels is carried on here.

LLA'TA, a town of Peru, in the dioceſe of Lima: ninety miles from Lima.

LLAU'GHARN, LLAUHARM, or LLANHARN, a market-town, ſea port, and pariſh, in Caermarthenſhire. The town is ſituated at the mouth of the river Coran, and is one of the moſt ſequeſtered towns in the principality. The church is a large handſome building, in excellent condition. Towards the ſouth end of the town, and cloſe upon the bay of Caermarthen, ſtand the ruins of an old caſtle, ſaid to have been erected, or at leaſt re-built, by Guido de Brian, in the reign of Henry III. The remains of the gateway, which is covered with a profuſion of ivy, and various other parts of it, are ſtill in good preſervation. The corporation of Llaugharn conſiſts of a portreeve, a recorder, an indefinite number of aldermen, two common attorneys, four conſtables, and ſeventy-ſix burgeſſes. The market is held on Friday; and there are two fairs annually, but theſe are very inconſiderable. This was the birth-place of a celebrated political writer and divine, Dr. Joſiah Tucker, who died in 1799.

At a ſhort diſtance from the town are the veſtiges of a ruin, now called Roches Caſtle. This building, according to tradition, was formerly a monaſtery; but when it was built, or by what order of monks, is wholly unknown. The pariſh-church is ſaid anciently to have ſtood on the farm named *Craſeland*, i. e. Chriſt's Land; but no traces of ſuch a building can now be diſcovered. Llaugharn is twenty-three miles eaſt of Haverfordweſt, and 233 weſt of London. Lat. 51. 46. N. lon. 4. 27. W.

LL. D. [*legum doctor.*] Doctor of laws; doctor of the canon and civil laws.

LLECH, *ſ.* The Welſh name for a kind of monumental ſtone found in that country.

LLED'DER, a river of Wales, in the county of Caernarvon, which runs into the Conway about eleven miles ſouth of Aberconway.

LLE'DING, a river of Wales, in the county of Montgomery, which runs into the Severn near Welch Pool.

LLED'WICH, a river in Shropſhire, which runs into the Teme at Great Chapel.

LLEG'GY, a river of Wales, in the county of Caernarvon, which runs into the Conway about ten miles ſouth of Aberconway.

LLEMNWCH'LLYN, a town of Merionethſhire, North Wales; with fairs on Sept. 22, and Oct. 16.

LLENDELAFA'YA, a town of Spain, in the province of Aſturia: eight miles ſouth-weſt of Oviedo.

LLENO'NY, a river of Wales, in the county of Caernarvon, which runs into the Iriſh Sea five miles ſouth-ſouth-weſt of Caernarvon.

LLERE'NA, a town of Spain, in the province of Eſtremadura, belonging to the knights of the order of St. Iago, by whom it was founded: fifty-three miles eaſt of Cordova, and fifty-three north of Seville. Lat. 38. 7. N. lon. 5. 59. W.

LLERE'NA, a town of Mexico, in the province of Zacatecas: eighty miles north-north-weſt of Zacatecas. Lat. 23. 48. N. lon. 104. 46. W.

LLEUEN'Y, a river of Wales, which runs into the Wye about three miles ſouth of Hay.

LLEVYNCYN'TEFIN, a village about eight miles from Brecknock. There is a beautiful waterfall in the river Uſk at this place, called the Pope's Chair, with a fine echo in the adjoining fields.

LLEWEL'LYN AP GRUF'FYDD, the laſt ſovereign of Wales, who reigned from A. D. 1254 to 1282. He was a brave prince, and reſiſted the ambition of Edward I king of England a long time; but he at laſt fell, and with him the independence of the Welſh as a diſtinct nation.

LLEWEL'LYN SI'ON, an eminent poet of Glamorgan, who collected the ſyſtem of Bardiſm, which is preſerved. He preſided at ſeveral meetings of the bards; and died in the year 1616.

LLEWEL'LYN (Thomas), a Welſh non-conformiſt divine of the baptiſt denomination, was a native of Monmouthſhire, and died in 1796. He publiſhed a hiſtory of the different editions of the Welſh Bible.

LLEYNGOR'YL, a river of North Wales, in the county of Merioneth, which runs into the Iriſh Sea three miles ſouth of Barmouth.

LLIR'IA, a town of Spain, in the province of Valencia: eighteen miles ſouth of Segorbe. This is a very ancient town, which is ſaid to have exiſted before the arrival of the Phœnicians in Spain. Under the Carthaginians it bore the name of *Edera*, and under the Romans of *Edeta* and of *Laurona*, when it was the capital of the country of the Edetani. There are ſome Roman monuments remaining. The town was almoſt deſtroyed during the wars of Sertorius and Pompey; but, being afterwards rebuilt, it was taken by the Goths from the Romans, from the Goths by the Moors, and from them, in 1252, by James the Conqueror, king of Aragon, who ſomewhat changed its poſition. It is ſituated between two little

hills; it has a pariſh-church, two chapels of eaſe, two convents of Trinitarian and Franciſcan monks, and a population of about ſix or ſeven thouſand perſons. This town has the title of duchy. King Philip V. gave it to marſhal Berwick, and his deſcendants ſtill poſſeſs it.

LLIV'IA, a town of Spain, in Catalonia, in the Pyrenées, near the ſource of the Segre, anciently called *Julia Libyca*: ſix miles north-eaſt of Puycerda.

LLOBREGAT', a river of Spain, in Catalonia, which runs into the Mediterranean about nine miles weſt from Barcelona.

LLOBREGAT', a ſmall river of Spain, which divides the dominions of France from Catalonia, and runs into the ſea near Roſas.

LLOGH'OR, or LLWGHOR, a river of Wales, which runs into the Briſtol Channel near Llanelthy.

LLOGH'OR, or LLWGHOR, a town of South Wales, in Glamorganſhire, on a river of the ſame name, mentioned by Antoninus under the name of Leucarum: ſix miles north-weſt of Swanſea, and two hundred and twelve weſt of London.

LLOM'SA, a town of the duchy of Warſaw, on the Narew: ſeventy miles north-north-eaſt of Warſaw.

LLOREN'TE (Bernardo), a Spaniſh painter, in favour at the court of Philip V. and employed to paint the infant Don Felipe. From the proſpect of preferment this circumſtance held forth to him, he was diverted by a decided turn for ſolitude; which made him fly the court, and in the ſequel obtained for him the name of Pintor de las Paſtoras, "the painter of ſhepherdeſſes," from the number of madonnas which he painted, arrayed in their garb, and ſurrounded by flocks. He died in 1757, at the age of 72.

LLO'RET, a town of Spain, on the ſouth-eaſt coaſt of Catalonia: twenty miles north-eaſt of Mataro. Lat. 41. 42. N. lon. 4. 42. E.

LLOW'ITSCH, a town of the duchy of Warſaw: twenty-four miles north-weſt of Rava.

LLOYD, a river of North Wales, which runs into the Severn near Llandylos.

LLOYD (William), a learned Engliſh prelate, born at Tilehurſt in Berkſhire in 1627. He was inſtructed in grammar-learning by his father, who was rector of his native place; under whom he made ſo rapid a progreſs, that, when he was only eleven years of age, he underſtood Latin and Greek, and ſomething of Hebrew. He was not quite twelve when he was entered a ſtudent of Oriel-college, Oxford; whence, in 1640, he was removed to a ſcholarſhip in Jeſus. In 1642, he proceeded B. A. and then quitted the univerſity, which was at that time garriſoned by the king's troops. As ſoon as the place ſurrendered to the parliament, he returned, was elected fellow of his college, and commenced M. A. in 1646. In 1648, he was ordained deacon by Dr. Skinner, biſhop of Oxford; and afterwards undertook the office of tutor to the children of William Backhouſe, eſq. of Swallowfield in Berkſhire. In 1656, he was ordained prieſt by Dr. Browning, biſhop of Exeter; and within four months after the reſtoration of king Charles II. in 1660, he was incorporated M. A. at Cambridge; and, about the ſame time, was promoted to a prebend in the collegiate church of Ripon in Yorkſhire. In 1666, the king appointed him one of his chaplains; and, in the following year, he was collated to a prebend in the cathedral of Saliſbury. About this time he took the degree of D. D. at Oxford. In 1668, he was preſented by the crown to the vicarage of St. Mary's in Reading; and, in the ſame year, was inſtalled archdeacon of Merioneth, in the church of Bangor, of which he was made dean in 1672. Soon afterwards he was appointed to a prebend of St. Paul's in London; and, in 1674, became reſidentiary of Saliſbury. In 1676, he was inſtituted to the vicarage of St. Martin's in the Fields, in Weſtminſter; on which occaſion he reſigned his prebend of St. Paul's. In the year 1680 he was promoted to the ſee of St. Aſaph.

In 1684, biſhop Lloyd publiſhed his "Hiſtory of the Government of the Church, as it was in Great Britain and Ireland, when they firſt received the Chriſtian Religion." This book was occaſioned by the diſputes concerning epiſcopacy, particularly David Blondel's treatiſe on that ſubject; and diſplays much curious information relative to the ancient eccleſiaſtical hiſtory of the Britiſh iſlands. On account of one part of it, in which he cuts off forty-four fictitious kings in the hiſtory of Scotland, he was attacked, with great vehemence, by ſir George Mackenzie of Roſehaugh, advocate to king James II. in "A Defence of the Antiquity of the Royal Line of Scotland," &c. 1685, 8vo. This piece being ſeen while in manuſcript by Dr. Stillingfleet, he wrote a full anſwer to it, by way of preface to his Origines Britannicæ. In 1688, Lloyd was one of the ſix biſhops, who, together with archbiſhop Sancroft, were committed to the Tower, for preſenting a petition to king James II. againſt that prince's declaration for ſuſpending the laws in favour of the papiſts, which the clergy were enjoined to read in the churches. Their triumphant acquittal, the enthuſiaſtic joy which even the king's troops around his perſon diſcovered on receiving the intelligence of it, and the ſevere mortification which it created to that tyrannical prince, are circumſtances well known in Engliſh hiſtory. See the article ENGLAND, vol. vi. p. 693. About the latter end of the ſame year, biſhop Lloyd, having concurred heartily in the revolution, was made almoner to king William III. and, in 1692, was tranſlated to the ſee of Lichfield and Coventry. In 1699, he publiſhed A Chronological Account of the Life of Pythagoras, and of other famous Men his Contemporaries; with an Epiſtle to the Rev. Dr. Bentley, about Porphyry's and Jamblicus's Lives of Pythagoras; in which his erudition and critical ſkill appear advantageouſly diſplayed. In 1699–1700, our author was tranſlated to the biſhopric of Worceſter. Two years afterwards, a complaint was preferred againſt him in the houſe of commons, that he and his ſon had interfered improperly in the election of knights of the ſhire for the county of Worceſter; in conſequence of which the houſe reſolved, that his proceedings had been carried on in violation of the liberties and privileges of the commons of England, and that an addreſs ſhould be preſented to the queen, requeſting her to remove the biſhop of Worceſter from the office of almoner to her majeſty. The biſhop was accordingly diſmiſſed from his poſt of honour at court. He died at Hartlebury Caſtle in 1717, when he had arrived at the ninety-firſt year of his age; and retained to the laſt the perfect uſe of his underſtanding. Biſhop Burnet, who knew him well, gives the following character of him: "He was a great critic in the Greek and Latin authors, but chiefly in the Scriptures; of the words and phraſes of which he carried the moſt perfect concordance in his memory, and had it the readieſt about him of all men that ever I knew. He was an exact hiſtorian, and the moſt punctual in chronology of all our divines. He had read the moſt books, and with the beſt judgment, and had made the moſt copious abſtracts out of them, of any of this age. He was ſo exact in every thing he ſet about, that he never gave over any part of ſtudy till he had quite maſtered it. He had many volumes of materials upon all ſubjects, laid together in ſo diſtinct a method, that he could, with very little labour, write on any of them. He had more life in his imagination, and a truer judgment, than may ſeem conſiſtent with ſuch a laborious courſe of ſtudy. Yet, as much as he was ſet on learning, he had never neglected his paſtoral care. He was a holy, humble, and patient, man, ever ready to do good when he ſaw a proper opportunity; even his love of ſtudy did not divert him from that." Beſides the pieces already mentioned, he publiſhed, 3. A Letter to Dr. William Sherlock, in Vindication of that Part of Joſephus's Hiſtory which gives an account of Jaddus the High Prieſt's ſubmitting to Alexander the Great, while Darius was living, &c. 1691, 4to. 4. A Diſcourſe of God's Ways of diſpoſing Kingdoms, 1691, 4to. 5. A Diſſertation

upon Daniel's Seventy Weeks. 6. A Letter upon the ſame Subject, printed in the Life of Dr. Prideaux. 7. Sermons, preached on public occaſions. He alſo left ſeveral pieces behind him, in an unfiniſhed ſtate; particularly, 8. A Syſtem of Chronology, out of which his chaplain, Benjamin Marſhal, is ſaid to have compoſed his Chronological Tables, printed at Oxford in 1712 and 1713. He is ſuppoſed to have had a principal hand in the Series Chronologica Olympiadum, Iſthmiadum, Nemeadum, &c. publiſhed by his ſon at Oxford in 1700. He engaged biſhop Burnet to undertake his Hiſtory of the Reformation, furniſhed him with a curious collection of his own obſervations, and corrected it with the moſt critical exactneſs. He aſſiſted Dr. Wilkins in compoſing his Eſſay towards a real Character and a philoſophical Language; and he added the chronology, and many of the references, and parallel places, printed in moſt of our Engliſh Bibles, particularly the quarto editions. *Gen. Dict. Burnet's Hiſt. of his own Times.*

LLOYD (Nicholas), an Engliſh divine, who was rector of St. Mary Newington, Surrey, where he died in 1680, at the age of 49. He compiled an hiſtorical, geographical, and poetical dictionary, which was printed at Oxford in 1670, in folio; and in 1695, in 4to.

LLOYD (Robert), ſon of Dr. Pierſon Lloyd, was one of the uſhers of Weſtminſter-ſchool. We have already, under the article CHURCHILL, vol. iv. p. 585, referred to this unfortunate young man, who is known chiefly as an author by a poem entitled The Actor, which not only exhibited proofs of great judgment in the ſubject he was treating of, but had alſo the merit of ſmooth verſification and ſtrength of poetry. He was ſome time at the univerſity of Cambridge, where he took the degree of M. A. After he quitted his place as uſher at Weſtminſter-ſchool, he relied entirely on his pen for ſubſiſtence; being of a thoughtleſs and very extravagant diſpoſition, he got deeply into debt, and was in conſequence thrown into the Fleet priſon, where he depended almoſt wholly on the bounty of his friend Churchill, whoſe kindneſs to him continued undiminiſhed during all his neceſſities. On the death of his benefactor, Mr. Lloyd ſunk into a ſtate of deſpondency, which put an end to his exiſtence in 1764. Mr. Wilkes ſays, that "Lloyd was mild and affable in private life, of gentle manners, and very engaging converſation. He was an excellent ſcholar, and an eaſy natural poet. His peculiar excellence was the dreſſing up an old thought in a new, neat, and trim, manner. He was contented to ſcamper round the foot of Parnaſſus on his little Welſh poney, which ſeems never to have tired. He left the fury of the winged ſteed, and the daring heights of the ſacred mountain, to the ſublime genius of his friend Churchill." His works were publiſhed in 2 vols. 8vo. in 1774.

LLOYD (General), the author of ſome uſeful works upon military affairs, was by birth an Engliſhman, but actively employed during the ſeven-years' war in the armies of Auſtria and Pruſſia. His works, forming an inexhauſtible ſource of moral, political, and military, information, conſiſt: 1ſt, of his Introduction to the Hiſtory of a Seven Years' War, entitled "Memoirs Military and Political;" which was tranſlated into French by an officer named Saint-Memon. 2dly, the Hiſtory itſelf, in two volumes; the firſt of which, containing the campaigns of 1756–7, was tranſlated into French by Rouz-Fazillac. 3dly, his Memoir on the Invaſion and Defence of Great Britain, tranſlated by Imbert. The Hiſtory of the Seven Years' War, in plan and execution, preſents an invaluable model to other writers. It contains general remarks on the art of war, according to the exiſting ſyſtem; he traces a brief ſketch of the relative ſituations, political and military, of the belligerent powers, and developes the operations of each campaign. He gives us a general view of the theatre of war, but particularizes the ſcenes of the principal actions; all which he narrates with a correctneſs and ability attributable ſolely to experience and ſuperior judgment. Mr. Lloyd died in the year 1783, at the moment he had it in contemplation to compoſe a general hiſtory of the wars in Flanders, Germany, and Italy, for the two foregoing centuries. *Andreoſſi's Obſervations on the Art of War.*

LLOYD's LA'KE, a bay on the ſouth coaſt of Eaſt Florida. Lat. 25. 18. N. lon. 80. 50. W.

LLUCH MAYO'R, a town of the iſland of Majorca: fifteen miles eaſt-ſouth-eaſt of Palma.

LLU'E, a river of North Wales, which runs into Pemble Meer in the county of Merioneth.

LLU'E, or THLU'E, a river in Caermarthenſhire, which runs into the Llogher near Llogher-Caſtle.

LLUL'LA AND CHIL'LARS, a juriſdiction of Peru, in the biſhopric of Truxillo. The principal commerce is in tobacco and almonds.

LLYN SAV'ATHAN, a lake of South Wales, in Brecknockſhire: four miles eaſt of Brecknock.

LLY'NAN, a river of North Wales, which runs into the Iriſh Sea about five miles ſouth of Caernarvon.

LLY'WARCH, a Welſh bard, who flouriſhed from about 1160 to 1220. Many of his pieces are in the Welſh Archaiology, and contain ſeveral hiſtorical notices of value.

LO, *interject.* [la, Sax.] Look; ſee; behold. It is a word uſed to recall the attention generally to ſome object of ſight; ſometimes to ſomething heard, but not properly; often to ſomething to be underſtood.—*Lo!* within ken our army lies. *Shakeſpeare.*

Now muſt the world point at poor Catharine,
And ſay, *Lo!* there is mad Petruchio's wife. *Shakeſpeare.*

To LO, *v. n.* [chiefly uſed in the imperative mode.] Look, ſee, behold; to expreſs ſurpriſe by crying *lo.*—Why *lo* you now! *Shakeſpeare.*

LO, *ſ.* An exclamation, a note of attention; as, You introduce that ſentence with a *lo* and behold.

LO, a river of China, which riſes in Chen-ſi, and runs into the Hoang twelve miles ſouth-eaſt of Tong.

LO, a river of China, which riſes ſeven miles ſouth of Sin-nhing, in Hou-quang, and runs into the Heng near Siang-yn.

LO, a river of England, which riſes in Cornwall, and runs into the ſea below Helſtone.

LO, in France. See SAINT LO.

LO-AM'MI, [Heb. not my people.] The name of a man. *Hoſea.*

LO-DE'BAR, [Hebrew.] The name of a place.

LO-HOE'I, a town of China, of the third rank, on the eaſt coaſt of the iſland of Hainan: forty-two miles ſouth-eaſt of Kiong-tcheou.

LO-KIANG', a town of China, of the third rank, in Se-tchuen: ſeventeen miles ſouth-weſt of Mien.

LO-KIANG-SO', a town of China, in Quang-tong: fifteen miles ſouth-weſt of Lao-ting.

LO-NAN', a town of China, of the third rank, in the province of Chen-ſi: fifteen miles north of Chang.

LO-PE', a town of China, of the third rank, in Quang-ſi: ſeven miles eaſt of Ta-ping.

LO-PING', a town of China, of the third rank, in Kiang-ſi: thirty miles eaſt of Yao-tcheou.

LO-PING', a town of China, of the third rank, in Chan-ſi: fifteen miles ſouth of Ping-ting.

LO-PING', a city of China, of the ſecond rank, in Yunnan: 1112 miles ſouth-ſouth-weſt of Pe-king. Lat. 25. N. lon. 103. 55. E.

LO-TCHANG', a town of China, of the third rank, in Quang-tong: twenty miles north-weſt of Chao-tcheou.

LO-TCHE'OU, a town of Corea: twenty-two miles weſt-ſouth-weſt of Koang-tcheou.

LO-TCHING', a town of China, of the third rank, in Quang-ſi: forty-two miles north-weſt of Lieou-tcheou.

LO-TCHU'EN, a town of China, of the third rank, in the province of Quang-ſi: ſeventeen miles ſouth-ſouth-eaſt of Ouei-ling.

LO-TCHU'EN, a town of China, of the third rank, in the province of Chen-ſi: twelve miles ſouth-eaſt of Fou.

LO-TI'EN, a town of China, of the third rank, in Hou-quang: forty miles north-eaſt of Hoang-tcheou.

LO-TING', a town of China, of the third rank, in Chang-tong: twenty-five miles north-weſt of Vou-ting.

LO-TONG', a town of China, of the third rank, in Yun-nan: thirty-two miles weſt of Yun-nan.

LO-TSA', a town of China, of the third rank, in Setchuen: fifty miles eaſt-ſouth-eaſt of Tching-tou.

LO-TSE', a town of China, of the third rank, in Yun-nan: twenty-five miles north-weſt of Yun-nan.

LO-TSIN', a town of China, of the third rank, in Tchekiang: twelve miles north-eaſt of Ouen-tcheou.

LO'A, a river of Peru, which runs into the Pacific Ocean in lat. 21. 30. S.

LO'ACH, *ſ.* [*loche*, Fr.] See COBITIS, vol. iv. p. 716. —The *loach* is a moſt dainty fiſh; he breeds and feeds in little and clear ſwift brooks or rills, and lives there upon the gravel, and in the ſharpeſt ſtreams: he grows not to be above a finger long, and no thicker than is ſuitable to that length: he is of the ſhape of an eel, and has a beard of wattels like a barbel: he has two fins at his ſides, four at his belly, and one at his tail, dappled with many black or brown ſpots: his mouth, barbel-like, under his noſe. This fiſh is uſually full of eggs or ſpawn, and is by Geſner, and other phyſicians, commended for great nouriſhment, and to be very grateful both to the palate and ſtomach of ſick perſons; and is to be fiſhed for with a ſmall worm at the bottom, for he ſeldom riſes above the gravel. *Walton's Angler.*

LO'AD, *ſ.* [hlaɒe, Sax.] A burthen; a freight; lading:

Let India boaſt her groves, nor envy we
The weeping amber, and the balmy tree;
While by our oaks the precious *loads* are borne,
And realms commanded which theſe trees adorn. *Pope.*

Weight; preſſure; encumbrance:

Jove lighten'd of its *load*
Th' enormous maſs, the labour of a god. *Pope.*

Weight or violence of blows.—And Mneſtheus laid hard *load* upon his helm. *Dryden.*

Like lion mov'd, they laid on *load*,
And made a cruel fight. *Chevy Chace.*

Any thing that depreſſes.—How a man can have a quiet and cheerful mind under a great burthen and *load* of guilt, I know not, unleſs he be very ignorant. *Ray.*—As much drink as one can bear.—There are thoſe that can never ſleep without their *load*, nor enjoy one eaſy thought, till they have laid all their cares to reſt with a bottle. *L'Eſtr.*

The thund'ring god,
Ev'n he withdrew to reſt, and had his *load*. *Dryden.*

To LO'AD, *v. a.* [preterite, *loaded*; part. *loaden* or *laden*.] To burden; to freight.—Your carriages were heavy *loaden*; they are a burden to the beaſt. *Iſa.* xlvi. 1.

At laſt, *laden* with honour's ſpoils,
Returns the good Andronicus to Rome. *Shakeſpeare.*

To encumber; to embarraſs.—He that makes no reflections on what he reads, only *loads* his mind with a rhapſody of tales, fit in winter nights for the entertainment of others. *Locke.*—To charge a gun.—A mariner having diſcharged his gun, and *loading* it ſuddenly again, the powder took fire. *Wiſeman.*—To make heavy by ſomething appended or annexed:

Thy dreadful vow, *loaden* with death, ſtill ſounds
In my ſtunn'd ears. *Addiſon's Cato.*

LO'AD, *ſ.* [more properly *lode*, as it was anciently written; from læɒan, Sax. to lead.] The leading-vein in a mine.—The tin lay couched at firſt in certain ſtrakes amongſt the rocks, like the veins in a man's body, from the depth whereof the main *load* ſpreadeth out his branches, until they approach the open air. Their manner of working in the lead-mines, is to follow the *load* as it lieth. *Carew's Surv. of Cor.*—In Cornwall and Devonſhire the *loads* chiefly hold their courſe from eaſtward to weſtward, though in other parts of England they frequently run from north to ſouth. *Ency. Brit.*

LOAD is alſo uſed for nine diſhes of ore, each diſh being about half a hundred weight.

LOAD WATER-LINE, in a ſhip, is the deepeſt line of floatation, or when all her cargo is taken in.

LO'ADER, *ſ.* He who loads.

LO'ADING, *ſ.* The act of burdening; that with which any thing is loaded; the cargo, the lading.

LO'ADSMAN, or LODESMAN, *ſ.* He who leads the way; a pilot.

LO'ADSTAR, *ſ.* [more properly, as it is in Maundeville, *lodeſtar*; from læɒan, to lead.] The pole-ſtar; the cynoſure; the leading or guiding ſtar.—She was the *loadſtar* of my life; ſhe the bleſſing of mine eyes; ſhe the overthrow of my deſires, and yet the recompence of my overthrow. *Sidney.*

Your eyes are *loadſtars*, and your tongue ſweet air!
More tuneable than lark to ſhepherd's ear,
When wheat is green, when hawthorn buds appear. *Shakeſp.*

She ſtandeth fix'd, yet ſpreads her heavenly worth,
Lodeſtone to hearts, and *loadſtar* to all eyes. *Davies*

LO'ADSTONE, *ſ.* [properly *lodeſtone*, or *læding-ſtone*.] The magnet; the ſtone on which the mariners' compaſs-needle is touched to give it a direction north and ſouth. —The *loadſtone* is a peculiar and rich ore of iron, found in large maſſes, of a deep iron-grey where freſh broken, and often tinged with a browniſh or reddiſh colour; it is very heavy, and conſiderably hard, and its great character is that of affecting iron. This ore of iron is found in England, and in moſt other places where there are mines of that metal. *Hill's Materia Medica.*—See MAGNET and MAGNETISM.

LO'AF, *ſ.* [from hlaf or laf, Sax.] A maſs of bread as it is formed by the baker: a loaf is thicker than a cake. —With equal force you may break a *loaf* of bread into more and leſs parts than a lump of lead of the ſame bigneſs. *Digby.*

Eaſy it is
Of a cut *loaf* to ſteal a ſhive, we know. *Shakeſpeare.*

Any thick maſs into which a body is wrought.—Your wine becomes ſo limpid, that you may bottle it with a piece of *loaf*-ſugar in each bottle. *Mortimer.*

LO'AM, *ſ.* [lim, laam, Sax. *limus*, Lat. from λιμνη, Gr. a fen. *Junius.*] Fat, unctuous, tenacious, earth:

The pureſt treaſure
Is ſpotleſs reputation; that away,
Men are but gilded *loam* or painted clay. *Shakeſpeare.*

A kind of mortar made of this earth by tempering it with water, ſtraw, &c.—Alexander returneth to duſt: the duſt is earth; of earth we make *loam*; and why of that *loam* might they not ſtop a beer-barrel? *Shakeſpeare.*

To LO'AM, *v. a.* To ſmear with loam, or mortar made of loam.—The joiſt-ends, and girders which be in the walls, muſt be *loamed* all over, to preſerve them from the corroding of the mortar. *Moxon's Mechanical Exer.*

LO'AMING, *ſ.* The act of ſpreading over with loam.

LO'AMY, *adj.* Abounding in loam; conſiſting chiefly of loam.—The mellow earth is the beſt, between the two extremes of clay and ſand, if it be not *loamy* and binding. *Bacon.*—Auricula ſeedlings beſt like a *loamy* ſand, or light moiſt earth; yet rich and ſhaded. *Evelyn.*

LO'AN, *ſ.* [hlæn, Sax.] Any thing lent; any thing given to another, on condition of return or repayment.—The better ſuch ancient revenues ſhall be paid, the leſs need her majeſty aſk ſubſidies, fifteens, and *loans*. *Bacon.*

You're on the fret,
Becauſe, in ſo debauch'd and vile an age,
Thy friend and old acquaintance dares diſown
The gold you lent him, and forſwear the *loan*. *Dryden.*

LOAN'DA, an iſland in the Atlantic, near the coaſt of Angola, about eighteen miles in length, and one mile wide, divided from the continent by a narrow channel, which forms a good harbour. The ſoil is unfruitful for grain; but fruits, ſuch as oranges, figs, citrons, &c. abound.

abound. It contains ſeven or eight villages. On the coaſt are found ſhell-fiſh, called zimbi, uſed for money by the natives, like cowries in the Indies. Lat. 8. 50. S.

LOAN'DA, or St. Paul de Loanda, a ſeaport town of Africa, in the kingdom of Angola, and capital of a fertile province, called Loanda, in poſſeſſion of the Portugueſe; the ſee of a biſhop, and containing ſeveral churches, convents, and about 5000 inhabitants; of whom only one thouſand are whites; the reſt are blacks or mulattoes. The country abounds in cattle and ſheep; Indian corn, millet, manioc, and fruits. Lat. 8. 55. S. lon. 13. 22. E.

LO'ANG-TSCHING', a town of China, of the third rank, in Pe-tche-li: fifteen miles ſouth of Tching-ting.

LOANGHIL'LY, a town of Africa, in Loango: the uſual burying-place of the emperor: ten miles ſouth of Loango.

LOAN'GO, a country of Africa, ſituated on the weſt coaſt, towards the Atlantic, and bounded on the north by Benin, on the eaſt by Anziko, and on the ſouth by Congo. The climate of this kingdom is much hotter, but not leſs healthy and pleaſant, than that of Congo and Angola, nor the ſoil leſs fertile. The inhabitants, indeed, are little diſpoſed to plant or ſow more than is ſufficient for their wants. They commonly content themſelves with bread and fiſh, and ſuch fruits, greens, and pulſe, as the ground naturally produces. They have ſeveral ſorts of peaſe and beans, large and ſmall millet, of all which the ground yields them three crops in the year. Their palms, bananas, and other trees, produce excellent fruits, of which they make wines. The cotton and pimento trees grow wild, as well as the paradiſe grain. Sugar-canes, caſſia, and tobacco, grow plentifully; but cocoas, oranges, and lemons, are not cultivated much. They have a great variety of roots, herbs, fruits, grain, and other vegetables, which they make bread of, or uſe for food. They have but few cattle, except goats and hogs; but poultry is ſo very cheap, that ſix-pennyworth of beads will purchaſe thirty of them. Among the wild beaſts they have the zebra, and multitudes of elephants, whoſe teeth they exchange with the Europeans for iron. The natives, who are called *bramas*, are tall, ſtout, and well-formed; and, though formerly cannibals, are of late much improved in their manners. They practiſe circumciſion, are addicted to trade among themſelves, and are friendly and hoſpitable in their mutual intercourſe. They are fond of females, and jealous of their wives. Every man marries as many as he pleaſes, who are obliged to get their huſbands a livelihood, as is the practice all along the African coaſt inhabited by blacks. The women, therefore, cultivate the land, ſow and reap, while the lazy huſbands loiter away their time in idleneſs. The king has about 1500 concubines. If any of them is ſurpriſed in adultery, ſhe and her paramour are inſtantly conveyed to the top of a very high hill, whence they are hurled down headlong from the ſteepeſt place.

The dreſs of the Loangoeſe conſiſts chiefly of cloth manufactured by themſelves; and they are fond of ornaments about their necks, legs, and wriſts, which they form of beads of coral, ivory, ſhells of a beautiful hue, chains of copper, tin, or iron, obtained from Europe. Of a Supreme Being, their notions are very imperfect and confuſed. Their worſhip is addreſſed to demons, domeſtic and rural; and to theſe they aſcribe great influence. To their monarchs they attribute a kind of ſupernatural and unlimited power. The foreign commerce of the country conſiſts chiefly in ſlaves; and they likewiſe ſell conſiderable quantities of ivory, tin, lead, iron, and copper.

The kingdom of Loango, ſeparated from Congo, of which it was formerly a part, is divided into four principal provinces, viz. Lovangiri, Louango-Mongo, Kilongo, and Piri. The firſt is fertile and well inhabited. The ſecond, lying north-eaſt of the former, is ſpacious and productive, particularly of palm-trees, the oil of which they extract in great quantities; and the inhabitants employ themſelves in working a variety of linen and cloth. The third is a maritime province, and is the largeſt and the moſt populous of the four; its plains are extenſive and fertile, and they are ſheltered at a diſtance by ridges of high mountains; the trade of the inhabitants, who are rude and unpoliſhed, conſiſts in elephants' teeth. The laſt province, north of Kilongo and Louango-Mongo, is low and flat, but abounds with variety of fruits and other trees, and is well peopled and cultivated; the inhabitants are peaceable, and ſtrangers to war. They have plenty of cattle, and of wild and tame fowl, and take great pleaſure in hunting. Their food is ſupplied by the game they take, and the milk of their cattle. In all theſe provinces there are many towns and villages.

LOAN'GO, capital of the country ſo named, ſituated on a river, which forms a bay at its mouth, about ſix miles from the coaſt of the Atlantic. It is called Loango, or Lovango, and Banza Loangiri; but by the natives *Borai*, or *Boori*. It is very airy and ſpacious, as the houſes are not contiguous to each other. The ſtreets are wide, and kept very clean; and the ſides lined with palm-trees, bananas, and bacavas, which afford a grateful ſhelter to the houſes before; and moſt of thoſe of the better ſort have the ſame behind, or even quite round, by way of ornament. In the centre of the city, facing the royal palace, is a great ſquare, and the palace itſelf, which forms another ſquare, a mile and a half in compaſs, is ſurrounded with a paliſado of ſtately palm-trees. It conſiſts of a vaſt number of houſes, among which are thoſe of the king's women, each of which is large enough to lodge ſeven or eight of them. The houſes of the king, his halls of audience, and other offices, are on the weſt ſide, facing the plain area above-mentioned, in which laſt he holds his councils of war; and there alſo feaſts his prime officers, and ſometimes his whole army. From this plain, likewiſe, there runs a wide ſtreet, ſome muſket-ſhots from the place, where there is a conſiderable market kept every day, which begins at ten o'clock, and where there are ſold great quantities and variety of palm-cloth; alſo proviſions, as meal, poultry, fiſh, wine, corn, and oil. In this market-place is a famous temple, and a mokiſſo, or idol, called *Mokiſſo Loango*, which was held in great veneration both by the kings and people. As to the other houſes of this metropolis, they are for the moſt part oblong, and covered in ſuch a manner as that the middle part of the top is flat, much after the Italian manner. They have uſually three or four rooms, but no ſtories upon one another. Every houſe is fenced round with a hedge of palm-twigs, canes, or bulruſhes. The furniture of their houſes conſiſts in a variety of pots and kettles, calibaſhes, baſkets, mats, and benches, on which they lay their clothes, weapons, and other utenſils. The bay of Loango, though reckoned pretty good, is incommoded, nevertheleſs, by a bank on the north ſide of its mouth or entrance, which runs about half a league along the coaſt, and has not above two fathoms and a half of water. The many large rivers that come down from the continent, occaſion ſuch ſtrong and rapid currents towards the north during almoſt the whole year, that it is very difficult to weather them, and gain a ſouthern courſe. The only months in which they may be ſtemmed with ſafety and eaſe, are January, February, March, and April; all the reſt of the year the currents flow ſo ſtrong, that even coaſters muſt keep at leaſt ten or twelve leagues off the land. Lat. 4. 40. S. lon. 10. 25. E.

LOAN'GO, a river of Africa, which runs into the Atlantic in lat. 10. 30. S.

LOA'NO, or Lovano, a town of Genoa, near the ſea; ſix miles ſouth-ſouth-weſt of Finale.

LO'AR, or Loar're, a town of Spain, in Aragon: thirteen miles ſouth of Jaca.

LOARDE'GA, a town of Hindooſtan, in Bahar: forty miles ſouth of Palamow.

LOA'SA, *ſ.* [probably ſo named by Adanſon from ſome Spaniſh botaniſt.] In botany, a genus of the claſs polyandria, order monogynia. The generic characters are—Calyx: perianthium five-leaved, ſuperior, permanent; leaflets

leaflets lanceolate, very ſpreading, with reflex ſides. Corolla: petals five, obovate, hooded, large, extremely ſpreading, narrowed at the baſe into claws. Nectary of five leaflets, alternating with the petals, converging into an acute cone, rather ſhorter than the calyx, lanceolate, rugoſe, awned with a double filament. Stamina: filaments numerous, capillary, longer than the nectary, from fifteen to ſeventeen to each petal; antheræ incumbent, roundiſh. Piſtillum: germ ſubovate, ſeed-bearing; ſtyle ſiliform, upright, the length of the ſtamens; ſtigma ſimple, obtuſe. Pericarpium: capſule top-ſhaped, one-celled, three-valved at the tip; valves ſemi-ovate, acute, ſpreading. Seeds: a great many, ovate, ſmall; receptacles three longitudinal lines running from the bottom of the capſule to the inciſures of the valves. In point of affinity it approaches to Mentzelia. In habit, and ſituation of the germ and ſeeds, it approaches the cucurbitaceous plants.—*Eſſential Character.* Calyx five-leaved, ſuperior: corolla five-petalled; petals hooded; nectary five-leaved, converging; capſule turbinate, one-celled, three-valved, many-ſeeded.

Loaſa hiſpida, a ſingle ſpecies. It is an elegant annual plant, riſing from a fibrous white root, the thickneſs of the little finger. It is ſubdivided into ſpreading branches; and is armed all over with ſtiff ſhining browniſh prickles, that ſting like the nettle. Stems round, whitiſh green, marked here and there with ſhort brown longitudinal lines. Leaves pinnatifid, petioled, irregularly alternate, rough, blunt; the uppermoſt ſinuate. Flowers elegant, but void of ſcent. Calycine ſegments acuminate, hairy. Petals yellow; nectaries white variegated with red and green dots; theſe are at a little diſtance from each other, the filaments whilſt they remain upright occupying the interſtices, and the antheræ exploding their pollen whilſt they are cloſe to the ſtigma. After the fecundation is completed, the filaments retire gradually under the arches of the petals. Adanſon calls theſe ſmall laminæ petals, and therefore makes the number of the petals ten. Feuillée ſays, that the corolla in his plant is red and deep green beneath, and that the leaves are oppoſite. Adanſon affirms that the capſule is five-valved, and the petals connected, which is not the caſe in Jacquin's plant. Perhaps Feuillée's and Adanſon's plant may be the ſame, and different from Jacquin's. Native of South America, and cultivated at Vienna before 1767.

LO'ATH, or Loth, *adj.* [laƀ, Sax.] Unwilling; diſliking; not ready; not inclined.—When Æneas is forced to kill Lauſus, the poet ſhows him compaſſionate, and is *loth* to deſtroy ſuch a maſter-piece of nature. *Dryden.*

As ſome faint pilgrim, ſtanding on the ſhore,
Firſt views the torrent he would venture o'er,
And then his inn upon the farther ground;
Loth to wade through, and *lother* to go round:
Then, dipping in his ſtaff, does trial make
How deep it is; and, ſighing, pulls it back. *Dryden.*

I know you ſhy to be oblig'd;
And ſtill more *loath* to be oblig'd by me. *Southerne.*

To LO'ATHE, *v. a.* To hate; to look on with abhorrence:

How am I caught with an unwary oath,
Not to reveal the ſecret which I *loathe!* *Waller.*

To conſider with the diſguſt of ſatiety.—*Loathing* the honey'd cakes, I long'd for bread. *Cowley.*

To LO'ATHE, *v. n.* To create diſguſt; to cauſe abhorrence. *Obſolete.*

Where I was wont to ſeek the honey-bee,
The griſly toadſtool grown there might I ſee,
And *loathing* paddocks lording on the ſame. *Spenſer.*

To feel abhorrence or diſguſt.—The fiſh in the river ſhall die, and the river ſtink; and the Egyptians ſhall *loathe* to drink of the water. *Exodus.*

Why do I ſtay within this hated place,
Where every object ſhocks my *loathing* eyes? *Rowe.*

LO'ATHER, *ſ.* One that loathes.

LO'ATHFUL, *adj.* Abhorring; hating:

Which he did with *loathful* eyes behold,
He would no more endure. *Hubberd's Tale*

Abhorred; hated:

Above the reach of *loathful* ſinful luſt,
Whoſe baſe effect, through cowardly diſtruſt
Of his weak wings, dare not to heaven flie. *Spenſer.*

LO'ATHING, *ſ.* Hatred; diſlike.—Parthenia had learned both liking and miſliking, loving and *loathing*. *Sidney.*—Our appetite is extinguiſhed with the ſatisfaction, and is ſucceeded by *loathing* and ſatiety. *Rogers.*—*Loathing* is a ſymptom known to attend diſorders of the ſtomach; the cure muſt have regard to the cauſe. *Quincy.*

I can give no reaſon,
More than a lodg'd hate, and a certain *loathing*
I bear Antonio. *Shakeſpeare's Merchant of Venice.*

LO'ATHINGLY, *adv.* In a faſtidious manner.

LO'ATHLY, *adj.* Hateful; abhorred; exciting hatred.—Unfather'd heirs, and *loathly* births of nature. *Shakeſpeare.*

An huge great dragon, horrible in ſight,
Bred in the *loathly* lakes of Tartary. *Fairy Queen.*

Sour-ey'd diſdain and diſcord ſhall beſtow
The union of your bed with weeds ſo *loathly*,
That you ſhall hate it. *Shakeſpeare's Tempeſt.*

LO'ATHLY, *adv.* Unwillingly; without liking or inclination.—The upper ſtreams make ſuch haſte to have their part of embracing, that the nether, though *lothly*, muſt needs give place unto them. *Sidney.*

This ſhows that you from nature *loathly* ſtray,
That ſuffer not an artificial day. *Donne.*

LO'ATHNESS, *ſ.* Unwillingneſs.—After they had ſat about the fire, there grew a general ſilence and *lothneſs* to ſpeak amongſt them; and immediately one of the weakeſt fell down in a ſwoon. *Bacon.*

Should we be taking leave
As long a term as yet we have to live,
The *lothneſs* to depart would ſtill continue. *Shakeſpeare.*

LO'ATHSOME, *adj.* Abhorred; deteſtable.—If we conſider man in ſuch a *loathſome* and provoking condition, was it not love enough that he was permitted to enjoy a being? *South.*

While they pervert pure nature's healthful rules
To *loathſome* ſickneſs. *Milton's Paradiſe Loſt.*

Cauſing ſatiety or faſtidiouſneſs:

The ſweeteſt honey
Is *loathſome* in its own deliciouſneſs,
And in the taſte confounds the appetite. *Shakeſpeare.*

LO'ATHSOMENESS, *ſ.* Quality of raiſing hatred, diſguſt, or abhorrence.—The catacombs muſt have been full of ſtench and *loathſomeneſs*, if the dead bodies that lay in them were left to rot in open nitches. *Addiſon.*

LO'AVES, plural of *loaf*.—Democritus, when he lay a-dying, cauſed *loaves* of new bread to be opened, poured a little wine into them; and ſo kept himſelf alive with the odour till a feaſt was paſt. *Bacon.*

LO'AVES, two rocks or ſmall iſlands in the Eaſtern Indian Sea: fifteen miles north-eaſt from the iſland of Madura.

LOA'YSA (Garcias de), a learned Spaniſh prelate, born at Talavera, in New Caſtile, about the year 1532. He was educated at the univerſity of Alcala, and acquired a high reputation for his profound acquaintance with philoſophy, divinity, the ſacred ſcriptures, hiſtory, and antiquities. He was promoted to a canonry, and alſo to an archdeaconry, in the metropolitan church of Toledo, where he reſided till 1584. In that year he was appointed almoner and dean of the chapel to king Philip II. and not long afterwards that monarch confided to him the education of his ſon, prince Philip. For this poſt he was admirably qualified, not only by his extenſive erudition, but by his excellent

excellent character, his ſweetneſs of temper, and agreeable pleaſing manners; whence, like the emperor Titus, he was called "the delight of human kind." For a conſiderable time he preſided over the ſee of Toledo, as *locum tenens* for Albert of Auſtria, nominated to that archbiſhopric; and upon the marriage of Albert, pope Clement VIII. at the requeſt of the king of Spain, appointed Loayſa to that dignity. Before, however, his pall arrived from Rome, he was carried off by a ſudden diſorder, when about ſixty-five years of age. It is reported that his death was owing to a broken heart, occaſioned by the ingratitude and ill-treatment which he experienced from his pupil Philip, after his acceſſion to the throne. Our prelate publiſhed at Madrid, in 1593, *Collectio Conciliorum Hiſpaniæ*, in folio, with learned and valuable prolegomena, diſſertations, and notes.—The editors of Moreri's Dictionary, and of the Nouveau Dictionnaire Hiſtorique, have erroneouſly attributed this work to a prelate of the ſame name, who was confeſſor to the emperor Charles V. preſident of the council of the Indies, archbiſhop of Seville, and a member of the college of cardinals.

LOB, *ſ.* Any one heavy, clumſy, or ſluggiſh:

Farewel, thou *lob* of ſpirits: I'll be gone;
Our queen and all her elves come here anon. *Shakeſp.*

A big worm.—For the trout the dew-worm, which ſome alſo call the *lob*-worm, and the brandling, are the chief. *Walton's Angler.*

LOB's POUND. A priſon. Probably a priſon for idlers, or ſturdy beggars:

Crowdero, whom in irons bound,
Thou baſely threw'ſt into *lob's pound.* *Hudibras.*

To LOB, *v. a.* To let fall in a ſlovenly or lazy manner:

The horſemen ſit like fixed candleſticks,
And their poor jades
Lob down their heads, dropping the hide and hips. *Shakeſp.*

LOBA'RIA, *ſ.* in helminthology, a genus of worms of the order molluſca. Generic characters—Body lobate, convex above, flat beneath. There is but one ſpecies,

Lobaria quadriloba: tail four-lobed. It inhabits the northern ſeas, at the bottom, among rocks; and is therefore very rarely met with for examination: hence it has been but imperfectly deſcribed. The naturaliſt who firſt made it known was Aſcanius, in the Act. Stock. 1772, by the name of Philine quadripartita. Muller deſcribes the whole animal (not the tail only) as divided into four lobes; the under part was divided into three ſmaller lobes. It was white, cartilaginous, and ſlippery. He could diſcover neither foramina nor tentacula; nor any motion except a very ſlow winding of the extremities of the ſmaller lobes: he confeſſes, however, that he made no very exact diſſection. The ſpecimen he examined was 18 lines long, 15 broad.

Abildgaard, who edited the third part of Zool. Dan. after the death of O. F. Muller, gave a more particular deſcription of this worm, accompanied with figures, which we have copied. The ſpecimens he examined did not exceed 7 lines in length. The covering is roundiſh, pellucid, very thin, and ſtriated longitudinally. The food ſeems to be a teſtaceous worm of the genus Bulla. In the ſtomach was alſo noticed, both by Muller and Abildgaard, a bony ſubſtance, conſiſting of three ſpindle-ſhaped lamellæ, connected by a ſoft membrane, and including a fleſhy matter terminating in a long inteſtine. The upper ſurface, or back, is divided into four lobes, the lower part into three. Between the lower and ſmaller lobes a longitudinal fiſſure appears on the ſides; this is the vent, whence the excrements are protruded. On the top of the anterior part of the body the mouth opens croſſwiſe; and above the fiſſure are two large points, or warts. Outer lip entire, ſlender; inner lip ſomewhat twiſted, ſimilar to the Bulla hydatis and aperta. Fig. 1, on the annexed Plate, is a back view of this worm; *a* is the poſterior extremity. Fig. 2, a front view of the ſame, the poſterior extremity uppermoſt, at *b*. Fig. 3, another front view of the ſame, the ſituation of the left lobe being altered, to ſhow the rima, or vent at the poſterior extremity. Fig. 4, another front view; *c*, the fore-part; *d*, the hind-part. Fig. 5, the anterior extremity of the body magnified, to ſhow the tranſverſe opening of the mouth, and the two marginal dots at the apex.

LO'BATE, *adj.* Having lobes. In botany, applied to leaves which are divided to the middle into parts diſtant from each other, with convex margins. The latter clauſe ſeems neceſſary to diſtinguiſh theſe from the cleft or cloven leaves. Theſe leaves take the names of *bilobate*, *trilobate*, &c. or *two-lobed*, *three-lobed*, &c. from the number of lobes into which they are divided. *Martyn's Language of Botany.*

LOBAU', a town of Pruſſia, in the territory of Culm: forty-four miles eaſt of Culm.

LOBAU', or LIE'BE, or LOBI'JE, a town of Upper Luſatia. It is one of the moſt ancient towns of the province, contains two churches, three chapels, an hoſpital, and a Latin ſchool. The chief trade is in linen and thread: twelve miles eaſt-ſouth-eaſt of Budiſſen, and ten ſouth-weſt of Görlitz. Lat. 51. 7. N. lon. 14. 46. E.

LOBB (Theophilus), a phyſician of conſiderable reputation about the middle of the laſt century, practiſed his profeſſion in London, and left ſeveral works on medical topics. He died on the 19th of May, 1763, in the eighty-fifth year of his age. The following are the titles of his publications. 1. Treatiſe of the Small-pox, London, 1731, 1748, 8vo. which was tranſlated into French in 1749. 2. Rational Method of curing Fevers, deduced from the Structure of the Human Body, Lond. 1734, 8vo. in this work he adopted the doctrines of Boerhaave. 3. Medical Practice in curing Fevers, 1735, 8vo. 4. A Practical Treatiſe on painful Diſtempers, with ſome effectual Methods of curing them, 1739. 5. A Treatiſe on Solvents of the Stone, and on curing the Stone and the Gout by Aliments, 1739. This work paſſed through ſeveral editions, and was tranſlated into Latin and French. The author conſidered the matter of urinary calculi and of gout as of an alkaline nature, and vegetable acids as the remedy. See LITHONTRIPTIC, p. 821. 6. Letters concerning the Plague and other contagious Diſtempers, 1745. 7. A Compendium of the Practice of Phyſic, 1747. Beſides theſe works, he was the author of ſeveral papers printed in the Gentleman's Magazine, and of one or more tracts on religious ſubjects in the latter part of his life. *Gent. Mag.*

LOB'BES. See OBBES.

LOB'BY, *ſ.* A ſmall hall or waiting-room; it is alſo an entrance into a principal apartment, where there is a conſiderable ſpace between that and a portico or veſtibule, and the length or dimenſions will not allow it to be conſidered as a veſtibule or an anti-room.—Before the duke's riſing from the table, he ſtood expecting till he ſhould paſs through a kind of *lobby* between that room and the next, where were divers attending him. *Wotton.*

His *lobbies* fill with 'tendance,
Rain ſacrificial whiſp'rings in his ear,
Make ſacred even his ſtirrup. *Shakeſp. Tim. of Ath.*

LOBBY, in a ſhip, an apartment cloſe before the captain's cabin.

LOBBY, in agriculture, a word lately brought into uſe for a ſort of narrow confined place, formed either by hedges and trees, or other kinds of fencing, near to the farm-yard, for the purpoſe of confining live-ſtock. It is obſerved by Mr. Marſhall, in his Minutes of Agriculture in the Midland Counties, that "every farmery ought to have a lobby and a croft appending to it, ſerving as a double fence; thereby preventing ſtock from running over, poaching, and injuring the farm; the latter for calves, a ſaddle horſe, and invalids. He found the conveniency of a lobby in Surrey, and the want of one in Norfolk, and in this diſtrict he can foreſee the uſe of that which he is forming, with a ſcreen of planting; embo-

Fig. 1 to 5. Lobaria quadriloba in different positions. 6. Water Lobelia. 7. Ceylon Lobelia.

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J. Pass sc

ſoming the entire farmery, in ſuch a manner as to ſhelter it effectually from the north and eaſt winds."

LOBE, *ſ.* [*lobus*, Lat.] A diviſion; a diſtinct part; uſed commonly for a part of the lungs.—Air-bladders form lobuli, which hang upon the bronchia like bunches of grapes; theſe lobuli conſtitute the *lobes*, and the *lobes* the lungs. *Arbuthnot on Aliments.*

Nor could the *lobes* of his rank liver ſwell
To that prodigious maſs for their eternal meal. *Dryden.*

From whence the quick reciprocating breath,
The *lobe* adheſive, and the ſweat of death. *Sewel.*

The lower part or tip of the ear. Du Laurent ſays, that the word, in this laſt ſenſe, comes from the Greek, λωβεῖν, to ſhame, or be aſhamed; this part of the ear being ſaid to bluſh when the perſon is aſhamed.

LOBE is alſo uſed in ſpeaking of fruits and grains. Thus the bean conſiſts of two equal parts, called lobes, which compoſe the body thereof, and are encompaſſed with the other ſkin. And all other grains, even the ſmalleſt, are divided, like the bean, into the two lobes, or equal parts; as Dr. Grew has ſhown in his Anatomy of Plants.

LOBE'DA, a town of Germany, in the principality of Eiſenach: three miles ſouth-ſouth-eaſt of Jena. Lat. 50. 52. N. lon. 11. 30. E.

LOBEDIAN', a town of Ruſſia, in the government of Tambov: 100 miles weſt-north-weſt of Tambov. Lat. 53. 28. N. lon. 38. 50. E.

LOBEGUN', a town of Weſtphalia, in the duchy of Magdeburg: twenty-five miles north of Leipſic, and thirty-ſix ſouth of Magdeburg.

LOBEI'RA (Vaſco), author of the celebrated romance called Amadis de Gaul, was born at Porta about the middle of the fourteenth century. He was knighted upon the field of battle at Aljubarotta by king Joam I. in the year 1386, and died at Elvas, where he poſſeſſed a good eſtate, in 1403. According to Mr. Southey, nothing more has been collected by the Portugueſe biographers of Lobeira. But it has been queſtioned whether he was the author of the Amadis de Gaul, and whether that poem was not written in France rather than in Portugal; to which the tranſlator replies, "Some weight muſt be allowed to the authority of the Portugueſe writers, who have all, with the exception of Cardoza, attributed it to Lobeira as an original production." "The romance," he farther adds, "is not older than Lobeira's age; for it refers to the Engliſh claim upon the crown of France, and repreſents Windſor as the moſt ſplendid court, and the king of England as the moſt powerful king, in Chriſtendom. It was written in a country remote from England; for Windſor is called an iſland, and the adventurers who croſs from France make Briſtol their port. Many other ſuch inſtances of geographical ignorance could be mentioned; miſtakes which might eaſily be made by a Portugueſe, but not by a Frenchman."

The original of this celebrated romance was preſerved in the library of the dukes of Aveiro; and may poſſibly ſtill be lurking in exiſtence, if it has eſcaped from the wreck of that houſe, and from the earthquake, which was ſo deſtructive to Portugueſe literature. The oldeſt verſion known to be extant is that of Garciordonez de Montalvo, which, according to Barboſa, was publiſhed at Salamanca in 1510. Nicholas Antonio claims it for the Spaniards, ſaying, "It is juſt that in a doubtful caſe the Portugueſe ſhould produce the ſtory in their own language, as the Spaniards did in Caſtilian." But the point was never doubted in Portugal; and the Spaniards themſelves admit Lobeira's claim; and, if it be neceſſary to bring forward modern teſtimony, that of Dr. Gregorio Mayans y Siſcar will be ſufficient to thoſe who are verſed in Spaniſh literature.

A conjecture was lately advanced by an Engliſh critic, that, if the loſt metrical romance of Sir Amadas were diſcovered, it might prove to be the foundation of this ſtory. By a ſingular coincidence, that metrical romance has fallen lately into the hands of Mr. Southey; and he aſſures us that the ſtory has not the ſlighteſt reſemblance to the Amadis of Gaul. Thus we think that the claim of Portugal and of Lobeira to this original work is fully eſtabliſhed.

Of the work itſelf, Mr. Southey ſays, "It may ſafely be affirmed, that it contains nothing which, in the age it was written, would be regarded as impoſſible, ſcarcely any thing which would be thought exaggerated. The actions of Amadis, and the importance of a ſingle chief, would not appear incredible to a people who had heard in their own days of ſir John Chandos, of Bertrand du Gueſclin, and of the Black Prince; and who had then living among them their own hero, Nuno Alvares Pereira, whoſe military exploits were as extraordinary, and as important to his own country; and upon whoſe character, private as well as public, moral and political, there is not the ſlighteſt ſtain or imputation; a knight who paſſed his youth in camps and courts with unſullied purity; who never committed one ſingle act of inhumanity, in an age of cruelty, during a long and ferocious war; who was as liberal as he was brave, as loyal as liberal, and as patriotic as loyal; and who, after living the life of a warrior and ſtateſman, retired in full poſſeſſion of his health and faculties to a cloiſter, and there died like a ſaint. To a nation who knew this man, and knew alſo that it was chiefly owing to his courage that they exiſted as a ſeparate people, the character of Amadis would not appear exaggerated." Indeed Amadis has been conſidered as the model of a perfect knight: "Truly," ſays ſir Philip Sidney, "I have known men, that even with reading Amadis de Gaul, which God knows wanteth much of a perfect poeſie, have found their hearts moved to the exerciſe of courteſy, liberality, and eſpecially courage." Fynes Moryſon, when adviſing a traveller how to learn languages, ſays, "I think no book better for his diſcourſe than Amadis of Gaul; for the knights errant, and the ladies of courts, do therein exchange courtly ſpeeches; and theſe books are in all languages tranſlated by the maſters of eloquence." Mr. Southey's tranſlation of this work is in 4 vols. 8vo. *R. S. in Gen. Biog.*

LO'BEL, or L'OBEL (Matthias de), a botaniſt nearly contemporary with Cluſius, whoſe wooden cuts, for the moſt part, re-appeared in his works, was not, as ſome have thought, an Engliſhman, but born, in 1538, at Liſle in Flanders, where his father practiſed in the law. He acquired in his youth an ardent love of plants; and had good opportunities of gratifying his taſte, and advancing his knowledge, at Montpellier, where he ſtudied phyſic under the learned Rondeletius. During his reſidence there, he found opportunities of making ſome botanical excurſions over the ſouth of France. At Narbonne he became acquainted with Pena, afterwards his fellow laborer in the *Adverſaria*, the firſt edition of which was publiſhed in ſmall folio, at London, in 1570, and dedicated to queen Elizabeth. The few cuts diſperſed through this volume are moſtly original, but inferior in ſtyle and accuracy, as well as in ſize, to thoſe of Cluſius. Before the publication of the Adverſaria, our author had extended his travels to Swiſſerland, the Tyrol, ſome parts of Germany and Italy; had ſettled as a phyſician at Antwerp, afterwards at Delft; and had been appointed phyſician to the illuſtrious William prince of Orange, and to the ſtates of Holland. Dr. Pulteney has not been able to aſcertain the time of Lobel's removal to England, but juſtly concludes it to have been before 1750; indeed, moſt probably, ſome years earlier, as he mentions, in this edition of the Adverſaria, having long ago received from Dr. Turner ſeeds of the ſea-kale, Crambe maritima, of which he there exhibits an indifferent cut, mentioning it as a plant whoſe flowery tops might be eaten, though much inferior to the cultivated kinds of the ſame tribe. It appears by this, that the young ſprouts, now known to be ſo excellent for the table, had not then been tried.

The aim of the authors of the Adverſaria was to inveſtigate the botany and materia medica of the ancients, and eſpecially of Dioſcorides. The Adverſaria was reprinted at Antwerp in 1576, the dedication being, of courſe, there ſuppreſſed.

ſuppreſſed. New title-pages had been printed to help the ſale of the original, in 1571 and 1572. Some copies of the Antwerp impreſſion appear to have been made up into a new edition at London in 1605, an ample Pharmacopeia, the foundation of which was from Rondeletius, being prefixed, and an appendix to the Adverſaria ſubjoined. This volume is dedicated to Edward lord Zouch, whom Lobel had attended, on his embaſſy to Denmark, in 1592; and he calls himſelf, in the title, *botaniſt to king James* I. Dr. Pulteney obſerves, after Haller, that this work exhibits ſome traces of a natural diſtribution of plants, inſomuch at leaſt as they are thrown together into a number of tribes or orders, according to their habits or flowers; but this is done without any remarks, and with ſo little preciſion, that it can only be ſaid the method of Lobel is better than that of Dodonæus, in which there is no conſiſtent principle at all. His work is much more valuable for the various remarks which it contains, and for the accounts of new plants, diſcovered by himſelf in England or elſewhere. On the ſubject of Britiſh natives indeed, Ray accuſes him of having made ſeveral miſtakes, from having truſted too much to his memory. The *Stirpium Hiſtoria* of this author, a volume in ſmall folio ſimilar to his Adverſaria, was publiſhed at Antwerp in 1576. This is much leſs copious in matter, the pages being moſtly occupied with wooden cuts, which are thoſe of Cluſius, borrowed for the preſent occaſion by the printer, Plantin. An impreſſion of theſe cuts, of an oblong ſhape, was ſtruck off, with names only, in 1581, and another in 1591. Linnæus poſſeſſed both. This publication is in very general uſe, and well known by the title of *Lobel's Icones*. It is, when complete, accompanied by an index in ſeven languages. Lobel ſeems to have had a very large work in contemplation, which he intended to call *Stirpium Illuſtrationes*. This he did not live to complete. A fragment of it was publiſhed in quarto, without plates, by Dr. W. How, in 1655, making 170 pages, beſides a cauſtic preface of the author, aimed chiefly at Gerarde, whom he doubtleſs comprehends among the *ſordidi pharmacarii*, charged with robbing the moſt experienced phyſicians of their honours. The ſtyle of Lobel's preface is properly reprobated by Dr. Pulteney, who blames him for this groſs abuſe of Gerarde after his death, though he had formerly on every occaſion extolled him. The botanical contents of this fragment are, however, very honourable to Lobel, for the number of new plants therein mentioned. Our author laboured to an advanced age in the purſuit of his favourite ſtudy, and procured from his correſpondents abroad many new plants for the gardens of his friends. He had the ſuperintendence of a garden at Hackney, cultivated at the expenſe of lord Zouch; and appears to have reſided, in the decline of life, at Highgate, where he had a daughter, married to a Mr. James Coel. His wife is recorded as having aſſiſted him in his botanical reſearches. He died in 1616, aged ſeventy-eight. *Pulteney's Sketches.*

LOBE'LIA, *ſ.* [ſo named by Linnæus from the ſubject of the preceding article. The plant to which Plumier originally applied the name, is now the Scævola of Linnæus. When the latter, at the ſuggeſtion of Jacquin, diſcovered that he and other botaniſts had confounded, under this original Lobelia, a vaſt number of ſpecies generically diſtinct from it, but which were then become much better known than itſelf by the name in queſtion, he judged it much leſs inconvenient to keep this name for them, and to give the genus of Plumier a new one.] CARDINAL FLOWER, &c. in botany, a genus of the claſs ſyngeneſia, order monogamia, natural order of campanaceæ, (campanulaceæ, *Juſſ.*) The generic characters are —Calyx: perianthium one-leafed, five-cleft, very ſmall; growing round the germ, withering; toothlets nearly equal; the two ſuperior ones looking more upward. Corolla: one-petalled, irregular; tube cylindric, longer than the calyx, divided longitudinally above; border five-parted, diviſions lanceolate; of which the two ſuperior ones are ſmaller, leſs reflex, more deeply divided, conſtituting an upper lip; the three inferior ones more ſpreading, frequently larger. Stamina: filaments five, awl-ſhaped, the length of the tube of the petal, connate above; antheræ connate into an oblong cylinder, gaping five ways at the baſe. See the BOTANY Plate VIII. fig. 33. vol. iii. p. 249. Piſtillum: germ ſharp-pointed, inferior; ſtyle cylindric, length of the ſtamens; ſtigma obtuſe, hiſpid. Pericarpium: capſule ovate, two or three-celled, two or three-valved, gaping at the top, girt by the calyx; diſſepiments contrary to the valves. See the ſame Plate, fig. 43. Seeds: a great many, very ſmall; receptacle conic.—*Eſſential Character.* Calyx five-cleft; corolla one-petalled, irregular: capſule inferior, two or three-celled.

Species. I. With entire leaves. 1. Lobelia ſimplex, or ſlender lobelia: ſtem upright; leaves linear, quite entire; peduncles ſolitary. This is a ſmall annual plant, ſcarcely a hand in height; herbaceous, upright, ſimple, ſmooth, and even. Leaves alternate, ſeſſile, remote, acute, even, patulous. Peduncles axillary, one-flowered, naked, even, upright, twice as long as the leaves. Capſule inferior, turbinate. Native of the Cape of Good Hope.

2. Lobelia columneæ, or mealy lobelia: leaves oblong, blunt, revolute, very much wrinkled; ſhining above, tomentoſe beneath. Branch or ſtem ſomewhat woody, angular, tomentoſe, mealy, eſpecially towards the top, leafy. Leaves ſcattered, oval-oblong, netted-veined, very thickly tomentoſe underneath, with the veins thick and ſtanding out. Leaves quite entire at the edge, but, being rolled back, Linnæus miſtook the interſtices between the veins for notches, and ſet them down as crenate in the ſpecific character. Native of New Granada, where it was found by Mutis. Linnæus ſuſpected a great affinity between this plant and Columnea ſcandens; and has given the differences in the Supplement.

3. Lobelia bellidifolia, or daiſy-leaved lobelia: ſtem upright, panicled; leaves obovate, crenate. This is an annual plant, about a hand in height, upright, hiſpid and leafy below, divided at top into a longer panicle. Leaves blunt, pubeſcent underneath. The lower peduncles are longer. Found at the Cape of Good Hope by Thunberg. Both in the Syſtema and Supplementum it is by miſtake named *bellidiflora.*

4. Lobelia pinifolia, or pine-leaved lobelia: ſhrubby, leaves linear, cluſtered, quite entire. This is a ſhrubby, upright, branched, plant; the branches ſurrounded with abundance of narrow ſharp leaves an inch in length. Flowers many, ſmall, blue, at the tops of the twigs, among the leaves. Native of the Cape of Good Hope; introduced in 1786, by Mr. Francis Maſſon.

5. Lobelia Dortmanna, water-lobelia, or gladiole: leaves linear, two-celled, quite entire, ſtem almoſt naked. This ſpecies is ſhown on the preceding Plate at fig. 6. The root conſiſts of numerous capillary whitiſh fibres. Leaves growing at the bottom of the water in a circle, numerous, about two inches long, reflected into an elegant curve at the end, ſmooth, conſiſting of two hollow parallel tubes. Stem erect, round, hollow, ſmooth, from twelve to eighteen inches high, naked except three or four oval ſeſſile ſcales about a quarter of an inch long. Flowers about nine, in a looſe ſpike, above the water, from half an inch to an inch aſunder, on ſlender peduncles about half an inch long, each ariſing from a bracteal ſcale ſimilar to thoſe on the ſtems; calyx divided into five linear or awl-ſhaped ſegments, a line and a half or two lines long; corolla white, faintly tinged with blue; tube narrow; upper lip of two narrow lanceolate ſegments, erect; lower of three oval reflected ſegments, the middle one larger and longer. Capſule elliptical, ſurrounded with the calyx, forming a ring a little beneath the ſummit, and terminated by the ſtyle with its club-ſhaped hairy ſtigma. Linnæus remarks that the whole plant, even the leaves beneath the water, are milky; and that the naked part of the ſtalk is of a length proportional to the depth of the water in which the plant grows. In order to ſhow this proportion on our Plate, we have been obliged to cut the ſtem in two, which, if ſuppoſed to be joined at this mark, +, will exhibit

exhibit the general aſpect of the plant. Native of the north of Europe; in lakes of mountainous countries. With us in Wales, Weſtmoreland, Cumberland, Scotland. It flowers in July and Auguſt. It was ſent to Cluſius by Dortmann, an apothecary at Groeningen; hence he named it Gladiolus ſtagnalis Dortmanni, and Rudbeck called it Dortmanna.

6. Lobelia tupa, or poiſonous lobelia: leaves lanceolate, quite entire, raceme ſpiked. The root and herb of this ſpecies are a violent poiſon. Native of Peru.

7. Lobelia Kalmii, or Kalm's lobelia: ſtem upright, leaves lanceolate-linear, bluntiſh, alternate, quite entire, raceme terminating. A foot high; with a round ſtem, ſcarcely branched. It is an annual plant; and a native of Canada, where it was found by Kalm.

8. Lobelia paniculata, or panicled lobelia: leaves linear, quite entire, panicle dichotomous. Native of the Cape of Good Hope.

9. Lobelia grandis, or great lobelia: leaves oblong, quite entire, ſmooth, corymbs bracted, corollas hiſpid. Native of South America, where it was found by Mutis.

10. Lobelia ferruginea, or ruſt-coloured lobelia: ſtem villoſe, leaves lanceolate, ſerrate, acute, where the veins anaſtomoze ruſt-coloured-tomentoſe on both ſides, genitals elongated. This differs from the preceding in the ferruginous nap with which the ſtems, petioles, nerves of the leaves, peduncles, calyx, and corolla, are covered. Native of America, found by Mutis. The hairineſs in this and L. columnea is ſingular, parts of the herb and flower being quite concealed by it.

11. Lobelia Chinenſis, or Chineſe lobelia: leaves lanceolate, quite entire, flowers ſolitary, terminating, ſtem creeping. Stem herbaceous, filiform, annual, procumbent, creeping; with upright branches, five inches in length. It differs both from L. zeylanica and erinoides in having the leaves quite entire, and the peduncles terminating; though it is like them in habit. Native of China near Canton.

12. Lobelia cornuta, or horned lobelia: leaves ovate, petioled; ſtamens very long. Native of Cayenne. Diſtinguiſhed and named from the great length of the ſtamens. Linnæus ſays that he ſaw the plant in Royen's collection; and we are no otherwiſe acquainted with it.

II. With an upright ſtem, and gaſhed leaves. 13. Lobelia phyteuma: leaves ovate-oblong, crenate; ſtem almoſt naked, ſpiked; anthers hirſute, diſtinct. Native of the Cape of Good Hope.

14. Lobelia bulboſa, or tuberous-rooted lobelia: ſtem upright; lower leaves pedate. This reſembles N° 40 very much. The filaments are connate at the baſe; the anthers diſtinct; and the petals equal. Hence Bergius ſeparated it from Lobelia under the name of *Cyphia*.

15. Lobelia triquetra, or tooth-leaved lobelia: ſtem upright; leaves lanceolate, toothed; raceme terminating, leafleſs. This is an annual plant; ſtems herbaceous, a foot high. Flowers blue. Native of the Cape of Good Hope; introduced in 1774, by Mr. Francis Maſſon; flowers from May to September.

16. Lobelia longiflora, or long-flowered lobelia: leaves lanceolate, toothed; peduncles very ſhort, lateral; tube of the corolla filiform, very long. This is an annual, herbaceous, elegant, upright plant, ſeldom above fourteen or ſixteen inches in height, the whole of it rough-haired. The whole plant is very poiſonous. Taken internally, it brings on an invincible purging. If the plant be handled, and the hand be unawares applied to the eyes or lips, it brings on an inflammation. Horſes are reported to burſt with eating it; whence in the Spaniſh Weſt Indies it has the name of *reventa-cavallos*; it is well-known in Domingo under the name of *quedec*; it is alſo a native of Jamaica, Cuba, and Martinico, by rivulets, and in moiſt, cool, ſhady places. Cultivated in 1739, by Mr. Miller. flowers from June to Auguſt.

17. Lobelia tomentoſa, or downy lobelia: ſtraight, tomentoſe; leaves linear, toothed; peduncles terminating, very long, one or two flowered. Native of the Cape of Good Hope, where it was found by Thunberg.

18. Lobelia ſecunda, or inferior lobelia: upright, ſmooth, lower leaves oblong, toothed, upper lanceolate, entire; peduncles racemed, directed one way. This ſpecies is ſingular in having the branches flowering almoſt from the baſe in all the axils of the leaves, and the flowers all nodding to one ſide. Found at the Cape by Thunberg.

19. Lobelia aſſurgens, or tree-lobelia: leaves broad-lanceolate, ſerrate, toothletted and decurrent below, racemes compound terminating. Root perennial. Stem herbaceous, three or four feet high, ſimple or only ſimply divided at top, angular, thick, ſmooth, red, milky. Flowers numerous, heaped, blood-red, very large. Native of Jamaica, in the cooler mountains, where it ſhoots frequently to the height of five or ſix feet. Introduced in 1787, by Mr. Alexander Anderſon.

20. Lobelia patula, or ſpreading lobelia: herbaceous, diffuſed, virgate, ſmooth, leaves ovate toothed, peduncles lateral. Found by Thunberg at the Cape of Good Hope. In the Supplement, it is ſaid to be ſingular that it ſeldom has leaves or flowers.

21. Lobelia acuminata, or pointed-leaved lobelia: ſtem upright, ſuffruticoſe, leaves lanceolate, attenuated, ſerrulate, raceme terminating, many-flowered. This ſeldom riſes above three feet in height. It grows generally in the lower ſhady hills of Jamaica. Sloane ſays it has a ſtalk as big as one's finger, green and ſmooth. Leaves many, without order, ten inches long, and two broad in the middle, dark green. Flowers pale yellow. Seeds very ſmall, brown.

22. Lobelia ſtricta, or narrow lobelia: ſtem upright, ſuffruticoſe, lower leaves ovate-lanceolate, ſmooth, toothletted, and prickly at the edge, raceme terminating, ſpiked; Native of the iſland of Guadaloupe.

23. Lobelia cardinalis, ſcarlet lobelia, or cardinal-flower: ſtem upright, herbaceous, leaves oblong, lanceolate, ſerrate, ſomewhat villoſe, flowers in a ſort of ſpike, calyxes ſmooth, ſegments quite entire. The root is compoſed of many white fleſhy fibres. The lower leaves are oblong, and of a dark purpliſh colour on their upper ſide. The ſtalks are erect, about a foot and a half high, with leaves about three inches long, and an inch and a half broad in the middle, on very ſhort petioles, and placed alternately. The ſtalk is terminated by a ſpike (raceme) of flowers, of an exceeding beautiful ſcarlet colour. They appear at the end of July and in Auguſt, when they make a fine appearance for a month or more; and, when the autumn proves favourable, they will produce good ſeeds here. It grows naturally by the ſide of rivers and ditches in great part of North America. Linnæus and the Kew Catalogue aſſign it to Virginia only. Parkinſon, who mentions it as cheriſhed in our gardens (in 1629), ſays, "that it groweth near the river of Canada, where the French plantation in America is ſeated."

24. Lobelia ſiphilitica, blue lobelia, or cardinal-flower: ſtem upright, leaves ovate-lanceolate, ſubſerrate, ſinuſes of the calyx reflex. Root perennial. Stem ſimple, from a foot to two feet in height, and upwards, ſtrong, ſimple, ſmooth, with angles formed by the decurrent edges of the leaves having ſtiffiſh hairs on them. Native of Virginia. Cultivated here in 1665, as appears from Rea's Flora. It flowers from Auguſt to October, or, according to Mr. Miller, earlier than the preceding; and the ſeeds frequently ripen in England. Every part of the plant abounds with a milky juice, and has a rank ſmell. The root, which is the part directed for medicinal uſe, in taſte reſembles tobacco, and is apt to excite vomiting. It derives the trivial name from its efficacy in the cure of ſiphilis, as experienced by the North-American Indians, with whom it was a ſecret. Sir William Johnſon purchaſed the ſecret; and it has ſince been publiſhed by Kalm, Bartram, &c. The method of employing this medicine is as follows: A decoction is made of a handful of the roots in three meaſures of water. Of this, half a meaſure is taken in the morning faſting,

faſting, and repeated in the evening; the doſe is gradually increaſed till its purgative effects become too violent, when it is to be intermitted for a day or two, and then renewed till a perfect cure is effected. During the uſe of this medicine a proper regimen is enjoined, and the ulcers are alſo to be frequently waſhed with the decoction, or, if deep and foul, to be ſprinkled with the powder of the inner bark of New Jerſey tea-tree (Ceanothus Americanus). Although the plant is ſaid to cure the diſeaſe in a very ſhort time, yet its virtues have not been confirmed by any inſtances of European practice.

25. Lobelia lacteſcens, or milky lobelia: ſhrubby, leaves ſmooth, elliptic-lanceolate, ſerrate; peduncles axillary, ſolitary, without bractes, calyxes ſmooth. This ſpecies is native of the iſland of St. Helena. It is probably the ſame with L. arborea of Forſter, found in the Society Iſles.

26. Lobelia Surinamenſis, or Surinam lobelia: ſuffruticoſe; leaves oblong, ſerrate, ſmooth; peduncles axillary, ſolitary, bracted at the baſe, calyxes toruloſe. L. lævigata, which is the ſame with this, is thus deſcribed in the Supplement: Stem herbaceous, ſmooth, round; leaves alternate, petioled, elliptic, or ovate-lanceolate, acute, ſmooth, ſerrate; calyx ſuperior, with five awl-ſhaped patulous teeth; corolla oblong, tubular, incurved, red, with a cavity at the baſe within and below the ſtamens; ſtamens longer than the corolla; capſule globular, crowned with the calyx, two-celled; ſeeds minute. Native of the Weſt Indies; introduced in 1786, by Mr. Alexander Anderſon; flowers in April.

27. Lobelia inflata, or bladder-podded lobelia: ſtem upright; leaves ovate, ſubſerrate, longer than the peduncle; capſules inflated. This is a biennial plant in England. Stems channelled, hairy, two feet high. Leaves about two inches long, and one broad in the middle, ſeſſile, light green. Flowers ſmall, on long, ſlender, axillary peduncles, forming a looſe ſpike; corolla light blue. It flowers in July, and the ſeeds ripen in September. Native of Virginia and Canada. Cultivated by Mr. Miller in 1759.

28. Lobelia Cliffortiana, or purple lobelia: ſtem upright, leaves cordate, even, obſoletely toothed, petioled; corymb terminating. This is an annual plant. The ſtem riſes about a foot high, and then divides into four or five ſmaller, which grow erect. The lower part has heart-ſhaped ſmooth leaves, an inch and a half long, and three quarters of an inch broad at the baſe, leſſening to a point at the end, on ſhort petioles. The upper ſlender ſtems are thinly furniſhed with ſmall purpliſh flowers to the top. It is a native of America: Linnæus ſays of Virginia and Canada; but Mr. Miller gives it to Jamaica, whence Dr. Houſtoun ſent him the ſeeds; he cultivated it in 1739.

29. Lobelia urens, or ſtinging lobelia: ſtem upright; ſmooth, angular; leaves lanceolate, toothed, ſmooth; racemes ſpike-ſhaped; calycine ſegments awl-ſhaped, even. Stem nearly upright, ſomewhat curved; from twelve to eighteen inches high; ſimple, ſmooth, angular; the angles rough. The whole plant is milky, of a warm taſte, and, if chewed, eſpecially the root, excites a pungent ſenſe of burning in the tongue. Native of France, Spain, and England; on Shute Common, between Axminſter and Honiton; flowers in July and Auguſt.

30. Lobelia minuta, or leaſt lobelia: root-leaves ovate, ſcapes capillary. This is a minute annual plant, like Cameraria and Bellium, only about an inch high. Root filiform, creeping by runners. It is allied to L. Laurentia, but is more tender, without any bracte on the ſcape. It differs from L. erinus in having no ſtem but the ſcape or naked flowering ſtalk. Native of the Cape of Good Hope. Introduced in 1772, by Monſ. Richard. It flowers from June to September.

31. Lobelia volubilis, or twining lobelia: ſtem twining. Stem filiform, contrary, herbaceous. Native of the Cape, where it was found both by Sparrman and Thunberg.

III. With a proſtrate ſtem, and gaſhed leaves. 32. Lobelia Laurentia, or Italian annual lobelia: ſtem proſtrate; leaves lanceolate-oval, crenate; ſtem branched; peduncles ſolitary, one-flowered, very long. This is ſeldom more than three or four inches high. The leaves reſemble thoſe of the common daiſy in ſhape and ſize. Native of Italy, about Piſa; in the iſland of Elba, Corſica, and Sicily. Micheli made this a diſtinct genus under the name of Laurentia, in compliment to Marcantonio Laurenti, M. D. and profeſſor at Bologna.

33. Lobelia repanda, or ſerpentine-leaved lobelia: ſtem proſtrate, quite ſimple; leaves roundiſh, repand-toothed; peduncles axillary, ſolitary, one-flowered. Native of New Zealand.

34. Lobelia erinus, or ſmall ſpreading lobelia: ſtem patulous, leaves lanceolate, ſomewhat toothed, peduncles very long. This is an annual plant; a ſpan high. Flowers ſmall and blue, appearing in July; ſucceeded by ſmall roundiſh ſeed-veſſels, filled with ſmall ſeeds which ripen in September. Native of the Cape of Good Hope. Said in the Kew Catalogue to have been introduced by Mr. Maſſon in 1774; but was cultivated by Mr. Miller in 1759.

35. Lobelia erinoides, or trailing lobelia: ſtem proſtrate, filiform; leaves petioled, oblong, toothed. This alſo is an annual plant, with many ſlender trailing herbaceous ſimple ſtems, half a foot long. It is a native of the Cape of Good Hope. Said in the Kew Catalogue to have been introduced by Mr. Maſſon in 1786; but was cultivated by Mr. Miller in 1759.

36. Lobelia anceps, or double lobelia: leaves lanceolate, decurrent. Root annual. It may perhaps be a variety of the preceding. Native of the Eaſt Indies.

37. Lobelia pubeſcens, or downy-leaved lobelia: ſtems angular, proſtrate; leaves lanceolate, toothed, rough-haired, peduncles axillary, one-flowered. Native of the Cape of Good Hope, where it was found by Mr. W. Paterſon; introduced in 1780, by the counteſs of Strathmore; flowers from May to Auguſt.

38. Lobelia Zeylanica, or Ceylon lobelia: ſtems procumbent, leaves ovate, ſerrate, acute, lower obtuſe, peduncles one-flowered, capſules ſubvilloſe. This is a ſmall plant, that has the appearance of Veronica Chamædrys. Stem creeping. Leaves alternate, petioled, almoſt ſmooth; lower obtuſe, crenate; upper acute, ſharply ſerrate. Peduncles axillary, ſubſolitary, longer than the leaf, pubeſcent. Stem round. Leaves cordate, ſmooth, petioled. Flowers blue. Native of China, in watery and ſhady places. This appears to be the Campanula Ceilanica of Seba; and is ſhown on the Plate, at *fig.* 7.

39. Lobelia lutea, or yellow lobelia: ſtems procumbent, leaves lanceolate, ſerrate; flowers ſeſſile ſubſpiked. Stem quite ſimple, upright, ſtriated. Leaves alternate, ſeſſile, upright, with a few acuminate upright ſerratures. Flowers terminating, yellow, larger than the leaf. Native of the Cape; introduced in 1774, by Mr. Francis Maſſon flowers in June and July.

40. Lobelia hirſuta, or hairy lobelia: ſhrubby, hirſute, proſtrate, leaves ovate-toothed, peduncles lateral very long, two or three flowered. Found at the Cape by Thunberg.

41. Lobelia coronopifolia, or buck's-horn leaved lobelia: leaves lanceolate, toothed, peduncles very long. Stem procumbent, hairy. Leaves linear, with three teeth on each ſide; peduncles longer than the whole plant. Native of the Cape; introduced in 1787 by Francis Maſſon; flowers in July and Auguſt.

IV. With a proſtrate ſtem, and entire leaves. 42. Lobelia depreſſa, or flatted lobelia: depreſſed, leaves lanceolate, ſtem fleſhy. Stem herbaceous, a hand long, varicoſe, proſtrate on every ſide. Peduncles alternate, the length of the leaves, ſolitary. Flowers dark-purple. Native of the Cape.

43. Lobelia ſpeculum. A pretty little annual, ſuppoſed to have been only of late diſcovered at the Cape of Good Hope; but which, from Dr. Sims's account, appears to

to have been long ago an inhabitant of the botanic garden at Amſterdam, and to have been deſcribed and figured by Commelin. *Bot. Mag.* vol. xxxvi.

Thunberg has ſeveral other ſpecies; and has enumerated thirty lobelias natives of the Cape of Good Hope, in his Prodromus Plantarum Capenſium, p. 39, 40.

Propagation and Culture. N° 1, 3, 4, 34, 35, 39–43, and all the ſpecies from the Cape. If the ſeeds of theſe ſorts be ſown in autumn, they will ſucceed much better than when they are ſown in ſpring; they may be ſown in pots, and ſheltered under a common hot-bed frame in winter, expoſing them to the open air at all times in mild weather, but ſcreening them from the froſt; and in the ſpring the pots ſhould be plunged into a moderate hot-bed, which will ſoon bring up the plants; when theſe are fit to remove, they ſhould be each planted in a ſeparate ſmall pot filled with rich each, and plunged into a moderate hot-bed again, ſhading them from the ſun till they have taken new root; when they muſt have a large ſhare of air at all times when the weather is mild; and, as the plants grow ſtrong, they ſhould be gradually hardened to bear the open air, into which they ſhould be removed in June, placing them in a ſheltered ſituation, where they will flower in July, and, if the ſeaſon prove favourable, the ſeeds will ripen in September; but, if the ſeaſon ſhould prove cold, it will be proper to remove one or two plants into a glaſs caſe, to obtain good ſeeds.

N° 2, 6, 16, and all the ſpecies from the Weſt Indies and South America. The ſeeds of theſe ſhould be ſown after they are ripe, in pots filled with rich earth, and plunged into the tan-bed in the ſtove, obſerving to refreſh the earth frequently with water. In the ſpring theſe pots may be removed, and plunged into a hot-bed, which will ſoon bring up the plants; when theſe are fit to remove, they ſhould be each tranſplanted into a ſeparate ſmall pot filled with rich earth, and plunged into a freſh hot-bed, ſhading them from the ſun till they have taken new root; then they may be treated in the ſame way as other tender plants from the ſame country, giving them a large ſhare of air in warm weather, and frequently refreſhing them with water. In autumn the plants muſt be plunged into the tan-bed of the ſtove, where they will flower the following ſummer, and produce ripe ſeeds; ſoon after which the plants will decay. If the ſeeds of this plant are brought from the Weſt Indies, they ſhould be ſown as ſoon as they arrive, in pots filled with rich earth: and, if it happens in the winter, the pots ſhould be plunged into the tan-bed in the ſtove; but, if in the ſpring or ſummer, they may be plunged into a hot-bed in the common frames. Theſe ſeeds, when ſown in the ſpring, ſeldom grow the ſame year; therefore the following autumn the pots ſhould be removed into the ſtove, and managed according to the above directions.

N° 5, 7, 23, 24, and the remaining ſpecies, which are natives of Europe or North America. Theſe are propagated by ſeeds, which, when they ripen in England, ſhould be ſown in autumn in pots filled with rich kitchen-garden earth, and placed under a common hot-bed frame; or, if the ſeeds come from the country where the plants grow naturally, they ſhould be ſown in the ſame way as ſoon as they arrive; for, if they are kept out of the ground till ſpring, they will lie a year in the ground before they vegetate. The pots in which theſe ſeeds are ſown ſhould be expoſed to the open air at all times when the weather is mild, but they muſt be ſcreened from the froſt, and the very hard rain in winter. In ſpring the plants will appear, when they ſhould have as much free air as poſſible in mild weather; and, if the ſpring proves dry, they muſt be frequently refreſhed with water. As ſoon as they are fit to remove, they ſhould be each planted in a ſeparate ſmall pot filled with the ſame rich earth, and placed in the ſhade till they have taken new root; then they may be placed where they may have the morning ſun, in which ſituation they may remain till autumn. During the ſummer, they muſt be duly watered in dry weather; and, when the roots have filled the pots, they ſhould be removed into larger. In autumn they muſt be placed under a common frame to ſcreen them from hard froſt, but they ſhould enjoy the open air at all times when the weather is mild. The ſpring following they ſhould be new potted, and placed where they may have the morning ſun, always obſerving to water them duly in dry weather, which will cauſe their ſtalks to be ſtronger, and produce larger ſpikes of flowers in Auguſt. Theſe will continue long in beauty, if they are not too much expoſed to the ſun; and, if the autumn proves warm, the ſeeds will ripen in England. The roots will ſometimes laſt two or three years, and produce offsets for increaſe; but they will not flower ſo ſtrong as the ſeedling plants, therefore an annual ſupply of them ſhould be raiſed. There are many who propagate them by cutting their ſtalks into proper lengths, and plant them in pots filled with good earth, or into an eaſt border, covering them cloſe with glaſſes. Theſe frequently take root, but they are not ſo good as the ſeedlings. They will live in the full ground if they are protected from hard froſt in winter, and they will flower ſtronger than thoſe in pots.

LOBE'LIA CHEIRAN'THUS. See MANULEA.

LOBE'LIA FRUTES'CENS. See SCÆVOLA.

LO'BEN. See LÖWEN.

LO'BENHAYN, a town of Saxony, in the margravate of Meiſſen: two miles ſouth-eaſt of Lauenſtein.

LO'BENSTEIN, a town of Saxony, and chief place of a lordſhip, on the Lemnitz, in the county of Reuſſen: twenty-ſix miles north of Bayreuth, and twenty-ſix ſouth-weſt of Greitz. Lat. 50. 21. N. lon. 11. 50. E.

LO'BENSTEIN, an ancient caſtle of Sileſia: three miles ſouth-ſouth-eaſt of Jagerndorf.

LOBE'RA, a town of Spain, in Arragon: twenty miles weſt-ſouth-weſt of Jaca.

LO'BES, a town of Bohemia, in the circle of Boleſlaw: nine miles weſt-north-weſt of Jung Buntzel.

LO'BES, one of the ſmaller Canary iſlands, between Lancerotta and Fortaventura. Lat. 28. 50. N. lon. 13. 40. W.

LOBE'TUM, anciently a town of the Hither Spain; ſaid to have been built by the Libyan Hercules. (Pliny.) Now *Albarazin*, a town of Arragon on the confines of New Caſtile, on the river Guadalavir. Lat. 40. 40. N. lon. 2. E.

LOBET'ZE. See LABES, p. 5.

LOBI'JE. See LÖBAU.

LOBINEAU' (Guy-Alexis), a writer of hiſtory, born at Rennes in 1666, entered among the Benedictines of St. Maur in his ſeventeenth year, and devoted his life to ſtudy. He died at the abbey of St. Jagut, near St. Malo, in 1727. His principal publications are, 1. Hiſtoire de Bretagne, 2 vols. folio, 1707; a work commenced by father le Gallois, and finiſhed by Lobineau. It is reckoned valuable for the number of charters and other documents it contains; but the ſuppoſed partiality of the writer for his own province involved him in a controverſy with the abbé Vertot and the abbé Moulinet des Thuilleries, who warmly ſupported the rights of Normandy, which had been impugned in that work. 2. Hiſtoire de Deux Conquêtes d'Eſpagne par les Maures, 1708, 12mo. a tranſlation from the Spaniſh, and regarded as little more than a romance. 3. Hiſtoire de Paris, 5 vols. folio, 1725: this work was conſiderably advanced by father Felibien, was and put into the hands of Lobineau to finiſh. 4. Hiſtoire des Saints de Bretagne, folio, 1724. 5. He alſo tranſlated the Stratagems of Polyænus from the Greek, in 2 vols. 12mo. 1738; and made verſions of ſome comedies of Ariſtophanes, which have not been publiſhed. *Moreri.*

LO'BITH, a town of the duchy of Cleves: three miles north-weſt of Emmerick.

LOBLOL'LY, *ſ.* A kind of ſluttiſhly-dreſſed pottage; a kind of burgoo. *Scott.*

LOBLOLLY BA'Y, a bay of the iſland of Antigua, on the weſt coaſt.

LOBLOLLY BA'Y, in botany. See GORDONIA, vol. viii. p. 692, 3.

LOBLOT'OME,

LOBLOT'OW, a town of Poland, in Red Ruſſia: thirty-ſix miles ſouth-eaſt of Halicz.

LOB'MING, a town of the duchy of Stiria: two miles ſouth-eaſt of Knitterfeldt.

LO'BO, a town on the ſouth coaſt of the iſland of Luçon. Lat. 13. 40. N. lon. 121. 10. E.

LO'BO (Jerome), a Jeſuit miſſionary, born at Liſbon in 1593. He entered into the ſociety of Jeſuits in his ſixteenth year, and in 1622 went out as one of their miſſionaries to the Eaſt Indies. After paſſing ſome time at Goa, he ſailed to the coaſt of Mozambique, whence he penetrated into Abyſſinia. He paſſed ſeveral years in that kingdom, where his zeal and reſolution brought on him the hatred of the Abyſſinian monks, from whoſe machinations he incurred much danger and ſuffering. On his intended return to Portugal, he was ſhipwrecked on the coaſt of Natal, where the ſurviving crew ſpent ſeven months in conſtructing two ſhallops to bring them away. One of theſe foundered at ſea; the other, with father Lobo on-board, got to Angola. Thence he embarked in a veſſel for Braſil; and, after ſeveral other adventures, was landed at Cadiz, whence he reached Liſbon. He employed himſelf both at Madrid and Rome in promoting the intereſts of the Ethiopian or Abyſſinian miſſion; and took a ſecond voyage to the Indies, where he became rector of the profeſſed houſe at Goa. He returned to Liſbon in 1658; and was made rector of the college of Coimbra, where he died in 1678, at the age of 84. Father Lobo wrote in the Portugueſe language an Hiſtorical Account of Abyſſinia, containing much curious and valuable information: it was tranſlated into French by the abbé le Grand in 4to. 1728, with the addition of diſſertations, letters, and ſome inſtructive memoirs. An abridged verſion of this was the earlieſt publication of Dr. Johnſon.

LO'BO (Franciſco Rodrigues), a Portugueſe author of more reputation than merit, who flouriſhed in the early part of the ſeventeenth century, was born at Leiria, and drowned on his way from Santarem to Liſbon, in the Tagus, whoſe waters he had ſo often celebrated, and in whoſe ſands he had expreſſed a wiſh in his poems to find a grave. His longeſt work is a dull paſtoral tale, with dull paſtoral verſes interſperſed, divided into three parts, under the titles of *Primavera*, the Spring; *O Paſtor Peregrino*, the Shepherd Stranger; and *O Deſenganado*, the Undeceived. Nothing can be more tedious than this ſtory; but it has beauties of ſtyle and compoſition which a foreigner cannot be expected to diſcover or underſtand. He wrote alſo an heroic poem upon the exploits of Nuno Alvares Pereira, entitled *O Grande Condeſtabre de Portugal*; and, *Corte em Aldea, ou Noites de Inverno*, the Court in a Village, or Winter Evenings; a converſational work, infinitely ſuperior to any of his other productions. His works have lately been re-edited at Liſbon, in 5 vols. and include a ſingle ſonnet ſo extremely beautiful, that, as it is the only ſpecimen of this kind of compoſition found in his works, a ſuſpicion aroſe as to the probability of its being the production of another author; and Fernando Alvares de Oriente was the poet who was honoured with the fame of being the compoſer. This ſuſpicion is now totally vaniſhed; and Lobo is allowed the quiet reputation of having produced a ſonnet equal in beauty to the beſt in the language. *Monthly Mag.* Nov. 1812.

LO'BON, a town of Spain, in the province of Eſtramadura: twelve miles weſt of Merida.

LO'BOS, a ſmall iſland in the Atlantic, near the coaſt of Africa. Lat. 21. 20. N.

LO'BOS, a ſmall iſlaud at the mouth of the La Plata river: fifteen miles ſouth-weſt of Cape St. Maria. Lat. 35. N.

LO'BOS, a ſmall iſland in the gulf of Mexico, on the coaſt of Guaſteca. Lat. 22. 28. N.

LO'BOS, iſlands in the Pacific Ocean, near the coaſt of Peru, ſurrounded with rocks, and ſeparated from the continent by a chain of rocks, low, and under water. They are diſtinguiſhed by the Spaniards from their ſituation, into *Lobos de Barlevento* and *Lobos de Sotovento*, or the Windward and Leeward Iſlands of Lobos; are about twenty-one miles from each other, and not far from the coaſt of Peru, in lat. 6. 25. and 6. 45. S. Theſe alſo are called *Sea Wolves*, or *Seals Iſlands*.

LO'BOS, a cluſter of ſmall iſlands in the South Paciſic Ocean, near the coaſt of Chili. Lat. 52. 20. S.

LO'BOS KEY, or SE'AL KEY, a ſmall iſland among the Bahamas. Lat. 22. 45. N. lon. 77. 44. W.

LO'BRES, a town of Spain, in the province of Grenada: ſeven miles north of Motril.

LOB'SKOI PALAN'SKOI, a town of Ruſſia, in the government of Olonetz, near the lake Sig: fifty-two miles weſt-north-weſt of Povenetz.

LOB'STADT, a town of Saxony, in the circle of Leipzig: two miles north-weſt of Borna, and ten ſouth-ſouth-eaſt of Leipzig.

LOB'STER, *ſ.* [lobꝑtep, Sax.] A cruſtaceous fiſh. See CANCER, vol. iii. p. 704.—Thoſe that caſt their ſhell, are the *lobſter*, the crab, and craw-fiſh. *Bacon's Natural Hiſtory.*—It happeneth often that a *lobſter* hath the great claw of one ſide longer than the other. *Brown.*

LOB'VA, a river of Ruſſia, which runs into the Lialia, in the province of Ekaterinburg, twenty miles eaſt of Verchotura.

LOB'ULE, *ſ.* A little lobe.

LO'BURG, a town in the duchy of Magdeburg: twenty-two miles eaſt of Magdeburg.

LO'BUS. See LOBE.

LO'BUS, *ſ.* in botany. See DOLICHOS, EPIDENDRUM, and GUILANDINA.

LOCAGNA'NO, a town of the iſland of Corſica: twelve miles north of Baſtia.

LO'CAL, *adj.* [Fr. from *locus*, Lat.] Having the properties of place.—By aſcending, after that the ſharpneſs of death was overcome, he took the very *local* poſſeſſion of glory, and that to the uſe of all that are his, even as himſelf before had witneſſed, I go to prepare a place for you. *Hooker.*

A higher flight the vent'rous goddeſs tries,
Leaving material world, and *local* ſkies. *Prior.*

Relating to place.—Where there is only a *local* circumſtance of worſhip, the ſame thing would be worſhipped, ſuppoſing that circumſtance changed. *Stillingfleet.*—Being in a particular place.—How is the change of being ſometimes here, ſometimes there, made by *local* motion in vacuum, without a change in the body moved? *Digby on Bodies.*

Dream not of their fight,
As of a duel, or of the *local* wounds
Of head or heel. *Milton's Paradiſe loſt.*

In law, ſomething fixed to the freehold, or tied to a certain place; thus, real actions are local, ſince they muſt be brought in the country where they lie; and local cuſtoms are thoſe peculiar to certain countries and places. Local medicines, thoſe deſtined to act upon particular parts; as fomentations, epithems, veſicatories, &c.

LOCAL'ITY, *ſ.* Exiſtence in place; relation of place, or diſtance.—That the ſoul and angels are devoid of quantity and dimenſion, and that they have nothing to do with groſſer *locality*, is generally opinioned. *Glanville.*

LO'CALLY, *adv.* With reſpect to place.—Whether things, in their natures ſo divers as body and ſpirit, which almoſt in nothing communicate, are not eſſentially divided, though not *locally* diſtant, I leave to the readers. *Glanville.*

LOCA'NA, a town of France, in the department of the Dora, on the Orco, in a valley, called the *Valley of Locana*: twenty-one miles ſouth of Aoſta, and twenty-three north-weſt of Turin.

LOCAR'NO, one of the Italian bailiwics, ceded to the Swiſs cantons by Maximilian Sforza duke of Milan, in the year 1512; the length about fifteen miles, and the breadth

breadth twelve. By the peace of Luneville, it was ceded to the Ciſalpine republic, now the kingdom of Italy. It is ſituated near the north-weſt coaſt of Lake Maggiora. It produces ſome corn, wine, cheſnuts, and abundance of fruit and ſilk. The number of inhabitants is eſtimated at 30,000.

LOCAR'NO, a town of Italy, and capital of the above bailiwic, now annexed to and included in the department of the Verbano, ſituated near Lake Maggiora: it was once ſituated on the lake, with a port for barks; but is now at about a quarter of a mile diſtance. The caſtle is ſaid to have been built by the Lombards; a great part of it was deſtroyed by the Swiſs in 1531, who left only enough for the reſidence of the bailiff. The number of inhabitants is about 1500. It is twenty-three miles ſouth-weſt of Chiavenna, and twenty-two eaſt-north-eaſt of Domo d'Oſcella. Lat. 45. 59. N. lon. 8. 35. E.

LOCA'TE, a town of Italy, in the department of the Olona: ſix miles ſouth of Milan.

LOCATEL'LI (Pietro), a native of Bergamo, and one of the greateſt performers on the violin in Europe during the early part of the laſt century; but no leſs remarkable for caprice in his compoſitions, than for execution and a full tone in his performance. He publiſhed twelve grand concertos for violins, and much muſic for other inſtruments, at Amſterdam, where he reſided from 1744 to 1764. His ſolos are full of beautiful arpeggios, diſplaying a remarkable variety of bowing. Foreigners who travelled through Holland, and were curious to hear Locatelli perform, were previouſly appriſed, that the remuneration expected was fixed at two golden ducats for himſelf, and a ſilver ducat to the perſon who accompanied him.

LOCA'TION, *ſ.* Situation with reſpect to place; act of placing; ſtate of being placed.—To ſay that the world is ſomewhere, means no more than that it does exiſt; this, though a phraſe borrowed from place, ſignifying only its exiſtence, not *location*. *Locke*.

LOC'CO, a town of Naples, in Abruzzo Citra, on the Peſcara: ten miles north of Sulmona.

LOCH, *ſ.* A name given in Scotland to a lake, and alſo to a bay.—A lake, or *loch*, that has no freſh water running into it, will turn into a ſtinking puddle. *Cheyne's Philoſ. Principles*.

LOCH ACH'AMISH, a bay on the north-weſt coaſt of the iſland of Mull. Lat. 56. 36. N. lon. of the mouth, 6. 16. W.

LOCH ACHASTI'EL, a bay of Scotland, on the weſt coaſt of the county of Argyle, opening into the ſound of Jura. This in Campbell's map is called *Loch Swine*. Lat. 55. 59. N. lon. of the mouth, 5. 40. W.

LOCH ACHOU'RY, a bay on the north ſide of Loch Linnhe. Lat. 56. 35. N. lon. 5. 40. W.

LOCH ACH'RAKIL, a bay on the weſt coaſt of Scotland, and county of Roſs, ſituated on the ſouth ſide of Loch Terridon.

LOCH ACHU'NE, a bay on the north-weſt coaſt of Mull. Lat. 56. 37. N. lon. 6. 12. W.

LOCH AL'ARICH, a lake of Scotland, in the county of Perth: ten miles ſouth of George's Town.

LOCH ALFAR'RIG, a lake of Scotland, in the county of Inverneſs: fourteen miles north-weſt of Fort Auguſtus.

LOCH AN'ACAT, a lake of Scotland, in the county of Perth: eleven miles ſouth-eaſt of George's Town.

LOCH ANN'E, a bay on the weſt coaſt of Scotland, which communicates with Mull Sound in lat. 56. 33. N. lon. 5. 48. W.

LOCH AN'STRONMUN, a lake of Scotland, in the county of Perth: four miles north-weſt of George's Town.

LOCH ARCHE'IG, a lake of Scotland, in the county of Inverneſs, ten miles long, and one broad: twelve miles north of Fort William.

LOCH AR'DVAR, a bay of Scotland, on the weſt coaſt of the county of Sutherland. Lat. 58. 14. N. lon. 5. 7. W.

LOCH ASY'NT, a bay of Scotland, on the north-weſt part of the county of Roſs, which communicates with Loch Inver.

LOCH A'VEN, a lake of Scotland, in the ſouth-weſt part of Bamffſhire: twenty-one miles ſouth of Inveraven.

LOCH AY'LORT, or HAYLORT, a bay on the weſt coaſt of Scotland. Lat. 56. 50. N. lon. of the mouth, 45. 5. W.

LOCH AW'E, a lake of Scotland, in the county of Argyle, twenty-two miles long, and from half a mile to one and a half wide: ſeven miles north-weſt of Inverary.

LOCH BA'A, a lake on the iſland of Mull, ſouth of Loch Nagaul, with which it communicates.

LOCH BAD'CAAL, a bay of Scotland, on the weſt coaſt of the county of Sutherland: twenty miles ſouth of Cape Wrath. Lat. 58. 18. N. lon. 5. 5. W.

LOCH BAHNACAP'LICH, a ſtrait between the iſland of Benbecula and the iſland of Grimſey.

LOCH BALNAKY'LE, a bay on the north-weſt coaſt of the iſland of Lewis. Lat. 58. 6. N. lon. 7. 4. W.

LOCH BAR'NERA, a lake or inlet of the ſea, on the north-weſt coaſt of the iſland of Lewis, eleven miles weſt of Stornaway. Lat. 58. 12. N. lon. 6. 56. W.

LOCH BAY', a bay on the weſt coaſt of the iſland of Skye: ſix miles ſouth of Vaterniſh Point. Lat. 58. 33. N. lon. 6. 34. W.

LOCH BOI'SDALE, a bay on the eaſt coaſt of South Uiſt. Lat. 57. 7. N. lon. 7. 44. W.

LOCH BRAC'ADALE, a bay on the weſt coaſt of the iſland of Skye: five miles ſouth-eaſt of Copnahow Head. Lat. 57. 21. N. lon. 6. 24. W.

LOCH BRIT'TLE, a bay on the weſt coaſt of Scotland, in the iſland of Skye, north of Dunan Point. Lat. 57. 10. N. lon. 6. 12. W.

LOCH BRO'LUM, a bay on the ſouth-eaſt coaſt of the iſland of Lewis. Lat. 57. 55. N. lon. 6. 30. W.

LOCH BROO'M, a bay on the weſt coaſt of Scotland, ſeven miles long, and two broad, which communicates with Loch More. Lat. 57. 56. N. lon. of the mouth, 5. 13. W.

LOCH BROO'M, a town of Scotland, in the county of Roſs, at the ſouth end of Loch Broom Lake: twenty-five miles weſt-north-weſt of Dingwall.

LOCH BROO'M (Little), a bay on the weſt coaſt of Scotland, eight miles long and one broad: eight miles ſouth-eaſt of Udrigil Head. Lat. 57. 52. N. lon. 5. 16. W.

LOCH BUY', a bay on the ſouth coaſt of the iſland of Mull. Lat. 56. 21. N. lon. 6. 52. W.

LOCH CAL'AWAY, or CAL'VA, a bay on the weſt coaſt of Scotland: twenty-one miles ſouth of Cape Wrath. Lat. 58. 15. N. lon. 5. 6. W.

LOCH CAS'TLE, a bay on the weſt coaſt of the iſland of Ilay. Lat. 55. 53. N. lon. 6. 26. W.

LOCH CAS'TLE SEM'PLE, a lake of Scotland, in the county of Renfrew; ſix miles ſouth-weſt of Paiſley.

LOCH CATH'ARINE, a lake of Scotland, in the ſouth-weſt part of the county of Perth, about ſix miles in length: twenty miles weſt-ſouth-weſt of Crieff. See LOCH NESS.

LOCH CHA'AD, a bay on the north-weſt coaſt of the iſland of Coll. Lat. 56. 37. N. lon. 6. 36. W.

LOCH CHE'ASBAY, a bay on the eaſt ſide of South Uiſt. Lat. 57. 19. N. lon. 7. 11. W.

LOCH CLASH', a bay on the north-weſt coaſt of Scotland: eight miles north-north-weſt of Dingwall.

LOCH CLA'Y, a bay on the ſouth-eaſt coaſt of the iſland of Lewis: eighteen miles ſouth-ſouth-weſt of Stornaway. Lat. 57. 55. N. lon. 6. 34. W.

LOCH CO'LM, a bay on the coaſt of Skye, with an iſland: three miles ſouth-eaſt of Sniſort Kirk.

LOCH CRA'IGNISH, a bay on the weſt coaſt of Scotland: twenty-one miles weſt-ſouth-weſt of Inverary. Lat. 56. 9. N. lon. 5. 32. W.

LOCH CRE'RAN, a bay on the weſt coaſt of Scotland,

LOCH CRIN'AN, a bay on the weſt coaſt of Scotland: twenty-one miles ſouth-weſt of Inverary. Lat. 56. 7. N. lon. 5. 29. W.

LOCH DALRE'ACH, a lake of Scotland, in the county of Ayr: ten miles ſouth-ſouth-eaſt of Ayr.

LOCH DAM'B, a lake of Scotland, in the county of Perth: ſeven miles ſouth of George's Town.

LOCH DEE', a lake of Scotland, in the county of Kircudbright: twelve miles north-weſt of New Galloway.

LOCH DERCUL'OCH, a lake of Scotland, in the county of Perth: ſeven miles ſouth of Blair Athol.

LOCH DIRANTAD'LIN, a lake of Scotland, in the counties of Argyle and Perth: ſeven miles north-weſt of George's Town.

LOCH DOI'NE, a lake of Scotland, in the county of Perth: twenty miles weſt-ſouth-weſt of Crieff.

LOCH DON', a bay on the eaſt coaſt of Mull. Lat. 56. 29. W. lon. 6. 44. W.

LOCH DOO'N, a lake of Ayrſhire, in the diſtrict of Kyle, ſix miles in length, and of conſiderable breadth. On an iſland in this lake ſtands Balloch-caſtle.

LOCH DRUI'NARD, a lake on the north-weſt ſide of the iſland of Ilay. Near it was fought the battle of Traiidhruinard, in 1598, between the Lord of the Iſles and ſir Lauchlan Maclean of Mull; the laſt, with 1600 men, invaded Ilay, with a view of uſurping it from his nephew; the firſt had only 1100, and was at firſt obliged to retreat, till he was joined by 120 freſh forces: this decided the engagement. Sir Lauchlan was ſlain with fourſcore of his principal kinſmen, and 200 of his ſoldiers, who lay ſurrounding the body of their chieftain. A ſtone, ſtill on the ſpot, was erected in memory of his fall.

LOCH DRUMEL'LY, a lake of Scotland, in the county of Perth: ſeven miles north-weſt of Coupar.

LOCH DUI'CH, a bay on the weſt coaſt of Scotland. Lat. 57. 15. N. lon. of the mouth, 5. 40. W.

LOCH DUN'GEON, or HOURN, a bay on the eaſt coaſt of the iſland of Lewis: nine miles ſouth of Stornaway. Lat. 58. 3. N. lon. 6. 20. W.

LOCH DUNTEL'CHAH, a lake of Scotland, in the county of Inverneſs: twenty miles north-eaſt of Fort Auguſtus.

LOCH EI'L, a lake of Scotland, in the county of Inverneſs, eight miles long, and one broad, near Fort William.

LOCH E'NARD, a bay on the weſt coaſt of Scotland, a little to the eaſt of Rumore Point. Lat. 58. 4. N. lon. 5. 17. W.

LOCH E'NOCH, a lake of Scotland, in the county of Kircudbright: fourteen miles north-weſt of New Galloway.

LOCH ER'ICHT, a lake of Scotland, in the county of Inverneſs, twelve miles long, and half a mile wide: four miles north of George's Town.

LOCH ER'RIBOLL, a capacious and ſafe bay on the northern coaſt of Scotland: three miles weſt of Whitenhead. Lat. 58. 32. N. lon. of the mouth, 4. 29. W.

LOCH ER'SEY, a lake of Scotland, in Arran iſland: five miles north-weſt of Brodick.

LOCH ES'SAN, a lake of Scotland, in the county of Perth: eighteen miles ſouth of George's Town.

LOCH E'TIVE, a bay on the weſt coaſt of Scotland, twenty miles in length, and ſcarcely above one broad: fifteen miles north of Inverary. Lat. 36. 26. N. lon. 5. 5. W.

LOCH EV'ORT, a bay on the eaſt ſide of the iſland of North Uiſt. Lat. 57. 34. N. lon. of the mouth, 7. 7. W.

LOCH EW'E, a bay on the weſt coaſt of Scotland: three miles from Udrigil Head. Lat. 57. 51. N. lon. of the mouth, 5. 35. W.

LOCH EY'NORT, a bay of Scotland, on the eaſt coaſt of South Uiſt. Lat. 57. 11. N. lon. 7. 15. W.

LOCH EY'NORT, a bay on the eaſt coaſt of the iſland of Skye. Lat. 57. 18. N. lon. 6. 0. W.

LOCH EY'NORT, a bay on the weſt coaſt of the iſland of Skye. Lat. 57. 14. N. lon. 6. 19. W.

LOCH EY'SORT, a bay on the ſouth coaſt of the iſland of Skye. Lat. 57. 8. N. lon. 6. 58. W.

LOCH FAI'NISH, a lake of Scotland, in the north-weſt part of the county of Roſs: ſixteen miles weſt of Dingwall.

LOCH FAL'ART, or FOL'LART, a bay on the weſt coaſt of the iſland of Skye. Lat. 56. 29. N. lon. 6. 37. W.

LOCH FIN', a bay of Scotland, in the county of Ayr: fourteen miles eaſt-north-eaſt of Irvine.

LOCH FI'NE, a bay of Scotland, in the county of Argyle, thirty-four miles long, and from one to four to ſix broad, extending from about ſix miles north-eaſt of Inverary, to the river Clyde. Lat. 55. 50. N. lon. of the mouth, 5. 8. W.

LOCH FIN'TRAKIN, a lake of Scotland, in the county of Dumfries: ſeven miles north-weſt of Lochmaben.

LOCH FIT'TY, a lake of Scotland, in the county of Fife: three miles north-north-eaſt of Dumferline.

LOCH FLEE'T, a bay on the eaſt coaſt of Scotland, at the mouth of the river Fleet. It is croſſed by a ferry: five miles north of Dornoch. Lat. 56. 54. N. lon. 3. 54. W.

LOCH FREN'CHY, a lake of Scotland, in the county of Perth: nine miles north of Crieff.

LOCH GA'RE, a bay on the weſt coaſt of Scotland: eight miles ſouth of Ru Rea. Lat. 57. 41. N. lon. 5. 46. W.

LOCH GA'RE, a bay in the river Clyde, on the coaſt of Dumbartonſhire. Lat. 56. N. lon. 4. 33. W.

LOCH GAR'RON, a bay on the weſt coaſt of Scotland: twenty-eight miles north-weſt of Fort Auguſtus. Lat. 57. 18. N. lon. of the mouth, 5. 38. W.

LOCH GAR'RY, a lake of Scotland, in the county of Perth: nine miles north-eaſt of George's Town.

LOCH GAR'VIE, a lake of Scotland, in the county of Roſs: ten miles weſt of Dingwall.

LOCH GIL'P, a bay of Scotland, in Loch Fine: eighteen miles ſouth-weſt of Inverary.

LOCH GOY'LE, a lake of Scotland, which branches off to the north-weſt from Loch Long. Lat. 56. 8. N. lon. 5. W.

LOCH GRAN'ARD, a bay on the north-weſt coaſt of the iſland of Ilay: thirteen miles weſt-ſouth-weſt of Ruvaal. Lat. 55. 55. N. lon. 6. 21. W.

LOCH GREMISHA'DER, a bay on the eaſt coaſt of the iſland of Lewis: five miles ſouth-ſouth-weſt of Stornaway. Lat. 58. 8. N. lon. 6. 21. W.

LOCH GREOS'AVAH, a bay on the north-eaſt coaſt of Harris. Lat. 57. 47. N. lon. 6. 46. W.

LOCH GRISOR'NISH, a bay on the north-weſt coaſt of the iſland of Skye, ſouth-weſt of Loch Snizort.

LOCH GROI'NARD, or CAMISCANICH, a bay on the weſt coaſt of Scotland: four miles ſouth-eaſt of Udrigil Head. Lat. 59. 50. N. lon. 6. 28. W.

LOCH HAM'NAWAY, a bay on the weſt coaſt of the iſland of Lewis. Lat. 58. N. lon. 6. 58. W.

LOCH HAR'PART, a bay on the weſt coaſt of the iſland of Skye. Lat. 57. 20. N. lon. of the mouth, 6. 23. W.

LOCH HEATH'ER, a bay on the weſt coaſt of Scotland: ten miles ſouth of Cape Wrath. Lat. 58. 29. N. lon. 5. 1. W.

LOCH HECK', a lake of Scotland, in the county of Argyle, between Loch Long and Loch Fine.

LOCH HO'PE, a bay of Scotland, in the county of Sutherland, five miles long: ſeven miles weſt of Tongue.

LOCH HOU'RN, a bay on the weſt coaſt of Scotland: twenty miles north-north-weſt of Fort William. Lat. 57. 8. N. lon. of the mouth, 5. 43. W.

LOCH HOU'RN. See LOCH DUNGEON.

LOCH IN'CHARD, a bay on the weſt coaſt of Scotland: eleven miles ſouth of Cape Wrath. Lat. 58. 29. N. lon. of the mouth, 5. W.

LOCH INDA'AL, a bay on the ſouth-eaſt coaſt of the iſland of Skye: ſix miles from Kyle Rhea. Lat. 57. 9. N. lon. 5. 46. W.

LOCH INDA'AL, a bay of Scotland, in the ſouth coaſt of the iſland of Ilay. Lat. 55. 48. N. lon. 6. 16. W.

LOCH IN'VER, a bay on the weſt coaſt of Scotland: five miles north-eaſt of Rumore Point. Lat. 58. 7. N. lon. 5. 11. W.

LOCH IN'VER, a lake of Scotland, in the county of Kircudbright: five miles north of New Galloway.

LOCH I'RIN, a bay on the ſouth-eaſt coaſt of the iſland of Coll. Lat. 56. 38. N. lon. 6. 28. W.

LOCH KENMOO'R, a lake of Scotland, five miles long, and half a mile wide, at the union of the Ken and the Dee.

LOCH KENNARD', a bay on the weſt coaſt of Scotland. Lat. 57. 56. N. lon. 5. 6. W.

LOCH KEO'SE, a bay on the eaſt coaſt of the iſland of Lewis: nine miles ſouth-weſt of Stornaway. Lat. 58. 6. N. lon. of the mouth, 6. 28. W.

LOCH KIL'IFLED, a bay on the weſt coaſt of Scotland, caſt of Point Knap. Lat. 55. 53. N. lon. 5. 33. W.

LOCH KING'SMOOR, a lake of Scotland, in the county of Selkirk: eleven miles ſouth-ſouth-weſt of Selkirk.

LOCH KIN'TRA, a bay on the weſt coaſt of Scotland: five miles eaſt of Ardimniſh Point. Lat. 55. 46. N. lon. 5. 52. W.

LOCH KIS'HORN, a bay on the weſt coaſt of Scotland. Lat. 57. 19. N. lon. 5. 39. W.

LOCH KYLESWAVEG', a bay on the eaſt coaſt of the iſland of Benbecula. Lat. 57. 25. N. lon. 7. 9. W.

LOCH LAG'GAN, a lake of Scotland, in the county of Inverneſs, eight miles long, and half a mile wide: ten miles ſouth-eaſt of Fort Auguſtus.

LOCH LA'IGH, a bay on the weſt coaſt of Mull. Lat. 56. 22. N. lon. 6. 16. W.

LOCH LAW'ERSTON, a lake of Scotland, in the county of Kincardine: nine miles north-north-eaſt of Stonehaven.

LOCH LAX'FORD, a bay on the weſt coaſt of the county of Sutherland: fourteen miles ſouth of Cape Wrath. Lat. 58. 24. N. lon. of the mouth, 5. W.

LOCH LEAD'MORE, a lake of Scotland, in the county of Roſs: twenty-four miles weſt-north-weſt of Dornoch.

LOCH LEE', a lake of Scotland, in the county of Angus: eleven miles north-north-weſt of Brechin.

LOCH LEOD'AMIS, a bay on the ſouth coaſt of the iſland of Ilay. Lat. 55. 42. N. lon. 6. 7. W.

LOCH LEV'EN, a lake of Scotland, in the county of Kinroſs. Though inferior to Loch Lomond, not only in extent but in beauty of ſcenery, ſtill it muſt be allowed to preſent to the eye a noble expanſe of water, interſperſed with a variety of fruitful and pleaſant iſlands. This lake varies in ſize conſiderably at different ſeaſons; but its average circumference may be taken at twelve miles. It is bounded on the eaſt by the Lomond-hills, on the ſouth by the hill of Balneartie, and on the weſt by the plain of Kinroſs. The trout of Loch Leven are of a large ſize, and bear a ſtrong reſemblance, both in taſte and appearance, to the ſalmon. They are regularly brought to the Edinburgh markets, where they find a ready ſale, being conſidered extremely delicate. The red colour of their fleſh undoubtedly ariſes from their feeding chiefly on a ſmall ſhell-fiſh of a very deep tinge, which abounds in the bottom of the loch. A variety of other fiſh are likewiſe caught here. Eels are particularly plentiful. Theſe, in the month of September, generally migrate towards the ſea in great numbers by the channel of the Leven river, which takes its riſe from the lake. It is remarkable that they never proceed in their migration except during the night.

Loch Leven deſerves particular attention on account of the many diſtinguiſhed remains of antiquity which either adorn its iſlands or its banks. The ruins of the caſtle of Loch Leven are placed upon an iſland nearly in the centre of the loch. Its original foundation is unknown; for, though tradition ſays it was built by Congal, ſon of Dongart, king of the Picts, yet very little credit can be given to this account. The firſt notice taken of it in hiſtory occurs in the year 1334, when it was beſieged by ſir John de Sterling, an Engliſh officer, commanding a party of Scots who had joined the Engliſh army. But what principally renders this caſtle famous in Scottiſh hiſtory, is the confinement here of the unfortunate queen Mary, by the confederate lords to whom ſhe ſurrendered herſelf priſoner, after having parted with Bothwell at Carberry. Being placed in the cuſtody of the wife of Douglas of Loch Leven, a woman of rude manners, and an inveterate enemy to the queen, ſhe ſuffered all the miſeries of a rigorous captivity. In this caſtle ſhe remained for ſeveral months almoſt forgotten, till, the haughty conduct of the regent having eſtranged the minds of many of the confederates, they reſolved to reſcue her and themſelves from his tyranny and oppreſſion. With this view ſeveral attempts were made to effect her releaſe, but all of them were rendered abortive by the vigilance of her keeper. Love, however, at laſt prevailed over every obſtacle. Mary, conſcious of poſſeſſing thoſe bewitching charms which ſeldom fail in ſecuring a deep intereſt in the breaſt of ambitious youth, reſolved to employ them in captivating the heart of George Douglas, her keeper's brother. She treated him with the moſt marked diſtinction, and even allowed him to entertain the moſt daring hopes. The temptation was too great to be reſiſted. Having engaged ſome accomplices, they contrived to ſecure the keys one evening, when the family were at their devotions; and, opening the gates, allowed the queen and her lover to eſcape by a boat which lay ready to receive them. As ſoon as they reached the ſhore, the queen was met with the utmoſt joy by lord Seaton and ſir James Hamilton, with whom ſhe immediately fled to Niddrie, in Eaſt Lothian. See the article SCOTLAND.—The keys of this caſtle were thrown into the loch, after Douglas had effected the eſcape of queen Mary, on Sunday, May 2, 1568. In the month of October, 1805, a boy, digging in the ſands near Kinroſe Houſe, found the bunch of keys, in a very corroded and decayed ſtate.

LOCH LEV'EN, a bay on the eaſt coaſt of Scotland, in the county of Inverneſs, ten miles long, and half a mile wide; an eaſtern branch of Loch Linnhe: nine miles ſouth of Fort William. Lat. 56. 40. N. lon. of the mouth, 5. 20. W.

LOCH LEV'EN, or SCRIB'EN, a bay on the weſt coaſt of Mull. Lat. 56. 23. N. lon. 6. 11. W.

LOCH LEU'RHURST, a bay or inlet of the ſea, on the eaſt coaſt of the iſland of Lewis, in Scotland: ſix miles ſouth-weſt of Stornaway. Lat. 58. 8. N. lon. 6. 27. W.

LOCH LE'YS, a lake of Scotland, in the county of Kincardine: eleven miles north-weſt of Stonehaven.

LOCH LIN'NHE, a bay on the weſt coaſt of Scotland, and county of Argyle, eighteen miles long, and from two to four wide: twenty-five miles north-weſt of Inverary. Lat. 56. 31. N. lon. of the entrance, 5. 36. W.

LOCH LO'CHY, a lake of Scotland, in the county of Inverneſs, between Fort Auguſtus and Fort William, ten miles long, and rather more than one wide, communicating with Loch Eil, Loch Linnhe, and Loch Arkeig.

LOCH LOD'WALL, a bay of Scotland, on the ſouth-eaſt coaſt of the Harris, a little to the north of Finniſbay. Lat. 57. 45. N. lon. 6. 53. W.

LOCH LO'EP, a ſtrait between the iſlands of Benbecula and Wia.

LOCH LOM'OND, a lake of Scotland, in the county of Dunbarton, or Lennoxſhire. It is the fineſt and moſt beautiful expanſe of water in that country; and is not ſurpaſſed, in variety and magnificence of ſcenery, by any in Great Britain. This lake extends about twenty-ſix miles in length from north to ſouth, and varies from one to eight miles in breadth. The broadeſt portion is towards the ſouth. As it approaches the north, it gradually contracts. Here it is much deeper than in the broader parts. At the foot of Ben Lomond the depth is about

120 fathoms, but in the ſouth diviſion it is not generally much above fourteen fathoms. The northern and deeper part of this lake is never covered with ice even in the ſevereſt froſts; but ſouth from Luſs it is often frozen over ſo completely, that not only men but loaded horſes can paſs over it to the different iſlands in perfect ſafety. Loch Lomond is ſupplied with water from ſeveral rivers, beſides ſmaller ſtreams from the mountains. It has, however, but one way of diſcharging itſelf, and this is the reaſon why it ſwells in wet ſeaſons even ſo high as ſix feet above its uſual level. Fiſh are caught here in great abundance, particularly ſalmon-trout, eels, and perch, as likewiſe a fiſh called pollock, which reſembles in appearance and flavour the large herrings.

The beauties of this lake have often been the ſubject of deſcription, both in poetry and proſe. Theſe ſeem chiefly to ariſe from the woods in its vicinity, the number and variety of its iſlands, and the near approach of the terrific Grampians, which afford a ſtriking contraſt to the more placid ſcenery immediately adjacent. At the Houſe of Cameron, placed at the ſouthern extremity of the lake, the whole charms of this delightful expanſe are in full view. After paſſing this manſion, the road ſkirts along the weſtern bank, ſometimes loſing itſelf among the natural foliage that clothes the brow of the mountains, and at other times emerging into a more free ſpace; thereby preſenting in ſucceſſion a variety of views of the lake, iſlands, and neighbourhood, highly captivating and delightful.

The iſlands in Loch Lomond, ſmall and great, are uſually reckoned to be thirty in number. Moſt of them are finely wooded, but not above ten are of any conſiderable ſize. The principal ones are the property of the duke of Montroſe and ſir James Colquhoun of Luſs. *Inchcailloch*, or the Iſland of Old Women, ſo called from a nunnery formerly there, was at one time the ſcite of the church of Buchanan in Stirlingſhire. Inchmurin is the moſt valuable iſland in the lake, and has a deer-park belonging to the duke of Montroſe. The iſland of *Inch-tavanach*, i. e. the Iſland of the Monk's Houſe, derives its name from the circumſtance of a monk having fixed his reſidence here at a very remote period. The other iſlands are not deſerving of particular notice, except as all contributing, by the beauty of their verdure, to render the whole ſcenery more intereſting and varied than it otherwiſe would be.

Loch Lomond has long been celebrated for three wonders; "fiſh without fins, waves without wind, and a floating iſland." The fiſh without fins are manifeſtly vipers, which abound here in great plenty, and ſometimes ſwim from one iſland to another. Waves without wind are common to this lake, with all extenſive deep waters, when a calm immediately ſucceeds a ſtorm. The floating iſland is now fixed near the weſt ſhore of the Iſle of Inchconagan; and, if it ever did float, muſt be conſidered as a moſſy fragment bound together by the matted roots of coarſe graſſes, willows, Dutch myrtles, &c. The waters of this lake are ſuppoſed to be riſing in height. Acroſs the channel of a ſtream called Falloch, at the northern extremity, there is a number of ſtones fixed regularly, and evidently intended for enabling paſſengers to croſs from one ſide to the other, which are now however covered with at leaſt five feet of water. Near the middle of the bay of Camſtraddan, when the water is low, there is a heap of ſtones viſible, which is ſaid to have formerly compoſed the reſidence of the Colquhouns of Camſtraddan. Camden, in his Atlas Britannica, mentions an iſland exiſting here in his day, with a houſe and garden upon it. About five miles to the ſouth of this heap of ſtones there is another, ſaid to be the ruins of an ancient church: the field oppoſite to it is ſtill called Church-field. At the time of the great earthquake at Liſbon in 1755, the waters of this lake, were agitated in a ſingular manner. Loch Lomond is twenty-four miles weſt of Stirling, and twelve eaſt of Inverary. Lat. 56. 3. N. lon. of the ſouth extremity, 4. 30. W.

LOCH LONG', a bay on the weſt coaſt of Scotland, and county of Argyle, fifteen miles long and one wide, between Loch Fine and Loch Lomond. Lat. 55. 59. N. lon. of the entrance, 4. 38.

LOCH LOSA'VA, a bay on the ſouth-weſt coaſt of the iſland of Lewis. Lat. 57. 54. N. lon. 6. 53. W.

LOCH LOU'NG, a north branch of Loch Duich.

LOCH OF THE LOW'S, a lake of Scotland, in the county of Selkirk: thirteen miles ſouth-weſt of Selkirk.

LOCH LOY'AL, a lake on the north coaſt of Scotland, and county of Sutherland, five miles long: two miles ſouth of Tongue.

LOCH LUI'CHART, a lake of Scotland, in the county of Roſs: eleven miles weſt of Dingwall.

LOCH LYD'OCH, a lake of Scotland, in the county of Perth: five miles weſt of George's Town.

LOCH LY'ON, a lake of Scotland, in the county of Perth: ten miles ſouth-weſt of George's Town.

LOCH MAD'DY, a lake of Scotland, in the county of Inverneſs, five miles long, and half a mile wide: ſeventeen miles north-north-weſt of Fort Auguſtus.

LOCH MAHA'AKE, a lake of Scotland, in the county of Perth: five miles north-weſt of Dumblane.

LOCH MA'RE, a bay on the north coaſt of Scotland, about eleven miles long and two broad, full of iſlands. To the north it communicates with Pluckart Bay and Loch Eve. Lat. 57. 34. N. lon. of the inland extremity, 5. 16. W.

LOCH MER'K, a lake of Scotland, in the county of Perth: ſeven miles north of Blair Athol.

LOCH MICK'LY, a lake of Scotland, in the county of Inverneſs: thirteen miles north-north-eaſt of Fort Auguſtus.

LOCH MIL'FORD, or LOCH MEL'FORD, a ſafe road or harbour, on the weſt coaſt of Scotland, much frequented by herrings. Lat. 56. 16. N. lon. 5. 32. W.

LOCH MINGA'RY, a bay on the north-weſt coaſt of Mull. Lat. 56. 37. N. lon. 6. 10. W.

LOCH MO'AN, a lake of Scotland, in the north-weſt part of the county of Kircudbright: eighteen miles north-weſt of New Galloway.

LOCH MOCH'RUM, a lake of Scotland, in the county of Wigton: ſeven miles weſt of Wigton.

LOCH MO'NAR, a lake of Scotland, in the county of Roſs, ſix miles long, and half a mile wide.

LOCH MONTE'ITH, a lake in the vicinity of Loch Lomond, about five miles in circumference, with two woody iſles, one preſenting the ruins of a monaſtery, the other thoſe of a caſtle of the old earls of Monteith.

LOCH MOO'RN, a lake of Scotland, in the north-weſt part of the county of Roſs: nine miles north of Dingwall.

LOCH MO'RE, a large bay on the weſt coaſt of Scotland, and county of Roſs. This is in the northern part of Loch Broom: nine miles eaſt of Udrigil Head. Lat. 57. 54. N. lon. 5. 8. W.

LOCH MOR'RER, a bay on the weſt coaſt of Scotland, in the county of Inverneſs, ten miles long, and half a mile wide: ſixteen miles north-weſt of Fort William. Lat. 56. 56. N. lon. of the mouth, 5. 50. W.

LOCH MOY', a lake of Scotland, in the county of Inverneſs, near a town of the ſame name: nine miles ſouth-eaſt of Inverneſs.

LOCH MOY'DART, a bay of Scotland, between the counties of Argyle and Inverneſs: four miles weſt of Ardimniſh Point. Lat. 56. 47. N. lon. 5. 50. W.

LOCH NAGAU'L, a bay on the weſt coaſt of the iſland of Mull. Lat. 56. 30. N. lon. 6. 8. W.

LOCH NAMAD'DY, a bay on the eaſt coaſt of North Uiſt. Lat. 57. 35. N. lon. 7. 7. W.

LOCH NA'VER, a lake in the north part of Scotland, twelve miles in circumference: twenty-eight miles north-north-weſt of Dornoch.

LOCH NELL', a lake of Scotland, in the county of Argyle: ſeventeen miles north-weſt of Inverary.

LOCH NESS', a lake of Scotland, in the county of Inverneſs:

verneſs: twenty-two miles long, and one broad, between Fort Auguſtus and the Frith of Murray, into which its waters run. Its depth, in the centre, is from ſixty to a hundred and thirty fathoms; and even near its ſides, excepting at the points of Torr and Foyers, the declivity is ſuch, that a ſhip of the line might ſail in ſafety within fifty yards of the ſhore, from end to end, on either ſide of the lake. Neither Loch Neſs nor Loch Catharine is ever frozen beyond a few fathoms from the margin. This fact was long accounted wonderful, and attributed to ſome peculiar quality of the water; but the water of Loch Neſs differs in no reſpect from other freſh water; and the water of both lakes freezes as quickly as any other water when expoſed in ſeparate veſſels. The phenomenon of the lakes themſelves never being frozen over, is eaſily and completely accounted for by the diſcoveries of modern chemiſtry. Water, like moſt other bodies, is expanded by heat, and condenſed, or contracted in volume, by cold; but there is this peculiarity in the effects of heat or cold on water, that water is gradually condenſed by cold until it arrives within a few degrees of the freezing point, when it begins to be again gradually dilated; and, when it reaches the freezing point, it expands with violence. This being the caſe, water in very deep lakes can never be frozen in ſuch climates as ours. When the upper ſtratum is condenſed in its progreſs towards freezing, it becomes, of courſe, ſpecifically heavier than the ſtrata below it, and ſinks down towards the bottom. What was the ſecond ſtratum now becomes the uppermoſt, is condenſed in its turn, becomes ſpecifically heavier, and ſinks down as the firſt ſunk. All the ſtrata in the lake muſt neceſſarily go through the ſame proceſs, ſinking and riſing alternately before congelation can take place; but where the water, as in Loch Neſs, is a hundred and thirty fathoms deep, the uppermoſt ſtrata receive their original temperature long before they reach the bottom, riſe again in their turn, and, in ſuch climates as ours, the proceſs goes on for ever, and prevents actual congelation.

Loch Neſs is frequently agitated with great violence by the winds; and on ſome occaſions even without any apparent cauſe. An event of this ſort occurred in a moſt extraordinary manner on the 1ſt of November, 1755, the time of the great earthquake which nearly deſtroyed Liſbon: the water roſe with the utmoſt impetuoſity from eaſt to weſt, many of the waves being carried two hundred yards up the Oich, and breaking, on its banks, five feet above the level of the river: it continued in this ſtate for nearly an hour, when the commotion ceaſed, by a wave much larger than any that preceded it overflowing the north ſhore of the lake. Loch Neſs communicates, by the river Neſs, with the Moray Frith, and forms part of the chain of lakes and rivers from that arm of the North Sea to the Sound of Mull on the weſtern coaſt. As the lakes are all navigable, and riſe very little above the level of the ſea, a canal was lately projected on this line. It is denominated the Caledonian Canal, and is now nearly completed, under the ſcientific management of Mr. Telford; and, as it is deſigned to admit frigates of 32 guns, there is reaſon to expect that the ſingular ſpectacle will ſoon be exhibited, of large veſſels croſſing the Britiſh iſland, from the Atlantic to the German ocean, ſurrounded by mountains which frequently tower to an enormous height. The ſcenery of this lake is grand and magnificent in the higheſt degree, as the hills are well covered with wood, and ſometimes ſlope gradually from the ſhore, and at others riſe with the utmoſt boldneſs and irregularity. The Vale of Foyers, at its eaſtern extremity, is not inferior in romantic beauty to the celebrated Dovedale of Derbyſhire. The river from which it derives its name forms two moſt beautiful falls, one of them ſeventy and the other two hundred and twelve feet in height. The latter is conſequently among the loftieſt in the world; and, during floods, preſents a view at once grand and impreſſive. *Pennant's Tour in Scotland. Miſs Spence's Sketches.*

LOCH NEV'ISH, a bay on the weſt coaſt of Scotland: twenty miles weſt-north-weſt of Fort William. Lat. 58. 14. N. lon. 5. 9. W.

LOCH NI'ET, a bay on the weſt coaſt of Scotland: twenty-four miles ſouth of Cape Wrath. Lat. 58. 14. N. lon. 5. 9. W.

LOCH OI'CH, a lake of Scotland, in the county of Inverneſs, four miles long, and a quarter of a mile wide; communicates with Loch Neſs four miles ſouth-weſt of Fort Auguſtus.

LOCH OO'CHAN, a lake of Scotland, in the county of Inverneſs: nine miles weſt-north-weſt of George's Town.

LOCH ORR', a lake of Scotland, in the county of Fife: ſix miles north-eaſt of Dunfermline.

LOCH O'RENT, a lake of Scotland, in the county of Caithneſs: ſix miles ſouth of Thurſo.

LOCH PAAT'OCH, a lake of Scotland, in the county of Inverneſs: twelve miles north of George's Town.

LOCH PAR'TIN, a bay on the eaſt ſide of the iſland of North Uiſt. Lat. 57. 35. N. lon. 7. 8. W.

LOCH POTREE', a bay on the eaſt coaſt of the iſland of Skye. Lat. 57. 23. N. lon. 6. 6. W.

LOCH PULTEE'L, a bay on the north-weſt coaſt of the iſland of Skye. Lat. 57. 29. N. lon. 6. 43. W.

LOCH QUICH', a lake of Scotland, in the county of Inverneſs: ſixteen miles north of Fort William.

LOCH RAN'NOCH, a lake of Scotland, in the county of Perth, about eight miles in length, to the eaſt of George's Town.

LOCH RESO'RT, a bay of Scotland, on the weſt coaſt of Lewis. Lat. 57. 57. N. lon. 6. 57. W.

LOCH RID'AN, a bay of Scotland, on the coaſt of the county of Argyle, north of the iſland of Bute.

LOCH RU'E, a bay on the weſt coaſt of Scotland: ſix miles ſouth of Aſynt Point. Lat. 58. 8. N. lon. 5. 13. W.

LOCH RU'EVAL, a bay on the ſouth-eaſt coaſt of the iſland of North Uiſt. Lat. 57. 30. N. lon. 7. 8. W.

LOCH RUT'TON, a lake of Scotland, in the county of Kirkcudbright: four miles ſouth-eaſt of Dumfries.

LOCH RY'AN, a large bay on the weſt coaſt of Scotland, between the counties of Ayr and Wigton, north of Stranrawer. Lat. 55. 7. N. lon. of the entrance, 4. 59. W.

LOCH SAR'K, a bay on the weſt coaſt of Scotland: twenty-two miles ſouth of Cape Wrath. Lat. 58. 16. N. lon. 5. 4. W.

LOCH SCAV'IG, a bay on the ſouth coaſt of the Iſle of Skye. Lat. 57. 8. N. lon. 36. W.

LOCH SCOU'RIE, a bay on the weſt coaſt of Scotland, ſeventeen miles ſouth of Cape Wrath. Lat. 58. 22. N. lon. 5. 6. W.

LOCH SE'AFORTH, a bay on the ſouth-eaſt coaſt of the iſland of Lewis, ten miles in length: eighteen miles ſouth-weſt of Stornaway. Lat. 57. 55. N. lon. 6. 38. W.

LOCH SER'ESORT, a bay on the eaſt coaſt of Rum Iſland. Lat. 56. 58. N. lon. 6. 19. W.

LOCH SHELL', a bay on the eaſt coaſt of Lewis. Lat. 58. N. lon. 6. 23. W.

LOCH SHIE'LL, a bay of Scotland, between the counties of Argyle and Inverneſs, ſixteen miles long, and one wide; has a communication with Loch Moydart: the north-eaſt end lies ten miles north-weſt of Fort William, and the mouth opens into Loch Moydart in lat. 56. 44. N. lon. 5. 48. W.

LOCH SHIE'LDAG, a bay of Scotland, on the ſouth ſide of Loch Terridon, in the county of Roſs: five miles ſouth-eaſt of Loch Achrakin.

LOCH SHIN', a lake of Scotland, in the north part of the county of Sutherland, twelve miles long, and one and a half wide: thirteen miles weſt-north-weſt of Dornoch.

LOCH SKE'NE, a lake of Scotland, in the county of Aberdeen: five miles ſouth of Kintore.

LOCH SKI'ACH, a lake of Scotland, in the county of Perth: ſix miles north-weſt of Dunkeld.

LOCH SKY'PORT, a bay on the eaſt coaſt of South Uiſt. Lat. 57. 18. N. lon. 7. 12. W.

LOCH SLEP'IN, a bay on the south coaſt of the iſland of Skye. Lat. 57. 8. N. lon. 6. W.

LOCH SLIGACHAN', a bay on the eaſt coaſt of the Iſle of Skye: one mile ſouth of Torrimore Head. Lat. 57. 20. N. lon. 6. 3. W.

LOCH SNI'ZORT, a large bay on the north coaſt of the iſland of Skye, between Ru Borniſlag and Vaterniſh Point. Lat. 58. 32. N. lon. 6. 25. W.

LOCH SPEL'VE, a bay on the eaſt coaſt of the iſland of Mull. Lat. 56. 27. N. lon. 6. 46. W.

LOCH STAF'FIN, a bay on the north-eaſt coaſt of the Iſle of Skye: ſix miles ſouth-eaſt of Ruhuniſh. Lat. 57. 37. N. lon. 6. 10. W.

LOCH STOCK'ENISH, a bay on the ſouth-eaſt coaſt of Harris. Lat. 57. 46. N. lon. 6. 49. W.

LOCK STOR'NAWAY, a bay on the eaſt coaſt of the iſland of Lewis, ſouth of Stornaway. Lat. 58. 11. N. lon. 6. 16. W.

LOCK STRATH'BEG, a bay on the north-eaſt coaſt of the county of Aberdeen: two miles weſt of Rattery Head.

LOCH STREV'IN, a bay of Scotland, on the coaſt of the county of Argyle, north of the iſland of Bute. Lat. 55. 53. N. lon. 4. 45. W.

LOCH SU'NART, a bay on the weſt coaſt of Scotland, fifteen miles long, and one broad: twenty-two miles ſouth-weſt of Fort William. Lat. 56. 39. N. lon. of the mouth, 5. 58. W.

LOCH SWI'NE. See LOCH ACHASTIEL, p. 861.

LOCH TA'IN, a bay of Scotland, in the north part of the iſland of Arran: five miles north of Brodick.

LOCH TAR'BET, a bay on the weſt coaſt of the iſland of Jura. Lat. 56. 1. N. lon. of the entrance, 5. 5. W.

LOCH TAR'BET (Eaſt), a bay of Loch Fyne, on the coaſt of Argyle, at the northern extremity of the peninſula of Kintyre, with a village called Eaſt Tarbet: thirty-ſeven miles ſouth of Inverary, and thirty-five north of Campbelton.

LOCH TAR'BET (Weſt), an arm of the ſea, about ſeven miles long, and one broad, at the north extremity of Kintyre, with a village called Weſt Tarbet, about a mile from Eaſt Tarbet. Lat. 55. 48. N. lon. of the mouth, 5. 30. W.

LOCH TAR'BET, a bay on the ſouth-eaſt coaſt of Scotland, which divides that part of the iſland of Lewis, called *The Lewis*, from that part called *Harris*; divided from Weſt Loch Tarbet by a narrow iſthmus of land: twenty miles ſouth-weſt of Stornaway. Lat. 57. 50. N. lon. 6. 44. W.

LOCH TAR'BET (Weſt), a bay on the north-weſt coaſt of the iſland of Lewis, ſeparated from Tarbet Loch by an iſthmus of land. Lat. 57. 53. N. lon. 6. 54. W.

LOCH TA'Y, a lake of Scotland, in the county of Perth. It abounds with fiſh, ſuch as pike, ſalmon, perch, trout, lampreys, eels, &c. At the end of the loch is an iſland, on which was once a priory; ſome of the ruins are yet viſible. It is twenty-four miles north-weſt of Perth.

LOCH TE'AGUS, a bay on the weſt coaſt of Scotland, a little to the ſouth of Loch Sunart.

LOCH TER'RIDON, a bay on the weſt coaſt of Scotland. In the year 1773, it is ſaid that the herrings ſwam ſo thick in this loch, that the boats of about 250 buſſes, all having two, and many three, together with an immenſe number of country boats, from twelve to twenty barrels burthen, were often twice loaded in a night, and frequently they were obliged to cut the taves (cords by which the nets are kept together) of their nets, leave part of them in the water, and carry the reſt on ſhore to be emptied, being ſo loaded that they could not carry the whole at one time. They continued there for two months. Lat. 57. 36. N. lon. 5. 47. W.

LOCH TI'ERKILL, a bay on the weſt coaſt of the iſland of Mull. Lat. 56 20. N. lon. 6. 21. W.

LOCH TOL'LIE, a lake of Scotland, in the county of Argyle: eleven miles north-north-eaſt of Glenorchy.

LOCH TROI'G, a lake of Scotland, in the county of Inverneſs: fourteen miles eaſt of Fort William.

LOCH TU'A, a bay on the weſt coaſt of the Mull, formed by the iſland of Ulva. Lat. 56. 32. N. lon. 6. 14. W.

LOCH TU'A, or BROAD BAY, a large bay or inlet of the ſea, on the eaſt coaſt of the iſland of Lewis, about ten miles in length, and four in breadth: eaſt of Stornaway. Lat. 58. 16. N. lon. 6. 12. W.

LOCH TUM'EL, a lake of Scotland, in the county of Perth: five miles ſouth of Blair Athol.

LOCH TUN'AG, a bay on the weſt coaſt of Scotland, the ſouth-eaſt continuation of Loch Ewe, with which it communicates.

LOCH TUR'RET, a lake of Scotland, in the county of Perth: five miles north-north-weſt of Crieff.

LOCH TUS'CAG, a bay on the weſt coaſt of Scotland. Lat. 57. 20. N. lon. 5. 48. W.

LOCH VACK', a lake of Scotland, in the county of Perth: three miles ſouth-ſouth-weſt of Blair Athol.

LOCH VAL'ICAN, a lake of Scotland, in the county of Perth: ſix miles eaſt of Blair Athol.

LOCH UI'LK, a bay on the ſouth coaſt of the iſland of Mull. Lat. 56. 24. N. lon. 5. 49. W.

LOCH VOI'L, a lake of Scotland, in the county of Perth: ſeventeen miles weſt of Crieff.

LOCH VRI'NE, a lake on the weſt coaſt of Scotland, in the county of Roſs: ſix miles long and half a mile wide. It is twenty-five mile weſt-north-weſt of Dingwal.

LOCH VROTACHAN', a lake of Scotland, in the ſouth-weſt part of Aberdeenſhire: ſeven miles ſouth of Caſtleton of Braemar.

LOCH USKEBA'GH, a bay on the eaſt coaſt of Benbecula. Lat. 57. 25. N. lon. 7. 12. W.

LOCH USS'IE, a lake of Scotland, in the county of Roſs: two miles weſt of Dingwal.

LOCH WAT'TEN, a lake of Scotland, in the county of Caithneſs: ſeven miles weſt of Wick.

LOCH YE'BEN, a lake on the weſt coaſt of Scotland, on the north ſide of Loch Terridon.

LO'CHA, in ancient geography, a large city of Africa, which was taken and plundered by Scipio's ſoldiers.

LOCHA'BER, a diſtrict of the ſhire of Inverneſs in Scotland. It is bounded by Moydart on the weſt, Glengary on the north, Badenoch on the eaſt, and Lorn on the ſouth. It derives its name from the Lake or Loch Aber; and extends about twenty miles from eaſt to weſt, and thirty from north to ſouth. The country is barren, bleak, mountainous, and rugged. Near the mouth of the river Aber, in the centre between the Weſt and North Highlands, ſtands Fort William, with the town of Maryburgh, built upon a navigable arm of the ſea, not far from the foot of Benevis. Lochaber is inhabited moſtly by the Macdonalds, Camerons, and Mackintoſhes. The caſtle of Macdonald of Glengary, in this diſtrict, was burnt to the ground in the year 1715, in conſequence of his declaring for the Pretender: the elegant houſe and gardens belonging to Cameron of Lochiel underwent the ſame fate, for the ſame reaſon, in the year 1746.

LO'CHE, or LOACH. See COBITIS.

LO'CHEM, a town of Holland, in the department of Guelderland, on the Borkel: ten miles eaſt of Zutphen.

LOCHER MOSS', a moraſs of Scotland, in the county of Dumfries, ten miles long, and three broad. From the vaſt oak-trees that are dug up, it is evident, that this moraſs has been at ſome diſtant period a great foreſt. Canoes and anchors have been frequently found here; and, as the preſent moraſs is but little elevated, it appears probable it has been once covered by the ſea.

LO'CHES, a town of France, and principal place of a diſtrict, in the department of the Indre and Loire. This town, with the reſt of Touraine, formerly belonged to the kings of England. Here is a caſtle, ſtanding on a rock, formerly a very important fortification. In this caſtle are, or were, four ranges of ſubterraneous paſſages, running over each other, in the uppermoſt of which Lewis Sforza,

duke of Milan, was kept priſoner for ten years, and where alſo he died. In a large tower in it, are two cages, or moveable rooms, with very ſtrong oak gates, covered with iron, in one of which cardinal Balve, biſhop of Angers, was confined by Louis XII. It is twenty-one miles ſouth-ſouth-eaſt of Tours, and thirty-ſix north-weſt of Châteauroux. Lat. 47. 7. N. lon. 0. 34. E.

LOCHFAL'LART, a village in the Iſle of Skye.

LO'CHIA, *ſ.* [from λοχος, Gr. a lying-in woman.] A diſcharge of blood from the uterus of women, occurring after the expulſion of the placenta, and continuing four, five, or more, days.

LO'CHIAL, *adj.* Pertaining to lying-in women. Applied by medical writers to ſuch fevers as ariſe from ſuppreſſions or imminutions of the lochial diſcharges, or from any other irregularities during the time of that diſcharge.

LO'CHIAS, in ancient geography, a promontory and citadel of Egypt, near Alexandria.

LOCHMA'BEN, a town and royal borough, in the county of Dumfries, and diſtrict of Annandale, Scotland. It is ſuppoſed to have derived its name from the number of ſmall lochs in its vicinity. This borough, according to tradition, received its original charter from king Robert Bruce, whoſe paternal eſtate was the lordſhip of Annandale. It is certain at leaſt, that this monarch beſtowed upon it a conſiderable portion of lands from his own property. The oldeſt charter extant is a writ of *novodamus*, by James VI. dated July 16, 1612; which aſſigns as a reaſon for the *renewal*, the deſtruction of the town and its records by the Engliſh, during ſome of their inroads. Lochmaben has undoubtedly been formerly of more importance than at preſent. The government of the town is veſted in a provoſt, three bailies, a dean of guild, a treaſurer, and nine common-council-men. Coarſe linen is the ſtaple production of this place; 60,000 yards being annually manufactured here and in the neighbourhood for the Engliſh market. The coal uſed for fuel is brought chiefly from Cumberland. Annan, Dumfries, Kirkcudbright, Sanquhar, and this town, join in ſending one member to parliament.

The pariſh of Lochmaben extends about ten miles along the banks of the Annan, which poſſeſſes a very valuable ſalmon-fiſhery, almoſt contiguous to the town. Several ſmaller ſtreams flow into this river, all of which are abundantly ſupplied with trout. In the largeſt of the lochs, which preſents a truly beautiful ſheet of water, a great variety of fiſh are caught. The fiſhermen aſſert, that there are fifteen or ſixteen different kinds fit for the table. Among theſe is one called the *vendiſe*, or *vendace*, ſome ſay from Vendois in France, as being brought thence by one of the Jameſes. This ſtory, however, does not ſeem very probable, as it is found by experience, that this fiſh dies the inſtant it is touched; it has in vain been attempted to tranſport it to other lochs in the neighbourhood. The vendiſe is about the ſize of a herring, and reſembles it both in external appearance and anatomical ſtructure. In taſte and flavour it is extremely delicate, ſo that it is reckoned among the moſt delicious fiſh that ſwims. It lies generally in the deepeſt parts of the loch, and is caught with the net.

Upon a peninſula which ſtretches out into this loch ſtands a caſtle, originally built by Robert de Bruce, the firſt of that name who ſwayed the Scottiſh ſceptre. It was a place of great ſtrength previous to the introduction of fire-arms; and could ſtill be made ſo, if its fortifications were raiſed anew according to the principles of modern warfare. The original buildings of the caſtle ſeem to have occupied about an acre of ground. The walls were twelve feet in diameter. Three ditches ſurround the whole at different diſtances. The area contained within the outermoſt wall may be about thirteen acres: the inner one paſſes through a part of the caſtle, within which there was a place for the ſecurity of the boats, either from the effects of the weather or an enemy. While Scotland was a diſtinct kingdom from England, this fort was the frontier garriſon againſt Carliſle. The marquis of Annandale, among his other titles, aſſumes that of conſtable, or hereditary keeper, of the caſtle of Lochmaben. To this office was attached a ſalary of 300l. Scotch, along with the fiſhings of the lochs. For the maintenance of the troops compoſing the garriſon, the government had likewiſe what was called a *laird-a-mart* or *lardiner-mart* cow, which was one of the beſt fat cows from every pariſh in Annandale. Very little of the caſtle now remains, it having been completely pillaged of its materials for the conſtruction and ornament of ſome houſes in the neighbourhood.

Between this caſtle and the Kirk-lochs, cloſe to the town, are the veſtiges of another fort of more ancient date. Tradition reports that the ſtones were removed to aſſiſt in building another caſtle, probably that in the loch. The ſituation of this caſtle is fine, and commands a beautiful proſpect over an extenſive plain. It was originally the reſidence of the Bruce family, before they aſcended the throne of Scotland. It is ſaid that king Robert I. was born here.

Contiguous to the caſtle firſt mentioned, on the banks of the Annan, lies a large tract of fertile land, called the Four-towns, as comprehending four populous villages. Theſe lands were originally granted by one of the Scottiſh monarchs to his houſehold ſervants; and, the property of each being very ſmall, bare poſſeſſion was declared a ſufficient title. When any part of this property is transferred, it is only neceſſary to mark the tranſaction in the books of the lord of the barony. In meaſuring the lands of this diſtrict, an ell, called the barony-ell, is made uſe of, which contains 42 inches, whereas the common ell of the country is only 38 inches. Lochmaben and its vicinity derive no ſmall degree of celebrity, as the ſcene of ſome of the heroic actions of the renowned ſir William Wallace. It is ten miles north of Dumfries, and ſixty-five ſouth-ſouth-weſt of Edinburgh. Lat. 55. 11. N. lon. 3. 27. W.

LOCHNEV', a town of Sweden, in the province of Smaland: ſixty miles north of Calmar.

LOCHO'N (Stephen), a French prieſt, whoſe religious and moral writings are held in eſteem by devout catholics, was a native of Chartres; but in what year he was born is not known. He purſued his ſtudies in the college of Navarre at Paris; and, in the year 1674, had the degree of doctor conferred upon him by the faculty of divinity in that ſeminary. For ſeveral years he was incumbent of Bretonvilliers in the dioceſe of Chartres; but was obliged by the ill ſtate of his health to reſign that benefice, and to remove to Paris, where he chiefly ſpent his time in ſtudy and compoſition. He died about the year 1720. Among other works, he was the author of, 1. A Picture of the truly devout Perſon, in all Kinds of Situations, according to the Sacred Scriptures and the Fathers of the Church, 12mo. 1679. 2. The Illuſions of Falſe Zeal, a Moral Allegory, &c. with Examples taken from the Scriptures and the Fathers, 1696, 12mo. 3. An Abridgment of Church Diſcipline, &c. for the Inſtruction of the Clergy, 2 vols. 8vo. 1702 and 1705. 4. The Death of Sinners in a State of Impenitence, 1709, 12mo. 5. Dialogues between a Courtier and a Solitary, relative to the Conduct of the Great, 1713, 12mo. 6. A Treatiſe on Confeſſion, for the Uſe of Confeſſors and Penitents, 1708, 12mo. to which a Supplement was added in 1710. *Moreri.*

LOCHRUS'BEG, a bay on the weſt coaſt of Ireland. Lat. 54. 46. N. lon. 8. 23. W.

LOCHRUS'MORE, a bay on the weſt coaſt of Ireland, and county of Donegal, a little to the north of Lochruſbeg.

LOCH'STETT, a town of Pruſſia, in the province of Smaland; near it are the remains of a caſtle, with a dreadful dungeon, which formerly ſerved as a priſon: four miles north of Pillau.

LOCH'TY WA'TER, a river of Scotland, in the county of Fife, which runs into the river Leven about three miles from its mouth.

LOCHVIT'ZE,

LOCHVIT'ZE, a town of Ruſſia, in the government of Tchernigov, on the Suſa: ninety-ſix miles ſouth-eaſt of Tchernigov. Lat. 50. 20. N. lon. 28. 14. E.

LOCHWIN'NOCH, a town of Scotland, in the county of Renfrew; conſiderable for its cotton manufactures: ſix miles ſouth-weſt of Paiſley.

LOCK, *ſ.* [loc, Sax.] An inſtrument compoſed of ſprings and bolts, uſed to faſten doors or cheſts.—As there are *locks* for ſeveral purpoſes, ſo are there ſeveral inventions in *locks*, in contriving their wards or guards. *Moxon.*

We've *locks*, to ſafeguard neceſſaries,
And pretty traps to catch the petty thieves. *Shakeſpeare.*

The lock is reckoned the maſterpiece in ſmithery; a great deal of art and delicacy being required in contriving and varying the wards, ſprings, bolts, &c. and adjuſting them to the places where they are to be uſed, and to the various occaſions of uſing them.

From the various ſtructure of locks, accommodated to their different intentions, they acquire various names. Thoſe placed on outer doors are called *ſtock-locks*; thoſe on chamber doors, *ſpring-locks*; thoſe on trunks, *trunk-locks*, *pad-locks*, &c.

As on the proper conſtruction of locks the ſecurity of the moſt valuable kinds of property almoſt entirely depends, and as numberleſs devices are continually fallen upon to elude the utmoſt efforts of mechanical invention in this reſpect, it thence becomes an object of no ſmall importance to invent a lock which it ſhould be impoſſible to open except by its proper key.

A common lock conſiſts of a ſtrong *bolt*, which muſt be fitted in a proper box or caſe affixed to the door, and incloſing it on all ſides, to defend it from violence, that it cannot be withdrawn except by the application of the key, which ſhould enter the lock by a ſmall key-hole, and be ſurrounded by numerous *wards*, that occaſion the paſſage the key paſſes through, in turning round to move the bolt, to be very crooked and intricate, and thus preventing the introduction of any inſtrument or falſe key to withdraw the bolt. The third part of the lock is the *tumbler*, which is a catch or click holding the bolt from being withdrawn except the tumbler be firſt removed by the key, which is done at the ſame time it ſhoots the bolt. This common lock cannot be made perfectly ſecure from being picked or opened without the right key, from the circumſtance that the wards, though they may be variouſly diſpoſed, ſo as to require a very crooked key, muſt be always left fixed in the lock, and their figure may be taken by introducing a ſmall falſe key, covered with wax or other plaſtic ſubſtance, and receiving the impreſſion of the wards, from which information a falſe or ſkeleton key may be made, that will enter the lock and withdraw the bolt; or, if it will only raiſe up the tumbler, the bolt may ſometimes be forced back by other means. Another reaſon of the inſufficiency of the common lock is, that the variations capable of being made in the arrangement of the wards are not ſufficient to produce the required number of locks without having great numbers exactly alike, and their keys capable of opening each other reciprocally; from which circumſtance they become but an imperfect ſecurity, as any ill-diſpoſed perſon may, by furniſhing himſelf with a great variety of old keys, be enabled to open almoſt any common lock; particularly if theſe keys are filed away to ſkeletons, that is, leaving as little as poſſible of the ſolid part of the key, which will then have a greater chance of paſſing in between the intricate wards.

To produce a lock which would be free from theſe objections has been the ſtudy of many ingenious mechanics, whoſe various locks have different properties and advantages. The locks invented by Mr. Joſeph Bramah diſplay great ingenuity, and demand a particular deſcription, having been in very general uſe for many years paſt, and greatly admired. He obtained a patent for his invention in 1784, and eſtabliſhed a manufactory of them, in which he employed a number of ingenious tools and engines for the fabrication of the different parts. Mr. Bramah has indeed written a treatiſe upon the ſubject; from which we ſhall make a few extracts, introductory to the explanation of his patent locks.

The firſt perſon, according to this ingenious mechanic, who had any claim to merit in the branch of lock-making, is Mr. Baron; whoſe lock he acknowledges to be by far more perfect and ſecure than any that ever appeared before; though he ſtill conſiders it as unfit for giving that abſolute ſecurity which is to be wiſhed for. His improvement conſiſted in the proper application of what are called *tumblers*. "Theſe (ſays Mr. Bramah) are a kind of grapple; by which the bolt is confined, as well in its active as in its paſſive ſtation, and rendered immovable till ſet at liberty by the key. One of theſe inſtruments is commonly introduced into all locks that are of any uſe or value; it is lodged behind the bolt, and is governed by a ſpring which acts upon the tumbler as the tumbler acts upon the bolt: the application therefore of any force to the tumbler, which is ſuperior to the force of the ſpring, will cauſe it to quit its hold, and ſet the bolt at liberty." In the common method of applying theſe machines, however, it matters nothing how far the tumbler is lifted above the point at which it ceaſes to controul the bolt; but it is otherwiſe in thoſe of Mr. Baron's conſtruction. The action of his tumblers is circumſcribed by a certain ſpace cut in the centre of the bolt, of dimenſions ſufficient only to anſwer the purpoſe intended. The ſpace in which the tumbler moves is an oblong ſquare; and is not only furniſhed with niches on the under ſide, into which the hooks of the tumblers are forced by the ſpring as in other locks, but is provided with correſpondent niches on the other ſide, into which the hooks are driven if any greater force be applied to the tumblers than what is juſt ſufficient to diſengage them from the bolt. Hence it becomes abſolutely neceſſary, in the making of a falſe key, to conſtruct it in ſuch a manner, that it may with the greateſt exactneſs give the requiſite degree of preſſure, and no more.

Mr. Bramah allows that this is a very great improvement; but objects that it is ſtill poſſible to frame a key which will open it as well as its own; nor will the addition of any number of tumblers preclude the poſſibility of opening it. "By giving (ſays he) an uniform motion to the tumblers, and preſenting them with a face which exactly tallies with the key, they ſtill partake, in a very great degree, of the nature of *fixed wards*; and the ſecurity of this lock is thereby rendered in a proportionable degree defective. Thus, ſuppoſe the falſe key to have paſſed the wards, and to be in contact with the moſt prominent of the tumblers, the impreſſion, which the ſlighteſt touch will leave on the key, will direct the application of the file till ſufficient ſpace is prepared to give it a free paſſage. The key will then bear upon a more remote tumbler; which difficulty being in like manner got over, the lock will be as eaſily opened by the falſe as by the true key."

This ſeemingly inſuperable objection to the perfection of lock-making, however, our author removes with the greateſt eaſe imaginable, by cauſing the tumblers, which project unequally, to preſent a *plane* ſurface; whence they would require a ſeparate and unequal motion to diſengage them; of conſequence no diſtinct impreſſion could be made by them upon the plane ſurface of the web that would give any idea of their poſitions with regard to one another, and the conſtruction of a falſe key would be altogether impoſſible. But, though the principal difficulty with regard to Mr. Baron's lock be now overcome, others ſtill occur, viz. the difficulty of making locks which are conſtructed with tumblers ſufficiently durable. The tumblers themſelves, he obſerves, muſt be but ſlightly made; and, being expoſed to perpetual friction by the key and their own proper motion, they muſt ſoon decay; and the keys of Mr. Baron's locks, he alſo obſerves, are much leſs durable than thoſe of any other locks he ever ſaw.

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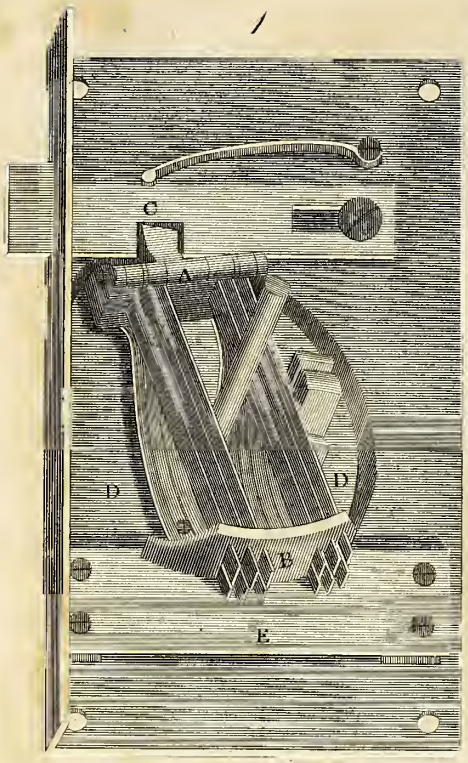

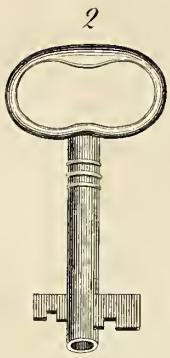

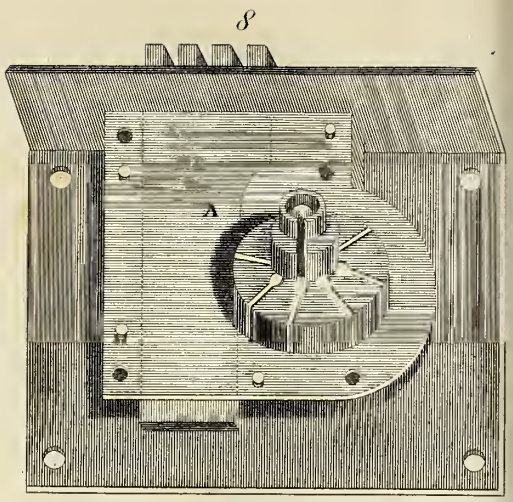

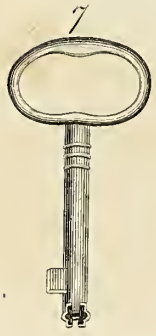

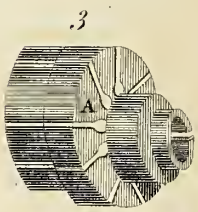

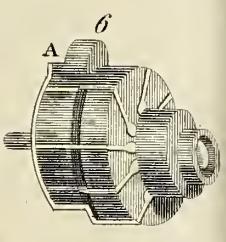

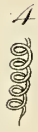

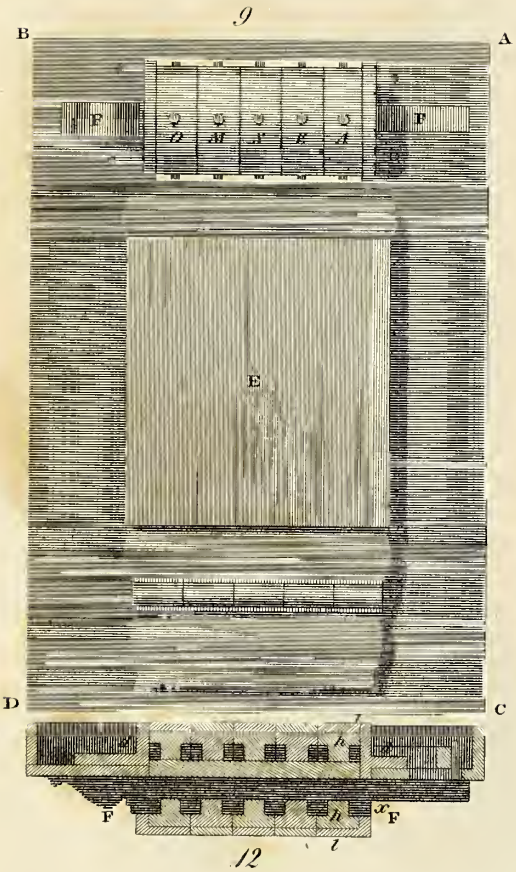

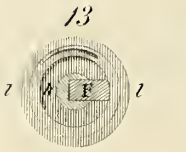

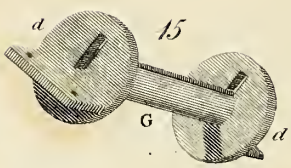

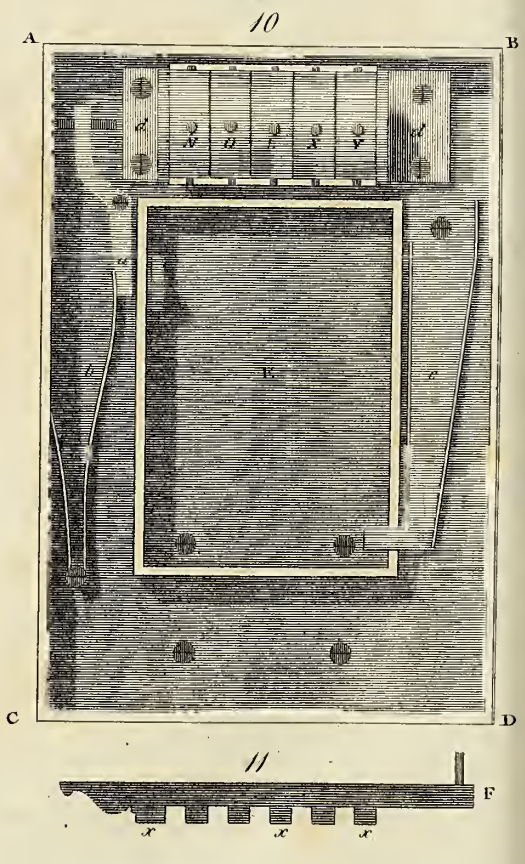

Fig. 1 to 8. Bramah's Locks. 9 to 16. Marshall's Secret Escutcheon.

J.Pass sc.

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With regard to the lock which Mr. Bramah preſents to the public as abſolutely perfect, he informs us, that the idea of conſtructing it was firſt ſuggeſted by the alarming increaſe of houſe-robberies, which may reaſonably be ſuppoſed to be perpetrated in a great meaſure by perfidious ſervants, or accompliſhed by their connivance. Thus it is evident, that the locks which might exclude ordinary houſebreakers could be no ſecurity againſt faithleſs ſervants, who, having conſtant acceſs to the locks, might eaſily get falſe keys fabricated at their leiſure. In conſidering the ſubject, our author was convinced, that his hope of ſucceſs depended entirely upon his uſing means as diſſimilar as poſſible to thoſe by which the old locks were conſtructed; as theſe, however varied, had been found inſufficient for the purpoſe. "As nothing (ſays he) can be more oppoſite in principle to *fixed wards* than a lock which derives its properties from the *motion* of all its parts, I determined that the conſtruction of ſuch a lock ſhould be the ſubject of my experiment." In the proſecution of this experiment he had the ſatisfaction to find, that the leaſt perfect of all his models fully aſcertained the truth and certainty of his principle. The excluſion of wards made it neceſſary to cut off all communication between the key and the bolt; as the ſame paſſage, which (in a lock *ſimply* conſtructed) would admit the key, might give admiſſion likewiſe to other inſtruments. The office, therefore, which in other locks is performed by the extreme point of the key, is here aſſigned to a lever, which cannot approach the bolt till every part of the lock has undergone a change of poſition. The neceſſity of this change to the purpoſes of the lock, and the abſolute impoſſibility of effecting it otherwiſe than with the proper key, are the points to be aſcertained; and this is effected in the following manner.

Fig. 1 ſhows Mr. Bramah's firſt attempt to conſtruct a lock upon this principle: which, to his ſurpriſe, turned out complete and perfect. A repreſents a common axis on which the ſix levers, croſſing the face of the lock, are united as on a joint. Each of theſe reſts upon a ſeparate ſpring ſufficiently ſtrong to bear its weight; or, if depreſſed by a ſuperior force, to reſtore it to its proper poſition when that force is removed. B repreſents a frame through which the levers paſs by ſeparate grooves, exactly fitted to their width, but of ſufficient depth to allow them a free motion in a perpendicular direction. The part which projects from the oppoſite ſide of the joint A, and is inſerted in the bolt C, is a lever to which two offices are aſſigned; one to keep the bolt in a fixed poſition, in the abſence of the key; the other, to give it its proper motion upon the application of the key. D D is a circular platform turning upon a centre. On this the joint or carriage of the levers, and the ſprings on which they reſt, are fixed; and the motion of this platform impels the bolt, in either direction, by means of the lever which is projected from the joint A. The inviolable reſtraint upon this lock, by which means it is ſubjected only to the action of the key, is lodged in the part E, which is a thin plate, bearing at each extremity on a block, and having of courſe a vacant ſpace beneath, equal in height to the thickneſs of the blocks on which it reſts. By this plate the motion of the machine is checked or guided in the following manner: On the edge of the plate which faces the movement there are ſix notches which receive the ends of the levers projecting beyond the frame B; and while they are confined in this manner the motion of the machine is ſo totally ſuſpended as to defy every power of art to overcome. To underſtand in what manner the proper key of this lock overcomes theſe obſtacles, it muſt be obſerved, that each lever has a notch on its extremity, and that thoſe notches are diſpoſed as irregularly as poſſible. To give the machine a capacity of motion, theſe notches muſt be brought parallel to each other, and, by a diſtinct but unequal preſſure upon the levers, be formed into a groove in a direct line with the edge of the plate E, which the notches are exactly fitted to receive. The leaſt motion of the machine, while the levers are in this poſition, will introduce the edge of the plate into the groove; which, controuling the power of the ſprings, will give liberty to the levers to move in a horizontal direction as far as the ſpace between the blocks which ſupport the plate E will admit, and which is ſufficient to give the machine a power of acting on the bolt. The impoſſibility of thus bringing the notches on the points of the levers into a direct line, ſo as to tally with the edge of the plate E by any other means than the motion and impulſe of the key, is that which conſtitutes the principal excellence of this lock.

The key, fig. 2, exhibits ſix different ſurfaces, againſt which the levers are progreſſively admitted in the operation of opening the lock; the irregularity of theſe ſurfaces ſhows the unequal and diſtinct degree of preſſure which each lever requires to bring them to their proper bearings, in order to put the machine in motion. Hence it appears, that, unleſs the various heights of the ſurfaces expreſſed on the bit of the key are exactly proportioned to the ſeveral diſtances neceſſary to bring the notches into a ſtraight line with each other, they muſt remain immovable; and (ſays our author), as one ſtroke of a file is ſufficient to cauſe ſuch a diſproportion as will prove an inſurmountable impediment to their motion, I may ſafely aſſert, that it is not in art to produce a key or other inſtrument, by which a lock, conſtructed upon this principle, can be opened." On this principle it would even be a matter of great difficulty for any workman, however ſkilful, to conſtruct a key for the lock when open to his inſpection: "for the levers being raiſed, by the ſubjacent ſprings, to an equal height in the frame B, preſent a *plane* ſurface; and conſequently convey no direction that can be of any uſe in forming a tally to the *irregular* ſurface which they preſent when acting in ſubjection to the key." Unleſs therefore we can contrive a method to bring the notches on the points of the levers in a direct line with each other, and to retain them in that poſition till an exact impreſſion of the irregular ſurface, which the levers will then exhibit, can be taken; the workman will be unable to fit a key to the lock, or to move the bolt. This proceſs muſt be rendered extremely troubleſome by means of the ſprings; and, if ſuch difficulties occur even when the lock is open to the inſpection of a ſkilful workman, much more muſt we ſuppoſe it out of the power of one who has not acceſs to the internal parts to make a falſe key to a lock of this kind. Theſe difficulties render it neceſſary, in making locks of this kind, not to fit the key to the lock, as is uſual in other locks, but to fit the lock to the key. In this kind of lock, therefore, the key muſt be made firſt; and the inequalities upon the ſurface of the bit worked as chance or fancy may direct, without any reference to the lock. The key being thus completed, and applied to the ſurface of the levers, will, by a gentle preſſure, force them to unequal diſtances from their common ſtation in the frame B, and ſink their points to unequal depths into the ſpace beneath the plate E. While the levers are in this poſition, the edge of the plate E will mark the preciſe point at which the notch on each lever muſt be expreſſed. The notches being cut by this direction, the irregularity which appears when the levers reſume their ſtation in the frame B, and the inequality of the receſſes on the bit of the key, will appear as a ſeal and its correſponding impreſſion.

The following is a lock contrived upon the ſame principle, but more curious, and, in our author's opinion, more extenſively uſeful. Fig. 3 repreſents a circular block of metal divided from the centre into eight compartments, each containing a cell which forms a paſſage through the block, as is repreſented by the ſmall circles deſcribed on the flat ſurface A. In each of theſe cells two grooves are cut at oppoſite points, which open a communication with the centre at one point, and with the ſpherical ſurface of the block or barrel at the other. The ſmall circle, which marks the centre of the flat ſurface A,

is the key-hole, which likewiſe forms a paſſage through the barrel in a parallel line with the cells which ſurround it. This figure repreſents the frame in which the active parts of the lock are depoſited. Fig. 4 ſhows a ſpiral ſpring lodged in the bottom of each cell, and occupying one half of the ſpace, the other being filled with a ſlider reſting upon the ſpring, and repreſented by fig. 5, the office of theſe ſliders exactly correſponding with that of the levers in the lock already deſcribed. Thus, when lodged in their reſpective cells, they are ſuſtained, like the levers, by the elaſticity of the ſprings upon which they reſt, till a ſuperior power is applied; and they are again reſtored to their ſtations by the re-action of the ſprings when the weight is removed. The ſide B of each ſlider is projected beyond the circular ſurface, as repreſented fig. 6, in a manner ſimilar to the projection of the levers in the former lock, beyond the curved frame in which they move. The point C, fig. 3, is projected through the interior groove into the ſpace which forms the centre or key-hole, expreſſed on the flat ſurface A. Fig. 7 repreſents the key. When this is applied, it muſt of courſe encounter theſe interior projections; and, when preſſed forward, the indented ſpaces on its point, being unequal, will force the ſliders to unequal diſtances from their bearers; bringing the notches expreſſed on their exterior projections in a direct line with each other, in a manner ſimilar to that by which the effect is produced upon the levers in the former lock. When the key is withdrawn, and the ſliders reſume their ſtations by the preſſure of the ſprings, the diſpoſition of the notches muſt be irregular in the ſame proportion that the indentations on the point of the key are unequal; and they muſt neceſſarily fall again into a ſtraight line when acted upon by the key.

Fig. 6 ſhows the barrel completely fitted for action. Its interior end is capped with a plate, which unites its compartments, and confines the ſprings and ſliders within the cells to which they belong. From that plate proceeds the point A, which repreſents the lever by which the bolt is projected or withdrawn, according to the direction in which the machine performs its revolution. The parts of the movement being thus united, the interior end of the barrel is depoſited in a bed repreſented fig. 8. The ſtation of the bolt is at A; the lever which acts upon it being projected on the other ſide.

On this lock our author obſerves, that it is excellent for ſtreet-doors; "for no method of robbery (ſays he) is more practiſed, than gaining admittance into houſes by thoſe keys, which, as is well known, may be procured at the old iron ſhops to fit almoſt any lock in uſe. Such robberies are generally committed where the ſervants are allowed to take the key with them when ſent on errands, it being impracticable while the key is left in the lock. The variations, by which the production of correſpondent keys is avoided, have two ſources; the one ariſing from the changes that may be made in the diſpoſition of the levers; the other from the number of points contained on the projected ſurface of each lever; by which the poſition of its notch may, in the ſmalleſt degree, be varied. The variations produceable in the diſpoſitions of ſix figures only, are 720; theſe, being progreſſively multiplied by additional figures, will increaſe by aſtoniſhing degrees; and eventually ſhow, that a lock containing twelve levers will admit of 479,001,500 changes; which, with the addition of another lever, will increaſe to 6,227,020,800. Theſe being again multiplied by the number of changes which the projected ſurface of the levers will admit in the diſpoſition of the notches, their amount will exceed numeration, and may therefore be properly ſaid to be infinite. The ſlighteſt inſpection will at once ſhow, that their conſtruction precludes all poſſibility of obtaining an impreſſion of their internal parts, which is neceſſary for the fabrication of a falſe key; for it will be eaſily ſeen, that the poſitions into which the levers are forced by the preſſure of the key in opening the lock, can no more be aſcertained when the key is withdrawn, than the ſeal can be copied from its impreſſion on a fluid, or the courſe of a ſhip be diſcovered by tracing it on the ſurface of the waves. But inviolable ſecurity is not the only excellence they poſſeſs; the ſimplicity of their principle gives them likewiſe a great advantage over locks that are more complicated, in point of duration; for, their eſſential parts being ſubject to no friction, nor expoſed to any poſſible accident from without, they will be leſs affected by uſe, and leſs liable to ſtand in need of repair."

Mr. Bramah's locks may be arranged ſo as to require a new and different key in caſe the original ſhould be loſt or ſtolen; for this purpoſe the lock muſt be opened, and the ſliders taken out and changed into different grooves; a new key muſt now be made, with the grooves of the ſame depth as the original key, but arranged in a different order, correſponding with the new arrangement of the ſliders. The old key will not now open the lock. Another great advantage of theſe locks is, that, from the circumſtance before explained of the bolt having no action to turn the barrel, though the barrel has a great power to ſhoot the bolt, a ſtrong lock may have but a very ſmall key. For inſtance, the bolt of the lock at fig. 1 is of great ſtrength, while the key, fig. 2, is ſo ſmall, that it may be carried ſuſpended to the watch-chain; and then it will not be in danger of being loſt or miſlaid, ſo as to give opportunity for ill-diſpoſed perſons to make a falſe key from it, unknown to the owner.

Mr. Bramah's locks continue to be moſt generally in uſe, though others diſplaying great ingenuity have been brought forward at different times. For ſome of theſe patents have been obtained, as that of Mr. Spears, deſcribed in the viiith volume of the Repertory of Arts. Others have been at once generouſly given to the public; and accounts of them may be ſeen in the Tranſactions of the Society for the Encouragement of Arts, &c. particularly in vols. iii. xviii. xix. xxiii. We ſhall devote the remaining ſpace of the preſent Engraving to a deſcription of Mr. Timothy Marſhall's ſecret eſcutcheon, from the third volume (now ſcarce) of thoſe Tranſactions.

The marquis of Worceſter appears to have invented ſome ſecret eſcutcheons; for, in his Century of Inventions, publiſhed in 1663, at N° 72, after having ſpoken of three kinds of locks invented by him, he ſays, "An eſcutcheon to be placed before any of theſe locks with theſe properties: The owner, though a woman, may with her delicate hand vary the ways of coming to open the lock ten million times beyond the knowledge of the ſmith that made it, or of me who invented it."

Many attempts have been made to form a machine equal in its properties to the deſcription here given; and from thence, it is probable, aroſe the kind of padlocks which have been long made in this country, in great numbers, which, having ſeveral letters on different rings, can only be opened when a certain ſet of thoſe letters is arranged in one order; but this was in no degree equal to the end propoſed; for, beſides the workman who made it being at all times informed of the poſition the letters muſt be in, and conſequently enabled to open it, the letters and rings admitting of no variation of place, at the will of the owner; reſerving, at the ſame time, a power of opening the lock; whenever the proper arrangement became known, the ſecret was divulged, and all ſecurity at an end; but, by the improvement made by Mr. Marſhall, the letters or figures allowing an almoſt infinite variety of changes, the owner may, in one minute, alter the ſecret in ſuch a manner, that even the maker would be as unlikely to open it as he would be of gaining the higheſt prize in a lottery by the chance of a ſingle ticket. Thus this kind of eſcutcheon is infinitely more ſecure than any hitherto in uſe, eſpecially as the alteration of the letters may be made every day for years, without recurring to their firſt ſtate; and, as the owner may at one time chooſe to truſt a friend or a domeſtic with the ſecret, ſo that they might have recourſe to his valuables, &c. he may alſo at another time wiſh to exclude them from that privilege, which this con-

trivance renders very eaſy to be done. As this improvement relates only to the eſcutcheon, it is obvious that every attempt to pick the lock it covers, or to open it by means of falſe keys, is prevented; a circumſtance of no ſmall importance, when locks of a curious conſtruction are made uſe of.

Figs. 9 to 16 repreſent the different parts of Mr. Marſhall's eſcutcheon. Fig. 9 is a view of the machine as it appears upon the door, when fixed over the lock, and covering the key-hole. Fig. 10 is an inſide view of the ſame, ſuppoſing it to be firſt removed from the door. A B C D is a braſs box, faſtened over the key-hole; it has a ſquare hole through it, covered by a ſmall door E; this door is kept ſhut by a pin fixed into a ſmall lever *a*, which enters a projection from the ſide of the door, and thus prevents it being opened unleſs the lever is firſt drawn back; a ſpring *b* is applied behind the lever to force it outward, and another at *c* always preſſes againſt the door, and acts to throw it open as ſoon as the lever *a* is drawn back, which is accompliſhed by means of a pin, which comes through a groove in the plate; this pin is faſtened in a ſquare bar F, figs. 9 and 13, (ſhown ſeparately in fig. 11.) on the front of the plate. The ſmall perſpective, fig. 15, repreſents two braſs cocks, *d*, *d*, which ſupport the ends of a cylindric barrel G, in which is a groove for the bar F to ſlide backwards and forwards; theſe cocks are ſcrewed to the plate within-ſide, as ſhown at *d d*, figs. 10 and 12, and come through an opening in the plate; ſo that the bar F is in front of the plate. The cylinder G, fig. 15, is the common axis for five ſmall rollers *A*, *E*, *S*, *M*, *O*, fig. 9. The ſtructure of one of theſe is explained by figs. 13, 14, and 16; *h*, fig. 12 and 16, is a circular piece of braſs which fits upon the centric wire; this, as is ſhown in the ſections, figs. 14 and 16, is thicker at the outſide than the middle; and the front views, fig. 13, 14, ſhow how a receſs is cut, communicating with the centre hole. Now, when the five rollers are turned round upon the central barrel G, ſo that the receſſes are all brought into the front, the projecting teeth *x*, *x*, of the ſlider F, fig. 11, will meet with no obſtruction, and may be drawn back ſo as to open the eſcutcheon; but, when any of the rollers are turned round, ſo that the thin parts near the centre are brought between the teeth of the ſlider, then the ſlider cannot be withdrawn. The poſition of the roller, when the ſlider is at liberty, is known by bringing five of the letters which are engraven on the outſide of the rollers uppermoſt, and it is in theſe letters that the ſecret conſiſts. But, to render the combination of letters variable, the letters are not engraved upon the outſide of the rollers themſeves, but upon a thin braſs hoop *l*, which is fitted on round the roller; a ſpring *n* is faſtened to the roller, and, preſſing upon the inſide of the hoop, cauſes ſuch a friction, that they go together in general; but when the ſecret is to be changed, the ſlider F muſt be drawn partly back, ſo that its teeth *x* come in the way of the thin parts of the rollers, and they cannot, therefore, be turned round; the outſide hoop *l* is then forced round upon the inſide one, and a freſh letter brought oppoſite the receſs; by this operation the ſecret is altered, and the eſcutcheon cannot be opened till the ſame combination is produced. Each roller has four letters upon it, in all twenty letters; and the combinations which they are capable of are ſo numerous, that the chance is ſtrongly againſt any perſon not acquainted with the ſecret opening it. Ten guineas were voted to Mr. Marſhall, on the 4th of February, 1784, for this invention; and the machine itſelf is preſerved at the ſociety's repoſitory in the Adelphi for the inſpection of the public.

In the ſame volume of the Society's Tranſactions, we find that the ſilver medal was preſented to Mr. Taylor, of Petworth, for his improvement on the latch or ſpring-bolt of common locks. This is effected by ſimply reverſing the tumbler, ſo that its curved ſide acts againſt two ſtubs fixed on the tail of the latch, and thruſts back the latter with eaſe, whether the knob be turned to the right or to the left when the lock is opened. Mr. Taylor has alſo, behind the tail of the latch, fixed a guide containing a groove, in which runs a ſmall friction-wheel, that ſerves to keep the latch in its direct ſituation, and at the ſame time to diminiſh its friction; the arms of his tumbler are ſomewhat contracted, in order that the latch or ſpring-bolt may move with greater facility. By this conſtruction, the parts of the tumbler and latch, which are in contact, move in a line, ſo that they paſs over the greateſt ſpace under the ſmalleſt angle; and the lock itſelf may be conſtantly uſed for ſeveral years, without requiring the application of oil.

The laſt lock we ſhall notice is one invented by Mr. A. O. Stanſbury of New York, and for which a patent was obtained in London in the year 1806. To underſtand the nature of this machine without the aſſiſtance of an engraving, we muſt ſuppoſe that a flat circular plate is fitted to turn round upon the centre pin for the key, and that this plate, when turned round, ſhoots the bolt, which may be done by various means. The locking-part conſiſts of four, ſix, or more, ſmall ſteel pins, which are received in holes made very near each other, through both the circular turning plate and the fixed plate beneath it. By theſe pins the circular plate is held faſt from turning. The key has the ſame number of pins, and arranged in the ſame poſition and diſtance as the pins in the plate. The key being introduced, it is preſſed forwards againſt the circular plate, and turned round till the pins in it come over the pins in the circular plate, and the preſſure of the hand forces the pins out of the circular plate, the pins in the key occupying the place of them. The plate is now relieved, and the key has hold of the plate to turn it round and open the lock. Each pin is provided with a ſpring behind the fixed plate to force it forwards. The difficulty of making a falſe key to this lock is very great; as any error in the number, ſize, poſition, or length, of the pins, will prevent it from opening the lock. To avoid the danger of impreſſions being taken, many marks are ſtamped upon the circular plate, which are exactly the ſame as the marks of the real pins; thus an impreſſion taken from it would only miſlead. Mr. Stanſbury has alſo made an ingenious improvement upon the common ſpring door-lock. The handle which opens the ſpring-catch for faſtening the door, inſtead of requiring to be turned round, is made ſo that it withdraws the ſpring-catch, by puſhing the handle on one ſide of the door and pulling it on the other. This method is extremely convenient; for preſſing the handle releaſes the lock, and continuing the preſſure opens the door, and pulling the handle on the other ſide has the ſame effect. A perſon with his hands full may open ſuch a door by only leaning againſt the handle. *Monthly Mag.* vol. xxi.

LOCK, *ſ.* The part of the gun by which fire is ſtruck.—A gun carries powder and bullets for ſeven charges and diſcharges; under the breech of the barrel is one box for the powder; a little before the *lock*, another for the bullets; behind the cock a charger, which carries the powder to the further end of the *lock*. *Grew.*—A hug; a grapple.—They muſt be practiſed in all the *locks* and gripes of wreſtling, as need may often be in fight to tugg or grapple, and to cloſe. *Milton on Education.*—Any incloſure:

Sergeſthus, eager with his beak to preſs
Betwixt the rival gally and the rock,
Shuts up the unwieldy centaur in the *lock*. *Dryden.*

A quantity of hair hanging together.—Well might he perceive the hanging of her hair in *locks*, ſome curled, and ſome forgotten. *Sidney.*—A goodly cypreſs, who bowing her fair head over the water, it ſeemeth ſhe looked into it, and dreſſed her green *locks* by that running river. *Sidney.*

His grizly *locks*, long growen and unbound,
Diſorder'd hung about his ſhoulders round. *Spenſer.*

A tuft.—I ſuppoſe this letter will find thee picking of daiſies, or ſmelling to a *lock* of hay. *Addiſon.*—The bot-

tom

tom was ſet againſt a *lock* of wool, and the ſound was quite deaded. *Bacon.*—They nouriſh only a *lock* of hair on the crown of their heads. *Sandys's Travels.*—A ſluice, or floodgate on a river. See the article CANAL NAVIGATION, vol. iii. p. 692 & ſeq.—To deſtroy any ſluice or lock on a navigable river, is made felony without benefit of clergy; and the offender may be tried, as well in an adjacent county, as in that wherein the act is committed. *Stat.* 8 *Geo.* II. *c.* 20. made perpetual by 17 *Geo.* II. *c.* 16.

To LOCK, *v. a.* To ſhut or faſten with locks:

The garden, ſeated on the level floor,
She left behind; and, *locking* ev'ry door,
Thought all ſecure. *Dryden.*

To ſhut up or confine, as with locks.—Always *lock* up a cat in a cloſet where you keep your china plates, for fear the mice may ſteal in and break them. *Swift.*

I am *lockt* in one of them;
If you do love me, you will find me out. *Shakeſpeare.*

Then ſeek to know thoſe things which make us bleſt;
And, having found them, *lock* them in thy breaſt. *Denham.*

To cloſe faſt.—Death blaſts his bloom, and *locks* his frozen eyes. *Gay.*

To LOCK, *v. n.* To become faſt by a lock:

For not of wood, nor of enduring braſs,
Doubly diſparted it did *lock* and cloſe,
That, when it *locked*, none might through it paſs. *F. Queen.*

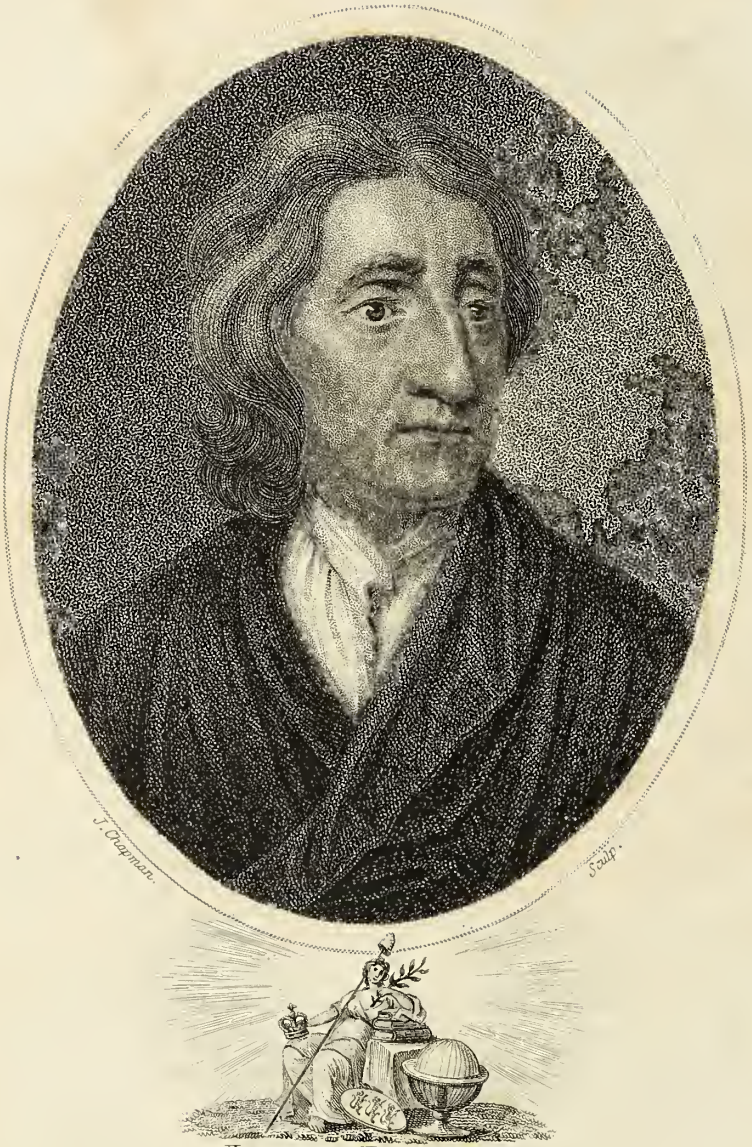
To unite by mutual inſertion.—Either they *lock* into each other, or ſlip one upon another's ſurface; as much of their ſurfaces touches as makes them cohere. *Boyle.*

LOCK (Matthew), organiſt and compoſer to king Charles II. was a native of Exeter, and a choriſter in the cathedral of that city, while William Wake was organiſt there. He had afterwards inſtructions in muſic from Edward Gibbons; and had ſo much diſtinguiſhed himſelf as a profeſſor, that we are told, in the Continuation of Sir Richard Baker's Chronicle, he was appointed to compoſe the muſic for the public entry of the king at the reſtoration. But he ſeems firſt to have appeared as an author in 1657, during the interregnum, by the publication of his "Little Conſort of three parts for viols or violins, conſiſting of pavans, ayres, corants, ſarabands, in two ſeveral varieties; the firſt twenty of which are for two trebles and a baſe." Some of his compoſitions appear in the ſecond part of John Playford's continuation of Hilton's Catch that catch can, in 1667. Of which publication, the ſecond part contains "Dialogues, Glees, Ayres, and Ballads, of two, three, and four, voices;" among which we find the moſt pleaſing of Lock's compoſitions; "Never trouble thyſelf about times or their turnings," a glee for three voices.

Lock was the firſt who attempted dramatic muſic for the Engliſh ſtage, if we except the maſques that were performed at court, and at the houſes of the nobility, in the time of Charles I. and II. When muſical dramas were firſt attempted, which Dryden calls *heroic plays* and *dramatic operas*, Lock was employed to ſet moſt of them. Circe, written by ſir William Davenant's ſon, Dr. Davenant, was ſet by Banniſter; but the *ſemi-operas*, as they were called, the Tempeſt, Macbeth, and Pſyche, tranſlated from the French of Moliere by Shadwell, were ſet to muſic by Lock. The Tempeſt and Pſyche were performed in 1673, with muſic, dancing, and ſplendid ſcenes; but not printed till 1675, when it was publiſhed with the following title: "The Engliſh Opera; or the vocal Muſic in Pſyche, with the inſtrumental therein intermixed. To which is adjoined the inſtrumental Muſic in the Tempeſt. By Matthew Lock, Compoſer in ordinary to his Majeſty, and Organiſt to the Queen." This publication is dedicated to James duke of Monmouth. There is a preface of ſome length by the compoſer, Matthew Lock, which, like his muſic, is rough and nervous, exactly correſponding with the idea which is generated of his private character, by the peruſal of his controverſy with Salmon, and the ſight of his picture in the muſic-ſchool at Oxford. It is written with that natural petulance which probably gave birth to moſt of the quarrels in which he was involved. He begins with a complaint of the tendency of his brother-muſicians "to peck and carp at other men's conceptions, how mean ſoever may be their own." And, expecting to fall under the laſh of "ſome ſoft-headed or hard-hearted compoſer," he ſets about removing "the few blocks at which they may take occaſion to ſtumble," with a degree of indignation that implies a ſpirit under no great governance. The firſt objection which he thinks likely to be made is to the word *opera*; to which he anſwers, that it is a word borrowed from the Italian, who by it diſtinguiſhed this kind of drama from their comedies, which, after a plan is laid, is ſpoken extempore; whereas this is not only deſigned, but written, with art and induſtry; and afterwards ſet to ſuitable muſic. In which idea he has produced the following compoſitions, which, for the moſt part, are "in their nature ſoft, eaſy, and, as far as his abilities could reach, agreeable to the deſign of the poet. For in them there is ballad to ſingle air, counterpoint, recitative, fugue, canon, and chromatic muſic; which variety, without vanity be it ſaid, was never in court or theatre till now preſented in this nation." He confeſſes, however, that ſomething had been attempted before in this way of compoſition, but more by himſelf than any other. And adds, "that the author of the drama prudently conſidering, that, though Italy was and is the great academy of the world for muſic and this ſpecies of entertainment, yet, as this piece was to be performed in England, which is entitled to no ſuch praiſe, he mixed it with interlocutor, as more proper to our genius." Here we have a ſhort hiſtory of theſe early attempts at dramatic muſic on our ſtage, in which, as in the moſt ſucceſsful repreſentations of this kind in later times, the chief part of the dialogue was ſpoken; and recitative, or muſical declamation, which ſeems to be the true criterion and characteriſtic of Italian operas, but ſeldom uſed, unleſs merely to introduce ſome particular airs and choruſes: as in the modern Comus, the air, "On ev'ry hill, in ev'ry dale," is preceded by the ſhort recitative "How gentle was my Damon's air."

Upon examining this muſic, it appears to have been compoſed very much on Lulli's model. The melody is neither recitative nor air, but partaking of both, with a change of meaſure as frequent as in any old French opera. Lock had genius and abilities in harmony ſufficient to have ſurpaſſed his model, or to have caſt his movements in a mould of his own making; but ſuch was the paſſion of Charles II. and conſequently of his court at this time, for every thing French, that in all probability Lock was inſtructed to imitate Cambert and Lulli. His muſic for the witches in Macbeth, which, when produced in 1674, was as ſmooth and airy as any of the time, has now obtained, by age, that wild and ſavage caſt which is admirably ſuited to the infernal characters that are ſuppoſed to perform it.

This muſician was of ſo iraſcible a diſpoſition, that he ſeems never to have been without a quarrel or two on his hands. He had a quarrel with the gentlemen of the chapel royal, early in Charles II's reign. Being compoſer in ordinary to the king, he produced for the chapel royal a morning ſervice, in which he ſet the prayer after each of the ten commandments to different muſic from that to which the ſingers had been long accuſtomed, which was deemed an unpardonable innovation; and, on the firſt day of the performance of it before the king, there was a diſturbance, and an obſtruction for ſome time to the ſervice. To convince the public that it was not from the meanneſs or inaccuracy of the compoſition that this impediment to its performance happened, Lock thought it neceſſary to print the whole ſervice; and it came abroad, in ſcore, on a ſingle ſheet, with a long and laboured vindication, by way of preface, under the following

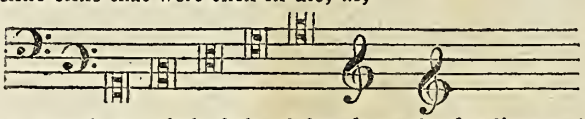


JOHN LOCKE.

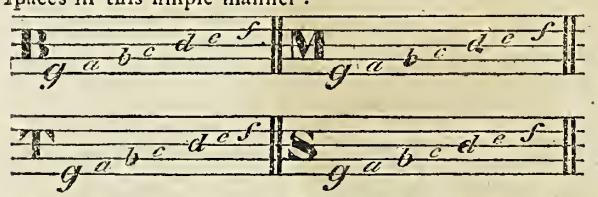
London, Published as the Act directs June [illegible]

lowing title: "Modern Church-muſic pre-accuſed, cenſured, and obſtructed in its performance before his majeſty." Lock was long ſuſpected of being a catholic; and it is probable that this new ſervice, by leaning a little more towards the maſs than the ſervice of the proteſtant cathedral, may have given offence to ſome zealous members of the church of England.

Another quarrel we ſhall mention was occaſioned by the following well-meant publication: "An Eſſay to the Advancement of Muſic, by caſting away the Perplexity of different Cliffs; and uniting all ſorts of Muſic, Lute, Viols, Violins, Organ, Harpſichord, Voice, &c. in one univerſal Character; by T. Salmon, A.M. of Trinity College, Oxford. London, 1672." This book (ſays Burney) is well-written; and, though very illiberally treated by Lock, Playford, and ſome other profeſſors, contains nothing that is either abſurd or impracticable; nor could we diſcover any ſolid objection to its doctrines being adopted, except the effect it might have upon old muſic, by ſoon rendering it unintelligible. At preſent the tenor cliff alone is thought an inſuperable difficulty in our country, by dilettanti performers on the harpſichord; but, if Salmon's ſimple and eaſy muſical alphabet were chiefly in uſe, the baſe cliff would likewiſe be ſoon rendered as obſolete and difficult as the tenor; ſo that two parts or cliffs out of three in preſent uſe, would become unintelligible. The author's plan was ſimply this: Inſtead of the eight or nine cliffs that were then in uſe, as,



to expreſs the whole ſcale of ſounds on the five lines and ſpaces in this ſimple manner:



g in every part of the ſcale being on the firſt line, *a* on the firſt ſpace, *b* on the ſecond line, &c. the letters preceding each ſeptenary implying baſe, mean, treble, and ſoprano. This innocent and ingenious propoſal was treated by Lock, in a pamphlet entitled, "Obſervations on a late Book called an Eſſay, &c." not only with contempt, but with obloquy and unbridled abuſe.

To do Lock juſtice, however, it muſt be acknowledged, that to him we are indebted for the firſt rules that were ever publiſhed in England, for a *baſſo continuo*, or thorough-baſe; theſe rules he gave to the world, in a book entitled Melotheſia, in oblong 4to. 1673. It is dedicated to Roger l'Eſtrange, eſq. afterwards ſir Roger l'Eſtrange, who was a good muſician, and an encourager of its profeſſors. It contains, beſides the thorough-baſe rules, ſome leſſons for the harpſichord and organ by Lock himſelf, and others. He was author likewiſe of ſeveral ſongs printed in The Treaſury of Muſic, The Theatre of Muſic, and other collections of ſongs. In the latter of theſe is a dialogue, "When death ſhall part us from theſe kids," which, with Dr. Blow's "Go, perjured man," was ranked among the beſt vocal compoſitions of the time.

It is preſumed, that, when Lock was appointed compoſer in ordinary to the king, he was profeſſedly a member of the church of England; but it is certain that he went over to the Romiſh communion afterwards, and became organiſt to queen Catharine of Portugal, the conſort of Charles II. and died a papiſt in 1677.

LOCKE, a town of Pruſſia, in Ermeland: eleven miles ſouth of Heilſberg.

LOCKE, a military town of America, in Milton townſhip, New York, in Onondago county; thirteen miles north-eaſt of the ſouth end of Cayuga lake.

LOCKE (John), one of the greateſt philoſophers and moſt powerful writers that ever adorned this country, was born at Wrington, in Somerſetſhire, on the 29th of Auguſt, 1632. His father was a gentleman of ſtrict probity and economy, and poſſeſſed a handſome fortune. He took great pains in the education of his ſon; and, when he was of a proper age, ſent him to Weſtminſter ſchool, where he continued till the year 1651, when he was entered a ſtudent of Chriſt-church college, in the univerſity of Oxford. Here he was diſtinguiſhed above all his contemporaries, and was conſidered to be the moſt ingenious young man in the college. It appears, however, that he was diſguſted with the method of ſtudy preſcribed to him, which was after the manner of the peripatetics; and it is ſaid, that the books which firſt gave him a reliſh for the ſtudy of philoſophy were thoſe written by Des Cartes. Having taken his degrees in arts in 1655 and 1658, Mr. Locke for ſome time cloſely applied himſelf to the ſtudy of phyſic; and it is certain that, for a ſhort time, he followed it as a profeſſion. In the year 1664, he accepted an offer to go abroad, as ſecretary to ſir William Swan, envoy from Charles II. to the elector of Brandenburgh; but, returning to England again within leſs than a year, he reſumed his ſtudies at Oxford with renewed vigour, applying himſelf particularly to natural philoſophy.

In 1666 he was accidentally introduced to the acquaintance of lord Aſhley, afterwards earl of Shafteſbury, in the capacity of a medical practitioner, during the abſence of the phyſician who regularly attended his lordſhip. When the noble lord left Oxford to go to Sunning Hill, he made Mr. Locke promiſe him a viſit there, which promiſe he performed in 1667. Having ſecured him as an inmate, lord Aſhley ſuffered himſelf to be governed entirely by his advice, and became ſo much attached to him, that he would not ſuffer him to practiſe medicine out of his own family, except in the caſe of ſome particular friends; and, perceiving that the great abilities of Mr. Locke were calculated to render him eminently ſerviceable to the world in other departments of knowledge, urged him to apply his ſtudies to ſtate-affairs and political ſubjects. To theſe Mr. Locke was naturally inclined; and ſucceeded ſo well, that lord Aſhley began to conſult him on all occaſions. He was now introduced to the ſociety of ſome of the moſt eminent men of the age, who were all delighted with his converſation. In the year 1668, Mr. Locke accompanied the earl and counteſs of Northumberland on a tour to France; and remained in that country with the lady, while his lordſhip ſet off to Italy, with an intention of viſiting Rome. This nobleman, however, died on his journey; and Mr. Locke accompanied the counteſs to England, and again took up his reſidence at lord Aſhley's. His lordſhip, at that period chancellor of the exchequer, having, in conjunction with other noble lords, obtained a grant of Carolina in North America, employed Mr. Locke to draw up a conſtitution for that province. Mr. Locke, notwithſtanding his connection with lord Aſhley, made frequent viſits to Oxford, though he was at the ſame time engaged to inſpect the education of his lordſhip's eldeſt ſon, an office which he executed with the greateſt care, and to the entire ſatisfaction of his employer. To Mr. Locke, likewiſe, was confided the important charge of ſelecting a wife for the young man. This was a taſk of great difficulty, as the father determined he ſhould only marry a lady of good family, of an agreeable temper, a fine perſon, and, above all, of good education and excellent underſtanding. Notwithſtanding the difficulties attending ſuch a commiſſion, Mr. Locke undertook it, and executed it to the perfect ſatisfaction of all parties. The eldeſt ſon by this marriage, afterwards the author of the Characteriſtics, was committed to the care of Mr. Locke in his education, and gave evidence to the world of the maſter-hand which had directed and guided his genius.

In 1670 Mr. Locke began to form the plan of his Eſſay on Human Underſtanding; but he was too much engaged by his patron to make much progreſs in the work. In

1672, lord Aſhley was created earl of Shafteſbury, and appointed lord high chancellor of England. His lordſhip immediately made Mr. Locke his ſecretary of the preſentations; but he held that place only till the end of the following year, when the earl was obliged to reſign the great ſeal. After this, lord Shafteſbury was preſident of the board of trade, and Mr. Locke was appointed ſecretary to the ſame. The commiſſion being diſſolved in 1674, he was again at leiſure, was admitted to the degree of bachelor of phyſic, and began to turn his attention to that faculty, as the means of future ſupport. He was at this time in the higheſt eſtimation with ſeveral perſons of eminence in the medical profeſſion: Dr. Sydenham, among others, ſpeaking of him, ſays, "If we conſider his genius, and penetrating and exact judgment, or the ſtrictneſs of his morals, he has ſcarcely any ſuperior, and few equals, now living." In 1675, Mr. Locke ſought relief from a pulmonary complaint by travelling to the ſouth of France; he afterwards ſettled at Paris, where he obtained the friendſhip of ſeveral men of letters. In 1679, the earl of Shafteſbury, being reſtored to favour at court, and made preſident of the council, ſent to requeſt that Mr. Locke would return home without delay. He inſtantly complied; but within ſix months that nobleman was again diſplaced, and in 1682 found it neceſſary to retire to the continent, to avoid a proſecution for high treaſon. Mr. Locke, ſteadily attached to his patron, followed him into Holland; and upon his lordſhip's death, which happened ſoon afterwards, did not think it ſafe to return to his native country, where his intimate connection with lord Shafteſbury had created him ſome powerful and malignant enemies. Their malice purſued him to the utmoſt extent of their means; and the dean of Chriſt-church had orders from the king to eject Mr. Locke from his ſtudent's place; which was accordingly done. On the acceſſion of James II. William Penn, the quaker, who was the friend of Locke in his adverſity, uſed his intereſt with the king to procure a pardon for him; and would have obtained it, had not Mr. Locke declined the acceptance of ſuch an offer, declaring that he had no occaſion for a pardon, having never been guilty of any crime.

In 1685, when the duke of Monmouth and his party were making preparations in Holland for his raſh and unfortunate enterpriſe, the Engliſh envoy at the Hague demanded that Mr. Locke, among others, ſhould be given up, on ſuſpicion of being actively engaged in the undertaking. This ſuſpicion, though entirely groundleſs, obliged him to lie concealed nearly a year; till it was rendered perfectly evident, even to his enemies and their ſpies, that he had no concern whatever in the buſineſs. Towards the end of the year 1686 he appeared again in public, and ſoon afterwards was the principal agent in forming a literary ſociety at Amſterdam, of which Limborch, Leclerc, and other learned men, were members, who met together weekly for converſation upon ſubjects of univerſal learning. In the following year he finiſhed his great work, the Eſſay concerning Human Underſtanding, which had been the principal object of his attention ſeveral years, and which proves how well he ſpent the period of his exile from England. That the public might be apprized of the outlines of his plan, he himſelf made an abridgment of it, which his friend Leclerc tranſlated into French, and inſerted in one of his Bibliotheques. This abridgment was ſo highly approved by the literati of that period, and by thoſe who were ſincerely attached to truth and juſt principles, that they took every opportunity of expreſſing the ſtrongeſt deſire to ſee the complete work in its original ſtate. During his concealment, he wrote his Firſt Letter concerning Toleration, which was firſt publiſhed in the Latin language at Gouda, in 1689; but afterwards tranſlated into Engliſh, and publiſhed in London in the year 1690. It was ſpeedily tranſlated into the Dutch and French languages, and has been exceedingly popular with liberal people of all countries from that period to the preſent. It has been frequently reprinted in forms adapted for general circulation; and has been diſtributed by perſons of fortune and rank, among whom may be mentioned, in our own country, his grace the late duke of Grafton. This epiſtle was followed by two others on the ſame ſubject; and A Fourth Letter concerning Toleration, was left unfiniſhed; but the fragment has been publiſhed among his poſthumous works.

To return, however, to the narrative of Mr. Locke's life, in the order of time. The revolution of 1688 opened a way for his return into his own country, whither he came in the ſame fleet which conveyed the princeſs of Orange; and, upon the reſtoration of public liberty, he did not heſitate to aſſert his own private rights, and accordingly put in his claim to the ſtudent's place in the college of Chriſt-church, of which he had been unjuſtly deprived. For the ſake of peace, he was adviſed to deſiſt from his claim. As he was conſidered to be a ſufferer for the principles of the revolution, he might have obtained ſome very conſiderable poſt under government; but he contented himſelf with that of commiſſioner of appeals, worth about 200l. per annum. In the year 1689, Mr. Locke had an offer to go abroad in a public character; but he declined the honour and advantages attached to ſuch a ſituation, on account of the infirm ſtate of his health; and in the following year he publiſhed his "Eſſay," which has given him an immortal reputation; and which, at the time, though it had many enemies, was ſtyled "one of the nobleſt, moſt uſeful, and moſt original, books the world ever ſaw." Thoſe who diſliked every thing like innovation, oppoſed the progreſs of our philoſopher's principles as laid down in his Eſſay. It was even propoſed, at a meeting of the heads of the houſes of the univerſity of Oxford, to cenſure and diſcourage the reading of it; and after long and warm debates among themſelves, it was agreed that each individual, at the head of a college, ſhould endeavour to prevent it from being read by the ſtudents; a ſure method of rendering every ſpirited young man anxious to peruſe it, and even to imbibe its principles. Mr. Locke's next publication was his Two Treatiſes on Government; in which he vindicated the principles upon which the revolution was founded, and completely demoliſhed ſir Robert Filmer's falſe principles; pointing out, at the ſame time, the true origin, extent, and end, of civil government. About this period, the public coin of the kingdom was known to be in a very bad and depreciated ſtate, having, by being clipped and ſweated, loſt one-third of its weight. The magnitude of this evil, and the miſchiefs which it threatened, called for the attention of parliament; and Mr. Locke, with the view of aſſiſting thoſe who were at the head of affairs to form a right underſtanding of this matter, and to excite them to rectify ſuch abuſes, printed a tract, entitled Some Conſiderations of the Conſequences of lowering the Intereſt, and raiſing the Value of Money. He publiſhed other tracts on the ſame ſubject, by which he convinced the world that he was as able to reaſon on trade and buſineſs as on the moſt abſtract queſtions of ſcience. He was accordingly conſulted by the miniſtry relative to a new coinage of ſilver. With the earl of Pembroke, then lord keeper of the privy ſeal, he was accuſtomed to hold weekly conferences; and he was in habits of intimacy and friendſhip with the earl of Peterborough, at whoſe houſe, at Fulham, he always met with a hoſpitable and kind reception, when the delicacy of his health obliged him to quit the metropolis. When he was at length obliged to leave London entirely, he accepted of the generous offer of ſir Francis Maſham, at Oates in Eſſex, to become a reſident in his houſe, where he ſpent the remainder of his life. Here he was received on his own terms, that he might have his entire liberty, and look upon himſelf as at his own home; and here he chiefly purſued his future ſtudies, being ſeldom abſent, becauſe the air of London grew more and more troubleſome to him.

In 1693 he publiſhed his Thoughts on Education, which he improved in ſome ſubſequent editions; and in 1695 he

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was appointed, by the king, one of the commiſſioners of trade and plantations, which obliged him to be more frequently in London than he had been for ſome time paſt. In the ſame year he publiſhed his excellent treatiſe, entitled the Reaſonableneſs of Chriſtianity as delivered in the Scriptures, of which he afterwards publiſhed a vindication, in anſwer to a ſcurrilous attack by Dr. Edwards, entitled Socinianiſm unmaſked. Scarcely was Mr. Locke diſengaged from this controverſy, before he was drawn into another, occaſioned by the publication of Mr. Toland's Chriſtianity not myſterious, in which he endeavoured to prove "that there is nothing in the Chriſtian religion not only contrary to reaſon, but even nothing above it;" and, in explaining his notions, he made uſe of ſeveral arguments from Mr. Locke's Eſſay. About the ſame time, ſeveral treatiſes were publiſhed by ſome Unitarian writers, maintaining that there was nothing in the Chriſtian religion but what was rational and intelligible, which ſentiment had been advanced by Mr. Locke. The uſe which was made of his writings in theſe inſtances, determined Dr. Stillingfleet, biſhop of Worceſter, to make an attack upon the author, in his Defence of the Doctrine of the Trinity, publiſhed in 1697. Mr. Locke wrote an anſwer, and the controverſy was carried on till the death of the biſhop. The candid of every party admitted that Mr. Locke was too powerful for the learned prelate: for never, perhaps, was a controverſy managed with ſo much ſkill and art on one ſide; nor, on the other, ſo unjuſtly, confuſedly, or ſo little to the credit of the party.

Mr. Locke's publications in the controverſy above mentioned were the laſt which were committed by himſelf to the preſs. The aſthmatic complaint, to which he had been long ſubject, increaſing with his years, began now to ſubdue his conſtitution, and rendered him very infirm. He, therefore, determined to reſign his poſt of commiſſioner of trade and plantations; but he acquainted none of his friends with his deſign, till he had given up his commiſſion into the king's own hand. His majeſty was very unwilling to receive it, and told Mr. Locke, that he would be well pleaſed with his continuance in that office, though he ſhould give little or no attendance; for that he did not deſire him to ſtay in town one day to the injury of his health. But Mr. Locke told the king, that he could not in conſcience hold a place to which a conſiderable ſalary was annexed, without diſcharging the duties of it; upon which the king reluctantly accepted his reſignation. Mr. Locke's behaviour in this inſtance, diſcovered ſuch a degree of integrity and virtue, as reflects more honour on his character than his extraordinary intellectual endowments. From this time Mr. Locke continued altogether at Oates, in which agreeable retirement he applied himſelf wholly to the ſtudy of the ſacred ſcriptures. In this employment he found ſo much pleaſure, that he regretted his not having devoted more of his time to it in the former part of his life. And his great regard for the ſacred writings appears from his anſwer to a relation who had enquired of him, what was the ſhorteſt and ſureſt way for a young gentleman to attain a true knowledge of the Chriſtian religion. "Let him ſtudy," ſaid Mr. Locke, "the Holy Scripture, eſpecially in the New Teſtament. Therein are contained the words of eternal life. It has God for its author; ſalvation for its end; and truth, without any mixture of error, for its matter." Mr. Locke now found his aſthmatic diſorder growing extremely troubleſome, though it did not prevent him from enjoying great chcerfulneſs of mind. In this ſituation his ſufferings were greatly alleviated by the kind attention and agreeable converſation of the accompliſhed lady Maſham, who was the daughter of the learned Dr. Cudworth. At the commencement of the ſummer of the year 1703, a ſeaſon, which, in former years, had always reſtored him ſome degree of ſtrength, he perceived that it had begun to fail him more remarkably than ever. This convinced him that his diſſolution was at no great diſtance; and he often ſpoke of it himſelf, but always with great compoſure; while he omitted none of the precautions which, from his ſkill in phyſic, he knew had a tendency to prolong his life. At length, his legs began to ſwell; and, that ſwelling increaſing every day, his ſtrength viſibly diminiſhed. He therefore prepared to take leave of the world, deeply impreſſed with a ſenſe of God's manifold bleſſings to him, which he took delight in recounting to his friends, and full of a ſincere reſignation to the divine will, and of firm hopes in the promiſes of future life. He expired, on the 28th of October, 1704, in the ſeventy-third year of his age. He was interred in the church of Oates, where there is a decent monument erected to his memory, with a modeſt inſcription in Latin, written by himſelf.

Of Mr. Locke's private character, an account was firſt publiſhed by Mr. Peter Coſte, who had lived with him as an amanuenſis, which was afterwards prefixed by M. des Maizeaux to A Collection of ſeveral Pieces of Mr. Locke never before printed, &c. publiſhed in 1720; from which, together with M. le Clerc's Bibliothèque Choiſie, we ſhall preſent our readers with ſome intereſting particulars relating to this great man. Mr. Locke poſſeſſed a great knowledge of the world, and was intimately converſant in the buſineſs of it. He was prudent, without cunning; he engaged men's eſteem by his probity; and took care to ſecure himſelf from the attacks of falſe friends and ſordid flatterers. Averſe to all mean compliance, his wiſdom, his experience, and his gentle manner, gained him the reſpect of his inferiors, the eſteem of his equals, and the friendſhip and confidence of thoſe of the higheſt quality. He was remarkable for the eaſe and politeneſs of his behaviour; and thoſe who knew him only by his writings, or by the reputation which he had acquired, and who had ſuppoſed him a reſerved or auſtere man, were ſurpriſed, if they happened to be introduced to him, to find him all affability, good humour, and complaiſance. He was exact to his word, and religiouſly performed whatever he promiſed. Though he chiefly loved truths which were uſeful, and with ſuch ſtored his mind, and was beſt pleaſed to make them the ſubjects of converſation; yet he uſed to ſay, that, in order to employ one part of this life in ſerious and important occupations, it was neceſſary to ſpend another in mere amuſements; and, when an occaſion naturally offered, he gave himſelf up with pleaſure to the charms of a free and facetious converſation. He remembered many agreeable ſtories, which he always introduced with great propriety; and generally made them yet more delightful, by his natural and pleaſant manner of telling them. He had a peculiar art, in converſation, of leading people to talk concerning what they beſt underſtood. With a gardener he converſed of gardening; with a jeweller of jewels; with a chemiſt of chemiſtry, &c. "By this," ſaid he, "I pleaſe thoſe men, who commonly can ſpeak pertinently upon nothing elſe. As they believe I have an eſteem for their profeſſion, they are charmed with ſhowing their abilities before me; and I, in the mean while, improve myſelf by their diſcourſe." And, indeed, he had by this method acquired a very good inſight into all the arts. He uſed to ſay too, that the knowledge of the arts contained more true philoſophy, than all thoſe fine learned hypotheſes, which, having no relation to the nature of things, are fit only to make men loſe their time in inventing or comprehending them. By the ſeveral queſtions which he would put to artificers, he would find out the ſecret of their art, which they did not underſtand themſelves; and often give them views entirely new, which ſometimes they put in practice to their profit. He was ſo far from aſſuming thoſe affected airs of gravity, by which ſome perſons, as well learned as unlearned, love to diſtinguiſh themſelves from the reſt of the world, that, on the contrary, he looked upon them as infallible marks of impertinence. Nay, ſometimes he would divert himſelf with imitating that ſtudied gravity, in order to turn it the better into ridicule; and upon ſuch occaſions he always recollected this maxim of the duke de la Rochefoucault, which he particularly admired, "that gravity is a myſtery

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of the body invented to conceal the defects of the mind." One thing, which thoſe who lived any time with Mr. Locke could not help obſerving in him, was, that he uſed his reaſon in every thing he did; and that nothing that was uſeful ſeemed unworthy of his attention and care.

In his friendſhips Mr. Locke was warm and ſteady; and, therefore, felt a ſtrong indignation againſt any diſcovery of treachery or inſincerity in thoſe in whom he confided. It is ſaid, that a particular perſon, with whom he had contracted an intimate friendſhip in the earlier part of his life, was diſcovered by him to have acted with great haſeneſs and perfidy. He had not only taken every method privately of doing Mr. Locke what injury he could in the opinion of thoſe with whom he was connected, but had alſo gone off with a large ſum of money which was his property, and at a time too when he knew that ſuch a ſtep muſt involve him in conſiderable difficulties. Many years after all intercourſe had, by ſuch treachery, been broken off between them, and when Mr. Locke was one of the lords of trade and plantations, information was brought to him one morning, while he was at breakfaſt, that a perſon ſhabbily dreſſed requeſted the honour of ſpeaking to him. Mr. Locke, with the politeneſs and humanity which were natural to him, immediately ordered him to be admitted; and beheld, to his great aſtoniſhment, his falſe friend, reduced by a life of cunning and extravagance to poverty and diſtreſs, and come to ſolicit his forgiveneſs, and to implore his aſſiſtance. Mr. Locke looked at him for ſome time very ſteadfaſtly, without ſpeaking one word. At length, taking out a fifty-pound note, he preſented it to him with the following remarkable declaration: "Though I ſincerely forgive your behaviour to me, yet I muſt never put it in your power to injure me a ſecond time. Take this triſle, which I give, not as a mark of my former friendſhip, but as a relief to your preſent wants, and conſign to the ſervice of your neceſſities, without recollecting how little you deſerve it. No reply! It is impoſſible to regain my good opinion; for know, friendſhip once injured is for ever loſt."

Mr. Locke was naturally very active, and employed himſelf as much as his health would permit. His bad health occaſioned diſturbance to no one but himſelf; and perſons might be with him without any other concern than that created by ſeeing him ſuffer. He did not differ from others in the article of diet; but his ordinary drink was only water; and this he thought was the cauſe of his having his life prolonged to ſuch an age, notwithſtanding the weakneſs of his conſtitution. To the ſame cauſe, alſo, he thought that the preſervation of his eye-ſight was in a great meaſure to be attributed; for he could read by candle-light all ſorts of books to the laſt, if they were not of a very ſmall print; and he had never made uſe of ſpectacles.

Among the honours paid to the memory of this great man, that of queen Caroline, conſort of king George II. ought not to be overlooked; for that princeſs, having erected a pavilion in Richmond-park in honour of philoſophy, placed in it our author's buſt, with thoſe of Bacon, Newton, and Clarke, as the four prime Engliſh philoſophers. Mr. Locke left ſeveral manuſcripts behind him, from which his executors, ſir Peter King, and Anthony Collins, eſq. publiſhed, in 1705, his Paraphraſe and Notes upon St. Paul's Epiſtle to the Galatians, in 4to. which were ſoon followed by thoſe upon the Corinthians, Romans, and Epheſians, with an eſſay prefixed, For the Underſtanding of St. Paul's Epiſtles, by conſulting St. Paul himſelf. In 1706, Poſthumous Works of Mr. Locke were publiſhed in 8vo. compriſing a treatiſe On the Conduct of the Underſtanding, ſupplementary to the author's Eſſay; An Examination of Malebranche's Opinion of ſeeing all things in God, &c. In 1708, ſome familiar Letters between Mr. Locke and ſeveral of his Friends were alſo publiſhed in 8vo. and, in 1720, M. des Maizeaux's Collection, already noticed. But all our author's works have been collected together, and frequently reprinted, in 3 vols. folio, and in 4 vols. 4to. and lately in 10 vols. 8vo. *Le Clerc's Bibliothèque Choiſie. Enfield's Hiſt. Phil.* vol. ii.

LOCK'ENITZ, a town and caſtle of Brandenburg, in the Ucker Mark: ſixteen miles north-eaſt of Prentzlow.

LOCK'ER, *ſ.* Any thing that is cloſed with a lock; a drawer.—I made *lockers* or drawers at the end of the boat. *Robinſon Cruſoe.*—It is almoſt excluſively a ſea-term.

LOCKER-GOW'LANS. See TROLLIUS.

LOCKER-UP', *ſ.* A turnkey; an under-gaoler.

LOCK'ERBY, a town of Scotland, in Dumfrieſſhire, on the Annan: four miles eaſt of Lochmaben.

LOCK'EREN, a town of France, in the department of the Scheldt, and chief place of a canton, in the diſtrict of Termoude. The place contains 11,941, and the canton 15,693, inhabitants.

LOCK'ERING, a village in Wiltſhire, ſouth-weſt of Marlborough.

LOCK'ET, *ſ.* A ſmall lock; any catch or ſpring to faſten a necklace, or other ornament:

Where knights are kept in narrow liſts,
With wooden *lockets* 'bout their wriſts. *Hudibras.*

LOCK'HART, a town of North Carolina, on Albemarle Sound: thirty-eight miles eaſt-ſouth-eaſt of Halifax. Lat. 36. 2. N. lon. 76. 56. W.

LOCKHART's CREE'K, a river of North Carolina, which runs into the Atlantic in lat. 33. 53. N. lon. 78. 25. W.

LOCK'HARTSBURG, a town of Pennſylvania, on the Suſquehana: 135 miles north-north-weſt of Philadelphia.

LOCK'ING, *ſ.* The act of faſtening with a lock.

LOCK'ING, a village in Somerſetſhire, near the Severn ſea, oppoſite to Steepholm Iſland.

LOCK'ING, Eaſt and Weſt, villages in Berkſhire near Wantage.

LOCKING-UP', or LOCKING-DOWN, *ſ.* The operation of paſſing boats up or down through locks.

LOCK'INGTON, a village in Leiceſterſhire, north-eaſt of Stanton Harold.

LOCK'INGTON, a village in Yorkſhire, north-weſt of Beverley.

LOCK'MAN, a mountain of Perſia, in the province of Choraſan: fifteen miles weſt of Maruerrud.

LOCK'MAN, *ſ.* An officer in the Iſle of Man to execute the orders of the governor, much like our under-ſheriff.

LOCK'MAN, in biography. See LOKMAN, vol. xiii.

LOCK'MITZ, a river of Saxony, which runs into the Elbe four miles above Meiſſen.

LOCK'RAM, *ſ.* A ſort of coarſe linen. *Hanmer.*

The kitchen malkin pins
Her richeſt *lockram* about her reeky neck,
Clamb'ring the walls to eye him. *Shakeſpeare.*

LOCK'RON, *ſ.* A kind of ranunculus.

LOCK'SFIELD, a village in Suſſex, near Eaſt Grinſtead.

LOCK'SMITH, *ſ.* A maker or mender of locks.

LOCK'SPIT, *ſ.* among miners, is the ſmall cut or trench, made about a foot wide, to mark out the firſt lines of a work.

LOCKTEWACK'I, a town of Swediſh Lapland, on a lake: ſixty-five miles weſt-north-weſt of Pitea.

LOCK'WOOD, a townſhip of England, in the weſt riding of Yorkſhire, near Huddersfield.

LOC'LE, a town of Swiſſerland, which gives name to a juriſdiction, in the county of Neufchâtel. The pariſh is extenſive, and contains a great number of watchmakers, cutlers, &c. It is eight miles north-weſt of Neufchâtel.

LOCMARIAQUER', a town of France, in the department of the Morbihan: ſix miles ſouth of Auray, and nine ſouth-weſt of Vannes.

LOC'MINE, a town of France, in the department of the Morbihan: ten miles ſouth of Pontivy, and twenty-one north-north-eaſt of l'Orient.

LO'CO ROTON'DO, a town of Naples, in the province of Bari: eleven miles ſouth-ſouth-eaſt of Monopoli.

LOCOCES'SION, *ſ.* in law, the act of giving place.

LOCOMO'TION, *ſ.* [from the Lat. *locus*, place, and *moveo*, to move.] The power of changing place; the act of changing place.—All progreſſion, or animal *locomotion*, is performed by drawing on, or impelling forward, ſome part which was before at quiet. *Brown's Vulgar Errors.*

LOCOMO'TIVE, *adj.* Changing place; having the power of removing or changing place.—An animal cannot well be defined from any particular organical part, nor from its *locomotive* faculty; for ſome adhere to rocks. *Arbuthnot.*

In the night too oft he kicks,
Or ſhows his *locomotive* tricks. *Prior.*

LOCOMOTIV'ITY, *ſ.* Power of changing place.—The moſt ſuperb edifice, that ever was conceived or conſtructed, would not equal the ſmalleſt inſect, bleſt with ſight, feeling, and *locomotivity*. *Bryant.*

LOCONTA'I, a town of Upper Siam: ſixty miles north of Porſelon.

LO'CRI, or LO'CRIANS, in ancient geography, a people who are ſaid to have derived their name from an ancient hero called Locris, or Locros, whoſe ſon Opus founded a town under his own name. Theſe people formed four diſtinct diviſions, with appropriate ſurnames, the three firſt of which, viz. Locri Ozoli, Locri Epicnemidii, and Locri Opuntiani, were ſettled in Greece; the fourth diviſion, denominated Epizephyrii, inhabited Magna Græcia, near the promontory of Zephyrium. The Ozoli occupied a conſiderable extent of country weſt of the Phocide, along the gulf of Corinth. The Epicnemidii derived their name from Mount Cnemis, about which they dwelt; the Maliac Gulf being on the eaſt, Mount Oeta on the north, the Phocide on the weſt, and the Locri Opuntiani on the ſouth, whoſe territory was of ſmall extent. The Epizephyrii were ſituated near the promontory of Zephyrium, and were diſtributed into two claſſes, diſtinguiſhed by their name and their ſituation. Their town, Locri Epizephyri, was ſituated on a hill near the abovementioned promontory. Some ſay that it was founded at the ſame time with Cyzicus, under the reign of Tullus Hoſtilius; but Strabo dates its origin a little after Crotona and Syracuſe, about the year 757 before our era. It was very flouriſhing, when Dionyſius the younger, having been driven from Syracuſe, practiſed there all ſorts of violence. But the Locrians, having recovered their liberty, expelled the garriſon, and took ample vengeance of the tyrant. Epherus, ſays Strabo, reports, that Zaleucus formed the laws of the Locrians from thoſe of Crete, Sparta, and Athens, one of which eſtabliſhed a conformity of puniſhment to crimes, whereas before they were arbitrary and depended upon the will of the judge. The Locrians had built upon the coaſt a temple of Proſerpine, which was pillaged by Pyrrhus when he carried his arms into Italy. The town was not better treated by the Roman garriſon under the orders of Flaminius. In the year 539 of Rome, the Locrians, having devoted themſelves to the Brutians and Carthaginians, by this conduct incenſed the Roman republic; ſo that they ſent troops againſt them, and took their city in the year 549. A little after, however, they recovered their liberty. The ſequel of the hiſtory of the Locrians is not known; but an inſtance of their valour has been recorded which deſerves to be mentioned. In a war between them and the Crotoniates, 10,000 Locrians, with a few additional troops, defeated 130,000 of the enemy near the river Sagra; an event ſo marvellous, that it became proverbial in giving atteſtation to a fact thought incredible: Αληθεϛερα των επι Σαγρα; i. e. "It is more true than the battle of Sagra."

LO'CRI, or LOCRIS, a town of Italy, in Brutium. It was founded, as mentioned in the preceding article, by a colony of Greeks called Locrians. Now *Motta di Bruzzano.*

LO'CRIAN, *ſ.* An inhabitant of Locris.

LO'CRIAN, *adj.* From or appertaining to Locris. In ancient muſic, the ſeventh ſpecies of diapaſon. It was alſo called *hypodorian*, and *common*.

LOCULAMEN'TUM, *ſ.* in botany, denotes a cell or partition, in a ſeed-pod, for the ſeed of a plant.

LOC'ULUS, *ſ.* A word uſed in old records for a coffin. In botany, the little cell of an anther, containing the pollen.

LO'CUS, *ſ.* [Latin.] A place.

LOCUS, in geometry, denotes a line by which a local or indeterminate problem is ſolved. If a point vary its poſition, according to ſome determinate law, it will deſcribe a line, which is called its *locus*: or a locus is a line, any point of which may equally ſolve an indeterminate problem. This, if a right line ſuffice for the conſtruction of the equation, is called *locus ad rectum*; if a circle, *locus ad circulum*; if a parabola, *locus ad parabolam*; if an ellipſis, *locus ad ellipſim*; and ſo of the reſt of the conic ſections. The loci of ſuch equations as are right lines, or circles, the ancients called *plane* loci; and of thoſe that are parabolas, hyperbolas, &c. *ſolid* loci. Apollonius of Perga wrote two books on *plane loci*, in which the object was, to find the conditions under which a point, varying in its poſition, is yet limited to have a right line, or a circle given in poſition. Theſe books are loſt; but attempts have been made at reſtorations by Schooten, Fermat, and R. Simſon; the treatiſe De Locis Planis, of the latter, publiſhed at Glaſgow, 1749, is a very excellent performance, in all reſpects worthy of its celebrated author. Beſides the above-mentioned writers, the doctrine of loci has been treated of by various other mathematicians, as Craig, Maclaurin, Des Cartes, De l'Hôpital, &c. the latter of whom has two chapters on this ſubject in his Conic Sections. Leſlie in his Geometry has alſo a chapter on plane loci, which contains ſeveral of the moſt ſimple and intereſting propoſitions of this kind. See the article GEOMETRY, vol. viii.

LOCUS, in muſic, was anciently uſed to ſignify the interval between one degree of acuteneſs or gravity of ſound and another. The Greeks uſed the word τοπος in the ſame ſenſe, for the ſpace through which the voice moved.

LOCUS, in rhetoric, a topic, or head, whence arguments are brought to prove the queſtion in hand. Some of theſe are called *loci communes*, or common topics, as being common to all ſorts of argument; thus, whether a thing be poſſible or impoſſible, more or leſs than ſomething elſe, &c.

LO'CUST, *ſ.* [*locuſta*, Lat.] A devouring inſect. See GRYLLUS, vol. ix.—The Hebrews had ſeveral ſorts of *locuſts*, which are not known among us: the old hiſtorians and modern travellers remark, that *locuſts* are very numerous in Africa, and many places of Aſia; that ſometimes they fall like a cloud upon the country, and eat up every thing they meet with. Moſes deſcribes four ſorts of *locuſts*. Since there was a prohibition againſt uſing *locuſts*, it is not to be queſtioned but that theſe creatures were commonly eaten in Paleſtine, and the neighbouring countries. *Calmet.*—Air replete with the ſteams of animals rotting, has produced peſtilential fevers; ſuch have likewiſe been raiſed by great quantities of dead *locuſts*. *Arbuthnot on Air.*

LO'CUST, a village in Hertfordſhire, near Hemel-Hempſted.

LO'CUST, *ſ.* in botany. See CERATONIA and MELIANTHUS.

LO'CUST (Baſe). See HYMENÆA.

LOCUST CREE'K, a river of Kentucky, which runs into the Ohio in lat. 38. 37. N. lon. 84. 15. W.

LOCUST CREE'K, a river of Kentucky, which runs into the Licking in lat. 38. 4. N. lon. 83. 45. W.

LO'CUST-EATERS. See ACRIDOPHAGI, vol. i. p. 94. and the article there cited.

LO'CUST-TREE. See CERATONIA, HYMENÆA, and ROBINIA.

LO'CUST-TREE (Honey). See GLEDITSCHIA.

LOCUSTA, a celebrated woman at Rome in favour

with Nero. She poiſoned Claudius and Britannicus, and at laſt attempted to deſtroy Nero himſelf, for which ſhe was executed. *Tacit. Ann. Suet. in Ner.*

LOCUS'TA, *ſ.* in botany. See VALERIANA.

LOCUS'TÆ, *ſ.* A term uſed by botaniſts for the tender extremities of the branches of trees; ſuch as, according to the ſuppoſition of ſome, John the Baptiſt fed on in the wilderneſs; as to which, ſee the article GRYLLUS, vol. ix. p. 56, 57.

LOCU'TIUS, in mythology, the god of ſpeech among the Romans, called by Livy AIUS LOCUTIUS, which ſee, vol. i. p. 228.

LOCUTO'RIUM, *ſ.* A hall or apartment in monaſteries where the monks and other religious met after dinner to converſe together. It was called *locutorium, a loquendo*; as we call ſuch a place in our houſes parlour, from the French *parler*, to ſpeak. They had another room, which was called *locutorium forinſecum*, where they might talk with laymen.

LOD, [Hebrew.] The name of a city; the name of a man.

LO'DAM, *ſ.* A game at cards.—She and I will take you at *lodam*. *T. Heywood's Woman killed with Kindneſs.*

LO'DAN, a river of England, in the county of Hereford, which runs into the Frome about five miles north from Hereford.

LODA'RIA, a town of Hindooſtan, in Bahar: twenty-four miles north-north-eaſt of Hajypour.

LODDIGE'SIA, *ſ.* [devoted by Dr. Sims in Curtis's Magazine, to commemorate a ſcientific cultivator of plants, Mr. *Conrad Loddiges*, of Hackney.] In botany, a genus of the claſs diadelphia, order decandria, natural order papilionaceæ, *Linn.* (leguminoſæ, *Juſſ.*) Generic eſſential characters—Standard many times ſmaller than the wings or keel; filaments all in one ſet, with a dorſal fiſſure; legume ſtalked, turgid.

Loddigeſia oxalidifolia, or oxalis-leaved loddigeſia, the only known ſpecies; a native of the Cape of Good Hope, whence its ſeeds were firſt received by George Hibbert, eſq. The plant is tolerably hardy in the conſervatory, readily propagated by cuttings, and flowers freely in May and June. Mr. Loddiges himſelf alſo raiſed it, many years ago, from Cape ſeeds. *Curt. Mag.* vol. xxiv. t. 965.

LOD'DON, a town of England, in the county of Norfolk; with a weekly market on Friday, and a fair on the 10th of November. It is 42 miles north of Ipſwich, and 113 north-north-eaſt of London. Lat. 52. 37. N. lon. 1. 13. E.

LOD'DON, a river of England, which runs into the Thames about five miles below Reading.

LODDON-BRID'GE, a village in Berkſhire, between Reading and Oakingham.

LODE, a town of the iſland of Sardinia: fifty-four miles eaſt of Saſſari, and eighty north of Cagliari.

LODE, *ſ.* [an old but correct ſpelling, from the Sax. lædan, to lead.] A load, the leading vein in a mine.

LODEMAN'AGE, *ſ.* A ſea-term; the hire of a pilot for conducting the ſhip into harbour. *Bailey.*

LO'DER, *ſ.* The loadſtar. *Chaucer.*

LO'DER, a town of Bavaria, in the territory of Augſburg: eight miles eaſt of Kaufbeuren, and twenty-five ſouth of Augſburg.

LO'DER (Robert), a reſpectable bookſeller at Woodbridge in Suffolk; author of a Hiſtory of Framlingham, and ſeveral other antiquarian tracts diſplaying conſiderable induſtry and judgment. He died at that place in May 1811, aged 61.

LO'DERBACH, a river of Saxony, which riſes ſix miles north of Leipſic, and runs into the Mulda two miles north of Bitterfeld.

LODESAN', a country of Italy, in the Milaneſe, bounded on the north and weſt by the duchy of Milan, on the eaſt by the Cremaſco and the Cremoneſe, on the ſouth by the Piacentin and Paveſe; it now forms the department of the Adda. The country is ſmall, but populous and fertile; and particularly celebrated for its cheeſe, of which the inhabitants are ſaid to export annually to the amount of 70,000l. ſterling. It is well watered by the river Adda, and various others. Lodi is the capital, from which it receives its name.

LODE'SE, or GAM'LA LODE'SE, a town of Sweden, in Weſt Gothland; which ſuffered ſo much by fire in the thirteenth and fourteenth centuries, that the inhabitants removed to Nylodeſe, or New Lodeſe.

LO'DESHIP, *ſ.* A ſmall fiſhing-veſſel.

LO'DESMAN, *ſ.* A coaſting pilot.

LO'DESTAR, *ſ.* [an old but correct ſpelling.] The loadſtar, the poleſtar.

LO'DESTONE, *ſ.* [an old but correct ſpelling.] The loadſtone, the magnet. *Chaucer.*

LODE'VE, a town of France, and principal place of a diſtrict, in the department of the Herault, containing about 4200 inhabitants; before the revolution, it was the ſee of a biſhop: twenty-one miles north of Beziers, and twenty-four weſt of Montpellier. Lat. 43. 44. N. lon. 3. 24. E.

LO'DEWITZ, a river of Saxony, which runs into the Elbe five miles above Dreſden.

LO'DEWORKS, *ſ.* The ſhafts of a mine.

To LODGE, *v. a.* [logian, Sax. *loger*, Fr.] To place in a temporary habitation.—When he was come to the court of France, the king ſtyled him by the name of the duke of York; *lodged* him, and accommodated him, in great ſtate. *Bacon's Henry* VII.—To afford a temporary dwelling; to ſupply with harbour for a night.—Every houſe was proud to *lodge* a knight. *Dryden.*—To place; to plant.—In viewing again the ideas that are *lodged* in the memory, the mind is more than paſſive. *Locke.*

He *lodg'd* an arrow in a tender breaſt
That had ſo often to his own been preſs'd. *Addiſon.*

To fix; to ſettle:

I can give no reaſon,
More than a *lodg'd* hate, and a certain loathing
I bear Antonio. *Shakeſpeare's Merchant of Venice.*

To place in the memory.—This cunning the king would not underſtand, though he *lodged* it, and noted it, in ſome particulars. *Bacon's Henry* VII.—To harbour or cover:

The deer is *lodg'd*, I've track'd her to her covert;
Riſh in at once. *Addiſon's Cato.*

To afford place to.—The memory can *lodge* a greater ſtore of images than all the ſenſes can preſent at one time. *Cheyne's Phil. Principles.*—To lay flat:

Though bladed corn be *lodg'd*, and trees blown down;
Though caſtles topple on their warders' heads. *Shakeſp.*

To LODGE, *v. n.* To reſide; to keep reſidence:

Care keeps his watch in ev'ry old man's eye;
And, where care *lodgeth*, ſleep will never lie. *Shakeſpeare.*

To take a temporary habitation.—I know not where he *lodges*; and for me to deviſe a lodging, and ſay, he lies here or he lies there, were to lie in mine own throat. *Shakeſpeare.*

Why commands the king,
That his chief followers *lodge* in towns about him,
While he himſelf keepeth in the cold field? *Shakeſpeare.*

To take up reſidence at night.—Here thou art but a ſtranger travelling to thy country: it is therefore a huge folly to be afflicted, becauſe thou haſt a leſs convenient inn to *lodge* in by the way. *Taylor.*

My lords
And ſoldiers, ſtay and *lodge* by me this night. *Shakeſpeare.*

To lie flat.—Long-cone wheat they reckon in Oxfordſhire beſt for rank clays; and its ſtraw makes it not ſubject to *lodge*, or to be mildewed. *Mortimer's Huſbandry.*

LODGE, *ſ.* [*logis*, Fr.] A ſmall houſe in a park or foreſt.—He brake up his court, and retired himſelf, his wife and children, into a certain foreſt thereby, which he

calleth

calleth his deſert, wherein he hath built two fine *lodges*. *Sidney*.—I found him as melancholy as a *lodge* in a warren. *Shakeſpeare*.

He and his lady both are at the *lodge*,
Upon the north ſide of this pleaſant chaſe. *Shakeſpeare*.

Any ſmall houſe appendant to a greater: as, the porter's *lodge*.

LODGE, the name of two villages in Dorſetſhire, two in Hertfordſhire, and two in Lancaſhire.

LOD'GEMENT, *ſ.* [from *lodge*; *logement*, Fr.] Diſpoſition or collocation in a certain place.—The curious *lodgement* and inoſculation of the auditory nerves. *Derham*. Accumulation; collection.—An oppreſſed diaphragm from a mere *lodgment* of extravaſated matter. *Sharp's Surgery*.—Poſſeſſion of the enemy's work.—The military pedant is making *lodgments*, and fighting battles, from one end of the year to the other. *Addiſon*.

LOD'GER, *ſ.* [from *lodge*.] One who lives in rooms hired in the houſe of another.—Thoſe houſes are ſooneſt infected that are crowded with multiplicity of *lodgers*, and naſty families. *Harvey*.—One that reſides in any place:

Look in that breaſt, moſt dirty dear;
Say, can you find but one ſuch *lodger* there? *Pope*.

LOD'GING, *ſ.* Temporary habitation; rooms hired in the houſe of another.—Let him change his *lodging* from one end of the town to another, which is a great adamant of acquaintance. *Bacon*.

I will in Caſſio's *lodging* loſe this napkin,
And let him find it. *Shakeſpeare's Othello*.

Place of reſidence.—The neſt of love, the *lodging* of delight. *Spenſer*.—Harbour; covert.—The hounds were uncoupled; and the ſtag thought it better to truſt to the nimbleneſs of his feet than to the ſlender fortification of his *lodging*. *Sidney*.—Convenience to ſleep on.—Their feathers ſerve to ſtuff our beds and pillows, yielding us ſoft and warm *lodging*. *Ray on Creation*.

LO'DI, a city of Italy, capital of the department of the Adda, late capital of a diſtrict, in the duchy of Milan, called the *Lodeſan*, ſituated on the Adda. An old city of this name, in the Paveſe, on the Silaro, being deſtroyed by the Milaneſe, the preſent town was built by the emperor Frederic Barbaroſſa, three miles from its former ſituation on the Adda, in the beginning of the twelfth century. It is the ſee of a biſhop, ſuffragan of Milan; and contains, beſides the cathedral, two collegiate and ſeven pariſh churches, and twenty-ſix convents. Lodi ſuffered very conſiderably in the diſputes between the Guelphs and the Gibelins, as well as in the wars with the French. After the French were driven out of Italy, it became ſubject to Spain; from whom it came, with the reſt of the Milaneſe, to the houſe of Auſtria. It is a place of little trade or manufactures, excepting the article of cheeſe, and a beautiful kind of earthen ware, reſembling china. It is ſurrounded with walls, and well built. The number of inhabitants is ſuppoſed to be between eleven and twelve thouſand. On the 11th of May, 1796, this town was taken by the troops of the French republic; the paſſage of the bridge was diſputed by 10,000 Auſtrians, and thirty pieces of artillery. The French were commanded by Bonaparte. See the article FRANCE, vol. vii. p. 820. Lodi is eighteen miles ſouth-eaſt of Milan, and ſeventy-ſix eaſt-north-eaſt of Turin. Lat. 45. 21. N. lon. 9. 30. E.

LO'DI VEC'CHIO, a town of Italy, in the Lodeſan, on the Silaro. This town was anciently known under the name of *Laus Pompeii*, or *Laus Pompeia*; and its flouriſhing ſtate was ſuch, that it inſtigated the Milaneſe to deſtroy it through jealouſy, and moſt of the inhabitants were driven away. It was the ſee of a biſhop, removed to LODI. It is three miles weſt-ſouth-weſt of Lodi.

LO'DITZ, a town of Germany, in the principality of Culmbach: three miles north-north-weſt of Hof.

LODOMIR'IA; ſee GALICIA, in Poland, vol. viii. p. 182. King of Lodomiria forms one of the titles of the houſe of Auſtria.

LODRO'NE, a town of Italy, in the Trentin, on the borders of the Breſſan, near a ſmall lake, called the *Lake of Idro*. On the 12th of Auguſt, 1796, the Auſtrians were defeated near this town by the French: twenty-five miles north-north-eaſt of Breſcia, and twenty-five ſouth-weſt of Trent.

LODO'SA, a town of Spain, in Navarre, on the Ebro: ſeventeen miles eaſt of Eſtella.

LODYPOU'R, a town of Hindooſtan, in Bahar: eighteen miles ſouth of Patna.

LODZIC'ZE, a town of Lithuania, in the palatinate of Troki: forty-eight miles north-north-weſt of Grodno.

LO'E, a town of Norway: forty-eight miles north-eaſt of Drontheim.

LO'E, a river of England, in the county of Cornwall, which runs into the Engliſh Channel four miles below Helſton.

LŒB'EGUN, or LOB'ECHIN, a town of the duchy of Magdeburg: forty-four miles ſouth of Magdeburg.

LO'ECK, or LEVEK. See CAMBOJA, vol. iii. p. 641.

LOEFLIN'GIA, *ſ.* [ſo named by Linnæus from *Peter Loefling*, one of his diſciples, who travelled in Spain and America, and died on his travels in 1756.] In botany, a genus of the claſs triandria, order monogynia, natural order of caryophyllei, (caryophylleæ, *Juſſ.*) The generic characters are—Calyx: perianth five-leaved, upright; leaflets lanceolate, marked on each ſide at the baſe with a toothlet, ſharp-pointed, permanent. Corolla: petals five, very ſmall, oblong-ovate, converging into a globe, round. Stamina: filaments three; length of the corolla; anthers roundiſh, twin. Germ ſuperior, ovate, three-cornered; ſtyle filiform, rather wider above; ſtigma a little obtuſe. Pericarpium: capſule ovate, ſomewhat three-cornered, one-celled, three-valved. Seeds: a great many, ovate, oblong.—*Eſſential Character*. Calyx five-leaved; corolla five-petalled, very ſmall; capſule one-celled, three-valved.

Loeflingia Hiſpanica, a ſingle ſpecies. Root annual. Leaves oppoſite, mucronate. Branches proſtrate, alternate, pubeſcent, clammy. It has the appearance of Scleranthus. Native of Spain, on open hills. Introduced in 1770, by Monſ. Richard. It flowers in June. Cavanilles ſays, that the ſtems are a ſpan high, ſubdichotomous. Leaves very ſmall, with ſtipulaceous appendages, toothletted below. Flowers ſolitary, axillary, and in the diviſions of the branches; corolla white.

LOEFLIN'GIA IN'DICA. See PHARNACEUM DEPRESSUM.

LO'EN-YU'EN, or HOEN-YUEN, a city of China, of the ſecond rank, in the province of Chan-ſi: 132 miles weſt of Peking. Lat. 39. 42. N. lon. 113. 24. E.

LOE'NEN, a town of Holland: ten miles ſouth-weſt of Naerden.

LO'ERSDORP, a town of the duchy of Holſtein: five miles north-eaſt of Oldenburg.

LO'ESDRECHT, a town of Holland: eight miles ſouth of Naerden.

LOESE'LIA, *ſ.* [ſo named by Linnæus from *John Loeſel*, author of Flora Pruſſica, 1654; publiſhed by Gottſched, with additions, in 1703.] In botany, a genus of the claſs didynamia, order angioſpermia, natural order of convolvuli, *Juſſ.* The generic characters are—Calyx: perianth one-leafed, tubular, four-cleft, ſharp, ſhort, permanent. Corolla: one-petalled, unequal; tube the length of the calyx; border five-parted; all the diviſions deflected to the lower ſide, ovate-lanceolate, equal. Stamina: filaments four, length of the corolla; of which two are ſhorter; all oppoſite the diviſions of the petal, and reflected in a contrary ſituation to the corolla; anthers ſimple. Piſtillum: germ ovate; ſtyle ſimple, ſituated as the ſtamens; ſtigma thickiſh. Pericarpium: capſule ovate, three-celled. Seeds: ſolitary or two, obſcurely cornered. Gærtner remarks, that the ſtamens are five, though one is ſhorter than the reſt, and faſtened to the neareſt ſegment of the corolla.—*Eſſential Character*. Calyx four-cleft, (five-toothed, *G.*) corolla:

rolla with all the ſegments directed one way, (deeply five-cleft, with oblong ciliated ſegments, *G*.) ſtamens oppoſite to the petal, (five, unequal, *G*.) capſule three-celled, (gaping at top, *G*.)

Loeſelia ciliata, or fringed loeſelia; a ſingle ſpecies. Found at Vera Cruz in South America by Houſtoun.

LO'ET, a river of France, which runs into the Juine at Eſtampes.

LO'FANGER, a town of Sweden, in Weſt Bothnia: forty miles north-north-eaſt of Umea.

LOFAN'GO, one of the ſmaller Friendly Iſlands: five miles eaſt-ſouth-eaſt of Neeneeva.

LOF'FINGEN, a town of Germany, in the lordſhip of Furſtenburg. Here is a medicinal bath: three miles weſt-ſouth-weſt of Huiffingen, and ſix weſt of Furſtenberg.

LOFOE'REN, a cluſter of ſmall iſlands in the North Sea, near the coaſt of Norway. Lat. 68. N.

LOF'SA, a river of Heſſe, which runs into the Fulda near Melſungen.

LOFSA'LO, a ſmall iſland in the gulf of Finland. Lat. 60. 2. N. lon. 46. 2. E.

LOF'STA, a town of Sweden, in Smaland: ſeventy miles north of Calmar.

LOF'STA, a town of Sweden, in the province of Upland; with a hammer-mill, eight forges, and a ſmelting-furnace; theſe works were burned and deſtroyed by the Ruſſians in the year 1719, but have ſince been rebuilt: forty miles north of Upſal.

LOFT, *ſ.* [*lloſt*, Welſh; or from *lift*.] A floor.—Eutychus fell down from the third *loft*. *Acts*.—The higheſt floor:

An ever-drizzling rain upon the *loft*,
Mixt with a murm'ring wind. *Fairy Queen.*

Rooms on high:

Paſſing through the ſpheres of watchful fire,
And hills of ſnow, and *lofts* of piled thunder. *Milton.*

LOFT, *adj.* [for *aloft*.] High. *Chaucer.*

LOF'TILY, *adv.* [from *lofty*.] On high; in an elevated place. Proudly; haughtily.—They ſpeak wickedly concerning oppreſſion: they ſpeak *loftily*. *Pſal.* lxxiii. 8.—With elevation of language or ſentiment; ſublimely:

My lowly verſe may *loftily* ariſe,
And lift itſelf unto the higheſt ſkies. *Fairy Queen.*

LOF'TINESS, *ſ.* Height; local elevation. Sublimity; elevation of ſentiment:

The firſt in *loftineſs* of thought ſurpaſs'd,
The next in majeſty; in both the laſt. *Dryden.*

Pride; haughtineſs.—Auguſtus and Tiberius had *loftineſs* enough in their temper, and affected to make a ſovereign figure. *Collier.*

LOF'TUS, a townſhip of Yorkſhire, in the north-riding: ſix miles north-eaſt of Giſborough.

LOF'TY, *adj.* [from *loft*, or *lift*.] High: hovering; elevated in place.—Cities of men with *lofty* gates and tow'rs. *Milton.*

See *lofty* Lebanon his head advance,
See nodding foreſts on the mountains dance. *Pope.*

Elevated in condition or character.—Thus ſaith the high and *lofty* One. *Iſaiah*.—Sublime; elevated in ſentiment.—He knew to ſing and build the *lofty* rhime. *Milton*.—Proud; haughty.—The eyes of the *lofty* ſhall be humbled. *Iſaiah*.

Lofty and ſour to them that lov'd him not;
But, to thoſe men that ſought him, ſweet as ſummer.
Shakeſpeare.

LOFVES'TA, a ſeaport town of Sweden, in the province of Schonen: twenty-five miles ſouth of Chriſtianſtadt.

LOFVSTU'TE, a town of Africa, in Biledulgerid: fifty-ſix miles ſouth-eaſt of Gadamis.

LOG, *ſ.* [*Skinner* derives it from ligȝan, Sax. to lie; *Junius* from *logge*, Dut. ſluggiſh; perhaps the Lat. *lignum*, wood, is the true original.] A ſhapeleſs bulky piece of wood.—The worms with many feet are bred under *logs* of timber, and many times in gardens, where no *logs* are. *Bacon.*

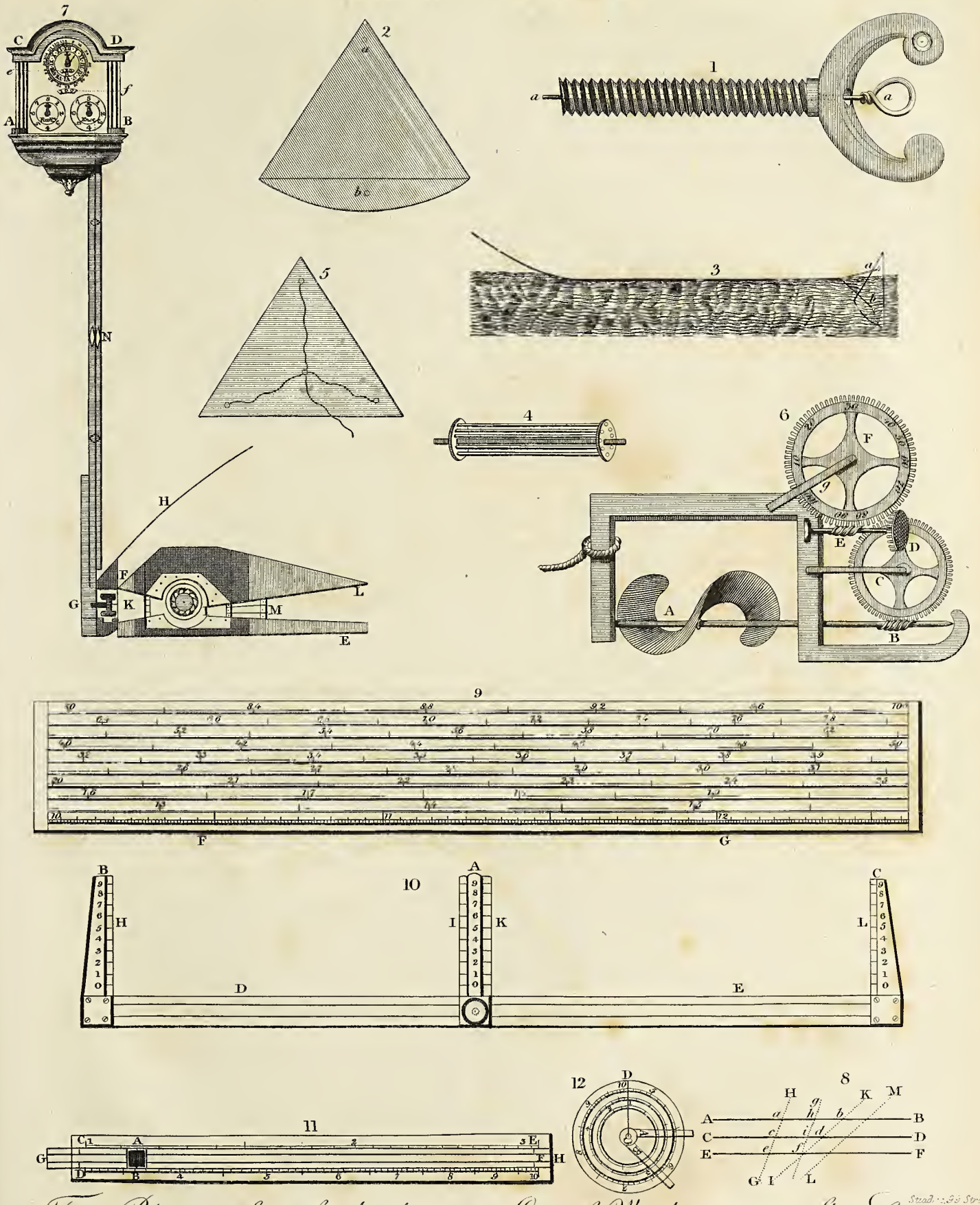
Some *log*, perhaps, upon the water ſwam,
An uſeleſs drift, which, rudely cut within,
And hollow'd, firſt a floating trough became,
And croſs ſome riv'let paſſage did begin. *Dryden.*

A ſilver medal was preſented to Mr. Richard Knight, ironmonger, of Foſter-lane, Cheapſide, by the Society for the Encouragement of Arts, in the year 1802, for his method of breaking-up logs of wood, for the purpoſes of fuel, by blaſting them with gunpowder. The following account is extracted from his communication to the ſociety. "I have frequently obſerved the great difficulty, labour, and loſs of time, experienced in breaking-up logs of wood, particularly for the purpoſe of fuel; ſuch as the ſtumps and roots of large trees, which remain after the felling of timber; many of which, eſpecially ſuch as conſiſt of the harder and more knotty kind, as oaks, elms, yews, &c. are frequently left to rot in the ground, in order to avoid the neceſſary expenſe of breaking them to pieces in the common way, which is generally effected by the axe, and driving a ſucceſſion of iron wedges with a ſledge-hammer; a laborious and tedious proceſs. Sometimes gunpowder is uſed, by ſetting a blaſt in a ſimilar way to that in mines or ſtone-quarries. This method, though leſs laborious than the former, is tedious, is attended with ſeveral difficulties, and requires conſiderable experience and dexterity, or the plug will be more frequently blown out than the block rent by the exploſion. With a view, therefore, to obviate theſe difficulties, I have conſtructed an inſtrument, a ſketch and deſcription of which I now incloſe for your approbation. The ſimplicity of its conſtruction and application is ſuch as almoſt to preclude an idea of its originality; but, as it has hitherto appeared entirely new to all my acquaintance, and as I do not know that any thing of the kind has ever before been preſented to the public, I am induced to think it may not be unacceptable." Fig. 1 on the annexed Plate repreſents the inſtrument, which conſiſts ſimply of a ſcrew, with a ſmall hole drilled through its centre. The head of the ſcrew is formed into two ſtrong horns, for the more ready admiſſion of the lever by which it is to be turned. *a a* repreſents a wire, for the purpoſe of occaſionally clearing the touch-hole. When a block of wood is to be broken, a hole is to be bored with an auger of a proper depth, and a charge of gunpowder introduced. The ſcrew is to be turned into the hole, till it nearly touches the powder; a quick-match is then to be put down the touch-hole (after taking out the wire *a a*) till it reaches the charge. The quick-match is made by ſteeping a roll of twine or linen thread in a ſolution of ſaltpetre. This match may be about eighteen inches in length, which will afford the operator an opportunity of retiring, after lighting it, to a place of ſafety.

LOG, *ſ.* A machine, by which a ſhip's progreſs is computed.—*Log* is a machine uſed to meaſure the ſhip's headway, or the rate of her velocity as ſhe advances through the ſea. It is compoſed of a reel and line, to which is fixed a ſmall piece of wood forming the quadrant of a circle. *Hawkeſworth's Voyages.*

The common log is a ſmall piece of timber of a triangular, ſectoral, or quadrantal, figure, as repreſented on the annexed Plate, at fig. 2. It is generally about a quarter of an inch thick, and five or ſix inches from the angular point to the circumference. It is balanced by a thin plate of lead, nailed to the arch, or circular ſide, ſo as to ſwim perpendicularly in the water. A little cord, or line, about a hundred and fifty fathoms long, is faſtened to the log by means of two legs, *a*, *b*, fig. 2 and 3. one of which paſſes through a hole at the corner, and is knotted on the oppoſite ſide, while the other leg is attached to the arch

LOG AND LOGARITHMS.



Figs. 1. Blasting Screw for breaking up Logs of Wood. 2 to 7. Ship Logs.

8 to 12. Instruments for setting off Logarithms.

London, Published as the Act directs, by G. Jones, Sept.r 4, 1813.

by a pin fixed into another hole, ſo as to draw out occaſionally. By theſe legs the log is hung in equilibrio; and the line thus annexed to it is wound round a reel (fig. 4) fixed for that purpoſe in the gallery of the ſhip. The French log is a perfect triangle, and is connected to the line by more cords, or legs, as at fig. 5. In either caſe, the log-line, from the diſtance of about ten, twelve, or fifteen, fathoms off the log, has certain knots or diviſions, which ought to be at leaſt fifty feet from each other; though it was the common practice at ſea not to have them above forty-two feet aſunder. The length of each knot ought to be the ſame part of a ſea-mile as half a minute is of an hour; and, admitting the meaſurement of Mr. Norwood, who makes a degree on a great circle of the earth to contain 367,200 Engliſh feet, or about 69½ Engliſh ſtatute-miles, the $\frac{1}{60}$th part of it, or a nautical mile, will be 6120 feet; and the $\frac{1}{120}$th of 6120, or 51 feet, ſhould be the length of each knot. But, becauſe it is ſafer to have the reckoning rather before the ſhip than after it, therefore fifty feet may be taken as the proper length of each knot. The knots are ſometimes made to conſiſt only of forty-two feet each, even in the preſent practice; and this method of dividing the log-line was founded on the ſuppoſition that ſixty miles, each of 5000 Engliſh feet, made a degree; for $\frac{1}{120}$ of 5000 is 41⅔, or, in round numbers, 42 feet. Mariners, rather than quit the old way, though known to be erroneous, uſe glaſſes for half-minute ones that run but 24 or 25 ſeconds. They have alſo uſed a line of 45 feet to 30 ſeconds, or a glaſs of 28 ſeconds to 42 feet. When this is the caſe, the diſtance between the knots ſhould be corrected by the following proportion: As 30 is to 50, ſo is the number of ſeconds of the glaſs to the diſtance between the knots upon the line. The heat or moiſture of the weather has often a conſiderable effect upon the glaſs, ſo as to make it run ſlower or faſter; it ſhould, therefore, be frequently tried by the pendulum in the following manner: On a round nail hang a ſtring that has a muſket-ball fixed to one end, carefully meaſuring between the centre of the ball and the ſtring's loop over the peg 39⅛ inches, being the length of a ſecond pendulum; then ſwing it, and count one for every time it paſſes under the peg, beginning at the ſecond time it paſſes: and the number of ſwings made during the time the glaſs is running out ſhows the ſeconds it contains. The line alſo is liable to relax and ſhrink, and ſhould therefore be occaſionally meaſured.

The uſe of the log and line is to keep account and make an eſtimate of the ſhip's way or diſtance run; which is done by obſerving the length of line unwound in half a minute's time, told by a half-minute glaſs; for ſo many knots as run out in that time, ſo many miles the ſhip ſails in an hour. Thus, if there be four knots veered out in half a minute, the ſhip is computed to run four miles an hour.

The author of this device for meaſuring the ſhip's way is not known; and no mention of it occurs till the year 1607, in an Eaſt-India voyage publiſhed by Purchas; but from that time its name occurs in other voyages among his Collections; and thenceforward it became famous, being taken notice of both by our own authors and by foreigners; as by Gunter in 1623; Snellius in 1624; Metius in 1631; Oughtred in 1633; Herigone in 1634; Saltonſtall in 1636; Norwood in 1637; Pournier in 1643; and by almoſt all the ſucceeding writers on navigation of every country.

To heave the log, as they call it, they throw it into the water on the lee ſide, letting it run till it comes without the eddy of the ſhip's wake; then one, holding a half-minute glaſs, turns it up juſt as the firſt knot, or the mark from which the knots begin to be reckoned, turns off the reel, or paſſes over the ſtern. As ſoon as the glaſs is out, the reel is ſtopped, and the knots run off are told, and their parts eſtimated. It is uſual to heave the log once every hour in ſhips of war and Eaſt Indiamen, and in all other veſſels once in two hours, allowance being made for the wind having increaſed or abated in the intervals.

The log is a very precarious way of computing, and muſt always be corrected by experience, there being much uncertainty, from the motions of the ſhip, the winds of variable force, the friction of the reel, and lightneſs of the log in the courſe of the current. Yet this is a much more exact way of computing than any other in uſe; much preferable certainly to that of the Spaniards and Portugueſe, who gueſſed at the ſhip's way by the running of the froth or water by the ſhip's ſide; or to that of the Dutch, who uſe to heave a chip overboard, and to number the paces they walk on the deck while the chip ſwims between any two marks or bulk heads on the ſide.

The above-mentioned errors, and particularly the log's being ſubject to drive with the motion of the water at its ſurface, (whereas the experiment requires it to be fixed in the place where it is when the mark commencing the knots goes off the reel,) have been conſidered, and many methods propoſed to remove or to leſſen them. M. Bouguer (Mem. Acad. Scienc. 1747.) propoſed the following method. Take for the log a conical piece of wood, which fix to the log-line, paſſed through or along its axis, at 50, 60, or more, feet from one end; and to this end fix the diver, which is a body formed of two equal ſquare pieces of tin, or of thin iron-plate, fixed at right angles to one another along their diagonals; and its ſize ſo fitted to that of the cone, that the whole may float. A cone of three inches diameter in the baſe, and of ſix inches in the ſlant height, is propoſed by M. Bouguer to ſuit a diver made of plates about 9¾ inches ſquare; the interſection of the diagonals is joined to the log-line, and the loop and peg fixed as in the common log. However, it has been found, that no kind of wood uſed in Britiſh dock-yards, when formed into a cone of the above dimenſions, will float a diver made of ſtout tin plates, one ſide of the ſquare being 9¾ inches. Such a diver, weighing 1⅞lb. avoirdupois, required to float it a cone of five inches diameter and twelve inches on the ſlant ſide, ſo as the point of the cone, which was made of light fir, ſhould juſt appear above the water. Now, ſuppoſing one ſide of ſuch a ſquare tin diver to be about ten inches, and made of plates only two-thirds of the thickneſs of the former, ſuch a diver would weigh, with its ſolder, about 20 ounces, and can be floated by a light fir cone of four inches diameter in the baſe, and ten inches in the ſlant height or length; and ſuch a compound log might perhaps be found on trial to be affected by about as much again as that propoſed by M. Bouguer; and conſequently the difference between the numbers given by the common log and compound log, muſt be augmented by two-thirds of itſelf for the neceſſary correction, as below. When the compound log of Bouguer, above deſcribed, is hove overboard, the diver will ſink too deep to be much affected by the current or motion of water at the ſurface, and the log will thereby keep more ſteadily in the place where it firſt fell; and conſequently the knots run off the reel will ſhow more accurately the ſhip's rate of ſailing. As the common log is affected by the whole motion of the current, ſo this compound log will feel only a part thereof, viz. ſuch a part nearly as the reſiſtance of the cone is to the reſiſtance of the diver; then the reſiſtances of the above cone and diver are about as 1 to 5; and conſequently this log will drive but one-fifth part of what the common log would do; and ſo the ſhip's true run will be affected by one-fifth only of the motion of the water. To obtain the true rate of ſailing, it will be proper to heave alternately, hour and hour, the common log, and this compound log; then the difference of their knots run off, augmented by its fourth part, is the correction; which applied to the knots of the common log, will give the ſhip's true rate of ſailing at the middle time between the hours when theſe logs were hove. The correction is additive when the compound log's run is the greateſt, otherwiſe it is ſubtractive.

tractive. To find the courſe made good: Increaſe the obſerved angle between the log-lines by one-fourth part; and this gives the correction to be applied to the apparent courſe, or the oppoſite of that ſhown by the common log; the correction is to be applied to the {right / left} of the apparent courſe, when the bearing of the common log is to the {left / right} of the compound log. Or thus: The lengths run off both logs, together with their bearings, being known; in a card or compaſs apply the knots run off, taken from a ſcale of equal parts along their reſpective bearings from the centre; join the ends; and in this line produced, on the ſide next the compound log's length, take one-fourth of the interval; then a line drawn from the end, thus produced, to the centre of the card, will ſhow the true courſe and diſtance made good. When a current, ſuch as a tide, runs to any depth, the velocity of that current may be much better aſcertained by the compound log than by the common one, provided the diver does not deſcend lower than the run of the current; for, as thoſe ſhips which are deepeſt immerged drive faſteſt with the tide; ſo, the diver, by being acted on below, as well as the log on the ſurface, their joint motion will give the total effect of the current's motion better than what could be derived from the motion at the ſurface only. Alſo, by ſuch a compound log, the depth to which any current runs may be eaſily tried.

The following is the ſpecification of a patent granted to Mr. Cheſter Gould, of the town of Rome, in the county of Oneida, in the ſtate of New York, merchant; for an improved log for aſcertaining a ſhip's diſtance. The patent is dated May 26, 1800.

"I take a cylinder of braſs, or other materials not liable to be injured by ſalt water, of ſuch diameter and length as the mechanic may chooſe, or the purchaſer direct; but one of three inches and a half in diameter, and nine or ten in length, is conſidered as the moſt proper. To one end of this cylinder is firmly fixed (by ſcrews or otherwiſe) a conical head-piece, conſiſting of a ring of braſs, made to fit on one end of the cylinder, and four ſtrong bars, one end of which is joined to the ring, and the other meets at ſome diſtance from the cylinder, and are confined together by a piece of braſs prepared for that purpoſe, and likewiſe to affix a ring by which the machine is towed through the water. Between thoſe bars, all round the cylinder, are paſſed a number of fine braſs wires, terminating at the ſame point, and ſecured to the ſame piece of braſs with the bars; the uſe of which is to prevent the entrance of ſea-weed, or any kind of ſubſtance that might prevent or obſtruct the working of the machine; the wires ſhould be as few as is conſiſtent with that deſign, and agreeable to the ſize of the cylinder. The head of the inſtrument will ſcrew off and on to the main cylinder, for the purpoſe of taking out the fly-wheel to regulate. A fly, which may conſiſt of two or more vanes of copper, or other materials, is ſuſpended within the cylinder, by means of two bars which croſs the inſide of it, and are affixed by ſcrews, which paſs through the cylinder into the bars, or may be hung in a frame of any ſuitable materials, made to fit the inſide of the cylinder, to which it may be affixed by ſcrews. This wheel muſt move freely about its axis, and is uſually about half the length of the cylinder; but the length may be varied, and the principle remain the ſame. When this machine is towed after a ſhip, a column of water paſſes through the cylinder with a velocity always proportioned to the velocity of the ſhip. This wheel, which is fixed with its axis nearly in the centre of the tube, preſents itſelf endways to the water, and takes motion from the winding or angular poſition of the vanes, on the ſame principle as a windmill, or ſmoke-jack. The diſtance this wheel will move at each revolution will be in exact proportion to the quantity of angle by which the vanes are removed from a parallel with the axis; increaſing the wind or angle will occaſion a revolution of the wheel in paſſing over a ſhorter ſpace; and decreaſing the angle will occaſion a revolution in paſſing over a longer ſpace; hence it is evident, that the machine may be regulated by increaſing or decreaſing the angular or winding poſition of the vanes. The angle muſt not be too great, for then the wheel will have too much motion in ſwift ſailing; nor muſt it be too ſmall, for then it will want ſtrength in ſlow ſailing. If the angle equals the twentieth part of a circle, or eighteen degrees, then the wheel will run twenty times its length at each revolution; if it equals the thirtieth part of a circle, or twelve degrees, then it will run thirty times its length at each revolution, let the length of the wheel be what it may; and ſo of any other angle, whether greater or leſs. The vanes ſhould be ſtrong, and firmly ſecured to the axis, to prevent their ſpringing or ſhifting in uſe, which would wholly diſorder the calculation or account. The vanes being firmly ſecured to the axis in nearly the like poſition or angle intended by the artiſt, they may be regulated to true diſtance by ſpringing or bending their ſubſtance a little, which will be known by experiment at any given diſtance. The inſtrument, being once adjuſted, will remain accurate till it is worn out. This mode of regulating the wheel is conſidered the beſt, becauſe it is the moſt ſimple, and much more ſecure in practice than any mechanical method of adjuſting the vanes. The angle which would be found true in theory muſt be a little increaſed, to overcome friction, and the obſtruction of ſuch parts of the machine as break the force of the water; this increaſe can only be known by experiment. On the axis of this wheel, and before the bar which ſuſpends the hind part of the wheel, is a pinion-head of eight leaves; this moves a contrate wheel of ninety-ſix teeth, the pinion of which ſtands acroſs the cylinder; the cylinder ſhould extend back ſo as to cover this wheel, to defend it from injury. The other wheels, five in number, are contained in a line, between two narrow plates, in as ſmall compaſs as can conſiſt with ſtrength; the under plate is nicely fitted to fit on the cylinder. Theſe five wheels and plates are attached to the cylinder by two ſcrews, through the two ends of the under plate, lengthways, and in ſuch manner as to receive the pinion of the contrate wheel through the cylinder and under plate into the upper plate, that it may give motion, by ſix leaves, to the firſt wheel of thirty-ſix teeth, contained between the plates. The four laſt wheels have ſixty teeth each, and are all moved by pinions of ſix leaves; each of theſe wheels carries an index round a circle, graduated into ten equal parts. The circles ſhould be as large as they can be conſtructed without interfering with each other; and theſe graduations are numbered from one to ten; and the numbers on the ſeveral circles are reverſed, becauſe the wheels move contrary ways. If the fly-wheel is regulated, which in this calculation will equal about one twenty-fourth part of a circle, or fifteen degrees, then will the fly or firſt wheel take one revolution for every eight feet and a quarter that the machine moves through the water, the ſecond every ſix rods, the third every thirty-ſeven rods, the fourth every three hundred and ſeventy rods, or a mile, ſea-meaſure, the fifth every ten miles, the ſixth every hundred miles, and the ſeventh every thouſand miles, &c. Although I have, in this inſtance, preferred a train of wheels and pinions, for the purpoſe of giving the requiſite motion to the indexes, yet it is obvious that wheels driven by endleſs ſcrews would anſwer the ſame end. The wheels on the outſide of the cylinder are ſecured from violence by a caſe of braſs, attached to the cylinder by ſcrews, and prepared with a ſliding cover for conveniently inſpecting the indexes. The machine is preſerved in an horizontal poſition by a plate of braſs, attached to the cylinder on the oppoſite ſide from the machinery. This plate extends about two inches back of the cylinder, and terminates in a point forward. The weight of the machinery on one ſide, and the action of the plate on the other, keep the machine always one ſide up, and ſufficiently horizontal. This

plate muſt be variouſly inclined, in practice, up and down, as different velocities may require. This inclination may be governed by a ſcrew, or by bending the ſubſtance of the plate; any other angle of the fly-wheel, with correſponding proportions of the other wheels, produces the ſame effect.

"The calculation may be lengthened, or ſhortened, or varied, by increaſing or diminiſhing the number of wheels, and altering their combinations, agreeably to every perſon's deſire. Thoſe parts of the machine which ſuffer moſt from friction, and therefore are moſt liable to decay, ſhould be conſtructed of the moſt durable ſubſtance or compoſition, whoſe qualities will abide the effects of, and not be injured by, ſalt water.

"As this machine always works under water, it avoids many irregularities which would ariſe from the violent agitation of the ſea's ſurface.

"The fly-wheel is ſo conſtructed as to be capable of being regulated to meet true diſtance; and, being ſmall and portable, it is eaſily taken in for inſpection, and cannot retard the ſhip's progreſs; it is properly guarded againſt choking with ſea-weed, or other ſubſtances; the indexes are ſecured from violence and diſorder; all of which advantages were never combined in any former attempt to meaſure diſtance by a ſpiral wheel. The contrate wheel may receive its motion from either end of the fly-wheel, but the hind end is confidered as the moſt proper. All the parts of the machine may be made of braſs, or any other proper ſubſtance not liable to be injured by the effects of ſalt water."

We have an account, in the Voyage to the North Pole, p. 97. of two other logs, which were tried by captain Phipps; one invented by Mr. Ruſſel, the other by Foxon; both conſtructed upon this principle, that a ſpiral, in proceeding its own length in the direction of its axis through a reſiſting medium, makes one revolution round the axis; if, therefore, the revolutions of the ſpiral are regiſtered, the number of times it has gone its own length through the water will be known. In both theſe the motion of the ſpiral in the water is communicated to the clockwork within board, by means of a ſmall line faſtened at one end to the ſpiral, which tows it after the ſhip, and at the other to a ſpindle, which ſets the clockwork in motion. That invented by Mr. Ruſſel has a half ſpiral of two threads, made of copper, and a ſmall dial with clockwork, to regiſter the number of turns of the ſpiral. The other log has a whole ſpiral of wood with one thread, and a larger piece of clockwork with three dials, two of them to mark the diſtance, and the other divided into knots and fathoms, to ſhow the rate by the half-minute glaſs, for the convenience of comparing it with the log. This kind of log will have the advantage of every other in ſmooth water and moderate weather; and it will be uſeful in finding the trim of a ſhip when alone, in ſurveying a coaſt in a ſingle ſhip, or in meaſuring diſtances in a boat between headlands and ſhoals; but it is ſubject to other inconveniencies, which will not render it a proper ſubſtitute for the common log.

In the Annales des Arts, we have the deſcription of a log upon the above principle, invented by Mr. le Guin, who introduces his account of it by obſerving, that calculations made by the common log can ſeldom be accurate; becauſe, 1, the plank is not fixed during the progreſs of the ſhip: 2, the progreſs of the veſſel is always unequal: 3, the pilot may run off the line too quickly or too ſlowly: 4, a ſtrong or a light breeze, at the moment when the log is thrown into the ſea, may produce an error in the reckoning: 5, when ſeven or eight knots are run off, the force of the wind acts upon a ſurface very different from that when the wind is more moderate, and when the veſſels proceed at the rate of but three or four knots: 6, a wave may drive the plank nearer or to a greater diſtance: 7, pilots commonly omit to count the fathoms of line exceeding the number of knots. From all theſe diſadvantages, therefore, the pilots frequently find themſelvss 100 leagues out of their reckoning.

Mr. le Guin proceeds to obſerve, that all theſe imperfections are corrected by the uſe of his log, which is repreſented at fig. 6. This machine being faſtened to the ſtern of the ſhip by a cord at a proper diſtance, the ſhock of the water cauſes the ſpiral A to turn round on its axis. On the ſtem of this axle is a ſcrew, B, which ſets in motion the machinery, C, D, E, F, conſtructed in ſuch a manner, that, while the great wheel F makes one turn the endleſs ſcrew B makes 240,000, and the number of turns of the endleſs ſcrew is indicated by a needle *g* on the wheel F. This wheel has 100 cogs, the wheel D has 40, and C has 60. From theſe ſtatements this log may be made of the ſame proportions, and tried. Thoſe who make trial of it at ſea muſt take it out of the water when the veſſel has proceeded one league; they muſt examine to what number the index of the great wheel points, which will certainly not have made one turn. This number they muſt note down; and, to aſcertain the utility of the log, they ſhould repeat their experiments both in moderate winds and heavy gales. Suppoſing at the end of a league that the index points to 88 with a moderate wind, and to 76 with a high wind, it will be eaſy to find the mean of this equation, and to confirm, by a calculation, or by this meaſure of the ſhip's way, the diſtance ſhe has proceeded. Mr. le Guin made an experiment of about 100 leagues with his log: the wheel F gave 20 cogs per league, and 19 with moderate winds. This log is entirely conſtructed of copper.

Perpetual Log, a machine ſo called by its inventor, Mr. Gottlieb of London, is intended for keeping a conſtant and regular account of the rate of a ſhip's velocity in the interval of heaving the log. Fig. 7 is a repreſentation of the whole machine; the lower part of which, EFG, is fixed to the ſide of the keel; H repreſenting only the boundary-line of the ſhip's figure. EF are the ſection of a wooden external caſe, left open at the ends KL, to admit the paſſage of the water during the motion of the ſhip. At M is a copper grating, placed to obſtruct the entrance of any dirt, &c. into the machine. I is a ſection of a water-wheel, made from 6 to 12 inches in diameter, as may be neceſſary, with floatboards upon its circumference, like a common water-wheel, that turns by the reſiſtance of the water paſſing through the channel LK. It turns upon a ſhouldered axis, repreſented by the vertical ſection at K. When the ſhip is in motion, the reſiſtance of the water through the channel LK turns round the wheel I. This wheel, by means of a pinion, is connected with and turns the rod contained in the long copper tube N. This rod, by a pinion fixed at its upper extremity, is connected with and turns upon the whole ſyſtem of wheels contained in the dial of the caſe ABCD. This dial, by means of the copper tube N, may be fixed to any convenient place on-board the ſhip. In the front of the dial are ſeveral uſeful circular graduations, as follow: The circle at A has a hand which is moved by the wheels within, which points out the motion of the ſhip in fathoms of ſix feet each. The circle at B has a hand ſhowing the knots, at the rate of 48 feet for each knot; and is to be obſerved with the half-minute glaſs at any time. The circle between C and D has a ſhort and a long hand; the former of which points out the miles in land-meaſure, and the latter or longer the number of knots contained in each mile, viz. 128, which is in the ſame proportion to a mile as 60 minutes to the hour in the reckoning. At *e*, a ſmall portion of a circle is ſeen through the front plate called the *regiſter*; which ſhows, in the courſe of 24 hours (if the ſhip is upon one tack), the diſtance in miles that ſhe has run; and in the 24 hours the mariner need take but one obſervation, as this regiſter ſerves as an uſeful check upon the fathoms, knots, and miles, ſhown upon the two other circles. *f* is a plate ſhowing 100 degrees, or 6000 miles; and this alſo acts as another regiſter or check; and is uſeful in caſe of

any

any miſtake being made in obſerving the diſtance run by the other circles. The reckoning by theſe circles, without fear of miſtake, may therefore be continued to nearly 12,000 miles. A communication from this machine may eaſily be made to the captain's bedſide, where, by touching a ſpring only, a bell in the head A B C D will ſound as many times in a half-minute as the ſhip ſails miles in an hour.

LOG, a Hebrew meaſure, which held a quarter of a cab, and conſequently five-ſixths of a pint. According to Dr. Arbuthnot, it was a liquid meaſure, the ſeventy-ſecond part of the bath or ephah, and twelfth part of the hin. *Calmet.*—A meat offering, mingled with oil, and one *log* of oil. *Lev.*

LOG'-BOARD, *ſ.* A ſort of table, divided into ſeveral columns, containing the hours of the day and night, the direction of the winds, the courſe of the ſhip, and all the material occurrences that happen during the 24 hours, or from noon to noon; together with the latitude by obſervation. From this table the officers of the ſhip are furniſhed with materials to compile their journals.

LOG'-BOOK, *ſ.* A book into which the contents of the log-board is daily copied at noon, together with every circumſtance deſerving notice that may happen to the ſhip, either at ſea or in a harbour. See the article NAVIGATION.

LOG'-HOUSES, *ſ.* A name given to certain houſes in America, which are generally the firſt that are erected on any new ſettlement, and which are cheaper than any others in a country where wood abounds. The ſides conſiſt of trees juſt ſquared, and placed horizontally one upon the other; the ends of the logs of one ſide reſting alternately on the ends of thoſe of the adjoining ſides, in notches; the interſtices between the logs are ſtopped with clay; and the roof is covered with boards, or with ſhingles, which are ſmall pieces of wood in the ſhape of ſlates or tiles, &c. uſed for that purpoſe, with few exceptions, throughout America. Theſe habitations are not very ſightly; but when well built they are warm and comfortable, and laſt for a long time.

LOG-I'SLAND, a ſmall iſland in the Cheſapeak Bay. Lat. 37. 14. N. lon. 76. 23. W.

LOG'-LINE. See LOG, p. 880.

LOG's TOW'N, a town of Pennſylvania, on the Allegany: eighteen miles north-weſt of Pittſburg.

LOG'ARITHMS, *ſ.* [from the Gr. λογος, ratio, and αριθμος, number; q. d. ratio of numbers.] The indices of the ratios of numbers one to another; or a ſeries of artificial numbers proceeding in arithmetical progreſſion, correſponding to as many others proceeding in geometrical progreſſion; contrived for eaſing and expediting calculation.—The addition and ſubtraction of *logarithms* anſwers to the multiplication and diviſion of the numbers they correſpond with; and this ſaves an infinite deal of trouble. In like manner will the extraction of roots be performed, by diſſecting the *logarithms* of any numbers for the ſquare root, and triſecting them for the cube, and ſo on. *Harris.*

There are various ways of expreſſing the relation between a number and its logarithm. We ſhall firſt ſtate that which ſubſiſts between the correſponding terms of two ſeries, the number being expreſſed by a ſeries in geometrical progreſſion, and the logarithm by a ſeries in arithmetical. Thus:

Logarithms,	0	1	2	3	4	5	6	7	8
Nat. Numb.	1	2	4	8	16	32	64	128	256

Or,

Logarithms,	0	1	2	3	4	5	6
Nat. Numb.	1	10	100	1000	10,000	100,000	1,000,000

In either of theſe ſeries it is evident, that, by adding any two terms of the upper line together, a number will be had which indicates that produced by multiplying the correſponding terms of the lower line. Thus, in the firſt two ſeries, ſuppoſe we wiſh to know the product of 4×32. In the upper line we find 2 ſtanding over the number 4, and 5 over 32; adding therefore 5 to 2 we find 7, the ſum of this addition, ſtanding over 128, the product of the two numbers. In like manner, if we wiſh to divide 256 by 8, from the number which ſtands over 256, viz. 8, ſubtract that which ſtands over 8, viz. 3; the remainder 5, which ſtands over 32, ſhows that the latter is the quotient of 256 divided by 8. Let it be required to involve 4 as high as the biquadrate or 4th power: Multiply 2, the number which ſtands over 4, by the index of the power to which the number is to be involved; which index is 4: the product 8, ſtanding over 256, ſhows that this laſt number is the biquadrate of 4 required. Laſtly, let it be required to extract the cube root of 64; divide the number 6, which ſtands over 64, by 3, the index of the root you wiſh to extract; the quotient 2, ſtanding over 4, ſhows that 4 is the root ſought.

Theſe examples are ſufficient to ſhow the great utility of logarithms in the moſt tedious and difficult parts of arithmetic. But, though it is thus eaſy to frame a table of logarithms for any ſeries of numbers going on in geometrical progreſſion, yet it muſt be far more difficult to frame a general table in which the logarithms of every poſſible ſeries of geometricals ſhall correſpond with each other. Thus, though in the above ſeries we can eaſily find the logarithm of 4, 8, &c. we cannot find that of 3, 6, 9, &c. and, if we aſſume any random numbers for them, they will not correſpond with thoſe which have already been aſſumed for 4, 8, 16, &c. In the conſtruction of every table, however, it was evident, that the arithmetical or logarithmic ſeries ought to begin with 0; for, if it began with unity, then the ſum of the logarithms of any two numbers muſt be diminiſhed by unity before we could find the logarithm of the product. Thus:

Logarithms,	1	2	3	4	5	6	7	8	9
Nat. Numb.	1	2	4	8	16	32	64	128	256

Here let it be required to multiply 4 by 16; the number 3 ſtanding over 4, added to 5 which ſtands over 16, gives 8 which ſtands over 128; but this is not juſt; ſo that we muſt diminiſh the logarithm by 1, and then the number 7 ſtanding over 64 ſhows the true product. In like manner it appears, that, as we deſcend below unity in a logarithmic table, the logarithms themſelves muſt begin in a negative ſeries with reſpect to the former; and thus the logarithm of 0 will always be infinite; negative, if the logarithms increaſe with the natural numbers; but poſitive, if they decreaſe. For, as the geometrical ſeries muſt diminiſh by infinite diviſions by the common ratio, the arithmetical one muſt decreaſe by infinite ſubtractions, or increaſe by infinite additions of the common difference.

The invention of logarithms, it is well known, forms a very diſtinguiſhing æra in the hiſtory of mathematical ſcience. How much they expedite every kind of calculation; to what an aſtoniſhing degree they facilitate the explication of trigonometry to every ſcience that is connected with it; and to what an extent they have contributed to enlarge the ſphere of our reſearches and knowledge in this way; it is altogether needleſs to mention. Thoſe who have any acquaintance with this branch of mathematics will not heſitate to allow its peculiar utility and importance; and they will trace with pleaſure the various ſteps that have been purſued by mathematicians, of all countries, in the cultivation and improvement of it.

This property of numbers was not unknown to the ancient mathematicians. It is mentioned in the works of Euclid; and Archimedes made great uſe of it in his Arenarius, or treatiſe on the number of the ſands; and it is probable that logarithms would have been much ſooner invented, had the real neceſſity for them been ſooner felt; but this did not take place till the end of the ſixteenth century, when the conſtruction of trigonometrical tables, and ſolution of perplexed aſtronomical problems, rendered them abſolutely indiſpenſable.

According to Kepler, one Juſte Byrge, aſſiſtant aſtronomer to the landgrave of Heſſe, either invented or projected logarithms long before baron Napier, and compoſed a table of ſines for every two ſeconds of the quadrant; though,

though, by reaſon of his natural reſervedneſs, he never publiſhed any thing to the world. But, whatever might have been in this, it is certain that the world is indebted for logarithms to baron Napier, who died in the year 1618. This nobleman likewiſe made conſiderable improvements in trigonometry; and the frequent numerical computations he had occaſion for in this branch, undoubtedly contributed to his invention of the logarithms, that he might ſave part of the trouble in theſe calculations. His book, publiſhed in 1614, was intitled *Mirifici Logarithmorum Canonis Deſcriptio*. At this time he did not publiſh his method of conſtructing the numbers until the ſenſe of the learned ſhould be known. In other reſpects the work is complete, containing all the logarithms of the natural numbers to the uſual extent of logarithmic tables; with the logarithmic ſines, tangents, and ſecants, for every minute of the quadrant, directions for uſing the tables, &c.

This work was publiſhed in Latin; but was afterwards tranſlated into Engliſh by Mr. Edward Wright, inventor of the principles of what has been falſely called Mercator's Sailing. The tranſlation was ſent to his lordſhip at Edinburgh, and returned with his approbation and ſome few additions. It was publiſhed in 1616, after Mr. Wright's death, with a dedication to the Eaſt-India Company, by his ſon Samuel Wright, and a preface by Mr. Briggs, who afterwards diſtinguiſhed himſelf ſo much in bringing logarithms to perfection. In this tranſlation, Mr. Briggs alſo gave the deſcription and draught of a ſcale invented by Mr. Wright, as well as other methods invented by himſelf, for finding the intermediate proportional numbers; the logarithms already found having been only printed for ſuch numbers as were the natural ſines of each minute. Mr. Wright's tranſlation was reprinted in 1618, with a new title-page, and the addition of 16 pages of new matter, "ſhowing the method of calculating triangles, as well as a method of finding out ſuch lines and logarithms as are not to be found in the canons."

Next year John Speidell publiſhed his New Logarithms, in which were ſome remedies for the inconveniences attending lord Napier's method. The ſame year alſo Robert Napier, the baron's ſon, publiſhed a new edition of his father's book, entitled *Canonis Logarithmorum Deſcriptio*; with another concerning the method of conſtructing them, which the baron had promiſed; together with ſome other miſcellaneous pieces, which his father had likewiſe compoſed along with Mr. Briggs. In 1620, alſo a copy of theſe works was printed at Lyons in one volume, by Bartholomew Vincent, a bookſeller there; but this publication ſeems to have been but little known, as Wingate, who carried logarithms to France four years after, is ſaid to have been the firſt who introduced them into that country.

The kind of logarithms now in uſe were invented by Mr. Henry Briggs, profeſſor of geometry in Greſham college, London, at the time they were firſt diſcovered by Napier. As ſoon as the logarithms of Napier were publiſhed, Mr. Briggs directed his attention to the ſtudy and improvement of them; and his employment in this way was announced in a letter to Mr. Uſher, afterwards the celebrated archbiſhop, in the year 1615. By him the ſcale was changed, and o was made the logarithm of 1; but lord Napier informed Mr. Briggs that he had already thought of ſuch a ſcheme, but choſe rather to publiſh the logarithmic tables he had completed, and to let thoſe alone until he ſhould have more leiſure, as well as better health. At an interview betwixt lord Napier and Mr. Briggs, the preſent plan ſeems to have been ſettled; and, in conſequence of his lordſhip's advice, Mr. Briggs made ſome alteration in the method of conſtructing his tables from that which he had begun. A correſpondence alſo took place betwixt his lordſhip and Mr. Briggs, which continued during the lifetime of the former. It appears, however, that, whether Mr. Briggs thought of this alteration before lord Napier or not, he certainly was the perſon who firſt publiſhed it to the world; and ſome reflections have been thrown upon his lordſhip for not making any mention of the ſhare which Mr. Briggs had in it.

In 1617 Mr. Briggs publiſhed his firſt thouſand logarithms under the title of *Logarithmorum Chilias Prima*; and in 1620 Mr. Edward Gunter publiſhed his canon of Triangles, containing the artificial or logarithmic ſines and tangents for every minute, to ſeven places of figures beſides the index; the logarithm of the radius being 10,000,000, &c. Theſe were the firſt tables of logarithmic ſines, tangents, &c. which made their appearance upon the preſent plan; and in 1623 they were reprinted in his book de *Sectore et Radio*, along with the Chilias Prima of Mr. Briggs. The ſame year Mr. Gunter applied theſe logarithms of numbers, ſines, and tangents, to ſtraight lines drawn on a ruler; and with theſe the proportions in common numbers, as well as in trigonometry, were ſolved by the mere application of a pair of compaſſes; a method founded upon this property, that the logarithms of the terms of equal ratios are equally different. The inſtrument is now well known by the name of the two-feet Gunter's ſcale. By the ſame methods he alſo greatly improved the ſector. He was alſo the firſt who uſed the word *cofine* for the ſine of the complement of an arc; and he introduced the uſe of arithmetical complements into the logarithmical arithmetic. He is ſaid alſo to have firſt ſuggeſted the idea of the *logarithmic curve*, ſo called becauſe the ſegments of its axis are the logarithms of the correſponding ordinates.

The logarithmic lines were afterwards drawn in many other ways. Wingate, in 1627, drew them upon two ſeparate rulers ſliding by each other, in order to ſave the uſe of compaſſes in reſolving proportions. In 1627, alſo, they were applied by Mr. Oughtred to concentric circles; about 1650, in a ſpiral form, by one Mr. Milburne of Yorkſhire; and in 1657, they were applied on the preſent ſliding-rule by Mr. Seth Partridge.

The knowledge of logarithms was diffuſed in France by Mr. Edmund Wingate, as already related, though not carried originally thither by him. Two ſmall tracts were publiſhed by him in French, and afterwards an edition in Engliſh, all printed in London. In the firſt of theſe he mentions the uſe of Gunter's ruler; and in the other that of Briggs's logarithms, with the canon of artificial ſines and tangents. There are likewiſe tables of theſe ſines, tangents, and logarithms, copied from Gunter.

From the time that Mr. Briggs firſt began to ſtudy the nature of logarithms, he applied to the conſtruction of tables with ſuch aſſiduity, that by the year 1624 he publiſhed his *Arithmetica Logarithmica*, containing the logarithms of 30,000 natural numbers to fourteen places of figures beſides the index; viz. from 1 to 20,000, and from 90,000 to 100,000, together with the differences of the logarithms. According to ſome, there was another chiliad, viz. from 100,000 to 101,000; but this does not ſeem to be well authenticated. In the preface to this work, he gives an account of the alteration made in the ſcale by lord Napier and himſelf; and earneſtly ſolicits other perſons to undertake the taſk of filling up the intermediate numbers; offering to give inſtructions, and to afford paper ready ruled for the purpoſe. He gives alſo inſtructions at large in the preface for the conſtruction of logarithmic tables. Thus he hoped to get the logarithms of the other 70,000 natural numbers completed; while he himſelf, being now pretty far advanced in years, might be at liberty to apply to the canon of logarithmic ſines, &c. which was as much wanted by mathematicians as the others. His wiſhes were accompliſhed by Adrian Vlacq, or Flack, of Gouda in Holland, who completed the numbers from 20 to 90,000; and thus the world was furniſhed with the logarithms of all natural numbers from 1 to 100,000; but thoſe of Vlacq were only done to ten places of figures. To theſe was added a table of artificial ſines, tangents, and ſecants, to every minute of the quadrant. Beſides the great work already mentioned, Mr. Briggs completed a table of logarithmic ſines and tangents for the 100th part of every degree, to fourteen places of figures beſides the

index; and a table of natural ſines for the ſame parts to fifteen places, with the tangents and ſecants to ten places, and the methods of conſtructing them. He deſigned alſo to have publiſhed a treatiſe concerning the uſes and application of them, but died before this could be accompliſhed. On his death-bed he recommended this work to Henry Gellibrand, profeſſor of aſtronomy in Greſham college, in which office he had ſucceeded Mr. Gunter. Mr. Briggs's tables above mentioned were printed at Gouda, and publiſhed in 1633; and the ſame year Mr. Gellibrand added a preface with the application of logarithms to plane and ſpherical trigonometry, the whole being denominated *Trigonometria Britannica*; and, beſides the arcs in degrees and hundredth parts, has another table containing the minutes and ſeconds anſwering to the ſeveral hundredth parts in the firſt column. The *Trigonometria Artificialis* of Vlacq contains the logarithmic ſines and tangents to ten places of figures, to which is added Briggs's firſt table of logarithms from 1 to 20,000, beſides the index: the whole preceded by a deſcription of the tables, and the application of them to plane and ſpherical trigonometry, chiefly extracted from Briggs's Trigonometria Britannica already mentioned. In 1635, Mr. Gellibrand alſo publiſhed a work, intitled An Inſtitution Trigonometrical, containing the logarithms of the firſt 10,000 numbers, with the natural ſines, tangents, and ſecants; and the logarithmic ſines and tangents for degrees and minutes, all to ſeven places of figures beſides the index; likewiſe other tables proper for navigation, with the uſes of the whole. Mr. Gellibrand died in 1636. See his article, vol. viii. p. 292.

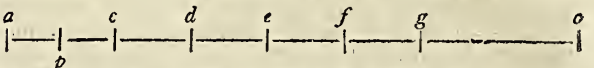
Sherwin's Mathematical Tables, publiſhed in 8vo. form the moſt complete collection of any; containing, beſides the logarithms of all numbers to 101,000, the ſines, tangents, ſecants, and verſed ſines both natural and logarithmic, to every minute of the quadrant. The firſt edition was printed in 1706; but the third, publiſhed in 1742 and reviſed by Gardiner, is looked upon to be ſuperior to any other. The fifth and laſt edition, publiſhed in 1771, is ſo incorrect, that no dependence can be placed upon it.

"Tables of Logarithms from 1 to 102,100, and for the Sines and Tangents to every ten ſeconds of each degree in the quadrant; as alſo for the Sines of the firſt 72 minutes to every ſingle ſecond, with other uſeful and neceſſary Tables. By Gardiner; Lond. 1742." This work contains a table of logiſtical logarithms, and three ſmaller tables to be uſed for finding the logarithms of numbers to twenty places of figures. Only a ſmall number of theſe tables was printed, and that by ſubſcription; and they are now in the higheſt eſteem for accuracy and uſefulneſs. An edition of theſe tables was printed at Avignon in France in 1770, with the addition of ſines and tangents for every ſingle ſecond in the firſt four degrees, and a ſmall table of hyperbolic logarithms, taken from a treatiſe upon fluxions by the late Mr. Thomas Simſon. The tables are to ſeven places of figures, but ſomewhat leſs correct than thoſe publiſhed by Gardiner himſelf.

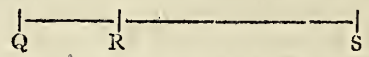
Different Methods of Constructing Logarithms.

Napier's Method as explained by Maclaurin.

The logarithms firſt thought of by lord Napier were not adapted to the natural ſeries of arithmetical numbers, 1, 2, 3, &c. becauſe he did not then intend to adapt them to every kind of arithmetical calculation, but only to that particular operation which had called for their immediate conſtruction, viz. the ſhortening of trigonometrical operations: he explained the generation of logarithms, therefore, in a geometrical way. Both logarithms, and the quantities to which they correſpond, in his way may be ſuppoſed to proceed from the motion of a point; which, if it moves over equal ſpaces in equal times, will produce a line increaſing equally; but if, inſtead of moving over equal ſpaces in equal times, the point deſcribes ſpaces proportional to its diſtances from a certain term, the line produced by it will then increaſe proportionally. Again, if the point moves over ſuch ſpaces in equal times as are always in the ſame conſtant ratio to the lines from which they are ſubducted, or to the diſtance of that point at the beginning of the lines from a given term in that line, the line ſo produced will decreaſe proportionally. Thus, let *ac* be to *ao*, *cd* to *co*, *ef* to *fo*, and

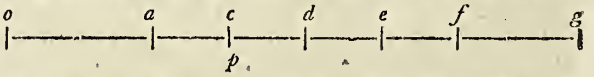


fg to *fo*, always in a certain ratio, viz. that of Q R to



Q S, and let us ſuppoſe the point *p* to ſet out from *a*, deſcribing the diſtances *ac*, *cd*, *de*, &c. in equal ſpaces of time, then will the line *ao* decreaſe proportionally.

In like manner, the line *oa*, increaſes proportionally,



if the point *p*, in equal times, deſcribes the ſpaces *ac*, *cd*, *de*, *fg*, &c. ſo that *ac* is to *ao*, *cd* to *co*, *de* to *do*, &c. in a conſtant ratio. If we now ſuppoſe a point P deſcribing

the line AG with an uniform motion, while the point *p* deſcribes a line increaſing or decreaſing proportionally, the line AP, deſcribed by P, with this uniform motion, in the ſame time that *oa*, by increaſing or decreaſing proportionally, becomes equal to *op*, is the logarithm of *op*. Thus AC, AD, AE, &c. are the logarithms of *oc*, *od*, *oe*, &c. reſpectively; and *oa* is the quantity whoſe logarithm is ſuppoſed equal to nothing.

We have here abſtracted from numbers, that the doctrine may be the more general; but it is plain, that if AC, AD, AE, &c. be ſuppoſed 1, 2, 3, &c. in arithmetic progreſſion; *oc*, *od*, *oe*, &c. will be in geometric progreſſion; and that the logarithm of *oa*, which may be taken for unity, is nothing.

Lord Napier, in his firſt ſcheme of logarithms, ſuppoſes, that, while *op* increaſes or decreaſes proportionally, the uniform motion of the point P, by which the logarithm of *op* is generated, is equal to the velocity of *p* at *a*; that is, at the term of time when the logarithms begin to be generated. Hence logarithms, formed after this model, are called *Napier's logarithms*, and ſometimes *natural logarithms*.

When a ratio is given, the point *p* deſcribes the difference of the terms of the ratio at the ſame time. When a ratio is duplicate of another ratio, the point *p* deſcribes the difference of the terms in a double time. When a ratio is triplicate of another, it deſcribes the difference of the terms in a triple time; and ſo on. Alſo, when a ratio is compounded of two or more ratios, the point *p* deſcribes the difference of the terms of that ratio in a time equal to the ſum of the times in which it deſcribes the differences of the terms of the ſimple ratios of which it is compounded. And what is here ſaid of the times of the motion of *p* when *op* increaſes proportionally, is to be applied to the ſpaces deſcribed by P, in thoſe times, with its uniform motion.

Hence the chief properties of logarithms are deduced. They are the *meaſures of ratios*. The exceſs of the logarithm of the antecedent above the logarithm of the conſequent, meaſures the ratio of thoſe terms. The meaſure of the ratio of a greater quantity to a leſs is poſitive; as this ratio, compounded with any other ratio, increaſes it. The ratio of equality, compounded with any other ratio, neither increaſes nor diminiſhes it; and its meaſure is nothing. The meaſure of the ratio of a leſs quantity to a greater is negative; as this ratio, compounded with any other ratio, diminiſhes it. The ratio of any quantity A to unity, compounded with the ratio of unity to A, produces the ratio of A to A, or the ratio of equality;

and the measures of those two ratios destroy each other when added together; so that, when the one is considered as positive, the other is to be considered as negative. By supposing the logarithms of quantities greater than *oa* (which is supposed to represent unity) to be positive, and the logarithms of quantities less than it to be negative, the same rules serve for the operations by logarithms, whether the quantities be greater or less than *ao*. When *op* increases proportionally, the motion of *p* is perpetually accelerated; for the spaces *ac*, *cd*, *de*, &c. that are described by it in any equal times that continually succeed after each other, perpetually increase in the same proportion as the lines *oa*, *oc*, *od*, &c. When the point *p* moves from *a* towards *o*, and *op* decreases proportionally, the motion of *p* is perpetually retarded; for the spaces described by it in any equal times that continually succeed after each other, decrease in this case in the same proportion as *op* decreases. If the velocity of the point *p* be always as the distance *op*, then will this line increase or decrease in the manner supposed by lord Napier; and the velocity of the point *p*, being the fluxion of the line *op*, will always vary in the same ratio as this quantity itself.

The fluxion of any quantity is to the fluxion of its logarithm as the quantity itself is to unity. Hence the fluxion of the logarithm of x will be $\frac{\dot{x}}{x}$. For $x : 1 :: \dot{x} : \frac{\dot{x}}{x}$ = the fluxion of the logarithm required.

When *op* increases proportionally, the increments generated in any equal times are accurately in the same ratio as the velocities of *p*, or the fluxions of *op*, at the beginning, end, or at any similar terms, of those times. When *op* increases or decreases proportionally, the fluxions of this line, in all the higher orders, increase or decrease in the same proportion as the line itself increases or decreases; so that one rule serves for comparing together those of any kind at different terms of time; and in this case we never arrive at any constant or invariable fluxion. If the logarithms of two quantities be always to each other in any invariable ratio, the fluxions of those quantities shall be in a ratio that is compounded of a ratio of the quantities themselves and of the invariable ratio of their logarithms.

Let *op* be greater than *oa*; *ad* : *ap* :: *oa* : *op*; and let *oa*,

o	*q*	*a*	*d*	*e*	*f*	*g*	*h*	*k*	*p*	*x*

A————————P

ad, *de*, *ef*, *fg*, &c. be in continued proportion: then by adding together *ad*, $\frac{1}{2}de$, $\frac{1}{3}ef$, $\frac{1}{4}fg$, &c. we approximate continually to the value of AP, the logarithm of *op*. And we approximate continually to the logarithm of *od*, by summing up the differences betwixt *ad*, $\frac{1}{2}de$, $\frac{1}{3}ef$, and $\frac{1}{4}fg$, $\frac{1}{5}gh$, and $\frac{1}{6}hk$, &c. See Maclaurin's Fluxions, art. 171, 172. From what has been said, it follows, that if *ao* : *od* :: *op* : *ox*, then the logarithm of *ox* will be equal to the sum of the logarithms of *op* and *od*: that is, to the sum of $ad+\frac{1}{2}de+\frac{1}{3}ef+\frac{1}{4}fg+\frac{1}{5}gh+\frac{1}{6}hk$, &c. and $ad+\frac{1}{2}de+\frac{1}{3}ef+\frac{1}{4}fg+\frac{1}{5}gh+\frac{1}{6}hk$, &c. and $ad-\frac{1}{2}de+\frac{1}{3}ef-\frac{1}{4}fg+\frac{1}{5}gh-\frac{1}{6}hk$, &c. which sum is $2ad+\frac{2}{3}ef+\frac{2}{5}gh$, &c.

Let $aq=ad$; then the logarithm of *ox* will measure the ratio of *od* to *oq*. But *od* and *oq* have half their sum equal to *oa*, and half their difference equal to *ad*, which are the two first terms of the geometric progression *oa*, *ad*, *de*, *ef*, *fg*, *gh*, *hk*, &c. Hence, if $oa=1$, and $ad=x$, *de*, *ef*, *fg*, &c. will be respectively, x^2, x^3, x^4, &c. and the ratio of $1+x$ to $1-x$ will be equal to that of *od* to *oq*. But the logarithm of this ratio is $2ad+\frac{2}{3}ef+\frac{2}{5}gh+$, &c. therefore the logarithm of $\frac{1+x}{1-x} = \overline{2\times x+\frac{1}{3}x^3+\frac{1}{5}x^5+\frac{1}{7}x^7+}$, &c. agreeably to what has been shown by Dr. Halley and others.

Having thus given an idea of the forms under which logarithms were considered, and the methods by which they were computed by some of the early writers on this subject, it will be proper now to explain the more modern way of investigating the principles and of computing these very useful numbers.

We have already defined a logarithm to be the index of a certain number called the radix, which, being raised to the power denoted by that index or logarithm, will produce the given number. If, therefore, $r^x=N$, then x is the logarithm of N, and r is the radix of the system. Now, first, in order to find an analytical expression for N in terms of x and r; r^x must be converted into a series, for which purpose it may be put under the form

$$r^x = (1+(r-1))^x = 1 + x\,(r-1) + \frac{x\,.\,(x-1)}{1\,.\,2}(r-1)^2 + \frac{x\,(x-1)\,(x-2)}{1\,.\,2\,.\,3}(r-1)^3 + \&c.$$

$$= 1 + x\left\{(r-1) - \tfrac{1}{2}(r-1)^2 + \tfrac{1}{3}(r-1)^3 - \&c.\right\}$$

$$+ \frac{x^2}{1\,.\,2}\left\{(r-1)^2 - (r-1)^3 + \&c.\right\} =$$

$$1 + A\,x + A'\,x^2 + A''\,x^3 + \&c.$$

by writing

$$A = (r-1) - \tfrac{1}{2}(r-1)^2 + \tfrac{1}{3}(r-1)^3 - \&c.$$
$$A' = (r-1)^2 - (r-1)^3 + \&c.$$
$$A'' = \&c.$$

where A, A′, A″, A‴, &c. are constant but unknown quantities. And now, in order to determine the law by which they are connected with each other, let x be increased by any determinate quantity z; then $r^{x+z} = 1 + A\,(x+z) + A'\,(x+z)^2 + A''\,(x+z)^3 \ldots\ldots A^{(n-1)}\,(x+z)^n$; or, expanding the powers of $x+z$, and stopping at the first two terms, we have

$$r^{x+z} = 1 + A\,(x+z)$$
$$+ A'\,(x^2 + 2\,x\,z + \&c.)$$
$$+ A''\,(x^3 + 3\,x^2\,z + \&c.)$$
$$+ A^{(n-1)}\,(x^n + n\,x^{n-1}\,z + \&c.)$$
$$+ A^{(n)}\,(x^{n+1} + (n+1)\,x^n + \&c.)$$

Again:

$$r^{x+z} = r^x \times r^z =$$
$$(1 + A\,x + A'\,x^2 + A''\,x^3 + \&c.) \times$$
$$(1 + A\,z + A'\,z^2 + A''\,z^3 + \&c.)$$

the actual multiplication of which gives

$$r^{x+z} = 1 + A\,(x+z) + A'\,x^2 + A''\,x^3 \ldots A^{(n-1)}\,x^n$$
$$A^2\,x\,z + A'\,.\,A\,x^2\,z\,.\,.\,\&c.$$

whence, by comparing the corresponding terms in the two expansions, we have

$$2\,A' = A^2, \text{ or } A' = \frac{A^2}{2};\quad 3\,A'' = A\,A' = \frac{A^3}{2};$$

and therefore $A'' = \frac{A^3}{1\,.\,2\,.\,3}$

in the same way $A''' = \frac{A^4}{1\,.\,2\,.\,3\,.\,4}$

and generally $A^{(n-1)} = \frac{A^n}{1\,.\,2\,.\,3\,\ldots\,n}$

$$A^n = \frac{A^{n+1}}{1\,.\,2\,.\,3\,\ldots\,(n+1)}$$

And consequently,

$$r^x = N = 1 + A\,x + \frac{A^2}{1\,.\,2}x^2 + \frac{A^3}{1\,.\,2\,.\,3}x^3 + \&c.$$

which is the analytical expression for any number in terms of the radix r and its logarithm x; but the reverse of this, by which the logarithm is expressed in terms of its number and radix, is the formula which is more particularly applicable in the present enquiry. This may be found as follows.

In the preceding article we found

$$r^x = N = 1 + A\,x + \frac{A^2}{1\,.\,2}x^2 + \frac{A^3}{1\,.\,2\,.\,3}x^3 + \&c.$$

where $A = (r-1) - \frac{1}{2}(r-1)^2 + \frac{1}{3}(r-1)^3 - \&c.$

and

and if we now make

$B = (N-1) - \frac{1}{2}(N-1)^2 + \frac{1}{3}(N-1)^3 - \&c.$

we shall have, on the same principles,

$$N^z = 1 + Bz + \frac{B^2}{1\cdot 2}z^2 + \frac{B^3}{1\cdot 2\cdot 3}z^3 + \&c.$$ But,

$$N^x = r^{xz} = 1 + Axz + \frac{A^2}{1\cdot 2}x^2z^2 + \frac{A^3}{1\cdot 2\cdot 3}x^3z^3 +$$

&c. whence, by comparing the co-efficients of z in both series, we have

$$Ax = B;\ \frac{A^2x^2}{1\cdot 2} = \frac{B^2}{1\cdot 2};\ \frac{A^3x^3}{1\cdot 2\cdot 3} = \frac{B^3}{1\cdot 2\cdot 3}\ \&c.;$$

each of which gives the same result, viz. $Ax = B$; whence we obtain immediately,

$$x = \frac{B}{A} = \frac{(N-1) - \frac{1}{2}(N-1)^2 + \frac{1}{3}(N-1)^3 - \&c.}{(r-1) - \frac{1}{2}(r-1)^2 + \frac{1}{3}(r-1)^3 - \&c.}$$

which is the analytical expression for the logarithm of any number N, in functions of itself, and the radix of the system; that is, writing a instead of N,

$$\log. a = \frac{(a-1) - \frac{1}{2}(a-1)^2 + \frac{1}{3}(a-1)^3 - \&c.}{(r-1) - \frac{1}{2}(r-1)^2 + \frac{1}{3}(r-1)^3 - \&c.}$$

$$\text{Or, } \log. 1 \pm a = \frac{\pm a - \frac{1}{2}a^2 \pm \frac{1}{3}a^3 - \frac{1}{4}d^4 \pm \&c.}{(r-1) - \frac{1}{2}(r-1)^2 + \frac{1}{3}(r-1)^3 - \&c.}$$

This, however, must only be considered as a simple algebraical method of expressing a logarithm; but it does not always answer the purposes of calculation; for, if a be any number greater than unity, it is obvious that the series in the numerator will either converge very slowly, or otherwise will diverge, and the same with regard to the denominator, supposing r to be equal to 10, as it is in the common system; in fact, the terms of the series are larger the more remote they are from the beginning; and consequently no number of them can exhibit, either exactly or nearly, the true sum. Let us, therefore, investigate the method of submitting these to calculation; in order to which we will repeat again our last series, viz.

$$\log. 1 \pm a = \frac{\pm a - \frac{1}{2}a^2 \pm \frac{1}{3}a^3 - \frac{1}{4}a^4 \pm \&c.}{(r-1) - \frac{1}{2}(r-1)^2 + \frac{1}{3}(r-1)^3 - \&c.}$$

and here, since the denominator is always a constant quantity when the radix of the system is given, we may make

$M = (r-1) - \frac{1}{2}(r-1)^2 + \frac{1}{3}(r-1)^3 - \&c.$

which renders the above expression still more simple, as in that case it becomes barely

$$\log. 1 + a = \frac{1}{M} \times \left\{ a - \tfrac{1}{2}a^2 + \tfrac{1}{3}a^3 - \tfrac{1}{4}a^4 + \&c. \right\}$$

Or, taking a negative,

$$\log. 1 - a = \frac{1}{M} \times \left\{ -a - \tfrac{1}{2}a^2 - \tfrac{1}{3}a^3 - \tfrac{1}{4}a^4 - \&c. \right\}$$

Whence, again by subtraction,

$$\log. \left(\frac{1+a}{1-a}\right) = \frac{2}{M}\left\{ a + \tfrac{1}{3}a^3 + \tfrac{1}{5}a^5 + \tfrac{1}{7}a^7 + \&c. \right\}$$

Now $a = \dfrac{1 + \frac{a-1}{a+1}}{1 - \frac{a-1}{a+1}}$; if, therefore, we substitute in the foregoing expression $\frac{a-1}{a+1}$ instead of a, it becomes $\log. a =$

$$\frac{2}{M} \times \left\{ \left(\frac{a-1}{a+1}\right) + \tfrac{1}{3}\left(\frac{a-1}{a+1}\right)^3 + \tfrac{1}{5}\left(\frac{a-1}{a+1}\right)^5 + \&c. \right\}$$

which series must necessarily converge, because the denominator of each of the fractions is greater than its numerator; still, however, when a is a number of any considerable magnitude, the decrease in the terms will be so slow as to render the formula useless for the purposes of calculation.

At present we have assumed the series which constitute the denominator in our first expression a known quantity, which we have represented by M. It will, however, be proper, before we proceed any farther, to offer a few remarks upon the absolute value of this series, according to any given radix. First then, since

$$\log. 1 + a = \frac{a - \frac{1}{2}a^2 + \frac{1}{3}a^3 - \frac{1}{4}a^4 + \&c.}{(r-1) - \frac{1}{2}(r-1)^2 + \frac{1}{3}(r-1)^3 - \&c.}$$

the denominator and numerator of this fraction are totally independent of each other, and therefore r may be assumed at pleasure, and the value of the whole denominator computed for any particular magnitude assigned to this letter: or otherwise, the whole denominator may be taken equal to any quantity, and the value of r itself determined by computation. The latter method, at first sight, appears the most eligible; for, by assuming the whole denominator equal to unity, it disappears entirely, and the expression becomes, $\log. (1+a) = a - \frac{1}{2}a^2 + \frac{1}{3}a^3 - \frac{1}{4}a^4 + \&c.$

There are, however, inconveniences attending this system, that do not appear upon a slight view of the subject, but which are notwithstanding very evident upon a farther investigation. In the case in which the whole denominator is assumed equal to unity, the value of r, the radix of this particular system, is found to be 2·718281828, &c. and the fraction $\frac{1}{M}$ becomes $= 1$. These constitute what are called *hyperbolic logarithms*. In the common system the radix r is assumed equal to 10, the same as the radix of our scale of notation; and hence arises a most important advantage, which is, that the logarithm of all numbers expressed by the same digits, whether integers, decimals, or mixed of the two, have the same decimal part; the only alteration being in the index or characteristic of the logarithm. For the radix being 10·0, 1, 2, 3, &c. will be logarithms of 1, 10, 10^2, &c. that is, $10^0 = 1$, $10^1 = 10$, $10^2 = 100$, &c. and therefore, to multiply or divide a number by any power of 10, we have only to add or subtract the number expressing that power from the integral part of the logarithm, and the decimal part will still remain the same, by which means the tables of logarithms are much more contracted than they could be with any other radix; for in the hyperbolic system, or in any other which has not its radix the same as that of the scale of notation, every particular number would require a particular logarithm; and this circumstance would either swell the tables to an unmanageable size; or, if they were kept within the present limits, frequent computations would become necessary; so that in either way it is clear that the advantages of the present logarithms much more than counterbalance the extra trouble in computing them. This in fact only consists in multiplying the hyperbolic logarithm by a constant factor; viz. the reciprocal of the foregoing constant denominator represented above by $\frac{1}{M}$, the value of which, when $r = 10$, is $\frac{1}{2{\cdot}302585{\cdot}09,\ \&c.} = {\cdot}43429448$, &c. Hence it is obvious, that different systems of logarithms are connected together by constant multipliers, and by means of which a logarithm may always be converted from one scale to another. Thus the hyperbolic logarithm of a number is transformed to the common logarithm by multiplying the former by ·4342944; and the latter is converted into the former by multiplying it by 2·302585·09.

Having said thus much with regard to advantages of different systems of logarithms, and the method of transforming them from one scale to another; we will now add one example by way of illustration. Let it therefore be proposed to find the common logarithm of 3. In this case our series,

$$\log. a = \frac{2}{M} \times \left\{ \left(\frac{a-1}{a+1}\right) + \tfrac{1}{3}\left(\frac{a-1}{a+1}\right)^3 + \tfrac{1}{5}\left(\frac{a-1}{a+1}\right)^5 \&c. \right\}$$

becomes $\log. 3 = \frac{2}{M} \times \left\{ \frac{1}{2} + \frac{1}{3\cdot 2^3} + \frac{1}{5\cdot 2^5} + \frac{1}{7\cdot 2^7} + \&c. \right\}$

the

the computation of which will ſtand thus:

$\frac{1}{2}$ = - - - - - ·5

$\frac{1}{3 \cdot 2^3}$ = - - - - - ·0416666666

$\frac{1}{5 \cdot 2^5}$ = - - - - - ·00625

$\frac{1}{7 \cdot 2^7}$ = - - - - - ·0011160714

$\frac{1}{9 \cdot 2^9}$ = - - - - - ·0002170138

$\frac{1}{11 \cdot 2^{11}}$ = - - - - - ·0000443892

$\frac{1}{13 \cdot 2^{13}}$ = - - - - - ·0000093900

$\frac{1}{15 \cdot 2^{15}}$ = - - - - - ·0000020345

$\frac{1}{17 \cdot 2^{17}}$ = - - - - - ·0000004487

$\frac{1}{19 \cdot 2^{19}}$ = - - - - - ·0000001003

$\frac{1}{21 \cdot 2^{21}}$ = - - - - - ·0000000227

$\frac{1}{23 \cdot 2^{23}}$ = - - - - - ·0000000050

·5493061422

whence $\frac{2}{2.30258509}$, or 43429448 × 5493061442 = ·4771212, which is the logarithm of 3 required.

This ſeries, we have already obſerved, will only anſwer for the computation of the logarithms of ſmall numbers; in other caſes different ſeries muſt be employed, according to the particular number under conſideration. The limits of this article will not admit of an inveſtigation of the ſeparate caſes. But for the ſake of reference it will be uſeful to ſubjoin a few of the moſt uſeful formulæ, for which purpoſe we avail ourſelves of the ſelection made by Mr. Bonnycaſtle, in his valuable treatiſe of Trigonometry.

1. $\text{Log. } a = \frac{1}{M} \times \left\{(a-1) - \frac{1}{2}(a-1)^2 + \frac{1}{3}(a-1)^3 - \text{&c.}\right\}$

2. $\text{Log. } a = \frac{1}{M} \times \left\{\left(\frac{a-1}{a}\right) + \frac{1}{2}\left(\frac{a-1}{a}\right)^2 + \frac{1}{3}\left(\frac{a-1}{a}\right)^3 - \text{&c.}\right\}$

3. $\text{Log. } a = \frac{2}{M} \times \left\{\left(\frac{a-1}{a+1}\right) + \frac{1}{3}\left(\frac{a-1}{a+1}\right)^3 + \frac{1}{5}\left(\frac{a-1}{a+1}\right)^5 + \text{&c.}\right\}$

4. $\text{Log. } \frac{a}{b} = \frac{1}{M} \times \left\{\left(\frac{a \backsim b}{b}\right) - \frac{1}{2}\left(\frac{a \backsim b}{b}\right)^2 + \frac{1}{3}\left(\frac{a \backsim b}{b}\right)^3 - \text{&c.}\right\}$

5. $\text{Log. } \frac{a}{b} = \frac{1}{M} \times \left\{\left(\frac{a \backsim b}{a}\right) + \frac{1}{2}\left(\frac{a \backsim b}{a}\right)^2 + \frac{1}{3}\left(\frac{a \backsim b}{a}\right)^3 - \text{&c.}\right\}$

6. $\text{Log. } \frac{a}{b} = \frac{2}{M} \times \left\{\left(\frac{a \backsim b}{a+b}\right) + \frac{1}{3}\left(\frac{a \backsim b}{a+b}\right)^3 + \frac{1}{5}\left(\frac{a \backsim b}{a+b}\right)^5 + \text{&c.}\right\}$

7. $\text{Log. } a = \log.(a-1) + \frac{1}{M} \times \left\{\frac{1}{a} + \frac{1}{2a^2} + \frac{1}{3a^3} + \frac{1}{4a^4} + \text{&c.}\right\}$

8. $\text{Log. } a = \log.(a-1) + \frac{1}{M} \times \left\{\frac{1}{a-1} - \frac{1}{2(a-1)^2} + \frac{1}{3(a-1)^3} - \text{&c.}\right\}$

9. $\text{Log. } a = \log.(a-2) + \frac{2}{M} \times \left\{\frac{1}{a-1} + \frac{1}{3(a-1)^3} + \frac{1}{5(a-1)^5} + \text{&c.}\right\}$

10. $\text{Log.} = \frac{1}{M} \times \left\{(a-a^{-1}) - \frac{1}{2}(a^2-a^{-2}) + \frac{1}{3}(a^2-a^{-3}) - \text{&c.}\right\}$

11. $\text{Log. } (a+z) = \log. a + \frac{1}{M} \times \left\{\frac{z}{a} - \frac{1}{2}\frac{z^2}{a^2} + \frac{1}{3}\frac{z^3}{a^3} - \frac{1}{4}\frac{z^4}{a^4} + \text{&c.}\right\}$

12. $\text{Log. } (a-z) = \log. a - \frac{1}{M} \times \left\{\frac{z}{a} + \frac{1}{2}\frac{z^2}{a^2} + \frac{1}{3}\frac{z^3}{a^3} + \frac{1}{4}\frac{z^4}{a^4} + \text{&c.}\right\}$

13. $\text{Log. } (a \pm z) = \log. a \pm \frac{2}{M} \times \left\{\left(\frac{z}{a+z}\right) + \frac{1}{3}\left(\frac{z}{a+z}\right)^3 + \frac{1}{5}\left(\frac{z}{a+z}\right)^5 + \text{&c.}\right\}$

14. $\text{Log. } a = \frac{m}{M} \times \left\{(\sqrt[m]{a}-1) - \frac{1}{2}(\sqrt[m]{a}-1)^2 + \frac{1}{3}(\sqrt[m]{a}-1)^3 - \text{&c.}\right\}$

Theſe formulæ might have been extended to a much greater length, but thoſe that are given will be found to embrace the generality of caſes, and will be found uſeful on various occaſions.

Kepler's Method of Conſtruction.

This was founded upon principles nearly ſimilar to that of Napier. He firſt of all erects a ſyſtem of proportions, and the meaſures of proportion, founded upon principles purely mathematical; after which he applies theſe principles to the conſtruction of his table, containing only the logarithms of 1000 numbers. The propoſitions on which his method is founded are in ſubſtance the following.

1. All equal proportions equal among themſelves are expreſſed by the ſame quantity, be the terms many or few; as the proportion of 2, 4, 8, &c. in geometrical progreſſion is expreſſed by 2; and of 2, 6, 18, 54, &c. by 3.

2. Hence the proportion of the extremes is compoſed of all the proportions of the intermediate terms; thus the proportion of 2 to 8 is compounded of that of 2 to 4, and of 4 to 8.

3. The mean proportional betwixt two terms divides that proportion into two equal ones. Thus the proportion between 2 and 32 is divided by the mean proportional 8 into two equal proportions of 4; for 2 is to 8 as 8 is to 32.

4. In any number of proportionals regularly increaſing, the means divide the proportion of the extremes into one more than their own number. Thus, in the ſeries 2, 4, 8, 16, the proportion of the extremes 2 and 16 is by the *two* means 4 and 8 divided into *three* proportions, viz. that betwixt 2 and 4, 4 and 8, 8 and 16. In like manner, in the ſeries 3, 6, 18, 54, 162, 486, the proportion betwixt 3 and 486 is divided by the four means into the five proportions of 3 to 6, 6 to 18, 18 to 54, 54 to 162, and 162 to 486.

5. The proportion betwixt any two terms is diviſible into any number of parts, until theſe become leſs than any aſſignable quantity. Thus the proportion of 2 to 8 is diviſible, by multiplying the two together and extracting the ſquare root, into two parts by the number 4; by multiplying 2 and 4 together, and extracting the ſquare root, and doing the ſame with 4 and 8, the proportion would be divided into four parts, viz. $2.\sqrt{8}.4.\sqrt{32}.8$; or in numbers, 2 : 2·813, &c. : 4 : 5·655, &c. : 8.

6. By dividing the ratios in this manner, the elementary part will become at laſt ſo ſmall, that it may be denominated by the mere difference of terms of that element. This is evident from the diminution of the ratios or proportions already inſtanced; for the proportion between 2 and 2·813 is only 1·406, &c. and, if we were to find a mean proportional betwixt 2 and 2·813, the ratio betwixt that proportional and 2 would be much leſs. But it muſt always be remembered, that ſuch *evaneſcent quantities*, as they are called, cannot give us any concluſion with abſolute exactneſs, however they may anſwer every uſeful purpoſe to us; for it is evident that neither mean proportional nor ratio can ever be found exactly; and therefore the error accumulated in all the operations muſt become very conſiderable, if any circumſtance ſhall happen to make it appear.

Mr. Briggs's Method.

The methods principally made uſe of by this gentleman were publiſhed in Napier's poſthumous work. Having ſuppoſed 0 to be the logarithm of 1, and 1 with any number of ciphers annexed, ſuppoſe 10, to be the logarithm of 10, this number is to be divided ten times by 5, which in a logarithmic number is equivalent to the extraction of the root of the fifth power; by which means he obtains the following numbers, viz. 2 with nine ciphers to it; 4 with eight ciphers; 8 with ſeven ciphers; 16 with ſix ciphers; 32 with five ciphers; 64 with four; 128000, 25600, 5120, and 1024. Dividing this laſt logarithm ten times by 2, we have a geometrical ſeries of ten numbers; the firſt of which is 512, and the laſt 1. Thus 20 logarithms are obtained; but the labour of finding the numbers belonging to them is ſo exceſſive, that it is ſurpriſing how it could be undergone by any body. To obtain thoſe correſponding to the firſt ten logarithms, the fifth root muſt be extracted ten times, and the ſquare root as often, to obtain the numbers correſponding to the others. The power from which theſe extractions is made, muſt originally be 1 with a number of ciphers annexed. Other logarithms might be formed from theſe by adding them, and multiplying their correſponding numbers; but, as this method, beſides its exceſſive labour, would produce only an *antilogarithmic* canon like that of Mr. Dodſon already mentioned, other more eaſy and proper methods were thought of.

The next was by finding continually geometrical means, firſt between 10 and 1, and then between 10 and that mean, and ſo on, taking the arithmetical means between their correſponding logarithms. The operation is alſo facilitated by various properties of numbers and their logarithms, as that the products and quotients of numbers correſpond to the ſums and differences of their logarithms; that the powers and roots of numbers anſwer to the products and quotients of the logarithms by the index of the power or root. Thus having the logarithm of 2, we can have thoſe of 4, 16, 256, &c. by multiplying the logarithms by 2, and ſquaring the numbers, to as great an extent, in that ſeries, as we pleaſe. If we have alſo that of 3, we can have not only thoſe of 9, 81, 8561, &c. but of 6, 18, 27, and all poſſible products of the powers of 2 and 3 into one another, or into the numbers themſelves. The following property may alſo be of uſe, viz. that, if the logarithms of any two numbers are given, and each number be raiſed to the power denoted by the index of the other, the products will be equal. Thus,

Logarithms,	0	1	2	3	4	5	6
Nat. Numb.	1	2	4	8	16	32	64

Let the two numbers be 4 and 16; it is plain, that if we raiſe 4 to the fourth power and 16 to the ſquare, the products will be the ſame; for $16\times16=256$, and $4\times4=16$; $16\times4=64$; and $64\times4=256$.

Another method mentioned by Mr. Briggs depends upon this property, that the logarithm of any number in this ſcale is 1 leſs than the number of places or figures contained in that power of that number whoſe exponent is the logarithm of 10, at leaſt as to integral numbers; for Mr. Briggs has ſhown that they really differ by a fraction. To this Mr. Hutton adds the following; viz. That of any two numbers, as the greater is to the leſs, ſo is the velocity of the increment or decrement of the logarithms at the greater; "that is (ſays he), in our modern notation, As X. Y : y : x; where x and y are the fluxions of X and Y."

In the treatiſe written upon the conſtruction of logarithms by Mr. Briggs himſelf, he obſerves, that they may be conſtructed chiefly by the two methods already mentioned, concerning which he premiſes ſeveral lemmata reſpecting the powers of numbers and their indices, and how many places of figures are in the products of numbers. He obſerves, that theſe products will conſiſt of as many figures as there are in both factors, unleſs the firſt figures in each factor be expreſſed in one figure only, which ſometimes happens; and then there will commonly be one figure leſs in the product than in the two factors. He obſerves, alſo, that if in any ſeries of geometricals we take two terms, and raiſe one to the power denoted by the index of the other, or any number raiſed to the power denoted by the logarithm of the other, the product will be equal to this latter number raiſed to the power denominated by the logarithm of the former. Hence, if one of the numbers be 10, whoſe logarithm is 1 with any number of ciphers, then any number raiſed to the power whoſe index is the logarithm of that number, that is, the logarithm of any number in this ſcale where a is the logarithm of 10, is the index of that power of 10 which is equal to the given number. But the index of any integral power of 10 is one leſs than the number of places of figures it contains. Thus the ſquare of 10, or 100, contains three places of figures, which is more by one than 2 the index of the power; 1000, the cube of 10, contains four places, which is one more than the index, 3, of the power. Hence, as the number of places of the powers of 10 are always exactly one more than the indices of thoſe powers, it follows, that the places of figures in the powers of any other number which is no integral power of 10 will not always be exactly one leſs in number than the indices of the powers.

From theſe two properties is deduced the following rule for finding the logarithms of many prime numbers: Find the 10th, 100th, 1000th, or any other, power of a number, ſuppoſe 2, with the number of places of figures in it; then that number of figures ſhall always exceed the logarithm of 2, although the exceſs will be conſtantly leſs than 1; whence, by proceeding to very high powers, we ſhall at laſt be able to obtain the logarithm of the number to great exactneſs. Thus, the logarithm of 2, found by other methods, is known to be 30102999566583, &c. The tenth power of 2 is 1024; which containing four places of figures, gives 4 for the logarithm of 2, which exceeds it, though not quite by 1. The 20th power of 2, conſiſting of the 10th power multiplied into itſelf, by its number of places ought to give the logarithm of 4; and, according to the rule already laid down, ſhould contain eight places

of figures; but, by reaſon of the cipher which ſtands in the ſecond place, it is eaſy to ſee that it muſt contain only ſeven; which therefore gives ſeven for the logarithm of four. The logarithm of 16 is then expreſſed by the number of places of figures in the product of the 20th power of 2 into itſelf; and is therefore denominated by 13. That of 256 is denoted by the 80th power of 2, containing 25 places of figures. The logarithm of 2, therefore, having been already expreſſed by the 10th power of 2, will be again expreſſed by the 100th power. Adding, therefore, the number of places contained in the 80th power, viz. 25, to 7, the number of places contained in the 20th, we have 32 for the next expreſſion of that logarithm. On account of the cipher which ſtands in the ſecond place of one of the factors, however, we muſt deduct one from the number; and thus we have 31 for the logarithm of 2, which is a conſiderable approximation. Proceeding in this manner, at the 1000th power of 2, we have 302 for the logarithm of 2; at the 10,000th power we have 3011; at the 100,000th power, 300103; at the 1,000,000th, we have 3010$\frac{3}{0}$; and at the 10,000,000th power, we obtain 30103$\frac{0}{0}$; which is as exact as is commonly expreſſed in the tables of logarithms; but, by proceeding in the ſame manner, we may have it to any degree of exactneſs we pleaſe. Thus, at the 100,000,000th power, we have 30103000; and at the 1,000,000,000th, the logarithm is 301029996, true to eight places of figures.

Mr. *James Gregory*, in his Vera Circuli Hyperbolæ Quadratura, printed at Padua in 1667, having approximated to the hyperbolic aſymptotic ſpaces by means of a ſeries of inſcribed and circumſcribed polygons, from thence ſhows how to compute the logarithms, which are analogous to the areas of thoſe ſpaces; and thus the quadrature of the hyperbolic ſpaces became the ſame thing as the computation of the logarithms. He here alſo lays down various methods to abridge the computation, with the aſſiſtance of ſome properties of numbers themſelves, by which the logarithms of all prime numbers under 1000 may be computed, each by one multiplication, two diviſions, and the extraction of the ſquare root. And the ſame ſubject is farther purſued in his Exercitationes Geometricæ. In this latter place, he firſt finds an algebraic expreſſion, in an infinite ſeries, for the logarithm of $\frac{1+a}{1}$, and then the like for the logarithm of $\frac{1}{1-a}$; and, as the one ſeries has all its terms poſitive, while thoſe of the other are alternately poſitive and negative, by adding the two together, every ſecond term is cancelled, and the double of the other terms gives the logarithm of the product of $\frac{1+a}{1}$ and $\frac{1}{1-a}$, or the logarithm of $\frac{1+a}{1-a}$, that is of the ratio of $1-a$ to $1+a$: thus, he finds,

$$\text{firſt, } a-\tfrac{1}{2}a^2+\tfrac{1}{3}a^3-\tfrac{1}{4}a^4 \text{ &c.} = \text{log. of } \frac{1+a}{1};$$

$$\text{and, } a+\tfrac{1}{2}a^2+\tfrac{1}{3}a^3+\tfrac{1}{4}a^4 \text{ &c.} = \text{log. of } \frac{1}{1-a};$$

$$\text{therefore, } 2a+\tfrac{2}{3}a^3+\tfrac{2}{5}a^5+\tfrac{2}{7}a^7 \text{ &c.} = \text{log. of } \frac{1+a}{1-a};$$

which may be accounted Mr. James Gregory's method of making logarithms.

In 1668, *Nicholas Mercator* publiſhed his "Logarithmotechnia, ſive Methodus conſtruendi Logarithmos, nova, accurata, & facilis;" in which he delivers a new and ingenious method for computing the logarithms upon principles purely arithmetical; and here, in his modes of thinking and expreſſion, he cloſely follows the celebrated Kepler in his writings on the ſame ſubject; accounting logarithms as the *meaſures of ratios*, or as the number of ratiunculæ contained in the ratio which any number bears to unity. Purely from theſe principles, then, the number of the equal ratiunculæ contained in ſome one ratio, as of 10 to 1, being ſuppoſed given, our author ſhows how the logarithm, or meaſure, of any other ratio may be found. But this, however, only by the bye, as not being the principal method he intends to teach, as his laſt and beſt. Having ſhown, then, that theſe logarithms, or numbers of ſmall ratios, or meaſures of ratios, may be all properly repreſented by numbers, and that of 1, or the ratio of equality, the logarithm or meaſure being always 0, the logarithm of 10, or the meaſure of the ratio of 10 to 1, is moſt conveniently repreſented by 1 with any number of ciphers; he then proceeds to ſhows how the meaſures of all other ratios may be found from this laſt ſuppoſition; and he explains theſe principles by ſome examples in numbers.

In the latter part of the work, Mercator treats of his other method, given by an infinite ſeries of algebraic terms, which are collected in numbers by common addition only. He here ſquares the hyperbola, and finally finds that the hyperbolic logarithm of $1+a$ is equal to the infinite ſeries $a-\frac{1}{2}a^2+\frac{1}{3}a^3-\frac{1}{4}a^4$, &c. which may be conſidered as Mercator's quadrature of the hyperbola, or his general expreſſion of an hyperbolic logarithm in an infinite ſeries.

This method was farther improved by Dr. Wallis, in the Phil. Tranſ. for the year 1668. The celebrated Newton invented alſo the ſame ſeries for the quadrature of the hyperbola, and the conſtruction of logarithms; and that before the ſame were given by Gregory and Mercator, though unknown to one another, as appears by his letter to Mr. Oldenburg, dated October 24, 1676. The explanation and conſtruction of the logarithms are alſo farther purſued in his Fluxions, publiſhed in 1736 by Mr. Colſon.

Dr. *Halley*, in the Phil. Tranſ. for the year 1695, gave a very ingenious eſſay on the conſtruction of logarithms, intitled, "A moſt compendious and facile Method for Conſtructing the Logarithms, and exemplified and demonſtrated from the Nature of Numbers, without any regard to the hyperbola, with a ſpeedy method for finding the Number from the given Logarithm." Inſtead of the more ordinary definition of logarithms, viz. *numerorum proporticnalium æquidifferentes comites*, the learned author adopts this other, *numeri rationum exponentes*, as better adapted to the principle on which logarithms are here conſtructed, conſidering them as the number of ratiunculæ contained in the given ratios whoſe logarithms are in queſtion. In this way he firſt arrives at the logarithmic ſeries before given by Newton and others; and afterwards, by various combinations and ſections of the ratios, he derives others, converging ſtill faſter than the former. Thus he found the logarithms of ſeveral ratios, as below, viz. when multiplied by the modulus peculiar to the ſcale of logarithms:

$q-\frac{1}{2}q^2+\frac{1}{3}q^3-\frac{1}{4}q^4$ &c. the log. of 1 to $1+q$,

$q+\frac{1}{2}q^2+\frac{1}{3}q^3+\frac{1}{4}q^4$ &c. the log. of 1 to $1-q$,

$\frac{x}{a}-\frac{x^2}{2a^2}+\frac{x^3}{3a^3}-\frac{x^4}{4a^4}$ &c. the log. of a to b, or

$\frac{x}{b}+\frac{x^2}{2b^2}+\frac{x^3}{3b^3}+\frac{x^4}{4b^4}$ &c. the ſame log. of a to b, or

$\frac{2x}{z}+\frac{2x^3}{3z^3}+\frac{2x^5}{5z^5}+\frac{2x^7}{7z^7}$ &c. the ſame log. of a to b,

$\frac{x^2}{2z^2}+\frac{x^4}{4z^4}+\frac{x^6}{6z^6}+\frac{x^8}{8z^8}$ &c. the log. of $\sqrt{ab}$ to $\frac{1}{2}z$, or

$\frac{1}{y^2}+\frac{1}{3y^6}+\frac{1}{5y^{10}}+\frac{1}{7y^{14}}$ &c. the ſame log. of $\sqrt{ab}$ to $\frac{1}{2}z$;

where a, b, q, are any quantities, and the values of x, y, z, are thus, viz. $x=b-a$, $z=b+a$, $y=ab+\frac{1}{4}z^2$.

Dr. Halley alſo, firſt of any, performed the reverſe of the problem, by aſſigning the number to a given logarithm; viz.

$$\frac{b}{a}=1+l+\tfrac{1}{2}l^2+\frac{1}{2\cdot3}l^3+\frac{1}{2\cdot3\cdot4}l^4 \text{ &c. or}$$

$$\frac{a}{b}=1-l+\tfrac{1}{2}l^2-\frac{1}{2\cdot3}l^3+\frac{1}{2\cdot3\cdot4}l^4 \text{ &c.}$$

where

where l is the logarithm of the ratio of a the leſs to b the greater of any two terms.

We muſt very briefly mention a few others who have treated of this ſubject.—Mr Abraham Sharp, of Yorkſhire, made many calculations and improvements in logarithms, &c. The moſt remarkable of theſe were, his quadrature of the circle to 72 places of figures, and his computation of logarithms to 61 figures, viz. for all numbers to 100, and for all prime numbers to 1100.

The celebrated Mr. Roger Cotes gave to the world a learned tract on the nature and conſtruction of logarithms: this was firſt printed in the Phil. Tranſ. N° 338. and afterwards with his Harmonia Menſurarum in 1722, under the title *Logometria*. This tract has juſtly been complained of, as very obſcure and intricate; and the principle is ſomething between that of Kepler and the method of fluxions. He invented the terms *modulus* and *modular ratio*; this being the ratio

of $1+\frac{1}{1}+\frac{1}{2}+\frac{1}{2\cdot3}+\frac{1}{2\cdot3\cdot4}+\frac{1}{2\cdot3\cdot4\cdot5}$ &c. to 1, or

of 1 to $1-\frac{1}{1}+\frac{1}{2}-\frac{1}{2\cdot3}+\frac{1}{2\cdot3\cdot4}-\frac{1}{2\cdot3\cdot4\cdot5}$, &c.

that is, the ratio of 2·718281828459 &c. to 1,
or the ratio of 1 to 0·367879441171 &c.
the modulus of any ſyſtem being the meaſure or logarithm of that ratio, which in the hyp. logarithms is 1, and in Briggs's or the common logarithms is 0·434294481903 &c.

The learned Dr. Brook Taylor gave another method of computing logarithms in the Phil. Tranſ. N° 352. which is founded on theſe three principles, viz. 1ſt, That the ſum of the logarithms of any two numbers is the logarithm of the product of thoſe numbers. 2d, That the logarithm of 1 is 0; and conſequently, that, the nearer any number is to 1, the nearer will its logarithm be to 0. 3d, That the product of two numbers or factors, of which the one is greater and the other leſs than 1, is nearer to 1 than that factor is which is on the ſame ſide of 1 with itſelf; ſo of the two numbers $\frac{2}{3}$ and $\frac{4}{3}$, the product $\frac{8}{9}$ is leſs than 1, but yet nearer to it than $\frac{2}{3}$ is, which is alſo leſs than 1. And on theſe principles he founds an ingenious, though not very obvious, approximation to the logarithms of given numbers.

Conſtruction of Logarithms by Fluxions.

From the definition and deſcription of logarithms given by Napier, and of which we have already taken notice, it appears that the fluxion of his, or the hyperbolic logarithm of any number, is a fourth proportional to that number, its logarithm, and unity; or, which is the ſame, that it is equal to the fluxion of the number divided by the number: for the deſcription ſhows, that $z1 : za$ or $1 :: \dot{z}1$ the fluxion of $z1 : \dot{z}a$, which therefore is $=\frac{\dot{z}1}{z1}$; but $\dot{z}a$ is alſo equal to the fluxion of the logarithm A, &c. by the deſcription; therefore the fluxion of the logarithm is equal to $\frac{\dot{z}1}{z1}$, the fluxion of the quantity divided by the quantity itſelf. The ſame thing appears again at art. 2. of that little piece in the appendix to his *Conſtructio Logarithmorum*, intitled "Habitudines Logarithmorum & ſuorum Naturalium Numerorum invicem;" where he obſerves, that, as any greater quantity is to a leſs, ſo is the velocity of the increment or decrement of the logarithms at the place of the leſs quantity to that at the greater. Now this velocity of the increment or decrement of the logarithms being the ſame thing as their fluxions, that proportion is this; $x : a ::$ flux. log. $a :$ flux. log. x. Hence, if a be $=1$, as at the beginning of the table of numbers, where the fluxion of the logs. is the index or characteriſtic c, which is alſo one in Napier's or the hyperbolic logarithms, and 43429, &c. in Briggs's, the ſame proportion becomes $x : 1 :: c :$ flux. log. x; but the conſtant fluxion of the numbers is alſo 1, and therefore that proportion is alſo this; $x : \dot{x} :: c : \frac{c\dot{x}}{x} =$ the fluxion of the logarithm of x; and in the hyperbolic logarithms, where c is $= 1$, it becomes $\frac{\dot{x}}{x} =$ the fluxion of Napier's or the hyperbolic logarithm of x. This ſame property has alſo been noticed by many other authors ſince Napier's time. And the ſame or a ſimilar property is evidently true in all the ſyſtems of logarithms whatever, namely, "that the modulus of the ſyſtem is to any number as the fluxion of its logarithm is to the fluxion of the number."

Now from this property, by means of the doctrine of fluxions, are derived other ways for making logarithms, which have been illuſtrated by many writers on this branch; as Craig, Jo. Bernoulli, and almoſt all the writers on fluxions. And this method chiefly conſiſts in expanding the *reciprocal* of the given quantity in an infinite ſeries, then multiplying each term by the fluxion of the ſaid quantity, and laſtly taking the fluents of the terms; by which there ariſes an infinite ſeries of terms for the logarithm ſought. So, to find the logarithm of any number N, put any compound quantity for N, as ſuppoſe $\frac{n+x}{n}$; then the flux. of the log. or $\frac{\dot{N}}{N}$ being $\frac{\dot{x}}{n+x}=\frac{\dot{x}}{n}-\frac{\dot{x}x}{nn}+\frac{x^2\dot{x}}{n^3}-\frac{x^3\dot{x}}{n^4}$ &c. the fluents give log. of N, or log. of $\frac{n+x}{n}=\frac{x}{n}-\frac{x^2}{2n^2}+\frac{x^3}{3n^3}-\frac{x^4}{4n^4}$, &c. And writing $-x$ for x gives log. $\frac{n-x}{n}=-\frac{x}{n}-\frac{x^2}{2n^2}-\frac{x^3}{3n^3}-\frac{x^4}{4n^4}$, &c. Alſo, becauſe $\frac{n}{n\pm x}=1\div\frac{n+x}{n}$, or log. $\frac{n}{n\pm x}=0-$ log. $\frac{n\pm x}{n}$, we have log. $\frac{n}{n+x}=-\frac{x}{n}+\frac{x^2}{2n^2}-\frac{x^3}{3n^3}+\frac{x^4}{4n^4}$, &c. and log. $\frac{n}{n-x}=+\frac{x}{n}+\frac{x^2}{2n^2}+\frac{x^3}{3n^3}+\frac{x^4}{4n^4}$, &c.

And by adding and ſubtracting any of theſe ſeries to or from one another, and multiplying or dividing their correſponding numbers, various other ſeries for logarithms may be found, converging much quicker than theſe do. In like manner, by aſſuming quantities otherwiſe compounded for the value of N, various other forms of logarithmic ſeries may be found by the ſame means.

Ex. *Given a Logarithm, to find the Number.*—Let $1+x$ be any number, and y its logarithm; then $\dot{y}=\frac{m\dot{x}}{1+x}$, m being the modulus; hence, $\dot{y}+x\dot{y}-m\dot{x}=0$. Aſſume $x=ay+by^2+cy^3+$ &c. then $\dot{x}=a\dot{y}+2by\dot{y}+3cy^2\dot{y}+$ &c. Subſtitute theſe values of x and $\dot{x}$ into $\dot{y}+x\dot{y}-m\dot{x}=0$, and we have,

$$\left.\begin{array}{llll}\dot{y} & +ay\dot{y} & +by^2\dot{y}+\&c.\\ -may & -2mby\dot{y} & -3mcy^2\dot{y}-\&c.\end{array}\right\}=0;\text{ hence,}$$

$1-ma=0$, $a-2mb=0$, $b-3mc=0$, &c. Therefore, $a=\frac{1}{m}$; $b=\frac{a}{2m}=\frac{1}{2m^2}$; $c=\frac{b}{3m}=\frac{1}{2\cdot3m^3}$; &c. hence, $x=\frac{y}{m}+\frac{y^2}{2m^2}+\frac{y^3}{2\cdot3m^3}+$ &c. Therefore, $1+x=1+\frac{y}{m}+\frac{y^2}{2m^2}+\frac{y^3}{2\cdot3m^3}+$ &c. the number whoſe logarithm is y.

If $m=1$, then $1+x=1+y+\frac{y^2}{2}+\frac{y^3}{2\cdot3}+$ &c. is the number whoſe hyp. log is y.

To find the Modular Ratio.—Every logarithm is the meaſure of the ratio of its correſponding number to 1; hence, y is the meaſure of the ratio of $1+\frac{y}{m}+\frac{y^2}{2m^2}+\frac{y^3}{2\cdot3m^3}+$ &c.

&c. to 1. Now the modular ratio is that ratio of which the modulus is the measure; hence, if we make $m = y$, m will become the measure of the above ratio, and the ratio becomes the *modular ratio*; making therefore $m = y$, the ratio becomes $1 + 1 + \frac{1}{2} + \frac{1}{2.3}$ + &c. to 1 the modular ratio, which is the same for all systems, it being independent of m and y.

Mr. Long's Method.

This method was published in N° 339 of the Phil. Trans. and is performed by means of a small table containing eight classes of logarithms, as follows.

Log.	Nat. Number.	Log.	Nat. Number.
·9	7·943282347	·00009	1.000207254
·8	6.309573445	8	1·000184224
·7	5·011872336	7	1·000161194
·6	3·981071706	6	1·000138165
·5	3·162277660	5	1·000115136
·4	2·511886432	4	1.000092106
·3	1·995262315	3	1·000069080
·2	1·584893193	2	1·000046053
·1	1·258925412	1	1·000023026
·09	1·230268771	·000009	1·000020724
8	1·202264435	8	1·000018421
7	1·174897555	7	1·000016118
6	1·148153621	6	1·000013816
5	1·122018454	5	1·000011513
4	1.096478196	4	1·000009210
3	1·071519305	3	1·000006908
2	1·047128548	2	1·000004605
1	1·023292992	1	1·000002302
·009	1·020939484	·0000009	1·000002072
8	1·018591388	8	1·000001842
7	1·016248694	7	1·000001611
6	1·013911386	6	1·000001381
5	1·011579454	5	1·000001151
4	1.009252886	4	1·000000921
3	1·006931669	2	1·000000690
2	1·004615794	3	1·000000460
	1.002305238	1	1·000000230
·0009	1.002074475	·00000009	1·000000207
8	1·001843766	8	1·000000184
7	1·001613109	7	1·000000161
6	1·001382506	6	1·000000138
5	1·001151956	5	1·000000115
4	1·000921459	4	1·000000092
3	1·000691015	3	1·000000069
2	1·000460623	2	1·000000046
1	1·000230285	1	1·000000023

Here, because the logarithms in each class are the continual multiples 1, 2, 3, &c. of the lowest, it is evident that the natural numbers are so many scales of geometrical proportionals, the lowest being the common ratio, or the ascending numbers are the 1, 2, 3, &c. powers of the lowest, as expressed by the figures 1, 2, 3, &c. of their corresponding logarithms. Also the last number in the first, second, third, &c. class, is the 10th, 100th, 1000th, &c. root of 10; and any number in any class is the 10th power of the corresponding number in the next following class.

To find the Logarithm of any Number, as suppose of 2000, *by this Table.*—Look in the first class for the number next less than the first figure 2, and it is 1·995262315, against which is 3 for the first figure of the logarithm sought. Again, dividing 2, the number proposed, by 1·995262315, the number found in the table, the quotient is 1·002374467; which being looked for in the second class of the table, and finding neither its equal nor a less, 0 is therefore to be taken for the second figure of the logarithm; and the same quotient 1·002374467 being looked for in the third class, the next less is there found to be 1·002305238, against which is 1 for the third figure of the logarithm; and, dividing the quotient 1·002374467 by the said next less number 1·002305238, the new quotient is 1·000069070; which being sought in the fourth class gives 0, but sought in the fifth class gives 2, which are the fourth and fifth figures of the logarithm sought; again, dividing the last quotient by 1·000046053, the next less number in the table, the quotient is 1·000023015, which gives 9 in the 6th class for the 6th figure of the logarithm sought; and again dividing the last quotient by 1·000020724, the next less number, the quotient is 1·000002291, the next less than which in the 7th class gives 9 for the 7th figure of the logarithm; and dividing the last quotient by 1·000002072, the quotient is 1·000000219, which gives 9 in the 8th class for the 8th figure of the logarithm; and again the last quotient 1·000000219 being divided by 1·000000207 the next less, the quotient 1·000000012 gives 5 in the same 8th class, when one figure is cut off, for the 9th figure of the logarithm sought. All which figures collected together give 3·301029995 for Briggs's logarithm of 2000, the index 3 being supplied; which logarithm is true in the last figure.

To find the Number answering to any given Logarithm, as suppose to 3·3010300.—Omitting the characteristic, against the other figures, 3, 0, 1, 0, 3, 0, 0, as in the first column in the margin, are the several numbers, as in the second column, found from their respective 1st, 2d, 3d, &c. classes; the effective numbers of which multiplied continually together, the last product is 2·000000019966, which, because the characteristic is three, gives 2000·000019966, or 2000 only for the required number answering to the given logarithm.

3	1·995262315
0	0
1	1·002305238
0	0
3	1·000069080
0	0
0	0

Mr. *Bonnycastle*'s method is as follows: The series now chiefly used in the computation of logarithms were originally derived from the hyperbola, by means of which, and the logistic curve, the nature and properties of these numbers are clearly and elegantly explained. The doctrine, however, being purely arithmetical, this mode of demonstrating it, by the intervention of certain curves, was considered, by Dr. Halley, as not conformable to the nature of the subject. He has, accordingly, investigated the same series from the abstract principles of numbers; but his method, which is a kind of disguised fluxions, is in many places so extremely abstruse and obscure, that few have been able to comprehend his reasoning. An easy and perspicuous demonstration, of this kind, was therefore still wanting; which may be obtained from the pure principles of algebra, independently of the doctrine of curves, as follows:

The logarithm of any number, is the index of that power of some other number, which is equal to the given number. Thus, if $r^x = a$, the logarithm of a is x, which may be either positive or negative, and r any number whatever, according to the different systems of logarithms. When $a = 1$, it is plain that x must be $= 0$, whatever be the value of r; and consequently the logarithm of 1 is always 0 in every system. If $x = 1$, it is also plain that a must be $= r$; and therefore r is always the number in every system, whose logarithm in that system is 1.

To find the logarithm of any number, in any system, it is only necessary, from the equation $r^x = a$, to find the value of x in terms of r and a. This may be strictly effected, by means of a new property of the binomial theorem of Newton. The general logarithmic equation being $r^x = a$, let

$$a = 1 + p, \text{ and } \frac{1}{x} = z; \text{ then } r = a^{\frac{1}{x}} = \overline{1+p}^{\frac{1}{x}} = \overline{1+p}^{z} = 1 +$$

$$(p - \frac{p^2}{2} + \frac{p^3}{3} - \frac{p^4}{4} \&c.)z + \frac{1}{2}(p - \frac{p^2}{2} + \frac{p^3}{3} - \frac{p^4}{4} \&c.)^2 z^2 +$$

$$\frac{1}{2.3}(p - \frac{p^2}{2} + \frac{p^3}{3} - \frac{p^4}{4} \&c.)^3 z^3 + \frac{1}{2.3.4}(p - \frac{p^2}{2} + \frac{p^3}{3} - \frac{p^4}{4} \&c.)^4$$

$$z^4 + \frac{1}{2.3.4.5}(p - \frac{p^2}{2} + \frac{p^3}{3} - \frac{p^4}{4} \&c.)^5 z^5, \text{ \&c.}$$

And, if $p-\frac{p^2}{2}+\frac{p^3}{3}-\frac{p^4}{4}+\frac{p^5}{5}$ &c. be put $=s$, we shall have

$$1+sz+\tfrac{1}{2}s^2z^2+\frac{1}{2\cdot3}s^3z^3+\frac{1}{2\cdot3\cdot4}s^4z^4+\frac{1}{2\cdot3\cdot4\cdot5}s^5z^5 \text{ &c.} = r,$$

$$\text{or } sz+\tfrac{1}{2}s^2z^2+\frac{1}{2\cdot3}s^3z^3+\frac{1}{2\cdot3\cdot4}s^4z^4+\frac{1}{2\cdot3\cdot4\cdot5}s^5z^5 \text{ &c} = r-1,$$

which let be put $=q$; then, by reverting the series, z or $\frac{1}{x}$ will be found $=\frac{q-\frac{1}{2}q^2+\frac{1}{3}q^3-\frac{1}{4}q^4+\frac{1}{5}q^5 \text{ &c.}}{s}=$

$\frac{q-\frac{1}{2}q^2+\frac{1}{3}q^3-\frac{1}{4}q^4+\frac{1}{5}q^5 \text{ &c.}}{p-\frac{1}{2}p^2+\frac{1}{3}p^3-\frac{1}{4}p^4+\frac{1}{5}p^5 \text{ &c.}}$ and consequently $x=$ $\frac{p-\frac{1}{2}p^2+\frac{1}{3}p^3-\frac{1}{4}p^4+\frac{1}{5}p^5 \text{ &c}}{q-\frac{1}{2}q^2+\frac{1}{3}q^3-\frac{1}{4}q^4+\frac{1}{5}q^5 \text{ &c}}$.

The logarithm of a, or $1+p$, is therefore $=\frac{p-\frac{1}{2}p^2+\frac{1}{3}p^3-\frac{1}{4}p^4+\frac{1}{5}p^5 \text{ &c}}{q-\frac{1}{2}q^2+\frac{1}{3}q^3-\frac{1}{4}q^4+\frac{1}{5}q^5 \text{ &c}}$; or, since $p=a-1$, and $q=r-1$, the logarithm of a is $=$

$$\frac{(a-1)-\frac{1}{2}(a-1)^2+\frac{1}{3}(a-1)^3-\frac{1}{4}(a-1)^4+\frac{1}{5}(a-1)^5}{(r-1)-\frac{1}{2}(r-1)^2+\frac{1}{3}(r-1)^3-\frac{1}{4}(r-1)^4+\frac{1}{5}(r-1)^5} \text{ &c.}$$

which is a general expreſſion for the logarithm of any number, in any ſyſtem of logarithms, the radix r being taken of any value, greater or leſs than 1.

But, as r in every ſyſtem is a conſtant quantity, being always the number whoſe logarithm in the ſyſtem to which it belongs is 1, the above expreſſion may be ſimplified, either by aſſuming $r=$ to ſome particular number, and from thence finding the value of the ſeries conſtituting the denominator; or by aſſuming this whole ſeries $=$ to ſome particular number, and from thence finding the value which muſt be given to the radix r. By the latter of theſe methods, the denominator may be made to vaniſh, by aſſuming the value of the ſeries of which it conſiſts $=1$, in which caſe, the logarithm of $1+p$ becomes $=p-\frac{p^2}{2}+\frac{p^3}{3}-\frac{p^4}{4}+\frac{p^5}{5}$ &c. or the logarithm of $e=(a-1)-\frac{1}{2}(a-1)^2+\frac{1}{3}(a-1)^3-\frac{1}{4}(a-1)^4+\frac{1}{5}(a-1)^5$ &c. and r, by reverſion of ſeries is found $=2{\cdot}71828818$ &c.

The ſyſtem ariſing from this mode of determining the value of the radix r, is that which furniſhes what have been uſually called *hyperbolic logarithms*; and appears to be the ſimpleſt form the general expreſſion admits of. If, on the contrary, the radix r be aſſumed $=$ to ſome particular number, as for inſtance 10, the value of the ſeries $q-\frac{1}{2}q^2+\frac{1}{3}q^3-\frac{1}{4}q^4+\frac{1}{5}q^5$ &c. or its equal $(r-1)-\frac{1}{2}(r-1)^2+\frac{1}{3}(r-1)^3-\frac{1}{4}(r-1)^4+\frac{1}{5}(r-1)^5$ &c. will become $=2{\cdot}30258509$ &c. and the log. of $1+p=\frac{1}{2{\cdot}30258509}\times(p-\frac{1}{2}p^2+\frac{1}{3}p^3-\frac{1}{4}p^4+\frac{1}{5}p^5$ &c) or the log. of $a=$ $\frac{1}{2{\cdot}30258509}\times(a-1)-\frac{1}{2}(a-1)^2+\frac{1}{3}(a-1)^3-\frac{1}{4}(a-1)^4+\frac{1}{5}(a-1)^5$ &c. which gives the ſyſtem that furniſhes Briggs's or the common logarithms.

And, in like manner, by aſſuming any particular value for r, and thence determining the value of the ſeries $q-\frac{1}{2}q^2+\frac{1}{3}q^3-\frac{1}{4}q^4+\frac{1}{5}q^5$ &c. or its equal $(r-1)-\frac{1}{2}(r-1)^2+\frac{1}{3}(r-1)^3-\frac{1}{4}(r-1)^4+\frac{1}{5}(r-1)^5$ &c. or by aſſuming the ſame ſeries of ſome particular value, and thence determining the value of r, any ſyſtem of logarithms may be derived.

The ſeries $q-\frac{1}{2}q^2+\frac{1}{3}q^3-\frac{1}{4}q^4+\frac{1}{5}q^5$ &c. or its equal $(r-1)-\frac{1}{2}(r-1)^2+\frac{1}{3}(r-1)^3-\frac{1}{4}(r-1)^4+\frac{1}{5}(r-1)^5$ &c. which forms the denominator of the above compound expreſſion, exhibiting the logarithms of numbers according to any ſyſtem, is what was firſt called, by Cotes, the modulus of the ſyſtem, being always a conſtant quantity, depending only on the aſſumed value of r. And, as the form of this ſeries is exactly the ſame as that which conſtitutes the numerator, and which has been ſhown to be the hyperbolic logarithm of a, it follows that the modulus of any ſyſtem of logarithms is equal to the hyperbolic logarithm of the radix of that ſyſtem, or of the number whoſe proper logarithm in the ſyſtem to which it belongs is 1.

The form of the ſeries here obtained for the hyperbolic logarithm of a, is the ſame as that which was firſt diſcovered by Mercator; and, if the ſeries of Wallis be required, it may be inveſtigated in a ſimilar manner, as follows:

The general logarithmic equation being $r^x=a$, as before, let $a=\frac{1}{1-p}$ and $z=\frac{1}{x}$; then $r=a^{\frac{1}{x}}=$ $\overline{\frac{1}{1-p}}^{\infty}=\frac{1}{1-p}^{z}$, and $\frac{1}{r}=\overline{1-p}^{\infty}=1-(p+\frac{p^2}{2}+\frac{p^3}{3}+\frac{p^4}{4}$ &c.) $+\frac{1}{2}(p+\frac{p^2}{2}+\frac{p^3}{3}+\frac{p^4}{4}$ &c.)$^2z^2-\frac{1}{2\cdot3}(p+\frac{p^2}{2}+\frac{p^3}{3}+\frac{p^4}{4}$ &c)$^3z^3$ $+\frac{1}{2\cdot3\cdot4}(p+\frac{p^2}{2}+\frac{p^3}{3}+\frac{p^4}{4}$ &c.)$^4z^4-\frac{1}{2\cdot3\cdot4\cdot5}(p+\frac{p^2}{2}+\frac{p^3}{3}+\frac{p^4}{4}$ &c.)$^5z^5$ &c.

And if $p+\frac{p^2}{2}+\frac{p^3}{3}+\frac{p^4}{4}+\frac{p^5}{5}$ &c. be put $=s$, we shall have $1-sz+\frac{1}{2}s^2z^2-\frac{1}{2\cdot3}s^3z^3+\frac{1}{2\cdot3\cdot4}s^4z^4$ &c. $=\frac{1}{r}$, or $sz-\frac{1}{2}s^2z^2+\frac{1}{2\cdot3}s^3z^3-\frac{1}{2\cdot3\cdot4}s^4z^4$ &c. $=1-\frac{1}{r}$, which let be put $=q$; then, by converſion of ſeries, z or $\frac{1}{x}$ will be found $=\frac{q+\frac{1}{2}q^2+\frac{1}{3}q^3+\frac{1}{4}q^4+\frac{1}{5}q^5\text{&c.}}{s}$

$=\frac{q+\frac{1}{2}q^2+\frac{1}{3}q^3+\frac{1}{4}q^4+\frac{1}{5}q^5}{p+\frac{1}{2}p^2+\frac{1}{3}p^3+\frac{1}{4}p^4+\frac{1}{5}p^5}$ and consequently $x=$ $\frac{p+\frac{1}{2}p^2+\frac{1}{3}p^3+\frac{1}{4}p^4+\frac{1}{5}p^5 \text{ &c}}{q+\frac{1}{2}q^2+\frac{1}{3}q^3+\frac{1}{4}q^4+\frac{1}{5}q^5 \text{ &c}}$.

The logarithm of a or $\frac{1}{1-p}$ is therefore

$=\frac{p+\frac{1}{2}p^2+\frac{1}{3}p^3+\frac{1}{4}p^4+\frac{1}{5}p^5 \text{ &c}}{q+\frac{1}{2}q^2+\frac{1}{3}q^3+\frac{1}{4}q^4+\frac{1}{5}q^5 \text{ &c}}$; or, since $p=1-\frac{1}{a}$ $=\frac{a-1}{a}$ and $q=1-\frac{1}{r}=\frac{r-1}{r}$, the logarithm of a is $=$

$$\frac{\frac{a-1}{a}+\frac{1}{2}\left(\frac{a-1}{a}\right)^2+\frac{1}{3}\left(\frac{a-1}{a}\right)^3+\frac{1}{4}\left(\frac{a-1}{a}\right)^4+\frac{1}{5}\left(\frac{a-1}{a}\right)^5 \text{ &c.}}{\frac{r-1}{r}+\frac{1}{2}\left(\frac{r-1}{r}\right)^2+\frac{1}{3}\left(\frac{r-1}{r}\right)^3+\frac{1}{4}\left(\frac{r-1}{r}\right)^4+\frac{1}{5}\left(\frac{r-1}{r}\right)^5 \text{ &c.}}$$

Which is another general expreſſion for the logarithm of any number, a, in any ſyſtem of logarithms, that may be ſimplified in the ſame manner as the former, the denominator being ſtill equal to the hyperbolic logarithm of the radix r; or, which is the ſame thing, to the modulus of the ſyſtem.

For, if the ſeries $q+\frac{1}{2}q^2+\frac{1}{3}q^3+\frac{1}{4}q^4+\frac{1}{5}q^5$ &c. or its equal

$$\frac{r-1}{r}+\frac{1}{2}\left(\frac{r-1}{r}\right)^2+\frac{1}{3}\left(\frac{r-1}{r}\right)^3+\frac{1}{4}\left(\frac{r-1}{r}\right)^4+\frac{1}{5}\left(\frac{r-1}{r}\right)^5 \text{ &c.}$$

be aſſumed $=1$, the hyperbolic logarithm of $\frac{1}{1-p}$ will be $=p+\frac{1}{2}p^2+\frac{1}{3}p^3+\frac{1}{4}p^4+\frac{1}{5}p^5$ &c. or the hyperbolic logarithm of a

$$=\frac{a-1}{a}+\frac{1}{2}\left(\frac{a-1}{a}\right)^2+\frac{1}{3}\left(\frac{a-1}{a}\right)^3+\frac{1}{4}\left(\frac{a-1}{a}\right)^4+\frac{1}{5}\left(\frac{a-1}{a}\right)^5 \text{ &c.}$$

and

and r, by reverſion of ſeries, will be found $= 2{\cdot}7182818$, as before. And if, on the contrary, the radix r be aſſumed $= 10$, the value of the ſeries

$q + \frac{1}{2}q^2 + \frac{1}{3}q^3 + \frac{1}{4}q^4 + \frac{1}{5}q^5$ &c. or its equal

$\frac{r-1}{r} + \frac{1}{2}\left(\frac{r-1}{r}\right)^2 + \frac{1}{3}\left(\frac{r-1}{r}\right)^3 + \frac{1}{4}\left(\frac{r-1}{r}\right)^4 + \frac{1}{5}\left(\frac{r-1}{r}\right)^5$ &c.

will become $= 2{\cdot}30258509$, as before; and the common logarithm of $\frac{1}{1-p} = \frac{1}{2{\cdot}30258509} \times (p + \frac{1}{2}p^2 + \frac{1}{3}p^3 + \frac{1}{4}p^4 + \frac{1}{5}p^5$ &c.) or the common logarithm of $a = \frac{1}{2{\cdot}30258509} \times : \frac{a-1}{a} + \frac{1}{2}\left(\frac{a-1}{a}\right)^2 + \frac{1}{3}\left(\frac{a-1}{a}\right)^3 + \frac{1}{4}\left(\frac{a-1}{a}\right)^4 + \frac{1}{5}\left(\frac{a-1}{a}\right)^5$ &c

Or the latter formula, for the logarithm of $\frac{1}{1-p}$, or its equal a, may be more conciſely derived from the firſt, as follows: The logarithm of $1+p$ has been ſhown to be $= \frac{p - \frac{1}{2}p^2 + \frac{1}{3}p^3 - \frac{1}{4}p^4 + \frac{1}{5}p^5 \text{ \&c}}{q - \frac{1}{2}q^2 + \frac{1}{3}q^3 - \frac{1}{4}q^4 + \frac{1}{5}q^5 \text{ \&c}}$, and if $-p$ be ſubſtituted in the place of $+p$, the logarithm of $1-p$ will become $= \frac{-p - \frac{1}{2}p^2 - \frac{1}{3}p^3 - \frac{1}{4}p^4 - \frac{1}{5}p^5 \text{ \&c}}{q - \frac{1}{2}q^2 + \frac{1}{3}q^3 - \frac{1}{4}q^4 - \frac{1}{5}q^5 \text{ \&c}}$, whence the logarithm of $\frac{1}{1-p} = \log. 1 - \log. (1-p) = 0 - \left(\frac{-p - \frac{1}{2}p^2 - \frac{1}{3}p^3 - \frac{1}{4}p^4 - \frac{1}{5}p^5 \text{ \&c}}{q - \frac{1}{2}q^2 + \frac{1}{3}q^3 - \frac{1}{4}q^4 + \frac{1}{5}q^5 \text{ \&c}} = \frac{p + \frac{1}{2}p^2 + \frac{1}{3}p^3 + \frac{1}{4}p^4 + \frac{1}{5}p^5 \text{ \&c}}{q - \frac{1}{2}q^2 + \frac{1}{3}q^3 - \frac{1}{4}q^4 + \frac{1}{5}q^5 \text{ \&c}}\right)$

or $\log. a = \frac{\frac{a-1}{a} + \frac{1}{2}\left(\frac{a-1}{a}\right)^2 + \frac{1}{3}\left(\frac{a-1}{a}\right)^3 + \frac{1}{4}\left(\frac{a-1}{a}\right)^4 \text{ \&c.}}{(r-1) - \frac{1}{2}(r-1)^2 + \frac{1}{3}(r-1)^3 - \frac{1}{4}(r-1)^4 \text{ \&c.}}$

where the denominator is the ſame as in the firſt formula, q being here $= r-1$.

If the denominator, in either of theſe general formulæ, be put $= m$, the logarithm of $1+p$ will be denoted by $\frac{1}{m} \times : (p - \frac{1}{2}p^2 + \frac{1}{3}p^3 - \frac{1}{4}p^4 + \frac{1}{5}p^5$ &c. or the logarithm of a by $\frac{1}{m} \times : (a-1) - \frac{1}{2}(a-1)^2 + \frac{1}{3}(a-1)^3 - \frac{1}{4}(a-1)^4 + \frac{1}{5}(a-1)^5$ &c. And the logarithm of $\frac{1}{1-p}$ will be denoted by $\frac{1}{m} \times : (p + \frac{1}{2}p^2 + \frac{1}{3}p^3 + \frac{1}{4}p^4 + \frac{1}{5}p^5$ &c. or the logarithm of a by $\frac{1}{m} \times : \frac{a-1}{a} + \frac{1}{2}\left(\frac{a-1}{a}\right)^2 + \frac{1}{3}\left(\frac{a-1}{a}\right)^3 + \frac{1}{4}\left(\frac{a-1}{a}\right)^4 + \frac{1}{5}\left(\frac{a-1}{a}\right)^5$ &c.

And, ſince the ſum of the logarithms of any two numbers is equal to the logarithm of their product, the logarithm of $\frac{1+p}{1-p}$ will become $= \frac{2}{m} \times (p + \frac{1}{3}p^3 + \frac{1}{5}p^5 + \frac{1}{7}p^7$ &c.) or the logarithm of a

$= \frac{2}{m} \times : \frac{a-1}{a+1} + \frac{1}{3}\left(\frac{a-1}{a+1}\right)^3 + \frac{1}{5}\left(\frac{a-1}{a+1}\right)^5 + \frac{1}{7}\left(\frac{a-1}{a+1}\right)^7$ &c.

Which is a third general formula, that converges faſter than either of the former.

The logarithm of any number may, therefore, be exhibited univerſally, or according to any ſyſtem of logarithms, in the following forms:

$$\text{Log. } (1+p) = \frac{1}{m} \times : p - \tfrac{1}{2}p^2 + \tfrac{1}{3}p^3 - \tfrac{1}{4}p^4 + \tfrac{1}{5}p^5 \text{ \&c.}$$

$$\text{Log. } \frac{1}{1-p} = \frac{1}{m} \times : p + \tfrac{1}{2}p^2 + \tfrac{1}{3}p^3 + \tfrac{1}{4}p^4 + \tfrac{1}{5}p^5 \text{ \&c.}$$

$$\text{Log. } \frac{1+p}{1-p} = \frac{2}{m} \times : p + \tfrac{1}{3}p^3 + \tfrac{1}{5}p^5 + \tfrac{1}{7}p^7 + \tfrac{1}{9}p^9 \text{ \&c.}$$

$$\text{Log. } a = \frac{1}{m} \times : (a-1) - \tfrac{1}{2}(a-1)^2 + \tfrac{1}{3}(a-1)^3 - \tfrac{1}{4}(a-1)^4 \text{ \&c.}$$

$$\text{Log. } a = \frac{1}{m} \times : \frac{a-1}{a} + \frac{1}{2}\left(\frac{a-1}{a}\right)^2 + \frac{1}{3}\left(\frac{a-1}{a}\right)^3 + \frac{1}{4}\left(\frac{a-1}{a}\right)^4 \text{ \&c.}$$

$$\text{Log. } a = \frac{2}{m} \times : \frac{a-1}{a+1} + \frac{1}{3}\left(\frac{a-1}{a+1}\right)^3 + \frac{1}{5}\left(\frac{a-1}{a+1}\right)^5 + \frac{1}{7}\left(\frac{a-1}{a+1}\right)^7 \text{ \&c.}$$

And, if $a+b$ be put $= s$, and $a \sim b = d$, theſe general formulæ may be eaſily converted into the following:

$$\text{Log. } \frac{a}{b} = \frac{1}{m} \times : \frac{d}{b} - \frac{d^2}{2b^2} + \frac{d^3}{3b^3} - \frac{d^4}{4b^4} + \frac{d^5}{5b^5} \text{ \&c.}$$

$$\text{Log. } \frac{a}{b} = \frac{1}{m} \times : \frac{d}{a} + \frac{d^2}{2a^2} + \frac{d^3}{3a^3} + \frac{d^4}{4a^4} + \frac{d^5}{5a^5} \text{ \&c.}$$

$$\text{Log. } \frac{a}{b} = \frac{2}{m} \times : \frac{d}{s} + \frac{d^3}{3s^3} + \frac{d^5}{5s^5} + \frac{d^7}{7s^7} + \frac{d^9}{9s^9} \text{ \&c.}$$

From which laſt expreſſions, if d or its equal $a \sim b$ be put $= 1$, we ſhall have, by proper ſubſtitution, and the nature of logarithms,

$$\text{Log. } a = \log.(a-1) + \frac{1}{m} \times : \frac{1}{a} + \frac{1}{2a^2} + \frac{1}{3a^3} + \frac{1}{4a^4} \text{ \&c.}$$

$$\text{Log. } a = \log.(a-1) + \frac{1}{m} \times : \frac{1}{a-1} - \frac{1}{2(a-1)} + \frac{1}{3(a-1)^3} - \frac{1}{4(a-1)^4} \text{ \&c}$$

$$\text{Log. } a = \log.(a-2) + \frac{1}{m} \times : \frac{1}{a-1} + \frac{1}{3(a-1)^3} + \frac{1}{5(a-1)^5} + \frac{1}{7(a-1)^7} \text{ \&c}$$

And, from the addition and ſubtraction of theſe ſeries, ſeveral others may be derived; but, in the actual computation of logarithms, they will be found to poſſeſs little or no advantage above thoſe here given. The ſame general formula may be derived from the original logarithmic equation $r^x = a$ in a different way, thus: Let $r = 1+q$, then $r^x = \overline{1+q}^x = 1 + (q - \frac{1}{2}q^2 + \frac{1}{3}q^3 - \frac{1}{4}q^4$ &c.$)x + \frac{1}{2}(q - \frac{1}{2}q^2 + \frac{1}{3}q^3 - \frac{1}{4}q^4$ &c$)^2x^2 + \frac{1}{2.3}(q - \frac{1}{2}q^2 + \frac{1}{3}q^3 - \frac{1}{4}q^4$ &c.$)^3x^3 + \frac{1}{2.3.4}(q - \frac{1}{2}q^2 + \frac{1}{3}q^3 - \frac{1}{4}q^4$ &c.$)^4x^4$ &c. $= a$; or if r be put $= \frac{1}{1-q}$, we ſhall have $\overline{1-q}^x = 1 - (q + \frac{1}{2}q^2 + \frac{1}{3}q^3 + \frac{1}{4}q^4$ &c.$)x + \frac{1}{2}(q + \frac{1}{2}q^2 + \frac{1}{3}q^3 + \frac{1}{4}q^4$ &c.$)^2x^2 - \frac{1}{2.3}(q + \frac{1}{2}q^2 + \frac{1}{3}q^3 + \frac{1}{4}q^4$ &c.$)^3x^3 + \frac{1}{2.3.4}(q + \frac{1}{2}q^2 + \frac{1}{3}q^3 + \frac{1}{4}q^4$ &c.$)^4x^4$ &c. $= \frac{1}{a}$.

And by denoting $q - \frac{1}{2}q^2 + \frac{1}{3}q^3 - \frac{1}{4}q^4$ &c. in the firſt caſe, or its equal $q + \frac{1}{2}q^2 + \frac{1}{3}q^3 + \frac{1}{4}q^4$, in the latter caſe, by m, theſe expreſſions will become

$$1 + mx + \tfrac{1}{2}m^2x^2 + \frac{1}{2.3}m^3x^3 + \frac{1}{2.3.4}m^4x^4 + \text{ \&c.} = a;$$

and $1 - mx + \frac{1}{2}m^2x^2 - \frac{1}{2.3}m^3x^3 + \frac{1}{2.3.4}m^4x^4$ &c. $= \frac{1}{a}$;

which are the two anti-logarithmic ſeries of Halley, from whence, by reverſion of ſeries, may be found the logarithm of any number, a, as before.

New Method by T. Manning, Eſq. Phil. Tranſ. 1806.

"If there already exiſted (ſays the author) as full and extenſive logarithmic tables as will ever be wanted, and of whoſe accuracy we were abſolutely certain, and if the evidence for that accuracy could remain unimpaired throughout all ages, then any new method of computing logarithms would be totally ſuperfluous ſo far as concerns the formation of tables, and could only be valuable indirectly, inaſmuch as it might ſhow ſome curious and new views of mathematical truth. But this kind of evidence is not in the nature of human affairs. Whatever is recorded is no otherwiſe believed than on the evidence of teſtimony; and ſuch evidence weakens by the lapſe of time,

time, even while the original record remains; and it weakens on a twofold account, if the record muſt from time to time be replaced by copies. Nor is this deſtruction of evidence ariſing from the uncertainty of the copy's being accurately taken, any where greater than in the caſe of copied numbers. It is uſeful then to contrive new and eaſy methods for computing not only new tables, but even thoſe we already have. It is uſeful to contrive methods by which any part of a table may be verified independently of the reſt; for, by examining parts taken at random, we may in ſome caſes ſatisfy ourſelves of its accuracy, as well as by examining the whole. Among the various methods of computing logarithms, none, that I know of, poſſeſſes this advantage of forming them with tolerable eaſe independently of each other by means of a few eaſy baſes. This deſideratum I truſt the following method will ſupply, while at the ſame time it is peculiarly eaſy of application, requiring no diviſion, multiplication, or extraction of roots, and has its relative advantages highly increaſed by increaſing the number of decimal places to which the computation is carried. The chief part of the working conſiſts in merely ſetting down a number under itſelf removed one or more places to the right, and ſubtracting, and repeating this operation; and conſequently is very little liable to miſtake. Moreover, from the commodious manner in which the work ſtands, it may be reviſed with extreme rapidity. It may be performed after a few minutes inſtruction by any one who is competent to ſubtract. It is as eaſy for large numbers as for ſmall; and on an average about 27 ſubtractions will furniſh a logarithm accurately to 10 places of decimals. In general, $9\times\frac{n+1}{2}$ ſubtractions will be accurate to $2n$ places of decimals."

The method employed may be thus ſtated: Suppoſe x to be any number; then

$$x-\frac{x}{\alpha}=\frac{\alpha-1}{\alpha}\cdot x=r$$

again; $r-\frac{r}{\alpha}=\frac{\alpha-1}{\alpha}\,r=r'$

&c. and ſo on, ſuppoſe, to $r''\ r'''$.

Again; $r^{iv}-\frac{r^{iv}}{\beta}=\frac{\beta-1}{\beta}\,r^{iv}=r^{v}$.

$$r^{v}-\frac{r^{v}}{\beta}=\frac{r^{v}(\beta-1)}{\beta}=r^{vi}\ \text{&c. and ſo on.}$$

Hence, if we ſtop at r^{vi},

$$x=\frac{\alpha}{\alpha-1}\ r=\frac{\alpha^2}{(\alpha-1)^2}\,r'=\frac{\alpha^3}{(\alpha-1)^3}\,r^{iv}=\frac{\alpha^5}{(\alpha-1)^5}\cdot\frac{\beta}{\beta-1}$$

$$r^{v}\ \&c.=\frac{\alpha^5}{(\alpha-1)^5}\cdot\frac{\beta^2}{(\beta-1)^2}\,r^{vi}$$

Hence $h.\log. x=5\,h.l.\frac{\alpha}{\alpha-1}+2\,h.l.\frac{\beta}{\beta-1}+h.l.\,r^{vi}$

$$=5\left\{\frac{1}{\alpha}+\frac{1}{2}\cdot\frac{1}{\alpha^2}+\frac{1}{3}\cdot\frac{1}{\alpha^3}+\&c.\right\}$$

$$+2\left\{\frac{1}{\beta}+\frac{1}{2}\cdot\frac{1}{\beta^2}+\frac{1}{3\beta^3}+\&c.\right\}$$

$$+h.r^{iv}$$

In the author's plan, α is 10, β either 100 or 1000, &c. and r^{vi}, ſuppoſing it to be the laſt remainder, is to be equal to 1 followed by half as many ciphers as the number of decimal places to which it is intended to work. Thus, ſuppoſe $r^{vi}=1{\cdot}0000\ 3141$, then $h.\,l.=0000\ 3141$ if we work only to 8 figures. α and β being taken powers of 10, it is plain that $h.l.\frac{\alpha}{\alpha-1}$, $h.l.\frac{\beta}{\beta-1}$ &c. are readily calculated; and the operations, ſuch as $x-\frac{x}{\alpha}$ or $x-\frac{x}{10}$, are performed by the aid of the decimal notation with the greateſt eaſe. In our inſtance, we have only employed α, β, and made ſix ſubtractions with α and two with β; but it is obvious that we might employ α, β, γ, &c. and make, generally, m ſubtractions with α, n with β, s with γ, &c. If the quantities be greater than two, they muſt be reduced by diviſion; thus, if the $h.\,l.$ 17 were required,

$17=2^4\frac{17}{16}=2^4\,(1.0625.)\ \therefore\ h.\,l.\ 17=4\ h.\,l.\ 2+h.\,l.$ (1.0625); and any number between 1 and 2 is eaſily found by the method above deſcribed.

The principle of this method of computing logarithms is very ſimple, and the practice is both ſafe and eaſy. If the conſtruction of new logarithmic tables were required, it would be valuable; and it is eſtimable for the ſkill and ingenuity with which it has been invented and conſtructed.

We ſhall conclude this article with Mr. Profeſſor Vince's Introduction to his Trigonometry.

On the Nature and Use of Logarithms.

Logarithms are a ſet of artificial numbers adapted to the common or natural numbers, 1, 2, 3, 4, 5, &c. in order to facilitate arithmetical calculations.

Definition. Let a be a conſtant quantity, and x be variable, and put $a^x=b$; then x is the logarithm of b.

Corollary. Hence, if for x we write 0, 1, 2, 3, 4, 5, &c. the correſponding values of b will be $a^0, a^1, a^2, a^3, a^4, a^5$, &c. If therefore the natural numbers be taken in geometrical progreſſion, their reſpective logarithms will be in arithmetical progreſſion. From this definition of logarithms, we immediately deduce thoſe properties which render them uſeful in ſhortening numerical computations.

To multiply numbers together, by logarithms.—Rule. Add the logarithms of the numbers together, and the ſum is the logarithm of their product.

For, let $a^x=b$, $a^y=c$, $a^z=d$; then, $a^{x+y+z}=bcd$; and x is the logarithm of b, y the logarithm of c, z the logarithm of d, and $x+y+z$ is the logarithm of $b.c.d$.

To divide one number by another, by logarithms.—Rule. From the logarithm of the dividend ſubtract the logarithm of the diviſor, and the remainder is the logarithm of the quotient.

For let $a^x=b$; $a^y=c$, then $\frac{b}{c}=\frac{a^x}{a^y}=a^{x-y}$; and x is the logarithm of b, y the logarithm of c, and $x-y$ is the logarithm of $\frac{b}{c}$.

To raiſe a number to any power, by logarithms.—Rule. Multiply the logarithm of the root by the index of the power, and the product is the logarithm of the power. For, let $a^x=b$; then $a^{rx}=b^r$; and x is the logarithm of b, and rx is the logarithm of b^r.

To extract the root of any number, by logarithms.—Rule. Divide the logarithm of the given number, by the number which expreſſes the root to be extracted, and the quotient is the logarithm of the root. For, let $a^x=b$; then $a^{\frac{x}{r}}=b^{\frac{1}{r}}$; and x is the logarithm of b, and $\frac{x}{r}$ is the logarithm of $b^{\frac{1}{r}}$.

Thus it appears, that multiplication may be performed by the addition of logarithms; diviſion, by the ſubtraction of logarithms; the raiſing of powers, by the multiplication of a logarithm; and the extracting of roots, by the diviſion of a logarithm.

As a may be aſſumed any number, we may have the ſame ſet of logarithms adapted to different ſets of natural numbers; and the ſame ſet of natural numbers may have different ſets of logarithms. But, as $a^0=1$, in every ſyſtem the logarithm of 1 is 0.

The tables of logarithms in common uſe are conſtructed upon ſuppoſition that $a=10$. Now $10^0=1$, $10^1=10$, $10^2=100$, $10^3=1000$, $10^4=10000$, &c. hence, in this ſyſtem, the log. of 1 is 0; the log. of 10 is 1; the log of 100 is 2; the log. of 1000 is 3; the log. of 10,000 is 4; &c. and, in general, if $10^x=b$, x is the logarithm of b. Hence, the logarithms of all numbers from 1 to 10 are

are expreſſed by 0, with decimals; from 10 to 100, they are expreſſed by 1, with decimals; from 100 to 1000, they are expreſſed by 2, with decimals; from 1000 to 10,0000, they are expreſſed by 3, with decimals; &c. Theſe numbers 0, 1, 2, 3, &c. are called *indices*, and the index is always leſs by unity than the number of figures in the integral part of the correſponding natural number. One method of finding the logarithms of the intermediate numbers between 1 and 10, 10 and 100, 100 and 1000, &c. has been from the equation $10^x = b$, by finding x, having given b.

The logarithm of 76348 is 4·8827977; for $10^{4\cdot8827977} = 76348$; divide by 10, and we get $10^{3\cdot8827977} = 7634\cdot8$; divide again by 10, and we get $10^{2\cdot8827977} = 763\cdot48$; and ſo on. Hence, if any number be multiplied or divided by 10, the index of its logarithm will be increaſed or diminiſhed by 1, the decimal part remaining the ſame. If therefore we continue to divide by 10 till the number becomes leſs than unity, and the index be negative, the decimal part is ſtill poſitive; on which account, the negative ſign is put *over* the index, becauſe that is the only figure affected by it. When therefore the negative ſign is put *over* the index, it is to be underſtood that the index is negative, and the decimal part poſitive; but, when the negative ſign is put *before* the index, it is here to be underſtood, that both index and decimal part are *negative*.

If the ſeries be continued downwards below 1, as 10^3, 10^2, 10^1, 10^0, 10^{-1}, 10^{-2}, 10^{-3}, &c. the reſpective logarithms are 3, 2, 1, 0, —1, —2, —3, &c. Therefore the logarithm of any number which ſtands between any two terms of the firſt ſeries, has for its index the index of the leaſt of thoſe two terms, together with a decimal which is always poſitive.

Thus the logarithm of any number between

10^3	and	10^2	is	2, + dec.
10^2	and	10^1	is	1, + dec.
10^1	and	10^0	is	0, + dec.
10^0	and	10^{-1}	is	$\bar{1}$, + dec.
10^{-1}	and	10^{-2}	is	$\bar{2}$, + dec.
10^{-2}	and	10^{-3}	is	$\bar{3}$, + dec. &c. &c.

The logarithm thus expreſſed is the *true* logarithm. Sometimes, inſtead of writing the index negative, 10 is added to it, and the index becomes poſitive; in this caſe, the logarithm of any number between

10^0	and	10^{-1}	is	9, + dec.
10^{-1}	and	10^{-2}	is	8, + dec.
10^{-2}	and	10^{-3}	is	7, + dec. &c. &c.

But here, when we come to 10^{-10}, the index becomes negative; in this caſe therefore, to preſerve the index poſitive, it is uſual to add 100 to the index; hence, the logarithm of any number between

10^0	and	10^{-1}	is	99, + dec.
10^{-1}	and	10^{-2}	is	98, + dec.
10^{-2}	and	10^{-3}	is	97, + dec. &c. &c.

In theſe caſes, the index is 10 or 100 greater than its *true* value, and in operations this muſt be conſidered.

Hence, we have the following gradation of numbers and their logarithms, the logarithms of decimal numbers being written each way.

Number.	*True* Logarithms.	Logarithm of Decimal Numbers, adding 10 to the Index	Logarithm of Decimal Numbers, adding 100 to the Index.
76348	4·8827977		
7634·8	3·8827977		
763·48	2·8827977		
76·348	1·8827977		
7·6348	0·8827977		
·76348	$\bar{1}$·8827977	9·8827977	99·8827977
·076348	$\bar{2}$ 8827977	8·8827977	98·8827977
·0076348	$\bar{3}$ 8827977	7·8827977	97 8827977
·00076348	$\bar{4}$ 8827977	6.8827977	96·8827977

The negative index denotes how many places the firſt ſignificant figure of the decimal number is below unity; and, when 10, or 100, is added to the index, how much ſuch index wants of 10, or 100, denotes the ſame. The negative index, however, is that which ſtands in the regular ſcale of logarithms, and always repreſents the *true* logarithm of a decimal number, and of that one number only; whereas, the logarithm of a decimal expreſſed by adding 10 or 100 to the index, is 10 or 100 too great, and expreſſes alſo the logarithm of a number greater than unity. Thus, 4·8827977 is the logarithm of 76348; and, conſidering it as the logarithm of a decimal, the index of the logarithm being increaſed by 10, it is alſo the logarithm of 0·00007634 8. By uſing the negative index, there is no danger of a miſtake, and every ſource of error ſhould be cut off; we ſhall therefore derive all our concluſions in terms of the *true* logarithm.

At the end of any operation where the logarithm of a decimal is taken by adding 10 to the index, and that logarithm is *added*, the 10 added muſt be *ſubtracted*; and, if there be any number, r, of ſuch logarithms *added*, then $10r$ muſt be *ſubtracted*, that the reſult may be the *true* logarithm. But, if a logarithm of this kind is to be *ſubtracted*, then 10 muſt be added to the reſulting index, to give the *true* logarithm; for, by ſubtracting a quantity which is 10 above its true value, you make the reſult 10 leſs than its true value, and therefore 10 muſt be added to give the *true* logarithm. In like manner, if you add 100 to the index, you muſt, in the former caſe, *ſubtract* 100 from the index for every ſuch logarithm *added*; and, in the latter caſe, you muſt *add* 100 for the logarithm which is *ſubtracted*; and the reſult will be the *true* logarithm.

When it is required to incorporate ſeveral logarithms by addition and ſubtraction, it will be more convenient to convert the ſubtraction into an addition, by writing down, inſtead of the logarithm to be ſubtracted, what it wants of 10·0000000, which you may very readily do, by writing down what the firſt figure on the right wants of 10, and what every other figure wants of 9; this is called the *arithmetical complement*. For inſtance, if the logarithm be 7·4693875, its arithmetical complement is 2·5306125. If one or more figures on the right be ciphers, write ciphers in their place, and take the firſt ſignificant figure on the right from 10, and the other figures from 9. Thus, if the logarithm be 5·3864000, its arithmetical complement is 4·6136000. In any operation therefore, having taken the arithmetical complements of all the quantities to be ſubtracted, the number of which we will ſuppoſe to be r, and added the whole together, you muſt ſubtract $10r$ from the index. The reaſon of this is evident; for to add what a number wants of 10 muſt evidently make a quantity greater by 10 than if you had ſubtracted that number. For inſtance; 14 + 6 is greater by 10 than 14 — 4. If the index of the quantity whoſe arithmetical complement you want to take be greater than 10, you may write down what the index wants of 20, and, after the addition, ſubtract 20 from the index.

When you have a logarithm with a negative index, it will ſometimes be convenient to reduce the whole to a negative quantity; and this is done, by ſubtracting 1 from the index, taking the arithmetical complement of the decimal part, and putting the ſign — *before* the index, ſo as to affect the whole; for by this operation you increaſe the value of the index by unity, and diminiſh that of the decimal part by unity; and therefore the value of the logarithm is not altered. Thus, $\bar{3}\cdot5972684 = -2\cdot4027316$; theſe we ſhall call *negative* logarithms. This reduction will often be found convenient when you want to multiply or divide a logarithm with a negative index; for otherwiſe, you muſt, in general, multiply or divide the index, and the decimal part, ſeparately. And here, the reſulting quantity muſt be reduced back again to its negative index and poſitive decimal (by taking the arithmetical complement of the decimal part, adding 1 to the index, and putting the negative ſign *over* it), in order to render it conformable to the ſcale of logarithms given in the common Tables.

bles. Thus, $-3\cdot5946281 = \bar{4}\cdot4053719$. The above reduction to a *negative* logarithm, if you want to subtract such a logarithm, is very convenient, for you have then only to add the logarithm after you have reduced it. Thus, if you want to subtract $\bar{3}\cdot5972648$, you may add $2\cdot4027316$, and the operation is performed; for the subtraction of a negative quantity is the same as the addition of a positive quantity of the same magnitude. Should the decimal part consist of ciphers only, the whole logarithm is then negative, and therefore no reduction becomes necessary.

When you have to subtract the logarithm of a decimal, and you write the logarithm by adding 10 to the index, you may take its arithmetical complement and add it, and it gives the true result. For, if you add the arithmetical complement, it makes the result greater by 10 than if you had subtracted the logarithm itself; but, as the logarithm is 10 too great, by subtracting it the result becomes 10 too little; therefore, by adding the arithmetical complement, you get the true result. And in like manner, if you write the logarithm by adding 100 to the index.

A Number being given, to find its Logarithm.

To find the logarithm of a number consisting of one, two, three, or four, figures.—Rule. The logarithms of all numbers to 100 are put down with their proper indices; and from 100 the logarithms are put down without their indices; and, when the logarithm is taken out, it is the decimal part only of the logarithm, and the index is supplied, being always less by unity than the number of figures in the integral part of the given number. From 100 to 1000, the decimal part of the logarithm stands in the column Log. directly against the corresponding number in the column *N.* and, as the two first figures are common to several logarithms, they are not repeated till they alter; they are therefore to be prefixed to the five others in the lines below them, till you come to the next two common figures. The decimal part of the logarithm of a number consisting of *four* figures, is found in the second column under 0 at the head, directly against the number in the first column.

In taking out the logarithm corresponding to any given number consisting of more than four figures, the three first figures of the decimal part of the logarithm are found in the second column; and these are common to all the figures in that and in the other nine columns, till you come to the next three figures; except when the first figure on the left of the other four figures, found in that or in one of the other nine columns, changes from 9 to 0; in which case, the *next* three figures are to be prefixed to the four figures thus beginning with 0, and to each of the four following figures in the same horizontal line.—Ex. The decimal part of the logarithm of 30837 is 4890721; for, though against 3083 the three common figures next above are 488, yet from the third to the fourth column, the first of the next four figures changes from 9 to 0, therefore we must take 489 for the three first figures.

To find the logarithm of a number having five figures.—Rule. Find the first four figures of the given number in the first column of the Table, and even with them in the second column take out the three first common figures; go on in the same horizontal line till you come to the column which has at its head the fifth figure of the given number, and take out the four figures there found, and annex them to the right of the three before found (remembering the observation in the preceding paragraph), and you have the decimal part of the logarithm; and the index is less by unity than the number of integral figures in the given number.

Ex. *Let the given number be* 39217. Here, in the second column, against 3921, you find 593 for the three first figures; and in the same horizontal line, under 7, you have 4744; therefore the required logarithm is $4\cdot5934744$.

To find the logarithm of a number having six figures.—Rule. Find the decimal part of the logarithm for the first five figures as before, and take the difference, *d*, between that logarithm and the logarithm next greater; then find that difference in the last column but one, marked *D*, of a common set of logarithmic tables, and under that difference in the last column marked *Pts* (proportional parts) against the figure in the sixth place, you have the part to be added for that figure.

Ex. *Let the given number be* 392176. The decimal part of the logarithm for the first five figures is 5934744, the difference between which and the next greater logarithm is 110; and in the last column under 110, and against 6, you find 66; therefore the decimal part of the logarithm is $5934744 + 66 = 5934810$; and, there being six places of integral figures, the required logarithm is $5\cdot5934810$.

To find the logarithm of a number having seven figures.—Rule. Find the decimal part of the logarithm for the first six figures, as before; then divide the number in that part of the column *Pts* having *d* at its head, corresponding to the seventh figure, by 10, and add it to the decimal part of the logarithm for the first six figures; remembering to place the first figure on the right of the quantity added, in the eighth place of the logarithm.

Ex. *Let the given number be* 3921764. The decimal part of the logarithm for the first six figures is 5934810; and in the last column, under 110, 44 stands against 4, the tenth part of which is 4·4; therefore the decimal part of the logarithm is 59348144; and, there being seven places of whole numbers, the required logarithm is $6\cdot59348144$.

To find the logarithm of a number having eight figures.—Rule. Find the decimal part of the logarithm for the first seven figures, as before; then divide the number in that part of the column *Pts* having *d* at its head, corresponding to the eighth figure, by 100, and it will give you the number to be added to the decimal part of the logarithm for that figure; remembering that, if the quotient consists of an integer and decimals, the integer must stand in the seventh place; and, if there be only decimals, the first decimal on the left must stand in the eighth place.

Ex. *Let the given number be* 39217648. The decimal part of the logarithm for the first seven figures is 59348144; and in the last column, under 110, against 8 stands 88, which divided by 100, gives 0·88; hence, the decimal part of the logarithm is 59348128; and, there being eight places of whole numbers, the required logarithm is $7\cdot59348128$.

If the given number be not all integral, the decimal part of the logarithm is found in the same manner, and the index is less by unity than the number of figures in the integral part.

Ex. *Let the given number be* 392·1764. Here, the decimal part of the logarithm is 5934815; hence, the logarithm required is $2\cdot5934815$.

To find the logarithm of a decimal.—Rule. Omitting the decimal ciphers on the left, if there be any, find the logarithm corresponding to the other part, as for a whole number, and annex a negative index which expresses how far the first significant figure of the decimal is from the place of units. Or, if you write the logarithm with a positive index, the index will be as much below 9, or 99, as there are decimal ciphers on the left.

Ex. *To find the logarithm of* 0·0004346. Look into the Table, and against 4346 you will find the logarithm 6380897; and, there being three decimal ciphers on the left of the significant figures, the required logarithm becomes $\bar{4}\cdot6380897$, if expressed by a negative index; or $6\cdot6380897$, if expressed by a positive index, by adding 10 to the index.

To find the logarithm of a proper fraction.—Rule. Add 10 to the index of the logarithm of the numerator, and subtract the logarithm of the denominator from it, and you get the logarithm of the fraction, expressed by a positive index, having 10 added to the index, as in decimals. Or subtract the logarithm of the denominator from that of the numerator, and you get the *true* logarithm of the fraction, expressed by a negative index.

Ex.

Ex. *To find the logarithm of* $\frac{3}{5}$. Here, by the rule, the logarithm is $10 + \log. 3 - \log. 5 = 10{\cdot}4771213 - 0{\cdot}6989700 = 9{\cdot}7781513$. Or the required logarithm is $\log. 3 - \log. 5 = 0{\cdot}4771213 - 0{\cdot}6989700 = \bar{1}{\cdot}7781513$ the *true* logarithm.

A LOGARITHM BEING GIVEN, TO FIND THE NUMBER.

To find the number to five figures answering to any given logarithm.—Rule. Neglect the index, and seek for the decimal part of the logarithm, the three first figures in the second column, and the other four in that or some of the other columns; and even with these four figures in the first column, *N*, you have the first four figures of the required number; and the fifth figure is that which stands at the head of the column where the four figures were found; and the number of integral figures is greater by unity than the index.

Ex. *Let the given logarithm be* 2·4967775. Having found the three first decimal figures 496 in the second column, against 7775 you find 3138 in the first column, and at the head of 7775 you find 9, which annexed to 3138 make 31389; and the index being 2, the required number is 313·89.

If the logarithm be found exactly, and the index be greater than 4, ciphers must be added to the right of the five figures, till the whole number of figures be greater by unity than the index; for, by increasing the index by 1, you make the corresponding number ten times greater.

To find the number to six or seven figures answering to any given logarithm.—Rule. The given logarithm, *A*, not being found exactly in the Table, take the next less, *B*; and in the column *Pts*, having at its head the difference between the logarithms next greater and less than the given logarithm, look for $A - B$, and against it you have the sixth figure; but if $A - B$ be not found exactly, take the figure in the column *Pts* corresponding to the next less number than $A - B$, for the sixth figure required; then take the difference between $A - B$ and the next less number in the column *Pts*, and prefix a cipher to the right; and against that number, or the nearest to it, you have the *seventh* figure required; and the number of integral figures is greater by unity than the index.

Ex. *What is the number corresponding to the logarithm* 6·4970385? The difference between the logarithms next greater and less than the given logarithm, is 139; this number therefore stands at the head of the column *Pts* to be entered.

Given log. - - -	$6{\cdot}4970385 = A$
Next less log. - - -	$6{\cdot}4970264 = B$
	$121 = A - B$
8 is the sixth figure - - - -	111 next less
7 is the seventh figure - - -	100

Now the first five figures of the number answering to *B* are 31407; therefore the required number is 3140787.

Or the additional figures, as many as may be required, may be found thus: Add as many ciphers to the right of $A - B$ as you want additional figures, and divide that quantity by the difference between the logarithm *B* and the next greater logarithm, and the quotient gives the figures required. Thus, in the last example, if we add two ciphers to $A - B$, it becomes 12100, which divided by 139 (the difference of the logarithm *B* and the next greater logarithm), the quotient is 87, the two next figures.

If the given logarithm be the logarithm of a decimal with a positive index, find the number corresponding to the decimal part, and prefix as many decimal ciphers to the left of it as the index wants of 9.

Ex. *Let the logarithm be* 6·6380897; *and let it represent the logarithm of a decimal with a positive index, or of a whole number with seven figures.* Look into the Table, and against the log. 6380897 you find the number 4346; and, the index 6 being 3 less than 9, there must be three ciphers added to the left; hence, the required decimal number is 0·0004346.

If the logarithm be written with a negative index, as $\bar{4}{\cdot}6380897$, find the significant figures of the corresponding number as before, and the index shows how many places the first significant figure is below unity.

Having thus far explained the principles of logarithms, we proceed to exemplify their use in numerical calculations.

MULTIPLICATION BY LOGARITHMS.

Rule.—If the numbers be greater than unity, add their logarithms together, and the sum is the logarithm of the product.

Ex. 1. *What is the product of* $2{\cdot}71 \times 38 \times 49$?

0·4329693 log. of	- - -	2·71
1·5797836 ———	- - -	38
1·6901961 ———	- - -	49
3·7029490 ———		5046·02 Product.

If any of the numbers be below unity, the rule is the same, if you write their logarithms with the negative index; for then you have the *true* logarithm.

Ex. 2. *What is the product of* $784 \times 0{\cdot}000079 \times 0{\cdot}0000036$?

2·8943161 log. of	- - -	784
$\bar{5}{\cdot}8976271$ ———	- -	0·000079
$\bar{6}{\cdot}5563025$ ———	- -	0·0000036
$\bar{7}{\cdot}3482457$ ———		0·0000002229696 Product.

Here, we carry 2 from the decimal part of the logarithm (which is positive) to the index, which added to 2 (the first index) make 4 for the positive part of the index, and the negative part is 11; therefore the sum is $4 - 11 = -7$, and there are six ciphers before the first significant figure.

If the operation be performed by adding 10 to the index of the logarithm of the decimal factors, and there be *r* such factors, you must subtract $10r$ from the index after the addition. We will take the last Example.

2·8943161 log. of	- - -	784
$5{\cdot}8976271$ ———	- -	0·000079
$4{\cdot}5563025$ ———	- -	0·0000036
$7{\cdot}3482457$ the same as before.		

Here, the index of the sum is 13, and $r = 2$, therefore $10r = 20$; hence, the index is $13 - 20 = -7$.

If the numbers be, some or all of them, less than unity, the product may be found by the following Rule. Consider the significant figures of each factor as whole numbers; add together their logarithms; and subtract as many units from the index as there are decimal figures in all the numbers, and you have the *true* logarithm of the product. For, let the given numbers be *a*, *b*, *c*, &c. and suppose them to contain *n* decimals; and let *A*, *B*, *C*, &c. be their respective values, conceiving the significant figures to represent whole numbers; then, by the nature of decimals, $a \times b \times c \times \&c. = \frac{A \times B \times C \times \&c.}{10^n}$; hence, the logarithm of $a \times b \times c \times \&c. = \log. A + \log. B + \log. C + \&c. - n$. For the log. of 10^n is *n*.

Ex. 1. *What is the product of* $2{\cdot}4 \times 0{\cdot}007 \times 0{\cdot}54$? Here, $n = 6$; hence,

1·3802112 log. of	- - -	24
0·8450980 ———	- - -	7
1·7323938 ———	- - -	54
$\bar{3}{\cdot}9577030$ ———	- -	0·009072 Product.

Here the index of the sum is 3, from which subtract $6n$, and the remainder is -3; therefore the first significant figure is 3 places below unity.

Ex.

Ex. 2. *What is the product of* 784 × 0·000079 × 0·0000036?
Here $n = 13$; hence,

2·8943161	log. of - - -	784
1·8976271	——— - -	79
1·5563025	——— - - -	36
$\overline{7}$·3482457	———	0·0000002229696 Product.

Here the index of the sum is 6, from which subtract $13n$, and the remainder is —7; therefore the first significant figure is 7 places below unity.

Thus the product of decimal factors, as well as of whole numbers, may be always found by taking the logarithms of whole numbers only.

Division by Logarithms.

Rule.—From the logarithm of the dividend subtract the logarithm of the divisor, and the remainder is the logarithm of the quotient.

Ex. 1. *Divide* 2004·64 *by* 34.

3·3020364	log. of - -	2004·64
1·5314789	——— - -	34
1·7705575	———	58·96 Quotient.

Ex. 2. *Divide* 19 *by* 72.

1·2787536	log. of - - -	19
1·8573325	——— - - -	72
$\overline{1}$·4214211	——— - -	0·2638889 Quotient.

Here, as we carry 1 from the decimal to the index, we have to subtract 2 in the index from 1; the remainder is therefore —1, which shows that the first significant figure of the quotient is 1 place below unity. In all cases the operation is the same, if the negative index be used for the logarithms of all quantities below unity.

If the dividend be less, and the divisor be greater than unity, and you write the logarithm of the former by adding 10 to the index, you must add 10 to the index of the logarithm of the latter before you subtract. For, making each index equally too great, you get the true difference.

Ex. *Divide* 0·000084 *by* 714.

By adding 10 to the index:

5·9242793	log. of - -	0·000084
2·8536982	——— - - -	714
$\overline{7}$·0705811	———	0·0000000117647 Quotient.

Here, 10 added to 2 make 12, which taken from 5, the remainder is —7.

By the negative index:

$\overline{5}$·9242793	log. of - -	0·000084
2·8536982	——— - -	714
$\overline{7}$·0705811	———	0·0000000117647 Quotient.

If the dividend be greater, and the divisor less, than unity, and you write the logarithm of the latter by adding 10 to the index, you must add 10 to the index of the logarithm of the former, before you subtract. This is true, for the reason before given.

Ex. *Divide* 96 *by* 0·00042.

By adding 10 to the index:

1·9822712	log. of - - -	96
6·6232493	——— - -	0·00042
5·3590219	———	228571·4 Quotient.

Here, 10 added to 1 make 11, from which subtract 6, and the remainder is 5.

By the negative index:

1·9822712	log. of - - -	96
$\overline{4}$·6232493	——— - -	0·00042
5·3590219	———	228571·4 Quotient.

Here, —4 subtracted from 1, the remainder is 5.

If the divisor and dividend be both less than unity, and their logarithms be written by adding 10 to the index, the subtraction gives the true result. For, the true index of each logarithm being equally increased, their difference is the true difference.

Ex. *Divide* 0·2 *by* 0·00057.

By adding 10 to the index:

9·3010300	log. of - - -	0·2
6·7558749	——— - -	0·00057
2·5451551	——— - -	350·877 Quotient.

By the negative index:

$\overline{1}$·3010300	log. of - - -	0·2
$\overline{4}$·7558749	——— - -	0·000057
2·5451551	——— - -	350·877 Quotient.

Here, carrying 1 to —4, the sum is —3, which subtracted from —1, the remainder is 2. The operation by the negative index is preferable to that by the other method, as there is no variety of cases.

If the divisor and dividend consist of factors, of which some, or all, are decimal numbers, the quotient may be found by the following Rule: Let the dividend be $a \times b \times c \times$ &c. containing n decimals in all the factors together; and let the divisor be $s \times t \times u \times$ &c. to r factors, containing m decimals in all the factors; and let $A, B, C,$ &c. and $S, T, U,$ &c. be the respective values of $a, b, c,$ &c. and $s, t, u,$ &c. considering their significant figures as whole numbers; then the logarithm of the quotient = log. A + log. B + log. C + &c. + ar. co. log. S, + ar. co. log. T + ar. co. log. U + &c. + $m - n - 10r$.

For, by the nature of decimals, $\frac{A \times B \times C + \&c.}{10^n} = a \times b \times c \times$ &c. and $\frac{S \times T \times U \times \&c.}{10^m} = s \times t \times u \times$ &c.

hence, $10^{m-n} \times \frac{A \times B \times C \times \&c.}{S \times T \times U \times \&c.} = \frac{a \times b \times c \times \&c.}{s \times t \times u \times \&c.}$;

therefore the log. of the required quotient = log. A + log. B + log. C + &c. + ar. co. log. S + ar. co. log. T + ar. co. log. U + &c. + $m - n - 10r$.

Ex. *What is the value of* $\frac{84 \times 0{\cdot}00769 \times 0{\cdot}683}{598 \times 0{\cdot}0000146 \times 0{\cdot}039}$?

Here, $n = 8$, $m = 10$, $m - n = 2$, $r = 3$, $10r = 30$, and $m - n - 10r = -28$; hence,

1·9242793	log. of - -	84
2·8859263	——— - - -	769
2·8344207	——— - - -	683
7·2232988	ar. co. log. of - -	598
7·8356471	——— - -	146
8·4089354	——— - -	39
3·1125076	- - - -	1295·71 Quotient.

The index of the sum of the logarithms is 31, from which subtract 28, and the remainder is 3 the index. By this method the operation is extremely plain and easy, and you have to take the logarithms of whole numbers only.

Involution by Logarithms.

Rule.—Multiply the logarithm of the root by the index of the power, and the product is the logarithm of the power.

Ex. *What is the 16th power of* 1·05?

0·0211893 log. of 1·05.
16

0·3390288 ——— 2·182875 the power required.

If the number to be raiſed to a power be leſs than unity, and you expreſs its logarithm by a negative index, the operation is performed by the following Rule: Multiply the index of the logarithm, and the decimal part, ſeparately by the index of the power, and ſubtract the former product (it being negative) from the latter, and the remainder is the logarithm of the power. For, the index being negative, and the decimal part poſitive, the logarithm, as it ſo ſtands, cannot generally be multiplied as one quantity; the index and logarithm are therefore multiplied ſeparately, and the former product is taken from the latter.

Ex. 1. *What is the* 8·3 *power of* 0·042?

The log. of 0·042 is $\overline{2}$·6232493; hence,

·6232493
8·3

18697479
49859944

From 5·17296919
Sub. 16·6 = 8·3 × 2

Rem. $\overline{12}$·57296919 log. of 0·000000000037408 the power required.

Ex. 2. *What is the* 0·07 *power of* 0·00563?

The log. of 0·00563 is $\overline{3}$·7505084; hence,

·7505084
0·07

From 0·052535588
Sub. 0.21 = 0·07 × 3

Rem. $\overline{1}$·842535588 log. of 0·695882 the power required.

If you reduce the logarithm of the root to a *negative* logarithm, the operation may be performed by one multiplication. Let us take the caſe of the laſt example.

The logarithm $\overline{3}$·7505084 = —2·2494916; hence,

— 2·2494916
0·07

— 0·1574644 12 = $\overline{1}$·842535588 the ſame as before.

The other method may generally be found moſt ready in practice, as you have here to reduce the given logarithm to a *negative* logarithm, and then at laſt to reduce it back again. This method, however, will be found very uſeful, when you have to find the value of a decimal number having an index expreſſed by a vulgar fraction.

If the number to be raiſed to a power be leſs than unity, and you expreſs its logarithm by adding 10 to the index, the operation may be performed by the following Rule: Let *n* be the index of the power; multiply the logarithm of the root by *n*, and from the product ſubtract 10*n*, and the remainder is the *true* logarithm of the power. For, the logarithm of the root being 10 greater than the true logarithm, when you multiply it by *n*, the logarithm muſt be 10*n* greater than the true logarithm, and therefore you muſt ſubtract 10*n* from the product, in order to get the true logarithm of the power.

Ex. 1. *What is the* 8·3 *power of* 0·042?

8·6232493 log. of 0·042
8·3

258697479
689859944

From 71·57296919
Sub. 83· = 10 × 8·3

Rem. $\overline{12}$·57296919 log. of 0·000000000037408 the power required.

Ex. 2. *What is the* 0·07 *power of* 0·00563?

7·7505084 log. of 0·00563
0·07

From 0·542535588
Sub. 0·7 = 10 × 0·07

Rem. $\overline{1}$·842535588 log. of 0·695882 the power required.

It will ſometimes happen, that the logarithm produced will not be the exact logarithm of the number required. For inſtance; the log. of 7^5 is 5 × log. 7 = 5 × 0·8450980 = 4·2254900. Now 7^5 = 16807, the log. of which is 4·2254902, differing from the above log. by 2 in the laſt figure; and this ariſes from the log. of every number being only an approximation; on which account, the error, when multiplied, becomes manifeſt. Had the firſt logarithm been continued to one or two more places, then, after the multiplication, 2 would have been carried to the ſeventh place of decimals, and the product would have agreed with the logarithm found in the Table.

Evolution by Logarithms.

Rule.—Divide the logarithm of the given number by the number denoting the root to be extracted, and the quotient is the logarithm of the root.

Ex. *What is the 5th root of* 784?

5)2·8943161 log. of - - - 784

0·5788632 ——— - - - 3·792044 the root.

If the given number be leſs than unity, and you expreſs its logarithm by a negative index, the operation is performed by the following Rule: Reduce the logarithm of the number to a *negative* logarithm, and then divide it by the number denoting the root to be extracted, and you have the logarithm of the root expreſſed by a *negative* logarithm; reduce this back again to a logarithm with a negative index and poſitive decimal part, and you have the *true* logarithm of the root.

Ex. 1. *What is the* 0·72 *root of* 0·096? The logarithm of 0·096 is $\overline{2}$·9822712 = — 1·0177288; and $\frac{0\cdot72}{-1\cdot0177288}$ = — 1·4135122 = $\overline{2}$·5864878 the log. of 0·03859116 the root required.

Ex. 2. *What is the* 504 *root of* 0·2? The log. of 0·2 is $\overline{1}$·3010300 = — 0·6989700, and $\frac{-0\cdot6989700}{504}$ = — 0·0013868 = $\overline{1}$·9986132 the logarithm of 0·9968119 the root required.

Ex. 3. *What is the* 0·1 *root of* 0·1? The log. of 0·1 is $\overline{1}$·0000000; and, as here is no decimal part, we have $\frac{-1}{0\cdot1}$ = — 10 = $\overline{10}$·0000000, the logarithm of 0·0000000001 the root required.

This Rule, for the extraction of roots of numbers leſs than unity, admits of no variety of caſes in practice.

To find the value of a quantity expreſſed by a number whoſe index is a vulgar fraction.—Rule. Multiply the logarithm of the number by the numerator of the fraction denoting the index, and divide the product by the denominator, and the quotient is the logarithm of the quantity required. But, if the given number be a decimal, reduce its logarithm to a *negative* logarithm; multiply it by the numerator of the fraction expreſſing the index, and divide the product by the denominator; and reduce the *negative* logarithm back to the logarithm with a negative index only; and you get the logarithm of the quantity required.

Ex. *What is the value of* $\overline{0\cdot096}^{\frac{5}{9}}$? The log. of 0·096 is $\overline{2}$·9822712 = — 1·0177288; hence,

— 1·01772885
5

9)— 5·0886440

— 0·5654049 = $\overline{1}$·4345951, the logarithm of 0·2720164 the quantity ſought.

As the numerator of the index denotes the power to which the number is to be raiſed, and the denominator denotes the root of that power to be extracted, the reaſon of the operation is manifeſt; for, by firſt multiplying the logarithm of the number by the numerator of the index, you have the logarithm of the power, and then, dividing by the denominator, you have the logarithm of the root of that power.

To find a fourth proportional to three given numbers.—The fourth term of a proportion is found by multiplying the ſecond and third terms together, and dividing the product by the firſt; hence we have the following Rule: Let a, b, c, be the firſt, ſecond, and third, terms; put $m =$ the number of decimal figures in a, $n =$ the number in b and c together, and $r = 1$; and let A, B, C, be the reſpective values of a, b, c, conſidering the ſignificant figures of each term as whole numbers; then the logarithm of the fourth term = ar. co. log. A + log. B + log. $C + m - n - 10$.

Ex. 1. *What is the fourth proportional to* 24, 35, *and* 79? Here, $m = 0$, $n = 0$; hence, we have to ſubtract 10 from the index.

8·61978888 ar. co. log. of	24	
1·5440680 log of - -	35	
1·8976271 ———	- 79	
2·0614839 ———	- 115·2083	the fourth proportional.

Ex. 2. *What is the fourth proportional to* 0·073, 0·42, *and* 0·009. Here $m = 3$, $n = 5$, $m - n - 10 = -12$; hence, we have to ſubtract 12 from the index.

8·1366771 ar. co. log. of	73	
1·6232493 log. of -	42	
0·9542425 ———	- 9	
$\overline{2}$·7141689 ———	0·0517808	the fourth proportional.

Here, the index of the ſum being 10, by ſubtracting 12 from it, the remainder is -2.

In trigonometrical operations, when radius is the *firſt* term, its logarithm in the Tables being 10·0000000, and therefore its arithmetical complement 0·0000000, we have only to add the logarithms of the ſecond and third terms together, and ſubtract 10 from the index. If radius be one of the *mean* terms, we then add 10 to the logarithm of the other mean term, and ſubtract the logarithm of the firſt term from it. In the Tables of *natural* ſines, coſines, &c. we generally ſuppoſe radius $= 1$, and therefore its logarithm $= 0$; but in the Tables of the *logarithmic* ſines, coſines, &c. the logarithm of radius is 10·0000000; if therefore we make any natural number, the ſine, coſine, &c. of an arc, to radius unity, and we want to expreſs its logarithm ſo as to agree with the logarithm of the ſines, coſines, &c. in the Table of thoſe quantities, we muſt add 10 to the index of the logarithm, as taken from the Table of the logarithms of the natural numbers. And, *vice verſâ*, if we want to reduce the logarithm of a ſine, coſine, &c. as found in the Table of thoſe quantities, to the logarithm of the natural numbers, in order to determine the value of ſuch a ſine, coſine, &c. we muſt ſubtract 10 from the index.

To find any number of geometrical means between two given numbers.—Rule: Take the difference between the logarithms of the two numbers, and divide it by the number of means increaſed by unity, and add the quotient continually to the leaſt logarithm, and you get the logarithms of the means.

Ex. *Find four geometrical means between* $10\frac{2}{3}$ *and* $14\frac{7}{9}$. The logarithm of $10\frac{2}{3} =$ log. of $\frac{32}{3} =$ log. 32 — log. $3 = 1{\cdot}5051500 - 0{\cdot}4771213 = 1{\cdot}0280287$; and log. of $14\frac{7}{9} =$ log. of $\frac{133}{9} =$ log. 133 — log. $9 = 2{\cdot}1238516 - 0{\cdot}9542425 = 1{\cdot}1696091$. The difference of theſe logarithms is 0·1415804, which divided by 5, the quotient is 0·0283161; hence,

1·0280287		
0·0283161		
1·0563448 log. of	11·38531	— 1ſt mean.
1·0846609 ———	12·15236	— 2d
1·1129770 ———	12·97111	— 3d
1·1412931 ———	13·84500	— 4th

The reaſon of this operation is, that, when the numbers are in geometrical progreſſion, their logarithms are in arithmetical progreſſion; and the number of intervals of the terms is always greater by unity than the number of means; and therefore you muſt divide the difference of the logarithms by a number greater by unity than the number by means.

Given the hypothenuſe (h) of a right-angled plane triangle, and one leg (l), to find the other leg (L). By Euc. B. i. p. 47. $L = \sqrt{h^2 - l^2} = \sqrt{h + l \times h - l}$; hence, log. $L = \frac{1}{2}$ (log. $\overline{h + l}$ + log. $\overline{h - l}$).

Ex. Let $h = 48796$, $l = 21435$; then

$h + l = 70230$ - -	log.	4·8465227
$h - l = 27361$ - -	log.	4·4371320
	2)9·2836547	
$L = 43835{\cdot}64$ - -	log.	4·6418273

For the more general application of logarithms to trigonometrical computation, ſee the article TRIGONOMETRY.

HYPERBOLIC LOGARITHMS.

If from the centre of an equilateral hyperbola you take upon one of its aſymptotes an abſciſſa which ſhall be equal to the correſponding ordinate, and repreſent each by unity; then, if $1 + x =$ any other abſciſſa, the correſponding ordinate $= \frac{1}{1+x}$; and (by Vince's Prin. of Flux. Art. 49. Ex. 3.) the area comprehended between the ordinates 1 and $\frac{1}{1+x}$, is the logarithm of $1 + x$ to the *modulus* unity. Hence theſe logarithms are called *hyperbolic* logarithms; and a Table thus conſtructed is very uſeful for finding fluents; for, the modulus being unity, the fluent found by theſe logarithms requires no multiplication. The general equation expreſſing the relation between a logarithm x and its natural number b, is $a^x = b$; and in this ſyſtem, $a = 2{\cdot}7182818$; hence, the equation is $2{\cdot}7182818^x = b$. If $b = 2$, $x = 0{\cdot}69314708$ the hyperbolic logarithm of 2. Now the common logarithm of 2 is 0·3010300; and the ratio of 0·69314708 to 0·3010300 is 1 to 0·43429448; therefore 0·43429448 is the modulus of the common ſyſtem; becauſe the logarithms of any number are to each other as the moduli of the ſyſtems. (Fluxions, Art. 103.) Hence, if we divide the common logarithm by 0·43429448, or multiply it by the reciprocal thereof 2·302585, we get the hyperbolic logarithm.

A Table of hyperbolic logarithms would not be ſo convenient for practice as that now in uſe; for in the latter ſyſtem the index of the logarithm is more readily known, it being always leſs by unity than the number of integral figures of the given number; on which account, the computations by this ſyſtem are made more readily and with greater certainty.

LOGISTICAL LOGARITHMS.

Beſides the common logarithms here treated of, there are others, called *logiſtical* logarithms, which are the common logarithms ſubtracted from 3·5563 the logarithm of 3600, the number of ſeconds in 60 minutes. By this means the logarithm of 3600″ (=60′) becomes nothing; and the logarithm of 360 is 1·0000. For numbers greater than 3600 the logarithms would be negative; but, inſtead of putting them down ſo, a unit is added to the index of the logarithm of 3600, before the ſubtraction; the logarithms are

therefore

therefore put down greater by a unit than their true value. These logarithms are frequently useful in astronomical computations, as it very often happens in a proportion that the first or one of the mean terms is 60′.

Rule. If the first term be 60′, or 3600″, and the second or third terms be each less than 60′, add the logarithms of the second and third terms together, and the sum is the logarithm of the fourth term. If the second, or the second and third terms, be greater than 60′, and the sum of the two last figures in the addition, the index excepted, be equal to or greater than 10, you are not to carry 1 to the index. For, in the first instance, the logarithm of the second term is 1 greater than its true value; and therefore, by not carrying 1 to the index, you get the proper value of the logathrim. In the second instance, the second and third terms being both greater by a unit than their true values, the sum is 2 in the index greater than its true value; by neglecting therefore to carry 1, the logarithm is still 1 greater than its true value; but, the fourth term being here greater than 60′, its logarithm is 1 in the index greater than its true value, and therefore the above addition gives the logarithm as found in the table. If one of the *mean* terms be 60′, subtract the logarithm of the first term from the logarithm of the other mean, adding 1 to the index of the logarithm of that mean if necessary, and the remainder is the logarithm of the fourth term. The reason of here adding 1 is upon the same principle as that of before subtracting 1; that is, on account of one of the logarithms being greater by unity than its true value. When a unit is to be added or subtracted will be manifest in any particular instance.

If the logarithms in the tables had been made negative above 60′, the rules would have been very clear and simple: for in this construction of the tables, when 60′ is the first term, take the sum of the logarithms of the other two terms (regard being had to their signs), and you have the logarithm of the fourth term, which is less or greater than 60′, according as the sum is positive or negative. When 60′ is one of the mean terms, subtract the logarithm of the first term from that of the other mean (regard being had to their signs), and you have the logarithm of the fourth term, which is less or greater than 60′, according as the difference is positive or negative. Here there can be no ambiguity, which there may be in the present form of the Tables, as the same logarithm may answer to a quantity both above and below 60′.

Ex. 1. *What is the fourth proportional to* 60′, 1′ 36″, *and* 27′ 38″?

1′ 36″	log.	1·5740
27 38	log.	3367
Answer, 0 44	log.	1·9107

Ex. 2. *What is the fourth proportional to* 60′, 65′ 25″, *and* 37′ 41″?

65′ 25″	log.	9625
37 41	log.	2020
Answer, 41 5	log.	1645

Ex. 3. *What is the fourth proportional to* 16′ 47″, 60′, *and* 17′ 28″?

17′ 28″	log.	5359
16 47	log.	5533
Answer, 62 27	log.	9826

Here, it was necessary to add 1 to the index of the logarithm of the third term, or, which is the same, to add 10 to the last figure 5 of the upper line; because the fourth term is greater than 60′, and therefore its logarithm in the Table is 1 greater than its true value.

Ex. 4. *What is the fourth proportional to* 27′ 19″, 60′, *and* 5′ 9″?

5′ 9″	log.	1·0663
27 19	log.	3417
Answer, 11 19	log.	7246

If the first term be 24 hours, and the second term be hours and minutes, and the third term be given in time or be an arc, we may find a fourth proportional by conceiving the head of the Table to represent hours.

Ex. 5. *What is the fourth proportional to* 24*h*. 13*h*. 53′, *and* 76′ 34″?

24*h*.	ar. co. log.	6021
13*h*. 53′	log.	6357
76 34″	log.	8941
Answer, 44 17	log.	1319

We here reject 2 in the index, because the first term is an arithmetical complement, and the third term is 1 greater than its true value.

In like manner, whatever may be the three terms, whether hours and minutes, minutes and seconds, of time; degrees and minutes, minutes and seconds, of an arc; or two of one, and one of the other; a fourth proportional may be found, provided the quantities fall within the limits of the Table.

Proportional Logarithms.

In the *Requisite Tables*, there is a Table of *proportional* logarithms, which are analogous to the logistical logarithms, the common logarithms being here subtracted from 4·0334, the logarithm of 10800, the number of seconds in 180′, which is 3 hours, or 3°, the logarithm of which is therefore nothing; and the Table goes no farther. These logarithms are peculiarly adapted to the purpose of finding the apparent time at Greenwich, by comparing the true distance of the moon and sun, or moon and star, found from the observed distance, with the true distance, put down in the Nautical Almanac for every 3 hours, under the meridian of Greenwich, because 3 hours always forms the third term; and therefore we have only to subtract the logarithm of the first term from that of the second.

Ex. 1. *On July* 7, 1775, *the true distance of the Sun from the Moon was found to be* 109° 34′ 26″; *to find the time at Greenwich.*—By the Nautical Almanac, the true distance is found to be 108° 5′ 58″ at 3 o'clock, and 109° 37′ 16″ at 6 o'clock; the moon has therefore receded from the sun 1° 31′ 18″ in 3 hours; now the difference between 108° 5′ 58″ and 109° 34′ 26″ is 1° 28′ 28″; to find therefore how long the moon will be in receding 1° 28′ 28″, we have, (upon supposition that the moon recedes uniformly from the sun, which is very nearly true,) 1° 31′ 18″ : 1° 28′ 28″ :: 3*h*. : 2*h*. 54′ 25″, which operation is thus performed by Proportional Logarithms; and the whole work may be arranged as follows:

True dist. of ☽ from ☉	109°	34′	26″		
——— at 3*h*. (N. Alm.)	108	5	58		
——— at 6*h*. ———	109	37	16		
Diff. bet. 1st and 2d	1	28	28	pr. log.	0·3085
——— 2d and 3d	1	31	18	———	0·2948
Time after 3*h*.	2	54	25	———	0·0137
Add	3	0	0		
Time at Greenwich	5	54	25		

The third term being here 3 hours, its logarithm is 0; we have therefore only to subtract the log. of the first term from that of the second, and the difference 0·0137 is the log. of 2*h*. 54′ 25″, the time in which the moon recedes 1° 28′ 28″ from the sun; and, as this is the space through which the moon has receded from the sun after 3 o'clock, if you add 2*h*. 54′ 25″ to 3*h*. you get 5*h*. 54′ 25″, the time at which the moon was at the distance 109° 34′ 26″ from the sun.

Ex. 2. *What is the fourth proportional to* 2° 7′ 48″, 1° 19′ 27″, *and* 3°?

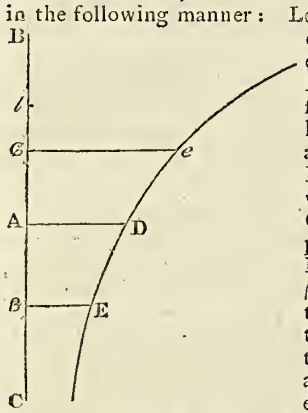
1° 19′ 27″	pr. log.	0·3552
2 7 48 ———		0·1487
Fourth prop. 1 51 53 ———		0·2065

If $3h$. or 3° ſhould be the firſt term of the proportion, the logarithm of the fourth term is found by adding together the logarithms of the ſecond and third terms; but in theſe caſes, none of the terms muſt exceed $3h$. or 3°, as the Tables go no farther.

Ex. 3. *What is the fourth proportional to* 3°, 2° 44′ 7″, *and* 1° 15′ 3″?

2° 44′ 7″ pr. log.	- - -	0·0401
1 15 3	- - -	0·3800
Fourth prop. 1 8 25	- - -	0·4201

LOGARITHMIC, ATMOSPHERICAL, is a curve deſcribed in the following manner: Let the point C repreſent the centre of the earth, C A the earth's ſemi-diameter, and A B any height above the ſurface; at A, place a right line A D, of any finite length, at right angles with A C. In the right line A C, towards C, take A β ſuch, that C A may be to A β in the proportion of C B to B A. In a right line drawn through β, at right angles with A C, take β E, of ſuch length, as to be to A D in the proportion of the denſity of the air at B to the denſity at A, the earth's ſurface. The curve, which the point E always touches, is a logarithmic, of which A C is the aſymptote; and is called by Dr. Horſley the *atmoſpherical logarithmic*. Imagine this curve deſcribed,



and take another height A l, and take A $\mathcal{G} = \frac{\text{C A} \times \text{A } l}{\text{C } l}$, and draw $\mathcal{G}e$ parallel to βE, meeting the curve in e. Then $\beta\mathcal{G}$ is the logarithm of the ratio of βE to $\mathcal{G}e$, or of the denſity at B to the denſity at l. But, if the greater of the two heights, A B and A l, bear but a very ſmall proportion to the ſemi-diameter of the earth, their difference B l will be very nearly equal to $\beta\mathcal{G}$.

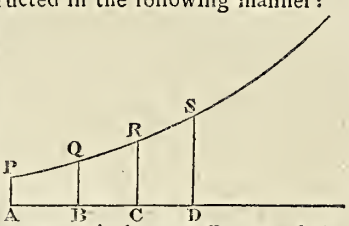
For, becauſe C B : B A = C A : A β by conſtruction, therefore, by converſion, C B : C A = C A : C β.
In like manner, and by inverſion, C A : C l = C $\mathcal{G}$: C A,
by equi-diſtance perturbate, C B : C l = C $\mathcal{G}$: C β,
and converting, C B : B l = C $\mathcal{G}$: $\mathcal{G}\beta$,
by permutation, B l : $\beta\mathcal{G}$ = C B : C $\mathcal{G}$.
But, when A B is infinitely diminiſhed, C B = C A ultimately. Alſo, A l being infinitely diminiſhed, C $\mathcal{G}$ = C A ultimately. Therefore C B = C $\mathcal{G}$ ultimately, and B l = $\beta\mathcal{G}$ ultimately. Q. E. D.

Now A B and A l will always be ſo ſmall, with reſpect to C A, if B and l be ſuppoſed to repreſent any acceſſible places, that C B, C $\mathcal{G}$, and B l, $\beta\mathcal{G}$, may always, in this caſe, be conſidered as in their ultimate proportion of equality. It is ſtill therefore to be admitted, as a principle, in practice, that the difference of elevation of any two places is as the difference of the tabular logarithms of the heights of the quickſilver in the barometer at the ſame time at both places; that is, it is the logarithm of the ratio of thoſe heights in *ſome* ſyſtem of logarithms. And the heights of the quickſilver being given by obſervation, the difference of elevation will be known, if that particular ſyſtem can be determined; that is, if the *modulus* of the ſyſtem, or the length of the ſubtangent of the curve D E e of that ſyſtem, can be aſcertained, in ſome known meaſure, as Engliſh fathoms, or Paris toiſes. The eaſieſt method of doing this, that theory ſuggeſts, is to compare barometers at two ſtations, ſuppoſe B and l, each of a known elevation, A B and A l, above the level of the ſea. For the logarithms of any given ratio, in different ſyſtems, are proportional to the ſubtangents; and the difference of elevation, B l, diminiſhed in the proportion of C B (the diſtance of the higher ſtation from the earth's centre) to C $\mathcal{G}$, (a third proportional to C l, the diſtance of the lower ſtation from the earth's centre, and C A, the earth's ſemi-diameter,) is the logarithm of the ratio of the denſity at B, to the denſity at l, (that is, of the columns of quickſilver ſuſtained in the barometer at B and l,) in the atmoſpherical ſyſtem. Therefore, as the difference of the tabular logarithms of theſe columns, to the ſubtangent of the tabular ſyſtem, ſo ſhould B l, diminiſhed as hath been ſaid, (that is, ſo ſhould $\beta\mathcal{G}$,) be to the ſubtangent of the atmoſpherical logarithmic. The utmoſt height to which we can aſcend, above the level of the ſea, is ſo ſmall, that the reduction of B l may, even in this inveſtigation, always be neglected. For, if A B were four Engliſh miles, which exceeds the greateſt acceſſible heights even of the Peruvian mountains, and A $\mathcal{G}$ three, $\beta\mathcal{G}$ would be ſcarcely one part in 500 leſs than B l. So that, by comparing barometers at different elevations, within a mile above the level of the ſea, the ſubtangent of the atmoſpherical curve might be determined, as it ſhould ſeem, without ſenſible error, by taking ſimply the difference of elevation, without reduction, for the logarithm of the ratio of the obſerved height of the quickſilver in the atmoſpherical ſyſtem.

The ſubtangent is different in length at different times; though Mr. de Luc has ſhown, that it is conſtant in a given temperature; ſo that, if the temperature of the air is +16¾ of his ſcale, the difference of the tabular logarithms of the heights of the quickſilver in the barometer gives the difference of elevation in 10ooths of a Paris toiſe; whence the number, which is the *modulus* of Briggs's ſyſtem, expreſſes the length of the ſubtangent of the atmoſpherical curve, ſuch as it is in that temperature, in 10ooths of a Paris toiſe. *Phil. Tranſ.* vol. lxiv. p. 231, &c.

LOGARITHMIC, or LOGISTIC, CURVE, is a curve which obtained its name from its properties and uſes in explaining and conſtructing logarithms; becauſe its ordinates are in geometrical progreſſion, while the correſponding abſciſſas are in arithmetical progreſſion; ſo that the abſciſſas are the logarithms of the correſponding ordinates. Hence the curve may be conſtructed in the following manner:

Upon any right line as an axis, take the equal parts A B, B C, C D, &c. or the arithmetical progreſſion A B, A C, A D, &c. and at the points A B, C D, &c. erect the perpendicular ordinates A P, B Q, C R, D S, &c. in a geometrical progreſſion; and the curve-line drawn through the extremities of theſe ordinates P, Q, R, S, &c. is the logarithmic or logiſtic curve, its abſciſſas A B, A C, A D, being as the logarithms of the reſpective correſponding ordinates B Q, C R, D S, &c.



Hence, if any abſciſſa A N = x, its ordinate N O = y, A P = 1, and a = a certain conſtant quantity, or the modulus of the logarithms, then the equation of the curve is $x = a \times \log. y = \log. y^a$; the fluxion of which being taken, it will be $\dot{x} = \frac{a\dot{y}}{y}$; whence the following proportion, $\dot{y} : \dot{x} :: y : a$; but, in any curve $\dot{y} : \dot{x} :: y :$ the ſubtangent AT; and therefore the ſubtangent to this curve is every where equal to the ſame conſtant quantity a, the modulus of the logarithms.

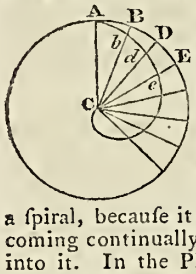
To find the Area contained between any two Ordinates.—Here the fluxion of the area A, or $y\dot{x}$, is $y \times \frac{a\dot{y}}{y} = a\dot{y}$; which corrected gives A = a (A P − y) = a (A P − N O) = a × P V = A T × P V. That is, the area A P O N, between any two ordinates, is equal to the rectangle of the conſtant ſubtangent, and the difference of the ordinates. And hence, when the abſciſſa is infinite, or the laſt ordinate

equal to zero; then the infinitely-long area APZ is equal to AT × AP, or double the triangle APT.

To find the Content of the Solid formed by the Revolution of the Curve about its Axis A Z.—The fluxion of the solid $S = py^2\dot{x} = py^2 \times \frac{a\dot{y}}{y} = pay\dot{y}$, where $p = 3{\cdot}14159$, &c. and the correct fluent is $S = \frac{1}{2}pa \times (AP^2 - y^2) = \frac{1}{2}p \times AT \times (AP^2 - NO^2)$, which is half the difference between two cylinders of the common altitude a, or AT, and the radii of their bases AP, NO. And hence, supposing the axis infinite towards Z, and consequently the ordinate at its extremity zero, the content of the infinitely-long solid will be equal to $\frac{1}{2}pa \times AP^2 = \frac{1}{2}p \times AT \times AP^2$, or half the cylinder on the same base and its altitude AT.

This curve greatly facilitates the conception of logarithms, and affords a very obvious proof of the very important property of their fluxions, or very small increments; namely, that the fluxion of a number is to the fluxion of its logarithm as the number is to the subtangent. As also this property, that if their numbers be taken very nearly equal, so that their ratios may differ but a little from a ratio of equality, their difference will be very nearly proportional to the logarithm of the ratio of these numbers to each other; which follows from the logarithmic arcs being very little different from their chords when they are taken very small. The constant subtangent of this curve is, what Cotes calls, "the *modulus* of the system of logarithms." This curve has been treated of by a great number of very eminent mathematicians, as Huygens, Le Seur, Keil, Bernouilli, Emerson, &c. See the latter author's Treatise on Curve Lines, page 19.

Logarithmic, or logistic, Spiral, is a curve constructed as follows: Divide the arch of a circle, into any



equal parts AB, BD, DE, &c. and upon the radii drawn to the points of division take C*b*, C*d*, C*e*, &c. in a geometrical progression; so is the curve A*bde*, &c. the logarithmic spiral; so called, because it is evident that AB, AD, AE, &c. being arithmeticals, are as the logarithms of CA, C*b*, C*d*, C*e*, &c. which are geometricals; and a spiral, because it winds continually about the centre C, coming continually nearer, but without ever really falling into it. In the Phil. Trans. Dr. Halley has happily applied this curve to the division of the meridian line in Mercator's chart. See also Cotes's Harmonia Mens. Guido Grando's Demonst. Theor. Huygen. the Acta Erudit. 1691. Emerson's Curves, &c.

Logarithmic Lines.—For many mechanical purposes it is convenient to have the logarithms of numbers laid down on scales, as well as the logarithmic sines and tangents; by which means, computations may be carried on by mere mensuration with compasses. Lines of this kind are always put on the common Gunter's scale; but, as these instruments must be extended to a very great length in order to contain any considerable quantity of numbers, it becomes an object of importance to shorten them. Such an improvement has been made by Mr. William Nicholson, and published in the 77th volume of the Philosophical Transactions. The principles on which the construction of his instruments depends are as follow:

If two geometrical series of numbers, having the same common ratio, be placed in order with the terms opposite to each other, the ratio between any term in one series and its opposite in the other will be constant: Thus,

2 6 18 54 162, &c.
3 9 27 81 243, &c. Then,
2 3 6 9 18 27 54 81 162 243, &c.

where it is evident, that each of the terms in the upper series is exactly two-thirds of the corresponding one in the lower.

2. The ratio of any two terms in one series will be the same with that between those which have an equal distance in the other.

3. In all such geometrical series as have the same ratio, the property above-mentioned takes place, though we compare the terms of any series with those of another: Thus,

2 4 8 16 32 64, &c.
3 6 12 24 48 96, &c.
4 8 16 32 64 128, &c.
5 10 20 40 80 160, &c.

where it is plain that 2, 4, 3, 6; also 2, 4, 4, 8, and 2, 4, 5, 10, &c. have the same ratio with that of each series.

4. If the differences of the logarithms of the numbers be laid in order upon equidistant parallel right lines, in such a manner that a right line drawn across the whole shall intersect it at divisions denoting numbers in geometrical progression; then, from the condition of the arrangement, and the property of this logarithmic line, it follows, 1st, That every right line so drawn will, by its intersections, indicate a geometrical series of numbers. 2dly, That such series as are indicated by these right lines will have the same common ratio. 3dly, That the series thus indicated by two parallel right lines, supposed to move laterally, without changing either their mutual distance or parallelism to themselves, will have each the same ratio, and in all series indicated by such two lines, the ratio between an antecedent and consequent; the former taken upon one line, and the latter upon another, will be also the same.

The 1st of these propositions is proved in the following manner. Let the lines AB, CD, EF, fig. 8, on the preceding Plate, represent parts of the logarithmic line arranged according to the proportion already mentioned; and let GH be a right line passing through the points *e*, *c*, *a*, denoting numbers in geometrical progression; then will any other line IK, drawn across the arrangement, likewise pass through three points, *f*, *d*, *b*, in geometrical progression. From one of the points of intersection *f*, in the last-mentioned line IK, draw the line *fg* parallel to GH, and intersecting the arrangement in the points *i*, *h*; and the ratios of the numbers *e*, *f c*, *i*, will be equal, as well as of *a*, *h*; because the intervals on the logarithmic line, or differences of the logarithms of those numbers, are equal. Again, the point *f*, the line *id*, and the line *hb*, are in arithmetical progression, denoting the differences between the logarithms of the numbers themselves; whence the quotients of the numbers are in geometrical progression.

The 2d proposition is proved in a similar manner. For, as it was shown that the line *fg*, parallel to GH, passes through points of division denoting numbers in the same continued ratio as those indicated by the line GH; it may also be shown, that the line LM, parallel to any other line IK, will pass through a series of points denoting numbers which have the same continual ratio with those indicated by the line IK, to which it is parallel.

The 3d proposition arises from the parallelism of the lines to their former situation; by which means they indicate numbers in a geometrical series, having the same common ratio as before; their distance on the logarithmic line also remains unchanged; whence the differences between the logarithms of the opposite numbers, and of consequence their ratios, will always be constant.

5. Supposing now an antecedent and consequent to be given in any geometrical series, it will always be possible to find them, provided the line be of unlimited length. Drawing two parallel lines, then, through each of the numbers, and supposing the lines to move without changing their direction or parallel situation, they will continually describe new antecedents and consequents in the same geometrical series as before.

6. Though the logarithmic line contain no greater range of numbers than from 1 to 10, it will not be found necessary for the purposes of copmutation to repeat it. The only thing requisite is to have a slider or beam with two

fixed points at the diſtance of the interval betwixt 1 and 10, and a moveable point be made to range betwixt them always to indicate the antecedent; then, if the conſequent fixed point fall without the ruler, the other fixed point will always denote the diviſion on which it would have fallen had the ruler been prolonged; and this contrivance may eaſily be adapted to any arrangement of parallel lines whatever. The arrangement of right lines, however, ought always to be diſpoſed in ſuch a manner as to occupy a right-angled parallelogram, or the croſs line already mentioned ought always to be at right angles to the length of the ruler.

Fig. 9. is a ruler conſiſting of ten parallel lines. Fig. 10, a beam-compaſs for meaſuring the intervals. B, A, C, are the parts which apply to the ſurface of the ruler; the middle one, A, being moveable ſidewiſe in a groove in the piece DE, ſo as always to preſerve its parallelism to the external pieces BC, which are fixed at a diſtance equal to the length of the ruler, and have their edges placed in ſuch a manner as to form with the parallel lines which they interſect a ratio, which by compoſition is $\frac{1}{10}$; which in the preſent caſe requires them to be at right angles to the length. The piece DE is applied to the edge FG of the ruler. The edges or border, H, I, K, L, are more conveniently made of tranſparent horn, or tortoiſe-ſhell, than of any opaque matter. In uſing this ruler, apply the edge of either B or C to the conſequent, and ſlide the piece A to the antecedent; obſerving the difference between the numbers on the pieces denoting the lines they are found on: then, applying the ſame edge of A to any other antecedent, the other piece B or C will interſect a conſequent in the ſame ratio upon that line, having the ſame ſituation with regard to the antecedent that the line of the former conſequent had to its antecedent. But if B be the conſequent piece, and fall without the ruler, the piece C will ſhow the conſequent one line lower; or if C, in like manner, fall without the ruler, then B will ſhow the conſequent one line higher. "It might be convenient (ſays Mr. Nicholſon), for the purpoſe of computation, to make inſtruments of this kind with one hundred or more lines; but, in the preſent inſtrument, the numbers on the pieces will anſwer the ſame purpoſe; for, if a conſequent fall upon a line at any given number of intervals without the ruler, it will be found on that line of the arrangement which occupies the ſame number of intervals reckoned inwards from the oppoſite edge of the ruler."

Fig. 11. is an inſtrument on the plan of a Gunter's ſcale of $28\frac{1}{2}$ inches long, invented by the late Mr. Robertſon. There is a moveable piece AB in the ſlider GH, acroſs which is drawn a fine line; the ſlider having alſo lines CD, EF, drawn acroſs it at diſtances from each other equal to the length of the ruler AB. In uſing the inſtrument, the line CD or EF is to be placed at the conſequent, and the line in AB at the antecedent; then, if the piece AB be placed at any other antecedent, the ſame line CD or EF will indicate its conſequent in the ſame ratio taken the ſame way; that is, if the antecedent and conſequent lie on the ſame ſide of the ſlider, all other antecedents and conſequents in that ratio will be in the ſame manner; and the contrary if they do not. But, if the conſequent line fall without the ruler, the other fixed line on the ſlider will ſhow the conſequent, but on the contrary ſide of the ſlider to that where it would elſe have been ſeen by means of the firſt conſequent line.

Fig. 12 is a circular inſtrument equivalent to the former; conſiſting of three concentric circles engraved and graduated upon a plate of an inch and an half diameter. Two legs A and B proceed from the centre, having right-lined edges in the direction of radii; and are moveable either ſingly or together. In uſing the inſtrument, place one of the edges at the antecedent and the other at the conſequent, and fix them at the angle. Move the two legs then together; and, having placed the antecedent leg at any other number, the other will give the conſequent one in the like poſition on the lines. If the line CD happen to lie between the legs, and B be the conſequent leg, the number ſought will be found one line farther from the centre than it would otherwiſe have been; and on the contrary it will be found one line nearer in the like caſe, if A be the conſequent leg. "This inſtrument (ſays Mr. Nicholſon), differing from that repreſented fig. 11 only in its circular form, and the advantages reſulting from that form, the lines muſt be taken to ſucceed each other in the ſame manner laterally; ſo that numbers which fall either within or without the arrangement of circles, will be found on ſuch lines of the arrangement as would have occupied the vacant places if the ſucceſſion of lines had been indefinitely repeated ſidewiſe. I approve of this conſtruction as ſuperior to every other which has yet occurred to me, not only in point of convenience, but likewiſe in the probability of being better executed; becauſe ſmall arcs may be graduated with very great accuracy, by diviſions tranſferred from a larger original. The inſtrument, fig. 11. may be contained conveniently in a circle of about four inches and an half diameter. The circular inſtrument is a combination of the Gunter's line and the ſector, with the improvements here pointed out. The property of the ſector may be uſeful in magnifying the differences of the logarithms in the upper parts of the line of ſines, the middle of the tangents, and the beginning of the verſed ſines. It is even poſſible, as mathematicians will eaſily conceive, to draw ſpirals, on which graduations of parts, every where equal to each other, will ſhow the ratios of thoſe lines by moveable radii, ſimilar to thoſe in this inſtrument."

LOG'ATEZ. See LOITSCH.

LO'GE, a town of Germany, in the county of Hoya: twenty miles ſouth-weſt of Nienburg.

LOGEFOUGEREU'SE, a town of France, in the department of the Vendée: three miles ſouth-eaſt of La Châtaigneraye.

LO'GENWASSER, a river of Sileſia, which runs into the Staritz in the principality of Neiſſe.

LOG'GATS, *ſ.*—*Loggats* is the ancient name of a play or game, which is one of the unlawful games enumerated in the thirty-third ſtatute of Henry VIII. It is the ſame which is now called kittle-pins, in which boys often make uſe of bones inſtead of wooden pins, throwing at them with another bone inſtead of bowling. *Hanmer.*—Did theſe bones coſt no more the breeding, but to play at *loggats* with them? *Shakeſpeare's Hamlet.*

LOG'GERHEAD, *ſ.* [*logge*, Dut. ſtupid, and *head*; or rather from *log*, a heavy motionleſs maſs, as *blockhead.*] A dolt; a blockhead; a thickſcul.—Says this *loggerhead*, What have we to do to quench other people's fires? *L'Eſtrange.*

To fall or go to LOGGERHEADS, to ſcuffle; to fight without weapons.—A couple of travellers that took up an aſs *fell to loggerheads* which ſhould be his maſter. *L'Eſtrange.*

LOG'GERHEAD KE'Y, or EL CONTOY, a ſmall iſland in the bay of Honduras, near the coaſt of Yucatan. Lat. 21, 25 N. lon. 87. 45. W.

LOG'GERHEADED, *adj.* Dull; ſtupid; doltiſh.—You *loggerheaded* and unpoliſh'd groom, what! no attendance? *Shakeſpeare's Taming of the Shrew.*

LOG'GERHEAT, *ſ.* in ſea-language, a large round ball of iron, with a long handle, for heating pitch.

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The following Plates of HERALDRY, publiſhed in this volume, 29, 38, 40, 42, 43, 44, 45, 46, 47, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 65*, 65‡, 89, 90, 93, 94, 95, 96, 100, 110, 111, 112, 113, 114, 115, and thoſe given in the Tenth and Eleventh Volumes, together with ſignature 9 O*, (in this N°.) which contains the deſcription of the four laſt Plates of Subſcribers' Arms, are to be carried to the Ninth Volume, making that volume, and the important article HERALDRY, entirely complete.

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END OF THE TWELFTH VOLUME.